

Quality, Safety & Experience Committee Meeting

Tue 15 June 2021, 09:00 - 12:00

Microsoft Teams

Agenda

1. Standing Items

1.1. Welcome & Introductions

Susan Elsmore

1.2. Apologies for Absence

Susan Elsmore

1.3. Declarations of Interest

Susan Elsmore

1.4. Minutes of the Committee Meeting held on 13 April 2021

Susan Elsmore

 1.4 Unconfirmed QSE Minutes April 13th 2021 JE.NF.pdf (15 pages)

1.5. Action Log – 13 April 2021

Susan Elsmore

 1.5 Action Log QSE for June 2021 meeting JE.pdf (2 pages)

1.6. Chair's Action taken since last meeting

Susan Elsmore

2. Items for Review & Assurance

2.1. CD&T Clinical Board Assurance Report

Matthew Temby / Sandeep Hemmadi

 2.1 Clinical Board QSE assurance report CDT June 2021 NS.pdf (19 pages)

2.2. Quality, Safety and Experience Framework Update

Carol Evans

- a) QSE Committee Group and Structures
- b) Clinical Safety Group (Terms of Reference)
- c) Organisational Learning Committee (Terms of Reference)

2.3. Quality Indicators Report

Ruth Walker

 2.3 Quality Indicators - June QSE 2021 V2.pdf (16 pages)

Saunders, Nathan
06/08/2021 14:36:42

📄 2.3 Appendix 1 -QSE Quality Indicators paper.pdf (1 pages)

2.4. Exception Reports – Verbal

Ruth Walker / Stuart Walker

2.5. Waiting Lists and Cancer Services update - Verbal

Steve Curry

2.6. Pressure Damage Report

Carol Evans / Clare Wade

- 📄 2.6 Pressure damage collaborative - QSE JUNE 2021.pdf (4 pages)
- 📄 2.6a Appendix 1 - Pressure Damage project plan June 21.pdf (1 pages)
- 📄 2.6a Appendix 1a - Pressure Damage project plan June 21.pdf (1 pages)
- 📄 2.6a Appendix 1b - Pressure Damage project plan June 21.pdf (2 pages)
- 📄 2.6b Appendix 2- Pressure damage Driver Diagram v2.pdf (1 pages)

2.7. Falls Group Update

Fiona Jenkins

- 📄 2.7 QSE Falls Report May 2021.pdf (9 pages)

2.8. Gosport Review Update

Carol Evans

- 📄 2.8 Gosport Review - QSE Committee - 2021 (2).pdf (4 pages)

2.9. HIW Activity Update

Carol Evans

- 📄 2.9 HIW update on activity_QSE June 2021 V1.pdf (6 pages)

2.10. Board Assurance Framework – Patient Safety

Nicola Foreman

- 📄 2.10 BAF Covering Report.pdf (2 pages)
- 📄 2.10a Patient Safety.pdf (3 pages)

3. Items for Approval / Ratification

3.1. Health Care Standards Strategy and Action Plan

Ruth Walker

- 📄 3.1 Health Care Standards Strategy and Action Plan - June 2021 Draft (002).pdf (4 pages)

3.2. Prevention and Management of In-Patient Falls Policy

Carol Evans / Fiona Jenkins

- 📄 3.2 - Falls Policy SBAR for QSE June 2021.pdf (2 pages)
- 📄 3.2a Draft Falls Policy May 2021.pdf (22 pages)
- 📄 3.2b Falls Investigation Template.pdf (8 pages)

4. Items for Noting & Information

Saunders, Nathan
06/08/2021 14:36:44

4.1.

Carol Evans

Minutes from Clinical Board QSE Sub Committees:

a) Children & Women's Clinical Board Minutes –

23.03.21 & 27.04.21

b) Specialist Clinical Board Minutes –

29.01.21 & 12.03.21

c) CD&T Clinical Board Minutes –

10.03.21 & 14.04.21

d) Surgery Clinical Board Minutes –

16.03.21

e) Mental Health Clinical Board Minutes -

25.02.21

f) Medicine Clinical Board Minutes –

25.02.21, 15.04.21 & 20.05.21

g) PCIC Minutes -

n/a - will be at next meeting

- 📄 4.1a C&W QSPE Minutes 23.03.21v2.pdf (8 pages)
- 📄 4.1a C&W QSPE Minutes 27.04.21.pdf (8 pages)
- 📄 4.1b Specialist QSE Minutes 29.01.21.pdf (6 pages)
- 📄 4.1b QSE Minutes 12.3.21 Final.pdf (6 pages)
- 📄 4.1c CD&T 2020-03-10 Minutes.pdf (8 pages)
- 📄 4.1c CD&T QSE Minutes 14.4.21.pdf (11 pages)
- 📄 4.1d Surgical CB Minutes QSE 16.03.21.pdf (11 pages)
- 📄 4.1e Mental Health CB 2021-02-25 Minutes..pdf (6 pages)
- 📄 4.1f MCB QSE Minutes 25 Feb 2021.pdf (5 pages)
- 📄 4.1f MCB QSE Minutes 15 April 2021.pdf (5 pages)
- 📄 4.1f MCB QSE Minutes 20 May 2021.pdf (4 pages)

4.2. Committee Effectiveness Survey Results 2020-2021

Nicola Foreman

- 📄 4.2 Cover Report Annual Board Effectiveness Survey 2020-2021 - QSE Committee je.pdf (3 pages)
- 📄 4.2a Appendix 1 - Board Effectiveness Survey - QSE Committee Results 2020-2021.pdf (9 pages)
- 📄 4.2b Appendix 2 - Board Effectiveness Action Plan 2020-2021 NF.pdf (3 pages)

4.3. Corporate Risk Register

Nicola Foreman

- 📄 4.3a QSE - Corporate Risk Register Covering Report - June 2021.pdf (2 pages)
- 📄 4.3b Corporate Risk Register Patient Safety Risks.pdf (4 pages)

4.4. Blood Inquiry – Update

Nicola Foreman

- 📄 4.4a QSE Infected Blood Inquiry report.pdf (4 pages)
- 📄 4.4b Transcript - London - 15 January 2021 - Professor Peter Collins.pdf (56 pages)

5. Items to bring to the attention of the Board / Committee

Susan Elsmore

6. Any Other Business

Susan Elsmore

7. Review of the Meeting

Susan Elsmore

8. Date & Time of Next Meeting:

Tuesday, 28 September 2021

9:00am

via MS Teams

Saunders, Nathan
06/08/2021 14:36:47

**Unconfirmed Minutes of the Quality, Safety & Experience Committee
Held on 13 April 2021 at 09.00am
Via MS Teams**

Chair:		
Susan Elsmore	SE	Independent Member – Local Authority
Present:		
Gary Baxter	GB	Independent Member – University
Mike Jones	MJ	Independent Member – Trade Union
Michael Imperato	MI	Independent Member – Legal
In Attendance		
Ruth Walker	RW	Executive Nurse Director (END)
Stuart Walker	SW	Executive Medical Director (EMD)
Abigail Harris	AH	Executive Director of Strategy and Planning (EDSP)
Fiona Jenkins	FJ	Executive Director of Therapies & Health Science (EDTHS)
Steve Curry	SC	Chief Operating Officer (COO)
Nicola Foreman	NF	Director of Corporate Governance (DCG)
Scott Mclean	SM	Director of Operations – Children & Women's (DOCW)
Cath Heath	CH	Director of Nursing – Children & Women's Clinical Board (DNCW)
Hywel Pullen	HP	Assistant Director of Finance (ADF)
Jason Roberts	JR	Deputy Executive Nursing Director (DEND)
Clare Rowntree	CR	Clinical Board Director for Children & Women's Clinical Board (CBDCW)
Carol Evans	CE	Assistant Director of Patient Safety and Quality (ADPSQ)
Kirsty Hook	KH	Secretary Children & Women's Clinical Board (SCWCB)
Angela Hughes	AH	Assistant Director of Patient Experience (ADPE)
Rajesh Krishnan	RK	Assistant Medical Director (Patient Safety and Clinical Governance) (AMD)
Suzanne Hardacre		Directorate Lead Nurse – Maternity (DLNM)
Stephen Allen	SA	Chief Officer – Community Health Council (CHC) (COCHC)
Amy English	AE	Deputy Chief Officer, Community Health Council (CHC) DCOHC
Annie Burrin	AB	Patient Safety Team
David Poland	DP	Audit Wales
Ian Virgil	IV	Audit Wales
Jacqueline Evans	JE	Interim Head of Corporate Governance (IHCG)
Secretariat		
Nathan Saunders	NS	Corporate Governance Officer (CGO)
Apologies		
Fiona Kinghorn	FK	Executive Director of Public Health (EDPH)
Catherine Phillips	CP	Executive Director of Finance (EDF)
Charles Janczewski	CJ	Chair

QSE 21/04/001	Welcome & Introductions	Action
	The Committee Chair (CC) welcomed everyone to the meeting.	
QSE 21/04/002	Apologies for Absence	
	Members noted that apologies for absence had been received from Fiona Kinghorn, Executive Director of Public Health, Catherine Phillips,	

	Executive Director of Finance and Charles Janczewski, Chair to Cardiff and Vale University Health Board (CVUHB).	
QSE 21/04/003	Declarations of Interest No declarations of interest were noted.	
QSE 21/04/004	Minutes of the Committee Meeting held on 16 February 2021 The minutes of the meeting held on 16 February 2021 were received and confirmed as a true and accurate record of the meeting, pending some minor typographical amendments which the CC advised she would send to the Corporate Governance Officer (CGO) for amendment. The Committee resolved that: a) The minutes of the meeting held on 16 February 2021 were approved as a true and accurate record of the meeting, pending minor amendments.	
QSE 21/04/005	Action Log following the Meeting held on 16 February 2021 The action log was received and the Committee noted that the majority of the actions had been completed or were on the agenda for discussion during the meeting, or were due for discussion at a future meeting.	
QSE 21/04/006	Chair's Action taken since last meeting No Chairs Actions were noted.	
QSE 21/04/007	Children & Women's Clinical Board QSE Assurance Report The Children & Women's Clinical Board (CWCB)QSE Assurance Report was received and the Director of Operations – Children & Women's (DOCW) gave an informative presentation and provided an overview of the patient safety and quality agenda over the preceding 18 months and highlighted achievements, innovation and transformational work undertaken to date, and gave an update on residual risks and mitigating actions being carried forward into 2021-2022. The Committee noted that: <ul style="list-style-type: none"> during 2020/2021 the CWCB comprised of five clinical directorates with associated clinical services and specialties. The CWCB delivers a number of highly specialised services to both the South East region and wider all Wales population and has responsibility for universal services which support the health, well-being, education, development and Public Health amongst the population of children, young people, parents, families, women and their partners. This includes partnership and safeguarding priorities. The services also provide primary and secondary care services to the local Cardiff and Vale population, The CWCB has a budget of £102.646m and a current workforce establishment of 1,906 WTE, 	Centre

Saunders, Nathan
06/08/2021 14:36:47

- Some services are commissioned from the Welsh Health Specialised Services Committee (WHSCC) through the relevant directorates, including Obstetrics, Gynaecology and Sexual Assault Resource Centre (SARC) and Cancer Services,
- The CWCB has a well-established Quality, Safety and Patient Experience Committee chaired by the Director of Nursing for the CWCB with strong representation from midwifery, medical, nursing and Allied health professionals staff,
- The annual self-assessment against the Welsh Government's Health and Care standards framework was not undertaken last year due to COVID-19, and are not required this year. The quality and safety patient experience group led on the self-assessment and identified improvement against each element of the standard,
- In December 2020 the CWCB held a risk assessment and governance workshop to analyse and review all risk assessment processes. Each Directorate has a risk register which aligns to Clinical Board Risk Register.

The DOCW informed the Committee that the Clinical Board leadership team had framed conversations around quality, performance and cost and were confident in providing these conversations to services.

The Director of Nursing for the C&W clinical board (DNCW) gave an update on the Clinical Boards performance over the last 12-18 months and the Committee noted:

- Child immunisations had worsened which was thought to be due to parent's reluctance to take their child for the vaccination, and due to school closures,
- The Staff influenza vaccine uptake had increased by 11% compared to the previous year,
- Safeguarding training compliance was at 75%, which was an improvement compared to the health board average of 63%,
- Healthcare Acquired Infection rates had improved and there was a 50% reduction in C-Diff infections and E-Coli bacteraemias,
- Vaginal/Non-interventional childbirth had worsened. Caesarean section, instrumental delivery and induction of labour rates had all increased,
- Research & Development (R&D) had improved. A new C&W R&D group had been established,
- Timely Access to care pre-COVID-19 had improved with significant improvements in Referral to Treatment (RTT) time, Cancer services and Tier-1 Primary Mental Health,
- Timely Access to care peri/post COVID-19 had worsened with a significant deterioration in RTT, Tier-1 Primary Mental Health and others,
- There were concerns response times had worsened with increasing volume and complexity as well as decreased capacity,
- Staff absence had improved with a decrease to 4.3% from 5.2%,
- Staff appraisal had worsened and reduced to 38% from 50%.

Saunders, Nathan
06/08/2021 14:36:47

The DOCW advised the Committee that the C&W clinical board were proud of the spirit, commitment, resilience and performance of the teams prior to, during and coming out of the COVID-19 pandemic.

The Committee noted the challenges facing the CWCB teams and that a number of plans were being developed to improve services, including:

- A Community Children's Services COVID-19 response plan,
- Attempting to maintain the Youth Board,
- Securing infrastructure for, and exploring the redesign of Benign Gynaecology services,
- Development of Clinical effectiveness strategy for the clinical board in line with the Cardiff and Vale University Health Board (CVUHB) strategy,
- Transforming inpatient care for Children and Young People with mental illness,
- Contributing to the WHSS National Strategy for Specialist Children's Services.

To progress the plans, it was suggested that the Board would need to support the Clinical Board in influencing external stakeholders and partners and that urgent short-term and other medium-term Estates work would be required in the Obstetrics and Gynaecology block at the University Hospital Wales (UHW).

It was also suggested that parity of access would be required in relation to Theatres and Anaesthetic resources and that resourcing would be needed, at scale, for a Community Children's Services COVID-19 response plan.

The Executive Nurse Director (END) asked the Directorate Lead Nurse for Maternity (DLNM) what the greatest learning had been from the maternity services review and what changes had been made to strengthen and develop existing practice.

The DLNM responded that the maternity services had been overwhelmed over the past 18 to 24 months and advised the Committee that the findings of the Royal College of Obstetricians and Gynaecologists (RCOG) report into maternity services at Cwm Taf Morgannwg University Health Board (CTMUHB) had provided an opportunity to review our own maternity services and assess existing service delivery. The report had highlighted vulnerable areas and areas for improvement within CTMUHB, which CVUHB could benchmark against. Two areas had already been improved as a consequence of the report concerning consultant cover and ante-natal and ward rounds.

The END asked the DNCW to share with the Committee the work that the Neonatal department had undertaken on the recurrent infection position, and the DNCW responded that a local Infection, Prevention & Control (IP&C) team had been established, was led by a consultant and met on a monthly basis to review practice. In addition, a new MRSA working party had been developed to look at increased incidents on neonatal screening.

Saunders, Nathan
06/08/2021 14:36:47

The Executive Director of Therapies & Health Science (EDTHS) advised the Committee of three areas in which she wished to thank the C&W clinical board:

- The Additional Learning Needs and Education Tribunal (Wales) Act (ALN). The C&WCB are hosting the Designated Education Clinical Lead Officer (DECLO) role and an update on progress will be given to the Health System Management Board (HSMB) in May 2021,
- The Women's health implementation group had an impact on the expectations around CVUHBs Women's services at national level,
- Children's Services – The therapists had been using digital methods to communicate and provide help and support. It was recognised that there would be some children who have been profoundly affected by the COVID-19 pandemic.

The Independent Member – Trade Union (IMTU) asked how staff morale had been. The DNCW responded that some nurses who had been supporting adult services had found it difficult but had stepped up when required. She added that had supported staff and that opportunities had been given to support and manage them in the workplace as they return to their main posts.

The DLNM advised that it had been challenging for community colleagues as the number of home births had increased due to the pandemic. She added that clinical psychology sessions had been offered to staff and it was noted that the Royal College of Nursing (RCN) had undertaken a census, the findings of which were currently being analysed.

The Independent Member – University (IMU) asked how many more Caesarean sections (C-Section) were being seen and what the reasons were. The DLNM responded that there were several factors contributing to the increase in C-sections and noted that it was not unique to CVUHB. She added that it showed that the service were detecting vulnerable babies more frequently and through early intervention, they were seeing a decrease in still-birth and perinatal morbidity.

The IMU asked what the issues were concerning infrastructure at UHW and the DLNM responded that the main concern was ageing lifts which frequently broke down and reflected the ageing estate in the Delivery unit and Theatres. The issues was captured on the Clinical Board's risk register.

The COCHC advised the Committee that a link to the Children and Adolescent Mental Health Services (CAMHS) high level service could not be seen, and the DOCW responded that it was a long standing issue and a number of conversations had been undertaken with CTMUHB concerning Tier-4 specialised services. He added that a significant approach was needed.

The COCHC noted that the birth rate was decreasing, however the acuity of care was increasing and that home births were less than 1% of total births and asked how that could be explained. The DLNM responded that

Saunders, Nathan
06/08/2021 14:36:47

there was a national drop in birth rates and that more women with underlying comorbidities were getting pregnant.

She added that when the University Hospital Llandough (UHL) closed and the birth centre opened at UHW, all eligible women who could receive midwifery led care could go to the maternity led unit (MLU) or have a home birth. Home birth was promoted but women tended to choose MLU.

The COCHC advised the Committee that there had been no mention of the child incontinence service and that concerns had been raised concerning children waiting 2 years to be assessed, and support was required to improve access to the service. The DOCW responded that the child incontinence service was under increased pressure and fell into the bundle of Community Children's Services. Improving the service would be included as part of the bigger plan for a response to COVID-19.

The Executive Medical Director advised:

- C-Section rate was described as "worsened" and he asked if that was the correct phrase as the World Health Organisation (WHO) stated that C-sections should be 10-15% and that CVUHB were running at around 25% on par with the rest of the UK. It was recommended that trend data and national benchmarking data could interpret that number,
- Having nationally mandated audits, outcome data and NICE (National Institute for Healthcare Excellence) guidance included in the quality and safety reports for Clinical Boards was informative and he welcomed the use of the information at future meetings. He thanked colleagues for the informative report.

The CC asked for a comment from the C&W Clinical Board in relation to the number of concerns received and the interventions to deal with those concerns in real time. The DNCW responded that the response times the C&W clinical board had experienced were around 80%, however during the pandemic there had been other competing pressures. Despite this, the Clinical Board had managed to hit above 75% and the last rating was above 83%.

She added that the Clinical Board had tried to resolve the majority of concerns informally, and had started some clinics within the crisis team in which children and their parents could talk through concerns.

The CC noted the open clinical negligence claims and asked how the figures compared to 2018/2019. The DNCW responded that the figures had not increased dramatically.

The CC asked if the Clinical Board were confident that everything was being done in terms of mitigating risk and ensuring good outcomes. The EMD responded that medical appraisals had a slightly different remit and different format for non-medics and noted that for the year 2020/2021 they had been effectively on hold which meant that the appraisal rate would be very low.

Saunders, Nathan
06/08/2021 14:36:47

	<p>The Clinical Board Director for Children & Women’s (CBDCW) advised the Committee that the medical engagement in quality and safety processes through the maternity department were probably the highest across the Clinical Board, to address this they had a risk lead, with protected time to undertake assessments of concerns and complaints, which proved an assurance that issues were being reviewed.</p> <p>The CC requested that the estates issues to be escalated as a matter of urgency. The Executive Director of Strategy and Planning (EDSP) advised that she had discussed the issue with the Director of Capital Estates and Facilities and requested a briefing on the situation.</p> <p>The Committee resolved that:</p> <ol style="list-style-type: none"> a) The progress made by the Clinical Board to date be noted, b) The approach and strategies for improvement be noted, c) The content of the report and the assurances provided by the Children and Women’s Clinical Board were approved. 	
<p>QSE 21/04/008</p>	<p>Quality Indicators Report</p> <p>The Quality Indicators Report was received and END gave an update on the report. The Committee noted that:</p> <ul style="list-style-type: none"> • the Committee had previously agreed a set of key indicators at the June 2020 meeting and had agreed to introduce a QSE dashboard. This was the first update since that meeting, and the dashboard was still under development, • the number of Serious Incidents (SI’s) reported had reduced significantly over the last 2 years and this was a continuing trend. This was mainly due to the change in the requirement to report pressure damage within the SI reporting framework for Wales, • a detailed thematic review of Never Events was presented to the QSE Committee in April 2021 and work was ongoing to support staff in reducing the number of Never Events, including an awareness campaign, staff survey and the development of a Human Factors Training Strategy, • the number of complaints had increased during February and March 2021, mainly due to concerns in relation to the vaccination waiting times. Despite the current challenges, compliance with the Welsh Government 30 day response time target remained consistently well above 75%, • the number of reported pressure ulcers had again increased in the last two months, and the Director of Nursing for the Surgery Clinical Board, who was the national lead for pressure damage prevention was working with the Wound Healing Team to develop an improvement plan and this will be presented to the QSE Committee in June 2021, • the Patient Safety Team had developed a detailed falls dashboard which would be monitored by the Falls Delivery Group, • A pilot of the Royal College of Physicians (RCP) National Audit of In-patient Falls (NAIF) debrief tool was currently being undertaken on a medical ward at the UHW to help inform a review of the current risk assessment and injurious falls investigation template, 	<p>CE</p>

Saunders, Nathan
06/08/2021 14:36:47

- The latest Stroke performance data was 40% compliance and demonstrated 100% compliance for patients seen by a Stroke Consultant within 24 hours. This issue would be discussed at the Clinical Board and Acute Stroke Team at the next Clinical Effectiveness Committee,
- There was an increase in mortality within 30 days of an emergency admission in December 2020, linked to an increase in patients with COVID-19 during the second wave. Data for March 2021 was incomplete due to time lag data input.

The CC asked the END if there were any early indication on the falls dashboard use, the END responded that all of the data was available right from the frontline and that every charge nurse and Multi-Disciplinary Team (MDT) had access to the data at ward level and that the data would be extended to the community. Discussion had also been held with Lightfoot concerning how to integrate some of their data into the pathway and to produce real time data.

The CC noted that the Stroke indicators had deteriorated to 17% but had since increased to 40% and asked if that was compliant against the 4 hour target. The END responded that it was against the 4 hour target.

The EDTHS advised the Committee that the COVID-19 pandemic had been a challenge for NHS Wales concerning Stroke performance. She added that there had been outbreaks of COVID-19 within the stroke unit which had required non-admittance of patients. It was suggested that the data needed to be looked at and monitored. All Health Boards were having a “restart” of stroke services and CVUHB were working with a strong stroke group. The EDTHS provided assurance to the Committee that plans were in place to move forward.

In relation to falls, the EDTHS advised that patients not admitted into hospital did not fall as much. Sometimes there was a correlation with falls and length of stay.

The Committee noted that the National falls group was being re-established and a new appointment had been to CVUHBs quality team who would monitor falls within CVUHB.

The Independent Member – Legal (IML) asked if context could be provided on the number of falls, the EDTHS responded that she would ask the falls group to provide an update and provide assurance around the work.

The Assistant Director of Patient Safety and Quality responded that Annie Burren, from the Patient Safety Team had undertaken some positive work on building a dashboard around falls and noted that it would be presented to the next fall’s group.

The Committee resolved that:

- a) The contents of the Quality Indicators report and the actions being taken forward to address areas for improvement be noted.

FJ

Saunders, Nathan
06/08/2021 14:36:47

Exception Reports – IP&C Position (Presentation)

The Exception Reports – Infection Prevention & Control (IP&C) Position presentation was received.

The Deputy Executive Nursing Director (DEND) gave an informative presentation and the Committee noted that CVUHB had encountered unprecedented challenges over the last 12 months including:

- 60 ward closures from 17 April 2020 to 23 February 2021,
- Approximately:
 - 8,000 bed days lost to date,
 - 740 patients with laboratory confirmed COVID-19 associated with incidents or outbreaks,
 - 370 staff with laboratory confirmed COVID-19 and possible links to incidents or outbreaks.

The DEND advised that the figures were from patients who had been admitted to hospital COVID-19 symptom free and had acquired COVID-19 whilst in hospital.

It was noted that the A1N-MDU at UHW had the highest number of deaths and that CVUHB was average in comparison with other Welsh Health Boards, however in January and February 2021, CVUHB saw a significant spike in cases.

The DEND advised the Committee of the mortality rates from November 2020 to January 2021:

- 25% Mortality rate from hospital acquired COVID-19,
- 44% of inpatient COVID-19 deaths were hospital acquired,
- 89% of those deaths were linked to an outbreak,
- November to December 2020 there were 45 HCA COVID-19 deaths,
- January to April 2021 there were 176 HCA COVID-19 deaths.

Themes were identified that drove the data to the levels presented. Some of the themes included:

- Patients testing negative and becoming positive up to 5 days into admission,
- Patients having multiple moves during their hospital stay,
- Staff behaviours,
- Issues with documentation.

The Committee noted that a significant number of lessons had been learnt during the pandemic and noted that two of the biggest lessons had been the ability to provide cessation of services, and waiting for the laboratory result before transferring patients on amber wards. The DEND advised that the following actions had been taken to improve:

- Continuation of regular communications to staff regarding social distancing, Personal Protective Equipment (PPE) and not coming into work when exhibiting symptoms,

Saunders, Nathan
06/08/2021 14:36:47

	<ul style="list-style-type: none"> • Retesting patients in amber areas 72 hours after admission and then every 5 days, • A daily IP&C Cell and fortnightly PPE Cell, • early discussions had commenced with the laboratory in planning for a third wave, • next steps included work with Public Health Wales (PHW) to ensure a cohesive approach. <p>The DEND finalised that it had been 36 days since the last HCA infection at the UHW and 31 days in University Hospital Llandough (UHL).</p> <p>The Committee resolved that:</p> <p>a) The Exception Reports – Infection Prevention & Control (IP&C) Position presentation be noted.</p>	
<p>QSE 21/04/010</p>	<p>Impact of COVID-19 on Patient Safety (Verbal)</p> <p>The verbal update on the Impact of COVID-19 on Patient Safety was received, and the END advised the Committee that hospital visiting had been restarted and was being done very carefully to ensure that all risks were balanced.</p> <p>The Committee noted that over 300,000 people had been vaccinated and that CVUHB were now inviting priority group 10 and over for vaccinations. 80% of groups 1 to 7 have been vaccinated which is 2 weeks ahead of the original plan.</p> <p>The END advised that the biggest challenge was the Did Not Attend (DNA) rate which had been significantly high last week due to the issues concerning the AstraZeneca vaccine. However, since opening up to allow more people to book themselves an appointment, DNA rates had slightly decreased over a 24 hour period.</p> <p>The Committee resolved that:</p> <p>a) The verbal update on the Impact of COVID-19 on Patient Safety be noted.</p>	
<p>QSE 21/04/011</p>	<p>HIW – Activity Update and Primary Care Update</p> <p>The Health Inspectorate Wales (HIW)-Activity Update and Primary Care Update was received, and the Assistant Director of Patient Safety and Quality (ADPSQ) gave an update on the reviews/inspections undertaken by HIW since the last report to the Committee in February 2021.</p> <p>The Committee noted that:</p> <ul style="list-style-type: none"> • HIW had scaled down their inspection work during the pandemic and in October 2020, HIW informed CVUHB of a planned programme of quality checks from November 2020 to January 2021, • HIW undertook a focused inspection at the Splott Mass Vaccination Centre (MVC) in March 2021 for which HIW issued an 	

Saunders, Nathan
06/08/2021 14:36:47

	<p>immediate action, an improvement plan was devised and accepted by HIW,</p> <ul style="list-style-type: none"> • Two Tier 1 Quality checks have been undertaken: <ul style="list-style-type: none"> ○ <u>Tier 1 Quality Check for Mental Health Services for Older People (MHSOP) E12</u> – HIW undertook a remote quality check of ward East 12 UHL, which had been positive overall with one ongoing issue concerning environmental risk assessments which the patient safety team were reinstating, ○ <u>The Hazel Ward at Hafan y Coed</u> for which feedback has not yet been received, • a Tier 1 Quality check was planned to take place on the Teenage Cancer Trust on the 31 of March 2021, • on the 13 January 2021 HIW informed the health board that the second phase of the maternity review will be delayed by around six months due to the effects of the COVID-19 pandemic, • HIW have announced their intention to undertake a national review of Mental Health Crisis prevention in the Community, which will be completed by Autumn 2021. <p>The Committee resolved that:</p> <ol style="list-style-type: none"> a) The level of Health Inspectorate Wales (HIW) activity across a broad range of services be noted, b) The appropriate processes in place to address and monitor the recommendations were agreed, c) The HIW Primary Care Contractor report be noted. 	
<p>QSE 21/04/012</p>	<p>Themes and Trends in Never Events</p> <p>The Themes and Trends in the Never Events report was received and the ADPSQ gave an update of the Never Events reported by CBUHB.</p> <p>The Committee noted:</p> <ul style="list-style-type: none"> • that since April 2015 34 Never Events had been reported by CVUHB. The highest number per year was 7 and the lowest was 3, • 16 Never Events had been reported since April 2018, the most common type reported related to wrong site surgery with 8 incidents being reported, the second most common was retained object post-surgery with 4 incidents occurring, • half of the Never Events had occurred at UHW, all of the 8 wrong site surgery Never Events were reported by the Surgery Clinical Board and half of them had occurred in the Dental Hospital, • a number of themes and trends had been identified including staff factors, patient factors, distractions and non-adherence with established policies and processes, • there were also some patient factors involved with Never Events concerning dental treatment whereby the patients were anxious and in distress so communication between the patients and clinical staff had decreased. <p>The ADPSQ advised the Committee that development of a Human Factors Framework and Training Strategy would be an important element of the revised Quality, Safety Experience (QSE) Framework for the next 5</p>	

Saunders, Nathan
06/08/2021 14:36:47

	<p>years. Embedding a Human Factors and Systems based approach to safety would support the reduction of Serious incidents (SI's) and Never Events.</p> <p>The EMD responded that focusing on the human factors was a positive step and that it could be key to the reduction of Never Events. He added that wrong site tooth extraction had been removed from NHS England's list of Never Events and Welsh Government had not yet confirmed its position on whether it would be removed from the list for Wales.</p> <p>The Committee resolved that:</p> <p>a) The Themes and Trends in Never Events report be noted.</p>	
<p>QSE 21/04/013</p>	<p>Gosport Review - Verbal</p> <p>The verbal update on the Gosport Review was received and the ADPSQ advised the Committee that she and the END had reviewed the original report that had been presented to the Committee in 2019 informing the Committee of the Gosport report concerning deaths caused by excessive opiate usage at the Gosport War Memorial Hospital.</p> <p>The Committee noted that there was an outstanding action related to building a clinical audit of anticipatory prescribing into the national audit of end of life care, and that an update on all outstanding issues would be brought to the Committee meeting in June 2021.</p> <p>The Committee resolved that:</p> <p>a) The verbal update on the Gosport Review be noted.</p>	
<p>QSE 21/04/014</p>	<p>Draft Quality, Safety and Experience Framework (Presentation)</p> <p>The Draft Quality, Safety and Experience (QSE) Framework presentation was received, and the ADPSQ advised the Committee that the purpose of the presentation was to provide the Committee with an update on the plans for the QSE framework over the next 5 years.</p> <p>The Committee noted that for strategic context, key documents would be needed to shape the thinking to support the QSE framework which included:</p> <ul style="list-style-type: none"> • Welsh Government's "A Healthier Wales: Our Plan for Health & Social Care, June 2018, • NHS Patient Safety Strategy 2019 (2021), • WHO Global Patient Safety Action Plan 2021-2030. <p>Seven themes had been identified for CVUHB to base the QSE framework on:</p> <ol style="list-style-type: none"> 1. Safety Culture, 2. Leadership and Prioritisation, 3. Patient experience and involvement , 	

Saunders, Nathan
06/08/2021 14:36:47

	<p>4. Patient safety, learning and communication, 5. Staff engagement and involvement, 6. Data and insight, 7. Professionalism, 8. Quality governance.</p> <p>The ADPSQ added that the Welsh Ergonomics and Safer Patient Alliance (WESPA) would be established</p> <p>The Committee noted that a revised QSE Committee and Group infrastructure with revised monitoring, reporting and scrutiny would be implemented with demonstrable and consistent learning. An update would be provided to the next meeting.</p> <p>The IMU asked how and when it would be rolled out, and the ADPSQ responded that the framework would be presented to the Committee in June accompanied by an implementation plan setting out what was achievable each year. The Committee noted that some of the work was already underway and that cultural change would take time.</p> <p>The COCHC advised that it was pleasing to see the themes identified, however queried if patients had played a part in influencing those themes. The END responded that co-production was very important and would form how the framework would be taken forward.</p> <p>The Committee resolved that:</p> <p>a) The Draft Quality, Safety and Experience Framework presentation be noted.</p>	CE
QSE 21/04/015	<p>Board Assurance Framework (BAF) – Patient Safety</p> <p>The Board Assurance Framework (BAF) was received.</p> <p>The Director of Corporate Governance (DCG) advised the Committee that the BAF had been presented to the Board in full and this risk had been brought to the QSE Committee to provide assurance to the Board that the issues were being discussed at Committee level.</p> <p>The Committee noted the patient safety risk which had increased from 15 to 20 at the Board meeting in January 2021 due to an increased risk to patients associated with COVID-19, and that the risk remained at 20 and was managed through the Corporate Risk Register.</p> <p>The DCG advised that a conversation would be undertaken with the CC and the EMD to move the risk forward and focus the need to manage patient safety effectively as we move into the recovery phase post COVID-19. The BAF would be reported to the Board meeting in May 2021.</p> <p>The Committee resolved that:</p>	NF

Saunders, Nathan
06/08/2021 14:36:47

	<p>a) The risk in relation to Patient Safety be noted, to enable the Committee to provide further assurance to the Board when the Board Assurance Framework is reviewed in its entirety.</p>	
QSE 21/04/016	<p>Thromboprophylaxis Policy</p> <p>The Thromboprophylaxis Policy was received.</p> <p>The Committee resolved that:</p> <p>a) The policy for the prevention of venous thromboembolism (VTE) in adult and teenage inpatients be approved, b) The full publication of the venous thromboembolism (VTE) in adult and teenage inpatients in accordance with the UHB Publication Scheme be approved.</p>	
QSE 21/04/017	<p>Swab, Instrument and Sharps Count Policy and Procedure</p> <p>The Swab, Instrument and Sharps Count Policy and Procedure was received.</p> <p>The Committee resolved that:</p> <p>a) The Swab, Instrument and Sharps Count Policy and Procedure be approved, b) The full publication of the Swab, Instrument and Sharps Count Policy and Procedure in accordance with the UHB Publication Scheme be approved.</p>	
QSE 21/04/018	<p>Minutes from Clinical Board QSE Sub Committees: Exceptional Items to be raised by Assistant Director Patient Safety & Quality:</p> <p>The Minutes from the Clinical Board QSE Sub-Committees were received:</p> <p>a) Children & Women’s Clinical Board Minutes – 26.01.21 b) Specialist Clinical Board Minutes – 20.11.20 c) CD&T Clinical Board Minutes – 9.12.20 / 10.2.21 d) Surgery Clinical Board Minutes – 19.01.21 e) Mental Health Clinical Board Minutes f) Medicine Clinical Board Minutes – 22.10.20 g) PCIC Minutes</p> <p>The CC noted that there were no minutes from the Mental Health Clinical Board.</p> <p>The ADPSQ provided assurance that the Mental Health Clinical Board undertook weekly meetings advised that that minutes would be brought to future meetings.</p> <p>The Committee resolved that:</p>	

Saunders, Nathan
06/08/2021 14:36:47

	The Minutes from the Clinical Board QSE Sub-Committees be noted.	
QSE 21/02/019	<p>Corporate Risk Register</p> <p>The Corporate Risk Register was received and the DCG advised the Committee that there were 14 risks that related to patient safety within the Clinical Boards that had been given a risk assessment rating of 15 and above. The Committee noted that work was ongoing to manage the risks.</p> <p>The Committee resolved that:</p> <p>a) The Corporate Risk Register be noted.</p>	
QSE 21/02/020	<p>Induction Support for New Committee Members (Verbal)</p> <p>The verbal update on induction support for new Committee members was received and the DCG gave an update on training opportunities for members.</p> <p>The Committee resolved that:</p> <p>a) The verbal update on induction support for new Committee members be noted.</p>	
QSE 21/02/021	<p>Items to bring to the attention of the Board / Committee</p> <p>There were no items to be brought to the attention of the Board / Committees.</p>	
QSE 21/02/022	<p>Any Other Business</p> <p>No other business was noted</p>	
QSE 21/02/023	<p>Review of the Meeting</p> <p>The CC asked if attendees were satisfied with the business discussions and format of the meeting, and CC commented that she had allowed ample time for the presenters as this provided the Committee with good quality presentations.</p> <p>The Committee discussed the length of the meeting and it was suggested that 2 hours was not long enough to fully discuss the items on the full agenda, and it was agreed that the length of time required for future meetings would be discussed at the next agenda setting meeting.</p>	
QSE 21/02/024	<p>Date & Time of Next Meeting:</p> <p>The CC thanked everyone for their attendance and contribution to the meeting, and confirmed that the next meeting would be held on Tuesday 15 June 2021 at 9am Via MS Teams</p>	

Saunders, Nathan
06/08/2021 14:36:47

Action Log

Quality, Safety & Experience Committee

Update for meeting 15 June 2021
(Following the meeting held on 13 April 2021)

MINUTE REF	SUBJECT	AGREED ACTION	DATE BY	LEAD	STATUS/COMMENT
Actions Completed					
QSE 19/09/011	Gosport Review	An audit in relation to anticipatory prescribing will be carried out to provide assurance that necessary standards are being adhered with	13.04.21	Carol Evans	COMPLETE: April Agenda: Item 2.7
QSE 20/09/019	Exception Reports – IP&C Position	END mentioned that the Chair had asked for the exception report for the IP&C Position back into the Open Board sessions	13.04.21	Ruth Walker	COMPLETE: April Agenda: Item 2.3
Actions In Progress					
QSE 21/04/014	Quality, Safety and Experience Framework update	An update on Quality, Safety and Experience Framework	15.06.21	Carol Evans	On June Agenda
QSE 21/04/013	Gosport Review	Provide an update on all outstanding issues	15.06.21	Carol Evans	On June Agenda
QSE 21/04/008	Falls group update	The falls group to provide an update and give assurance around the work being done.	15.06.21	Fiona Jenkins	On June Agenda
QSE 21/04/008	Pressure Damage Report	A pressure damage report would be brought to the June 2021 meeting	15.06.21	Carol Evans	On June Agenda
QSE 21/02/005	Perfect Ward Report	To share a report on the commencement of the “perfect ward”.	28.09.21	Ruth Walker	On September Agenda:

MINUTE REF	SUBJECT	AGREED ACTION	DATE BY	LEAD	STATUS/COMMENT
Actions referred to Board / Committees					

Saunders Nathan
06/08/2021 14:36:47



Report Title:	CLINICAL DIAGNOSTICS AND THERAPEUTICS CLINICAL BOARD QUALITY, SAFETY AND PATIENT EXPERIENCE REPORT				
Meeting:	Quality, Safety and Experience Committee			Meeting Date:	14th June 2021
Status:	For Discussion		For Assurance	x	For Approval
Lead Executive:	Executive Nurse Director				
Report Author (Title):	Clinical Board Director, CD&T Clinical Board Director of Operations, CD&T Clinical Board Director for Quality, Safety and Patient Experience, CD&T				

SITUATION

The work outlined within this paper reflects the activity taking place to improve quality, safety and patient experience within the Clinical Diagnostics and Therapeutics Clinical Board leading to improved quality and care outcomes for patients.

REPORT

BACKGROUND

The Clinical Diagnostics and Therapeutics Clinical Board provides a wide range of diagnostic and therapeutic procedures on a local, regional and UK wide basis. Collectively these services underpin, and are core components of, almost every aspect of clinical activity undertaken within the UHB.

The Clinical Board consists of 7 directorates:

1. Laboratory Medicine
2. All Wales Therapeutics and Toxicology
3. Radiology, Medical Physics and Clinical Engineering
4. Medical Illustration
5. Outpatients/Patient administration
6. Therapies
7. Pharmacy and Medicines Management

The Clinical Board Quality, Safety and Patient Experience (QSPE) governance framework provides assurance that it is delivering its diverse portfolio of services in a safe and sustainable manner. The Clinical Board's QSPE priorities for 2020/21 include:

- A strong safety culture embedded at every level of the Clinical Board and Directorates
- Supporting the health and well-being of staff
- Regulatory compliance and accreditation

Saunders Nathan
06/08/2021 14:36:47

- Continued self-assessment against the Health and Care Standards with improvement planning against any indicator requiring action
- Regular review of risk management processes and action plans to provide assurance that mitigating actions and risk reduction strategies have been implemented.
- Serious and Adverse Incident Management and Concerns Management
- Embedding the Patient Experience Framework across the Clinical Board, ensuring patients are always treated with compassion, dignity and respect
- On-going support for continuing service improvement
- Ensuring safe working conditions and environments
- Timely access to services based on clinical need
- Response to, and recovery from, the Covid-19 pandemic

ASSESSMENT

The Quality, Safety and Patient Experience (QSPE) agenda is a key priority for the Clinical Board. The Clinical Board Director leads the QSPE agenda and operational responsibility is devolved to the Clinical Board Director of QSPE. QSPE meetings are held monthly and the Terms of Reference are reviewed annually. The QSPE meeting agenda has been shaped to align with the Health and Care Standards for Wales and this is replicated at Directorate QSPE meetings.

The Clinical Board was clear that the QSPE priority must be maintained despite the challenges of the last year, and the usual governance arrangements continued along with a heightened communications channel through our virtual 'Team Briefings' which were flexed up and down in response to the pandemic waves.

In March 2020 we faced into the challenges of the pandemic and our work over the whole year has demonstrated that we can respond quickly and positively. We have had to adapt in many ways to a new way of working and in this period of reflection we are now considering the benefits of the change and how we can move into recovery retaining some of these changes as a better way of working rather than simply returning to 'normal'.

Laboratory Medicine

2020 was a difficult year but also provided rewarding projects as a consequence of the pandemic. The Haematology and Transfusion and Biochemistry laboratories were part of the services in the Dragon's Heart Hospital, temporarily housed in the Principality Stadium in Cardiff city centre. A UKAS standard laboratory was installed within three weeks of the first meeting. This included a blood refrigerator to store units of blood for transfusion. Both the laboratory and the refrigerator were used to treat patients at the facility. In addition, a Mortuary facility was provided with the Dragons Heart Hospital for the care of the deceased. The Dragon's Heart Hospital was constructed at pace and in a safe manner – this was a matter of pride to staff and was a good morale boost.

The Haematology laboratory adapted to provide local testing facilities in the Haematology Day Unit and this will continue as a permanent service once the change control and contract are complete.

A new Haematology analyser was placed in Velindre Hospital and from installation to UKAS ISO 15189:2012 recommendation for accreditation was completed within one month.

There was a need to change the pace on some assay evaluations to ensure they could be introduced quickly- this is particularly relevant to COVID related assay PCT and Antibody tests. There was a very positive change in a working relationship with PHW as we supported each other in the introduction of staff antibody testing.

In support of the demand for an increase of Point of Care Testing (POCT) equipment in the response to Covid, there was a huge impact on Point of Care Testing Services for the UHB. This mainly focused on the management of Blood Gas Analysers, POCT Covid Antibody Testing Evaluations and Implementation and POCT Covid Antigen Testing/Respiratory Tests across the UHB.

Pharmacy

The Pharmacy team have been very involved in the implementation and safe delivery of the vaccination programme whilst continuing to deliver their normal day-to-day work.

Medicines Information have played an important role during the pandemic. The team started by providing (mainly citizens (CAV)) advice about the safety of the COVID vaccines for their individual circumstances. The numbers of enquiries were challenging, we have received >1600 since the beginning of January, coupled with frequently changing advice only added to the challenge to which they have risen. Their work was recognised by Welsh Government and in collaboration with the clinical pharmacologists at AWTTC were asked to provide an All Wales solution to the increasing demand across the country for this advice especially in relation to allergies. We were commissioned and had about 3-4 weeks to set up a service and develop a digital referral process. We launched that on the 26th April 2021 and so far, via that route have received over 100 enquiries. The challenges are complex, involving numerous stakeholders and teams but we are ensuring a safe vaccination programme for those where there are complicated histories and without which vaccination may be delayed or withheld.

Therapies

Within Therapies whilst some services were temporarily suspended this was on a risk-based approach and urgent care continued. There was a shift from face-to-face clinics to running virtual interventions. Podiatry were an early adopter of Attend Anywhere and the benefits arising from a change in delivery model have positively impacted on waiting times and patient experience. Not all patients have engaged well with virtual appointments and face-to-face appointments have been available where needed. Risk assessments have been recently completed for the planned return of group therapy sessions.

Dietetics developed a nutritional pathway and nutrition support standard operating procedures to mitigate the detrimental effects of Covid-19 on patients' nutritional status. These aimed to ensure early instigation of nutritional therapy at hospital admission and provide a robust protocol for first line nutritional therapy should patient numbers overwhelm the dietetic resource. Routine nutritional risk screening was promoted and supported by the dieticians providing direct clinical input. A service

review lead to the suspension of some services and deployment of resources into acute and field hospital environments. We moved from a five-day service delivery model to a full seven-day model. Where ward staffing came under particular pressure, dieticians, support workers and other therapists provided ad hoc support particularly at meal times

There are some issues arising from changes in service delivery, and use of accommodation. Physiotherapy and Speech and Language Therapy have not had all of their working locations returned to them, which has made it difficult and, in some instances, impossible to resume services for patients. Innovative approaches to delivery are being pursued.

The number of patients waiting greater than 14 weeks for a therapy appointment was 1713 at its peak in June 2020, but is currently 229 (April 2021). Work continues to reduce this number further through the recovery planning programme.

It is clear that a sustained programme of rehabilitation will be key to many people regaining full health following coronavirus. The therapies teams contributed to, and lead on, the Covid-19 Rehabilitation Model and the development of the 'Keeping Me Well' website which provides support and information not only for those patients with 'long Covid' but for a wide range of conditions for which patients have rehabilitation needs.

A number of therapy staff have supported the nursing teams during the response to Covid-19 demand. This has meant staff coming out of their area of expertise and working on the wards as HCSW, which although some have found this to be rewarding others have found this particularly difficult and stressful.

Radiology, Medical Physics and Clinical Engineering

In response to the demands of the pandemic routine imaging was suspended. Outpatient requests were reviewed and only imaging of priority/high-risk patients were carried out.

The pause allowed the opportunity to review imaging pathways and reduce the number of inappropriate imaging requests.

Significant work has been undertaken to reduce the backlog created by the suspension of services. The number of patients waiting more than 8 weeks was 6959 patients at its peak in May 2020 (in March 2020 we were on track for zero) and as at April 2021 has reduced to 1730. The Clinical Board has received recovery plan funding to support increased scanning and reporting to further address the backlog.

Homeworking stations were provided to Radiologists to enable off site reporting which has contributed to the maintenance of turnaround times.

Clinical Engineering worked tirelessly in the Dragon's Heart and elsewhere setting up beds and other equipment and have been invaluable to the UHB with the work they undertake.

Out-patients and Health Records

The volume of appointment cancellations and management of these was an enormous task for Health Records, something which the department had never dealt with on volume and size. There have been a very small number of errors regarding patient appointments considering the size of the task.

The Bereavements teams on both sites pulled together amazingly well, with B4 staff offering their support. There were some very quick changes to the process which were implemented efficiently. This included a change in process from Pathology to improve the process and turnaround time.

CD&T would like to recognise the vital work, advice and steer provided from colleagues in Digital & Health Intelligence through the pandemic. On numerous occasions this provided the help we needed to help others and often rapidly and innovatively

On this note, Health Records collaborated with colleagues in PMS Development to enable the system to register and book virtual consultations; a vital response to help mitigate the restrictions enforced by the pandemic. They have enabled text messaging to support this and likewise stood up virtual receptioning, with continued service collaboration to enhance and increase this new platform

Whilst supporting new technology to enable outpatient appointments to take place, the Directorate has also had to respond to wholesale changes in the provision of face to face appointments. To help aid the effective use of outpatient rooms, the Outpatient nursing team has developed a more robust room request mechanism. It has also introduced the 6:4:2 session utilisation process used in Theatres, with services attending weekly meetings to ensure rooms can be re-utilised timely and appropriately. The model, used currently in selected UHW suites, is being refined prior to adoption in other outpatient areas, with the learning to date forming the basis of a specification for a fully functioning, UHB wide, clinical room booking and allocation system

The nursing resource in the Clinical Board was used very flexibly. A number of nurses/HCSW remained in their directorates to support services and the pandemic and there were a number of hot clinics running in UHW and UHL.

A Staff nurse was deployed to Occupational Health (OH) as a telephone handler for Covid related queries for several months. Admin support was also given to OH for 6 months by a HCSW. A HCSW was deployed twice to ward West 2 within the first wave of the pandemic for 3 months and then for a further 5 months to East 6 / Glan Ely Ward during the second wave. A Qualified nurse was deployed to Medicine for 4 months initially to East 6 then helped to assist with the setting up and running of the new Glan Ely ward at St. Davids.

A Qualified nurse helped to train in fit testing for UHB staff. 'Flu champions helped to assist with the initial commencing of Covid vaccination centres (e.g. Physio UHW) and this valuable support is ongoing.

Many HCSW helped the volunteering service / Michelle Fowler in organising a vast number of donations and delivering these donations to all areas of both UHW /UHL Hospitals.

The benefits to the OPD as a result of the Covid pandemic have been identified as:

- A screening tool which has IP&C approval, a designated safe patient number process for F2F Consultation e.g. 1 room, 1 Clinician, 1 patient every 30 mins per session of a 4 hour session.
- As a result, an AM and PM session that is now 4 hours long. Change of hours for qualified staff which has received positive feedback.
- A new way of delivering Consultations via Virtual means e.g. Telephone /Video (a better PMS system that recognises these patients via a 01, 02 and 03 system)
- Priority given for new Windows 10 computers to assist with these new delivery methods (Access to Virtual Village for a time within the second Pandemic)
- The use of pagers at both sites to help assist with social distancing
- Lateral flow tests for all staff, to minimise risk and aid reassurance
- Safe working practice designated numbers of staff within areas e.g. staff room
- Training opportunities for staff, enforced by the need to support new services such as MTC and T&O therefore an increased knowledge and theory base for all staff.

Reflections from staff

Staff were asked to reflect on their experiences during the Covid-19 pandemic. Positives identified from their experiences included:

- The pandemic brought people together within and across services, and probably saw us working better and more effectively than we have done before.
- The staff were very good at adapting to the situation, and this has led us to new ways of working which has benefits for all.
- Staff acceptance to changed working hours during the first lockdown was good and helped to allay fears
- Staff having to work in different areas due to drop in workload in first lockdown – again staff were helpful and worked as a team
- A need to change how we communicate with both other staff and patients – the move to virtual meetings and consultation for our clinical teams
- We established regular staff newsletter in partnership with staff side to try to keep staff informed of changes around COVID and also departmental news
- We had compliments from Clinical colleagues on the very clear communications in the department, they felt we were organised and staff knew what to do – they felt this was a stark difference to the clinician's experience on the wards
- The Covid laptops helped some staff to be able to carry out some work from home, although they became difficult to obtain, working from home was particularly helpful when staff needed to self-isolate and for some staff has allowed new ways of slightly more flexible working to evolve.

Sent by: Nathan
06/06/2021 14:36:47

There were some difficulties encountered and these included:

- In the early part of the pandemic many people were wanting and willing to do something, but there was not enough co-ordination of this to ensure that the effort was used well.
- The advice seemed to be ever-changing and was sometimes confusing and concerning to staff as it was often contradictory and not focused on areas which were not patient facing. Sometimes it was hard to understand how we applied them to a laboratory environment. The examples given usually involved a ward or nurse situation, and we had to think how to apply them to our working environment. It would be nice sometimes, that the hospital gives advice for a pathology setting. An example of this was PPE, we really had to think what masks we should have handling samples, lab coat infection risk. Information was largely related to ward settings and nursing staff.
- We did communication fairly well in CD&T, but local variations in the way PPE and IP&C rules were being applied on some wards created a lot of tension with non-nursing staff group often feeling that they were not being treated as well.
- Homeworking became normal for some staff, but that has significant implications for wellbeing and work/life balance which we have tried to address locally. Senior staff working from home where staff on lower bands were required to be in work created a very bad impression, particularly at the time when work felt like a dangerous place to be, so some managers have not worked from home at all, and have found ways for lower band staff to work from home where possible.
- We could not get segregation screens for staff who worked in high footfall areas and this caused a lot of anxiety – there seemed to be no clear method to get these and they never arrived despite Estates measuring up

Overall, the staff working in CD&T have really stepped up to the challenge from Covid-19, embracing new ways of working, and seeing the opportunities to develop and improve services. As we balance the demands of any future pandemic waves, the recovery of backlog work and 'business as usual', we have no doubt that staff will continue to maintain and drive the key quality improvements required to ensure optimum patient experience and service delivery.

Risk Management

The Clinical Board risk register is a live document which is maintained and updated monthly. The highest risk issues currently on the risk register are summarised for the Corporate Risk Register as:

Risk	Risk Score	Gaps in control/assurance	Mitigation in place and actions required
<p>Point of care Testing (POCT)</p> <p>Developments in technology and improved manufacturing processes are producing POCT devices which are more robust and less prone to error than previous generations. However, the successful</p>	20	<p>Lack of Clinical Scientist lead</p> <p>Lack of Clinical lead</p> <p>Lack of POCT Governance committee</p>	<p>POCT manager in place</p> <p>Central register of POCT devices held</p> <p>Standard operating procedures (SOPs) which must include the manufacturer's instructions for</p>

<p>implementation of POCT is still dependent on the effective organisation and management of staff.</p> <p>MHRA guidance (Management and use of IVD point of care test devices, January 2021) identifies key issues for POCT as</p> <ul style="list-style-type: none"> - A clinical need must be identified before the implementation of a POCT service - Consider involving the local hospital laboratory in the management of POCT services. - Lines of accountability for POCT management must be clear. - Managers of POCT services must be aware of their responsibilities under clinical governance. - Arrangements for training, management, quality assurance (QA) and quality control (QC), health and safety policy and the use of standard operating procedures (SOPs) must be made and reviewed at frequent specified intervals. - Assessment of the service by an external accreditation body is recommended. - Evidence for the performance of the test. - Adverse incidents must be reported to the MHRA. - Clear, comprehensive record keeping and documentation is vital. - Everyone involved in POCT should know what to do in the event of any abnormal result or unsatisfactory QC result. <p>Failure to adhere to the guidance above could lead to error and incorrect testing results leading to patient harm</p>	<p>Failure of some services to comply with POCT policy</p> <p>Lack of maintenance contract on some units</p> <p>Equipment management and control of purchase and deployment</p> <p>Increasing demand for POCT devices (e.g.g. COVID) which meant devices were deployed at pace</p> <p>Reduced level of staffing resource exacerbated by vacancies in the Team</p> <p>Office accommodation for POCT insufficient and located away from hospital sites</p> <p>Lack of connectivity of devices to POCT database and therefore to Clinical Portal</p> <p>Lack of performance monitoring for non-networked POCT</p> <p>Absence of some SOPs</p>	<p>use, are developed. This include instances where staff should be particularly aware of situations when the device should not be used</p> <p>Record keeping is essential and must include patient results, test strip lot number and operator identity</p> <p>Maintaining devices according to the manufacturer's guidance is essential, to ensure that they continue to perform accurately</p> <p>Training and competency assessment - staff who use POCT devices must be trained. Only staff whose training and competence has been established and recorded are permitted to carry out POCT</p> <p>Internal quality control and management procedures provides assurance that the system is working correctly. External Quality Assurance process undertaken on devices</p> <p>POCT sitting under the umbrella of Laboratory Medicine and CD&T Clinical Board to provide support and oversight</p> <p>Planned actions:</p> <ol style="list-style-type: none"> 1.Clinical Lead and Clinical Scientist roles to be put in place 2.Re-establishment of POCT committee 3.Review implementation of POCT procedure within Clinical Boards 4.Review of current POCT stock and seek assurance on training, competence assessment, SOPs, maintenance, audit
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Saunders Nathan
06/08/2021 14:36:47

<p>Backlog of diagnostics and therapies (as a consequence of Covid19)</p> <p>Due to a reduction in capacity from</p> <ul style="list-style-type: none"> - reprioritisation of activity - social distancing requirements - decontamination time - staffing constraints (shielding, sickness) - patients not wishing to attend hospital <p>Resulting in</p> <ul style="list-style-type: none"> - risk of increased morbidity and mortality to patients due to delayed pathways - missed/delayed cancer or critical illness diagnosis due to incorrect prioritisation - increase in concerns/complaints - adverse public reputation 	16	<p>Lack of demand management may mean that demand may outstrip capacity</p> <p>Skills and Professional mix opportunities could be used to manage backlogs differently</p>	<p>Priority matrices</p> <p>Scheduling based on priority rather than time waited</p> <p>Virtual consultation</p> <p>Communication with service users</p> <p>Health Pathways redesign (e.g. MSK, DXA)</p> <p>Waiting List Monitoring/ Business Intelligence</p> <p>Directorate Performance Reviews</p> <p>Cancer Performance monitored through Cancer Operational Group</p> <p>Actions: Explore opportunities across professions</p> <p>Fully embed clinical prioritisation model of performance</p>
<p>IT/Digital</p> <p>Impact from aging hardware and software, slow delivery of key IT systems, on-going stability issues (WCCIS, WLIMS, TrakCare, Telepath)</p> <ul style="list-style-type: none"> - No electronic requesting in Radiology (inability to address patient identification issues) - Lack of Radiology results notification and acknowledgement system so that unable to meet requirements of NPSA16 and unable to flag significant and expected findings - Results and significant findings notification in Cellular Pathology - Uptake of laboratory medicine electronic test requesting (leads to mislabelling of 	16		<p>Development of safety net processes and 'workarounds' to mitigate risks, e.g. Radiology red flag process (**cancer), results notification from WCP in Pathology</p> <p>ETR programme (see update within the report)</p> <p>Business Continuity Plans</p> <p>Continue to engage with Digital & Health Intelligence Communication to end users</p> <p>SOP/Governance arrangements</p> <p>Validation and change control</p> <p>Enhanced monitoring arrangements</p>

<p>samples, poor test requesting, slower processes in the lab)</p> <ul style="list-style-type: none"> - Inability of PARIS to interface with the Welsh Clinical Portal - Velindre histology results, processed by CAV UHB's Telepath system, are not being presented in a WCP patient record when the NHS number is not sent with a result. - Lack of access to the medical record including physical and digital storage - Multiple work streams with digital agenda, risk that not aligned or inconsistently implemented 			<p>Continue to engage with the National Programme (Digital Health and Care Wales) to work towards standardisation and interoperability in order to implement more prudent and effective IT systems, e.g. LINC (replacement LIMS), RISP (replacement Radiology system)</p>
<p>Regulatory Compliance and Accreditation</p> <p>Non-compliance with regulatory and accreditation requirements leading to:</p> <ul style="list-style-type: none"> - impact on service delivery and patient safety (potential for cease and desist of service) - reputational risk - financial risk e.g. loss of income, fine for breach of statutory duty - inability to maintain suitable systems, practices and facilities to ensure on-going compliance - increasing requirements from regulators which cannot be met - mismatch in capacity/demand on QMS which leads to failure to deliver activities - patient/staff harm as a result of poor safety governance, e.g. ultrasound, MR safety, decontamination, POCT - Health and Safety at Work incidents - patient concerns, claims and redress - failure to comply with GDPR and Information Governance 	<p>15</p>	<p>Limited or no capacity to undertake full range of QMS activities including self-assessment/audit, change control, incident management</p> <p>Lack of a single QMS database to enable oversight of compliance (WG procured QMS i-Passport in evaluation phase)</p> <p>No dedicated quality resource in some Directorates</p> <p>Absence of some regulatory roles (e.g. MR Safety Expert, ultrasound governance)</p>	<p>Governance through QSE and Regulatory Compliance Group with Clinical Board oversight of regulated and accredited services.</p> <p>Compliance dashboard developed to monitor KPI/metrics</p> <p>Standardised approach to QMS across Directorates</p> <p>Locally replicated QSE structures with escalation triggers</p> <p>Incident management, including Root Cause Analysis</p> <p>Concerns management</p> <p>Risk register</p> <p>Service Improvement initiatives</p> <p>Clinical Board Data Integrity Policy and Assessment (MHRA regulatory requirement)</p> <p>Q Pulse and local audit</p> <p>Monitoring of non-conformance/action plans through QSE and RCG</p> <p>Management policies and procedures</p>

Saunders Nathan
06/08/2021 14:36:47

The Clinical Board continues to work with services to review risks held on the register to ensure continued appropriate action and mitigation against all held risks.

In our previous report to this committee, the Clinical Board reported a key risk relating to the reporting turnaround time for diagnostic tests in both Radiology and Pathology. It is pleasing to note that this risk has significantly reduced as a consequence of a number of workstreams improving the efficiency and timeliness of diagnostic reporting.

Internal Safety Notices

A number of internal safety notices have been developed with the Patient Safety Team to alert staff within the UHB to urgent safety issues.

These have included:

- T34 syringe drivers and the recommended use of Duracell batteries (Clinical Engineering)
- Risk of incorrect results with SST sample tubes for patients on anticoagulants (Biochemistry)
- Copan swab contamination risk (POCT)
- Medical Gas Valve regulators (Pharmacy and Clinical Engineering)
- POCT pregnancy testing (POCT)
- Ferrous objects and MRI safety (Radiology)

Health Promotion, Protection and Improvement

The uptake of the Influenza vaccination is a key priority for the Clinical Board. The uptake rate for frontline staff for the season 20/21 was 72 %. This was only slightly lower than the previous year which was 72.1%

Considerable work has been undertaken in developing the role of peer vaccinators and an evaluation of the outcome of this work was undertaken at the end of the vaccination season.

The CD&T Clinical Board is reporting the highest uptake of the Covid-19 vaccination (as at 18th March 2021) at 84%, which exceeds the uptake target of 80%. Healthcare Scientists staff group are reporting the highest uptake at 86%. However, it is recognised that work is needed to improve uptake amongst medical staff.

The Mental Health and Wellbeing of staff continues to be a priority for the Clinical Board. We have been working on two projects with 'AftaThought' who deliver training. Both are video montages, the first concerns Mental Health Awareness for staff and managers, the second is based on the values and behaviours of the organisation and the importance of inclusion. Mental Health First Aid training is also being scheduled this year.

Saunders Nathan
06/08/2021 14:36:47

Regulatory Compliance and Accreditation

The Clinical Board services are well regulated and subject to regular inspection against legislation, regulation and standards. In 2020/21 the following inspections took place:

12th February 2020

Natural Resources Wales undertook a regulatory visit against compliance with the Environmental Permitting Regulations (radioactive waste management). The inspector noted we had demonstrated very good compliance overall with the conditions of our permit.

5th March 2020

The MHRA inspected the Blood Transfusion Laboratory (BTL) for compliance against the Blood and Safety Quality Regulations. It is recognised that significant effort has been undertaken by the team in BTL to improve the quality management system within the service. As a result of this previous concern levels were removed and the laboratory was de-escalated from the MHRA Inspection Action Group on 1st July 2020.

17th November 2020

The Office for Nuclear Regulation carried out an inspection in Radiopharmacy for compliance against the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG), the Ionising Radiations Regulations 2017 (IRR17) and the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPP19). Following a successful inspection, the service was given a green rating.

11th December 2020

Re-accreditation visits against ISO15189 in Biochemistry resulted in successfully maintained accreditation. Accreditation ensures safe delivery of services, technical competence, timely, accurate and reliable results and good quality management.

January 2021

The Bone Marrow Transplantation Unit (which includes our Stem Cell Processing Laboratory) had its statutory biennial HTA visit (planned for January/February) deferred, due to Covid, after a risk-based assessment considered our service low risk so that an inspection was not considered necessary.

1st March 2021

Accreditation against ISO9001:2015 in Clinical Engineering maintained. There were two non-conformities

- No clear professional leadership in place (resolved)
- Lack of space to operate efficiently and safely (on-going need to review accommodation for this service)

2nd March 2021

Re-accreditation visits against ISO15189 in Cellular Pathology resulted in successfully maintained accreditation.

22nd April 2021

Re-accreditation visits against ISO15189 in Haematology resulted in successfully maintained accreditation. The UKAS Quality Manager and the peer reviewers were very complimentary and reflects again the efforts made by the team in this service.

The governance arrangement for regulation and accreditation is through the Clinical Board Regulatory Compliance Group which uses a combination of metrics to drive the compliance dashboard, ensuring appropriate senior management oversight, escalation of issues, and monitoring of performance.

The Clinical Board are currently managing the on-going response to the MHRA regarding outstanding issues in St Mary's Pharmaceutical Unit, and the Radiopharmacy through its enhanced governance and monitoring arrangements.

Patient Safety Incidents

In the period 1/4/20 to 31/3/21 there were two Serious Incidents reported in the Clinical Board. These were:

Radiology	Failure of imaging system during pacing wire removal.
Pharmacy	Dispensing error, patient was prescribed Phenobarbitol 15mg/5ml elixir. The dose being 10ml (30mg) twice a day. The correct label was produced but Phenobarbital 50mg/5ml was incorrectly dispensed dispensed

Learning from serious and adverse incidents is shared at the Clinical Board QSPE sub-committee and recorded in the risk register where appropriate. There are adequately trained staff to undertake robust investigations including RCA. Significant effort has been made to ensure closure of old incidents and submission of closure forms within WG timescales.

Saunders, Nathan
06/08/2021 14:36:47

Between 1/4/20 and 31/3/2021 there were nine IR(ME)R reportable incidents (reported to HIW).

	Total incidents	Of which were reportable incidents
Referrer error: wrong patient (wrong addressograph)	4	3
Referrer error: illegibility of information	1	
Referrer error: wrong examination	2	1
Operator error: failure to ID patient	1	1
Operator error: repeated examination which was not indicated	8	2
Equipment failure	3	2

This is an improvement on the previous year (11). A theme and trends review was undertaken. In particular, this included a theme of repeat examinations that were not indicated (i.e. the patient had already had the examination) and actions have been implemented to reduce the number of these incidents.

Incident Reporting

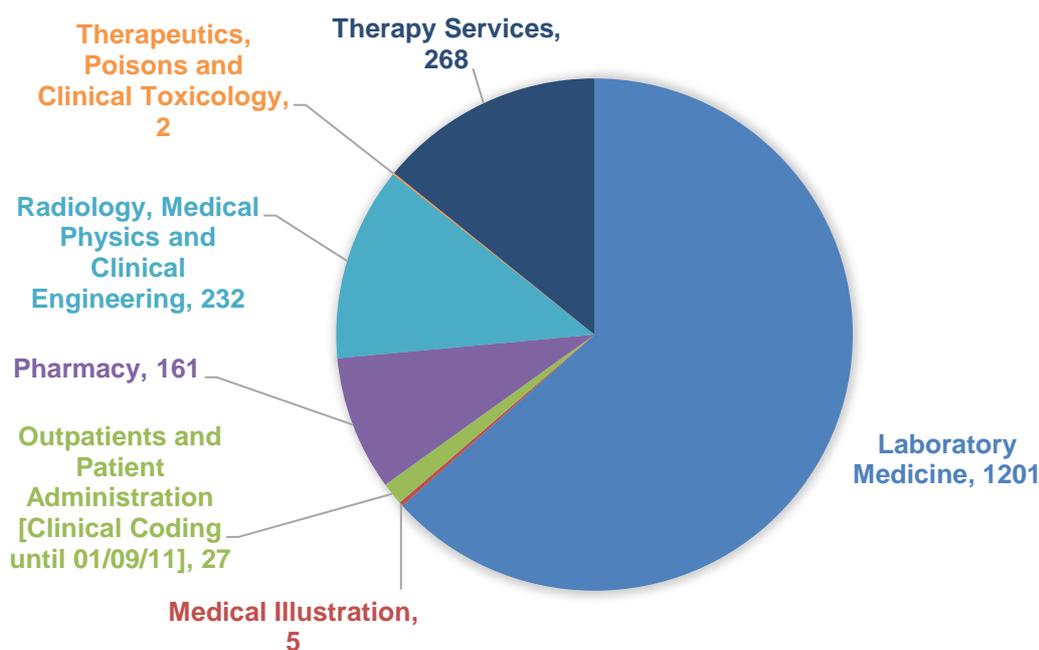
For the period 1/4/20 to 31/3/21, 1896 incidents (previous year 2725) were reported by Clinical Board staff using e-Datix.

E-Datix queue are regularly reviewed and managed with emphasis placed on managers and DIF2 users to action and close incidents in a timely manner.

There has been significant improvement in the number of incidents held in 'queues' and this work will further continue into 2021 in view of the move to the new Datix system.

Saunders, Nathan
06/08/2021 14:36:47

REPORTING DIRECTORATE



The top 10 reported incidents were (previous year in brackets):

		Reported in this year	Number reported last year
1	Diagnostic processes/procedures	822	1139
2	Blood/plasma	203	331
3	Patient medication	219	218
4	Documentation	160	207
5	Patient accidents/falls	135	176
6	Staff accidents	86	111
7	Staff exposure to environmental hazards	67	83
8	Behaviour towards staff (including violence and aggression)	57	76
9	Medical Devices, equipment and supplies	35	
10	Communication	28	39

Health and safety issues

Clinical Board Health and Safety meetings are held monthly. There is a Clinical Board Health and Safety priority work plan in place which is used as a framework to drive improvement. The meeting also receives feedback from workplace inspections.

There have been 3 RIDDOR reportable incidents in the period 1/4/20 to 31/3/21:

- Trip on cables (1)
- Manual handling (2)

No common themes were noted. All cases have been managed with the support of the Health and Safety Unit.

The current training compliance for the Clinical Board is:

Training Compliance by Directorate

Org L5	Moving and Handling - E Learning	Moving and Handling - Objects Only	Moving and Handling - Patients	Violence and Aggression - A - E Learning	Violence and Aggression - B - E Learning	V&A - C - Breakaway / Care control	Violence and Aggression - Module D - specialist techniques	Fire Safety - E Learning
001 Clinical Diagnostics and Therapeutics	100.00%			100.00%	66.67%	0.00%		85.71%
001 Laboratory Medicine	88.43%	27.74%		89.74%	67.71%	6.25%		57.86%
001 Medical Illustration Directorate	100.00%	100.00%		96.30%	83.33%	33.33%		85.19%
001 Outpatients & Patient Admin Services	93.03%		74.07%	93.03%	75.62%	17.50%		54.73%
001 Pharmacy & Medicines Management	86.17%	7.22%	0.00%	87.46%	49.41%	0.81%		38.59%
001 Radiology, Medical Physics & Clinical	93.02%	11.90%	59.51%	88.91%	75.87%	12.34%		69.20%
001 Therapeutics & Poisons	91.07%	0.00%		89.29%	50.00%	0.00%		46.43%
001 Therapies	91.86%	35.80%	37.01%	92.37%	65.17%	32.24%		59.32%

Concerns and compliments

The management of concerns continues to be a key priority for QSPE and significant efforts have been made towards timely response to patient concerns.

The number of concerns being raised in the period 1/4/20 to 31/3/21 was 136 (compared to 66 in the previous year last year). The main theme highlighted from the concerns received relates to difficulties in arranging and cancelling appointments, and reflects the difficulties related to Covid-19 and non-urgent service delivery.

Tracking of concerns is undertaken and every effort is made to ensure compliance with timescales for formal responses. Delays in response times were due to complexity of some of the concerns and multi-disciplinary and multi-clinical board input requirements.

In contrast, 74 compliments were received by the Clinical Board in the same period and it is pleasing to note the positive reports received from patients.

Service Developments

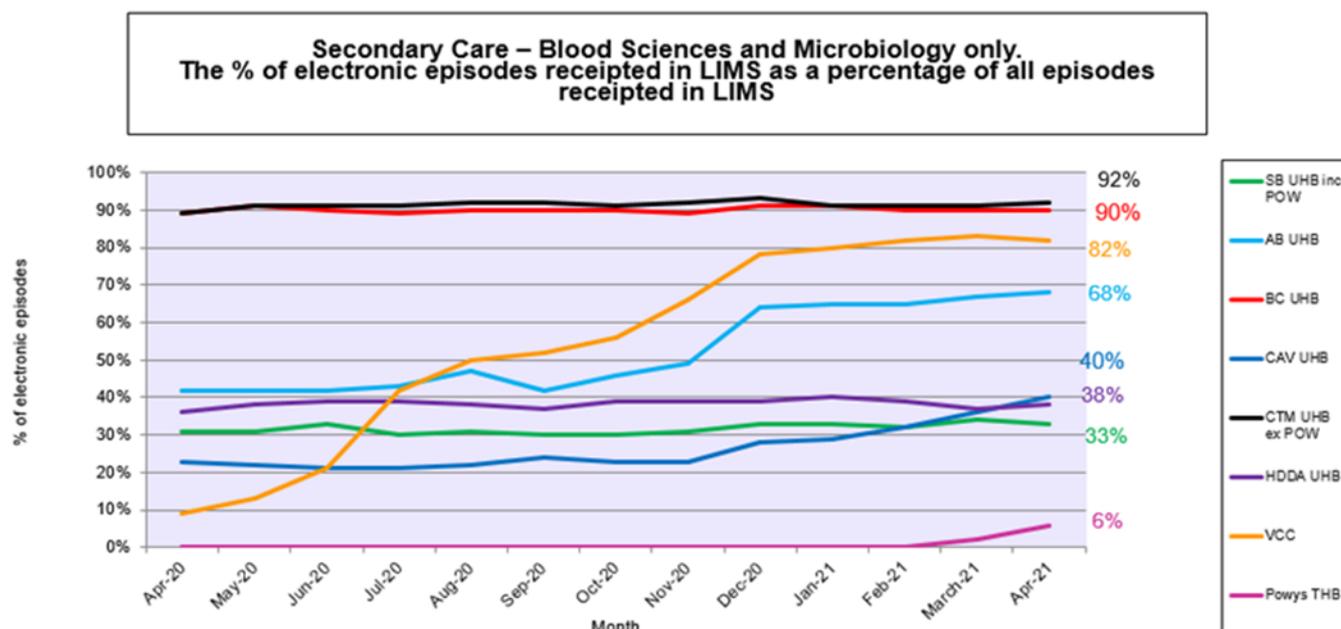
Last year, the Clinical Board recognised in this report the need to progress Electronic Test Requesting (ETR) for Laboratory Medicine.

The Benefits of ETR include

1. Laboratory has requestor details to communicate urgent results
2. Legible requests - removing laboratory transcription errors resulting in missing or wrong tests
3. Improved turnaround time
4. Correct specimen types and the number of specimens required are specified by labels printed
5. In progress message updates
6. View previous results before you order the next test
7. Reduces duplicate / unnecessary testing
8. Demand management (test rejection due to repeat period) in hands of requestor
9. Bespoke request sets and Bulk Requesting available

The chart below shows how prior to standing up an ETR Programme (Nov 2020), the UHB was at around 25% uptake in secondary care, whereas in April it had reached 40% (a relative 60% increase).

WCP Monthly Usage Figures – Tests Requested



Since then, the four-week Emergency Unit implementation period has been completed, where ETR usage in this area has moved from 0% to 100%. Paper has been removed from the unit as ETR is now felt to be embedded. This and a similar approach in MEAU has now pushed the UHB to over 50% ETR usage i.e. the majority of secondary care tests are now ETR.

Given the success recently, all built on good engagement and support, the intention is to move to ETR only from 1st August; this will coincide with the period of junior team rotations. In readiness

there is an ongoing training provision and hardware assessments with view to undertaking upgrades / replacements as necessary

Request forms have been changed to include a paper failsafe in the rare event that Welsh Clinical Portal cannot be used.

The learning from the implementation of ETR will now be used to deliver the implementation of Laboratory Medicine electronic test requesting into Primary Care (GPTR).

The Clinical Board continues to drive innovation and service development. We were pleased to appoint a new R&D lead for the Clinical Board, and have successfully recruited to R&D posts. This will enable the Clinical Board to lead on research activities. It is the aspiration of our R&D lead that we will work more collaboratively as a Clinical Board to undertake research, to bring the strengths of each directorate together to grow in R&D, and to strengthen an academia culture within the Board.

As part of the development of the Clinical Board IMTP, a number of other service development schemes are underway including Community Diagnostic Centres, the Cancer Diagnostics Programme, SLT support to Transgender service, and Patient Participation Booking (as part of the UHB's digital patient facing communications programme). The Clinical Board will provide further updates on this work in future assurance reports

RECOMMENDATION

The Quality Safety and Experience Committee is asked to:

- **NOTE** the progress made by the Clinical Board to date and its planned actions
- **APPROVE** the approach taken by the Clinical Board

Shaping our Future Wellbeing Strategic Objectives

This report should relate to at least one of the UHB's objectives, so please tick the box of the relevant objective(s) for this report

1. Reduce health inequalities	<input checked="" type="checkbox"/>	6. Have a planned care system where demand and capacity are in balance	<input checked="" type="checkbox"/>
2. Deliver outcomes that matter to people	<input checked="" type="checkbox"/>	7. Be a great place to work and learn	<input checked="" type="checkbox"/>
3. All take responsibility for improving our health and wellbeing	<input checked="" type="checkbox"/>	8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	<input checked="" type="checkbox"/>
4. Offer services that deliver the population health our citizens are entitled to expect	<input checked="" type="checkbox"/>	9. Reduce harm, waste and variation sustainably making best use of the resources available to us	<input checked="" type="checkbox"/>

5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time	x	10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	x						
Five Ways of Working (Sustainable Development Principles) considered <i>Please tick as relevant, click here for more information</i>									
Prevention	x	Long term	x	Integration	x	Collaboration	x	Involvement	x
Equality and Health Impact Assessment Completed:	Not Applicable If “yes” please provide copy of the assessment. This will be linked to the report when published.								



Saunders, Nathan
06/08/2021 14:36:47



Report Title:	Quality Indicators – Progress Report					
Meeting:	Quality, Safety and Experience (QSE)				Meeting Date:	15/06/2021
Status:	For Discussion		For Assurance	√	For Approval	For Information
Lead Executive:	Executive Nurse Director Executive Medical Director					
Report Author (Title):	Assistant Director of Patient Safety and Quality					

Background and current situation:

In June 2020, the QSE Committee agreed a range of quality indicators that would be routinely monitored at each meeting. To enable this, work has been undertaken with the Information Department to develop a QSE dashboard. This is the first report and at the time of writing the dashboard is still under development.

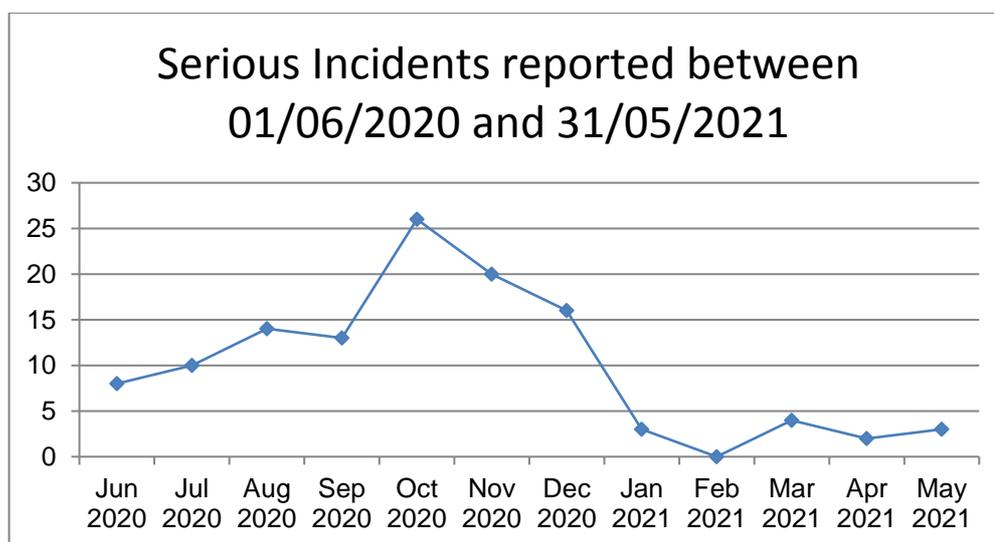
This paper provides an overview of current performance against those quality indicators that are available within the dashboard.

Executive Director Opinion/Key Issues to bring to the attention of the Board/Committee:

The QSE dashboard remains under development.
Actions to address any deteriorating positions are outlined within the paper.

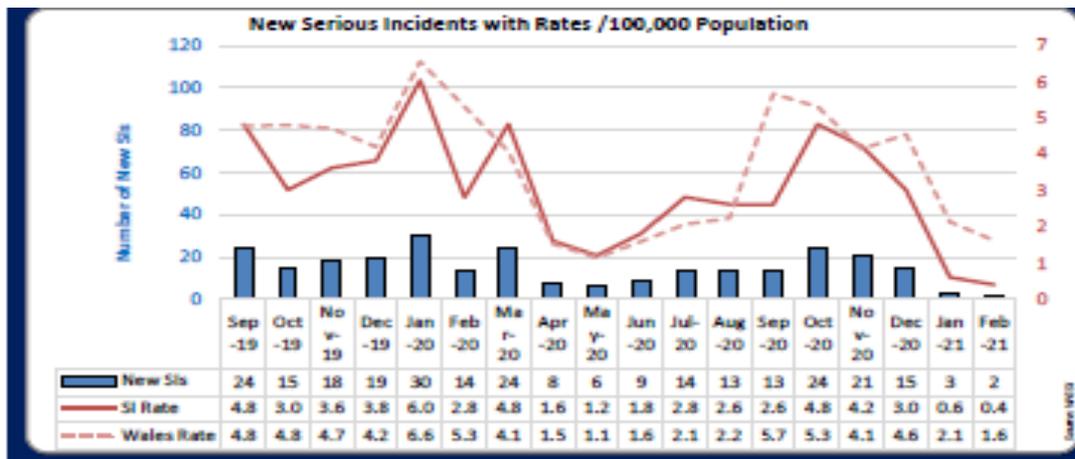
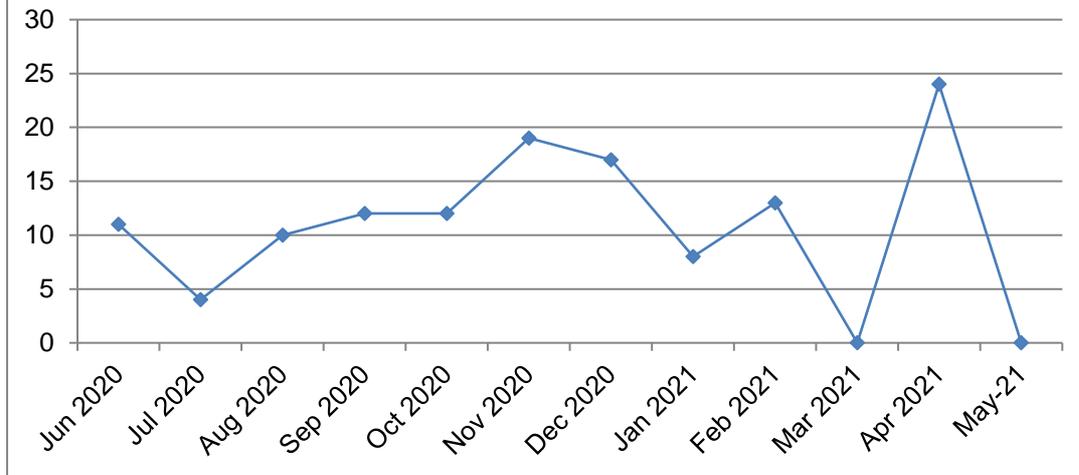
Assessment and Risk Implications (Safety, Financial, Legal, Reputational etc.):

Serious Incidents



Saunders Nathan
06/08/2021 14:36:47

Serious Incidents closed between 01/06/2020 and 31/05/2021



Saunders Nathan
06/08/2021 14:36:47

The number of Serious Incidents (SI) reported has reduced significantly over the last two years and this is a continuing trend. This is due mainly to the change in the requirement for reporting pressure damage and more recently changes to the SI reporting Framework in Wales. SI reporting reduced during Q1 of 2020/2021 but was returning to pre-Covid rates. Welsh Government have however put in place again in January 2021, a more limited reporting requirement for Serious Incidents due to the on-going workforce challenges of the pandemic. The Patient Safety Team continues to monitor those incidents which would normally meet the SI reporting requirements and the usual investigation processes are in place.

In May 2021, WG in partnership with the Delivery Unit have issued a new All Wales Patient Safety Incident Reporting Policy. This is less prescriptive than the previous policy. This new reporting policy represents the first step in creating a broader systems approach to incident management. Through this new approach, we want to change the way learning is extracted from healthcare incidents, and importantly, influence how that learning helps inform and develops practice to reduce future risk, and improve patient quality, safety and experience. There will be a phased approach and from June 14th, there will be a requirement for organization to report incidents which are considered as significant. These include:

Unexpected or avoidable deaths (wherever they occur) and or severe / permanent harm of one or more patients, staff or members of the public, which could include, but is not limited to, incidents relating to the following (this is likely to be where an initial 'make safe'/ 72 hour review has identified issues to trigger a patient safety incident investigation, to then be reported within 7 days) :-

- delays and omissions in care in any setting
- maternity and neonatal including maternal death
- Children
- Serious medication errors

The following must always be reported:

- suspected homicides where the alleged perpetrator has been under the care of mental health services in the past 12 months
- in-patient suicides in any clinical settings;
- Maternal deaths
- all Never Events, as specified within existing all Wales guidance;

- incidents where the number of patients affected is significant such as those involving screening, IT, public health and population level incidents possibly as the result of a system failure;

- occasionally incidents may present which are unusual, unexpected or surprising, where seriousness of the incident requires it to be nationally reported and the learning would be beneficial. Incidents of this nature will be considered further through the implementation guide.

Phase 2 which will commence in early July 2021, will focus on developing new thematic ways of reporting certain incident types across a number of specialities, including commonly reported incidents such as pressure damage, falls, and hospital acquired infections (including nosocomial Covid-19).

The number of SI closure forms submitted to WG improved during Q3 2020/2021. However this performance has been variable during the first two months of Q4. The Patient Safety Team are working closely with Clinical Boards to ensure timely investigation and closure of SIs, so that the

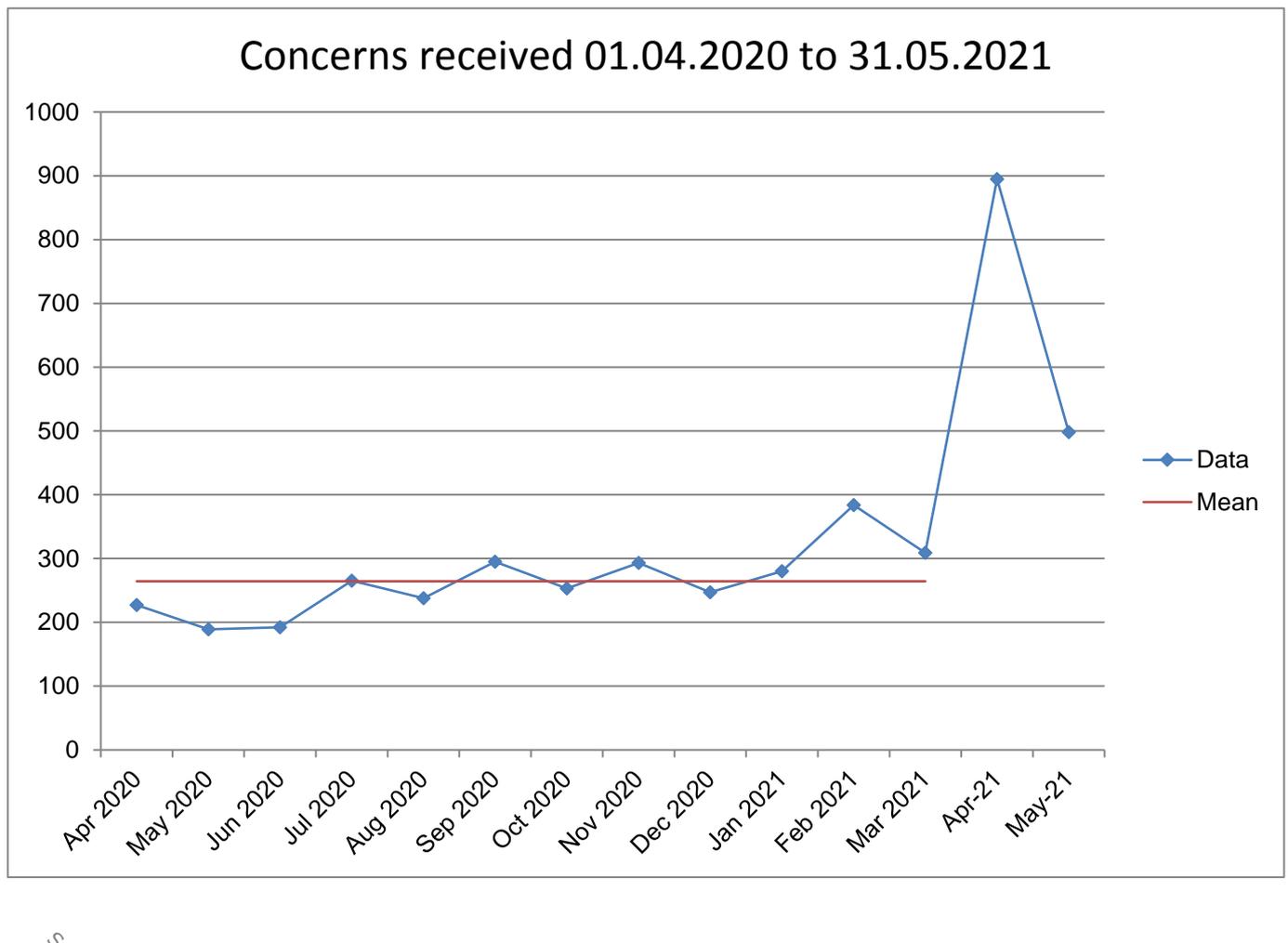
UHB can achieve pre-Covid rates of SI closures. At the time of writing however, the UHB has 67 open SIs, which is a further 20% improvement on the number open in the last report to the Committee in April 2021.

Never Events

There have been no further Never Events since the last report to the Committee in April 2021.

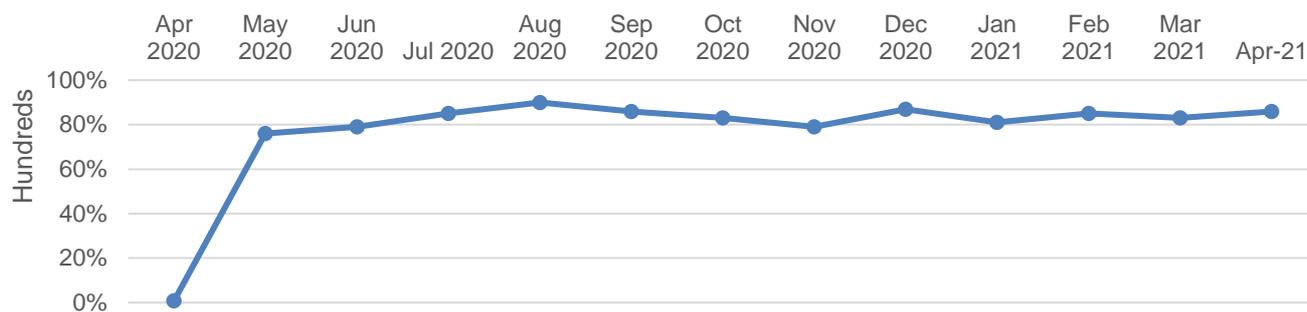
A detailed thematic review of Never Events was presented as a separate paper to the April 2021 Quality, Safety and Experience Committee. The draft paper was discussed at the 26th March NaTSSIPs meeting – the group is putting in place a number of initiatives (including an awareness campaign, staff survey and observational audits) to support staff in reducing the number of Never Events. Development of a Human Factors Framework and Training Strategy will be an important element of our revised QSE Framework for the next five years. Embedding a Human Factors and Systems based approach to safety will support the reduction of Serious incidents and Never Events.

Complaints



Saunders Nathan
06/08/2021 14:36:47

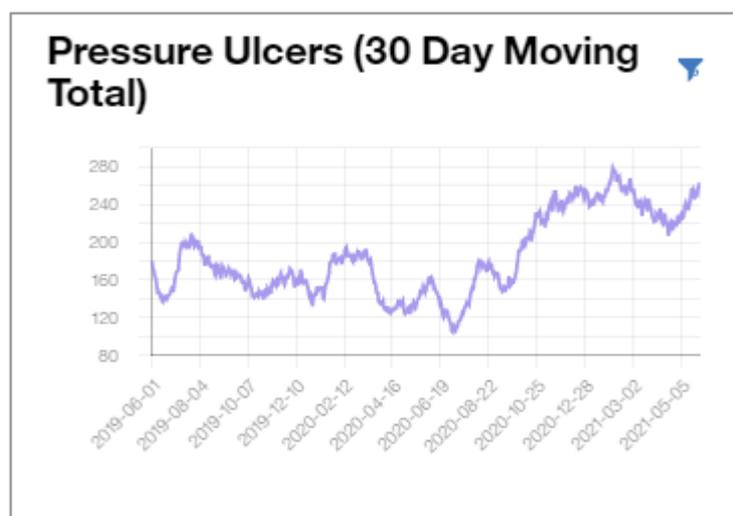
30 Day Performance



The number of complaints increased significantly during April 2021, against a background of increasing numbers. This was due largely to concerns in relation to choice of vaccine and waiting times. In early April, there was an increase in concerns about visiting and the visiting helpline was re-established in May 2021.

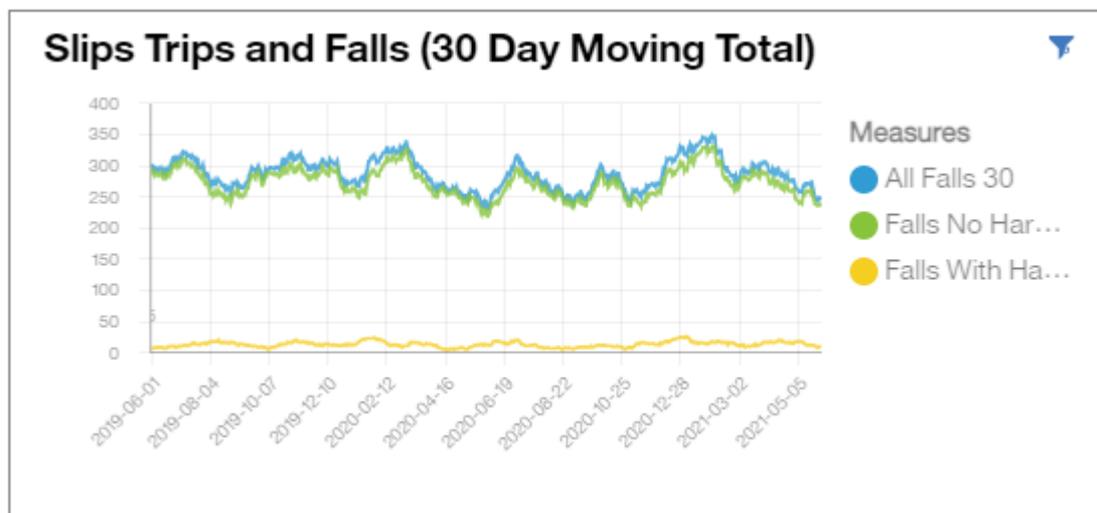
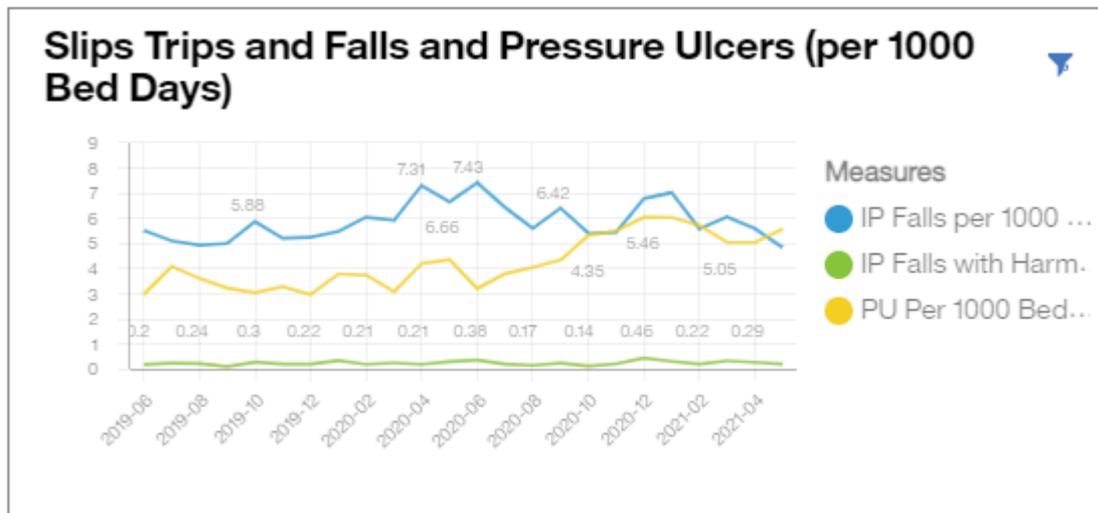
Despite the current challenges, compliance with the Welsh Government 30-day response time target remains consistently well above the target of 75%.

Pressure damage



The number of reported pressure ulcers continues to increase. This trend will be kept under review by the UHB Pressure Ulcer Collaborative. Considerable work has been undertaken in the organisation to improve the rate and quality of reported pressure damage; nevertheless this is a trend which will require continued monitoring. The Director of Nursing for Surgery Clinical Board, who is the organisational lead for pressure damage prevention, is working with the Wound Healing Team to develop a project plan which is presented in a separate report to the June 2021 QSE Committee. A Pressure damage collaborative has been established with support from the Patient Safety and Quality Improvement and Organisational learning team. A number of excellent initiatives are underway and areas for improvement for 2021/2022 are described in a separate Health and Care Standards self-assessment report to the June 2021 Committee.

In-patient falls

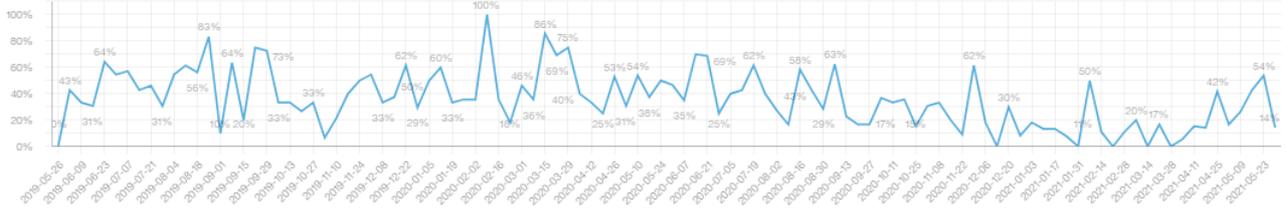


At its April 2021 meeting, the Falls Delivery Group agreed a suite of indicators which will be monitored routinely by the Falls Delivery Group. In-patient falls prevention work is now being undertaken by one of the Patient Safety and Quality Organisational Learning Managers (0.4 WTE) and a multidisciplinary Falls Review Panel has been established and meets regularly to review the care of all patients who have had an injurious fall while an in-patient. Learning from the Falls Review panel is fed back individual departments and thematic learning is now being fed back through use of a useful infographic (See Appendix 1)

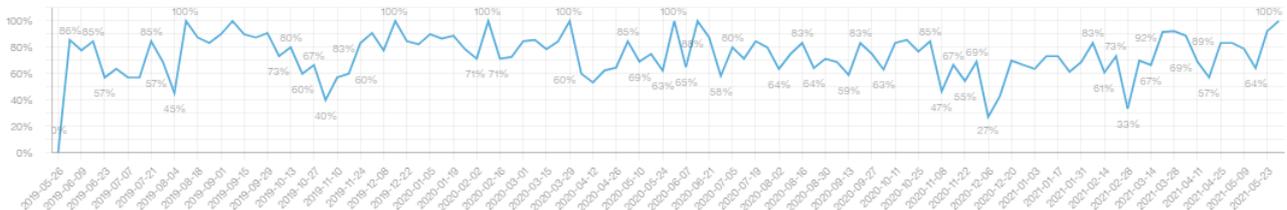
A pilot of the Royal College of Physicians National Audit of In-patient Falls (NAIF) Hot debrief tool is currently being undertaken on a medical ward at University Hospital of Wales. This has helped to inform a review of the current risk assessment and injurious falls investigation template (and this is included as part of the revised Falls Prevention and Management Policy – also presented as a separate agenda item to the June 2021 Committee).

Stroke indicators

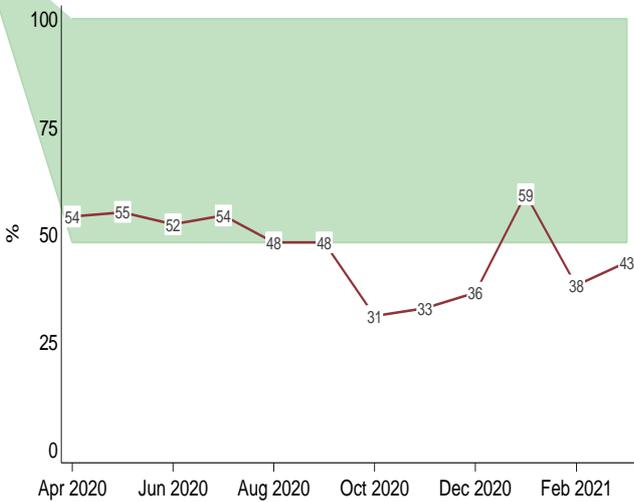
Stroke 4hr (Weekly)



Stroke 24hr (Weekly)



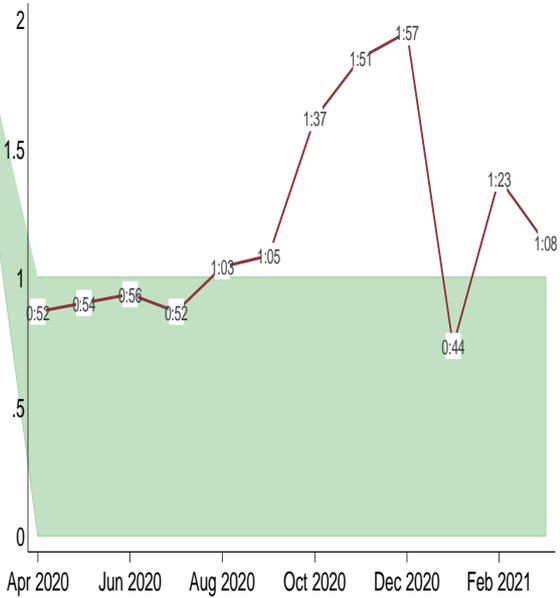
Scan within 1 hour



Source: SSNAP Jan to Mar 2021
Team-centred results at team level for Key Indicator 1.1B

Team 282

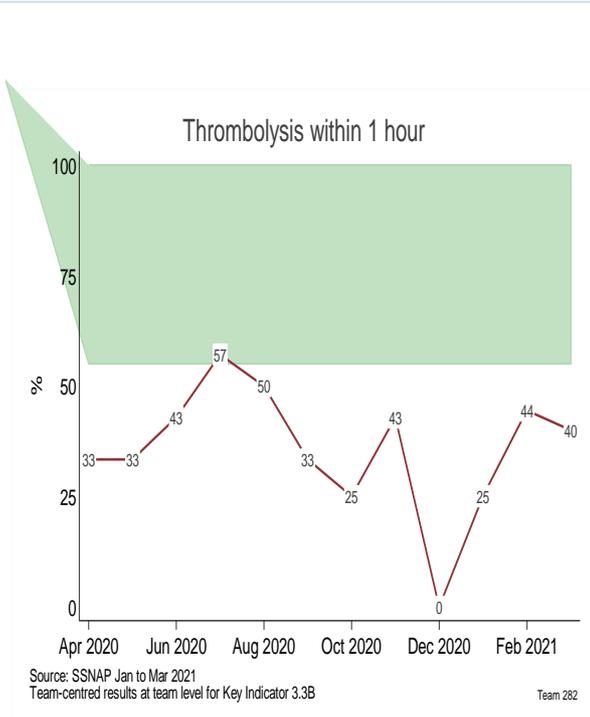
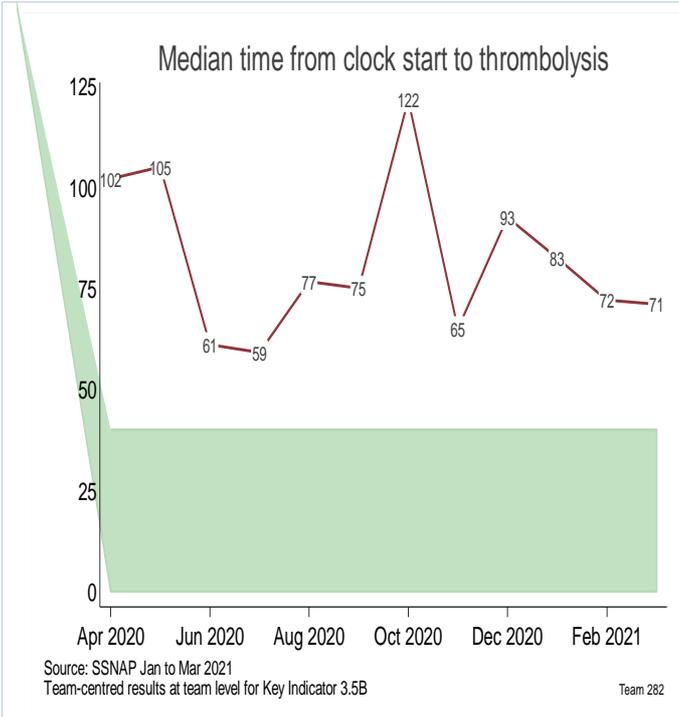
Median time from clock start to scan (hh:mm)



Source: SSNAP Jan to Mar 2021
Team-centred results at team level for Key Indicator 1.3B

Team 282

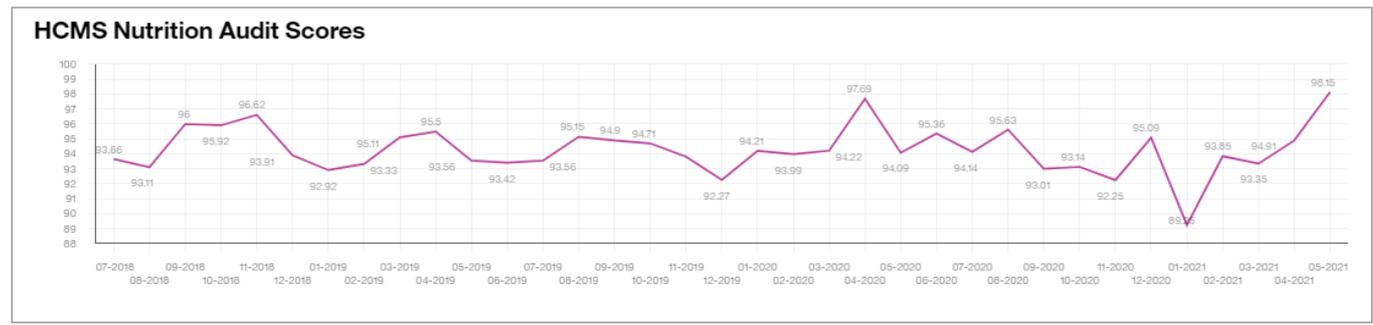
Saunders:Nathan
06/08/2021 14:36:41



Data from the National Stroke Audit (SSNAP) will be discussed with the Clinical Board and Acute Stroke Team at the next Clinical Effectiveness Committee on 8th June 2021.

In this report we have also included data on compliance with CT scanning and Thrombolysis targets.

Nutritional assessment scores

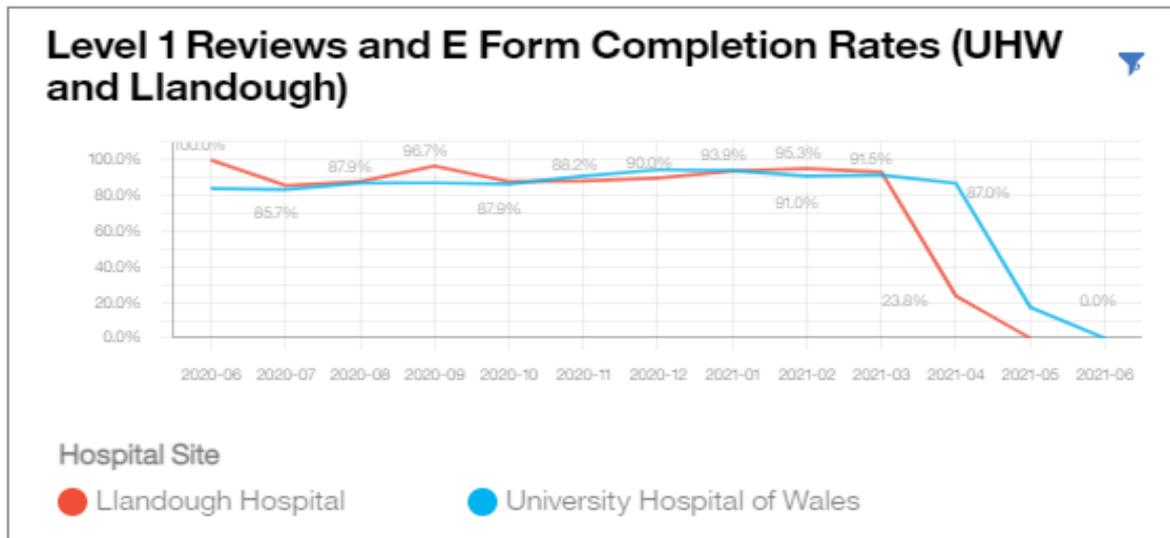
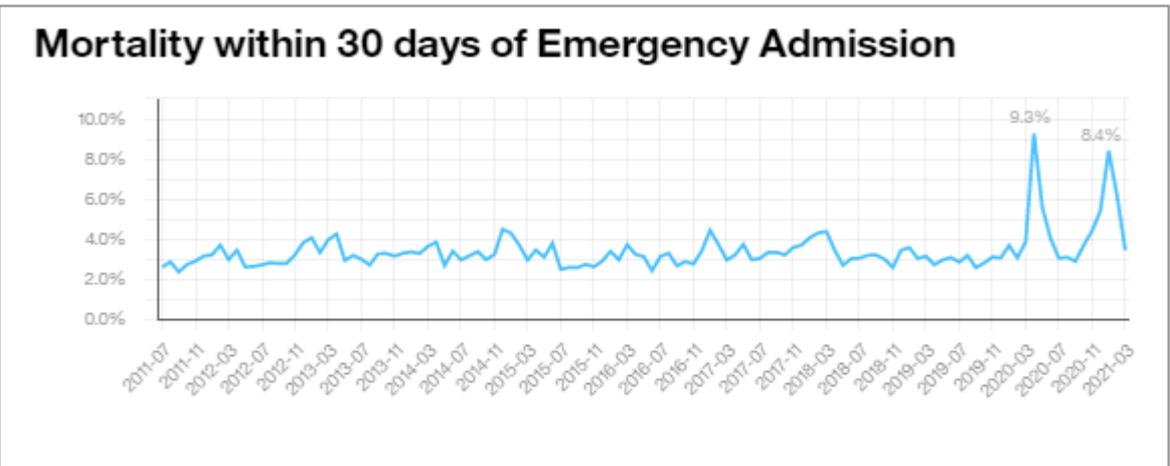
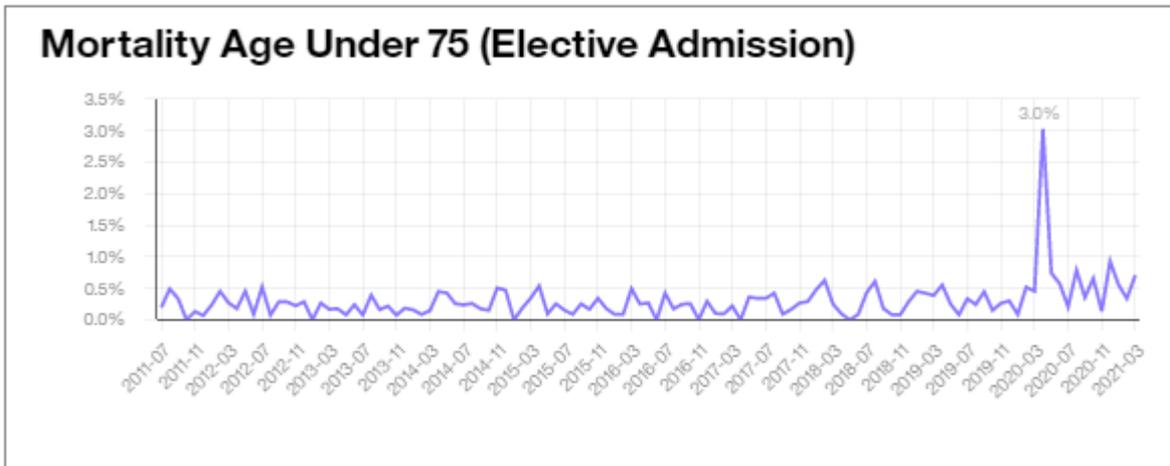


Following a decrease in compliance with nutritional assessment scores which was noted at the Committee in February 2021, the Executive Director of Therapies and Health Sciences has asked the Nutrition and Catering Group to work with Clinical Boards to improve compliance with nutritional assessment on admission. There has been a subsequent improvement in performance which the UHB will continue to monitor.

Saunders Nathan
06/08/2021 14:36:47

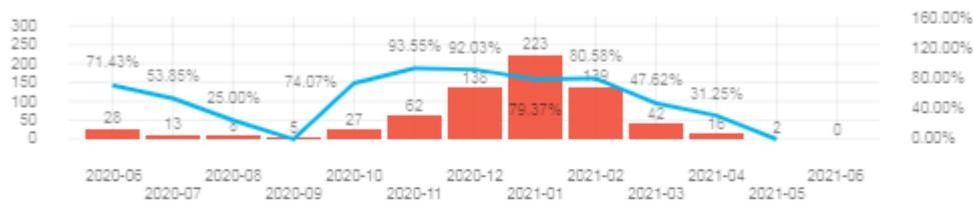


Mortality Indicators



Saunders/Nathan
06/08/2021 14:36:41

% COVID 19 Positive Deaths with E Form (All Sites)



Column values

COVID Positive Deaths (Calculated)

Level 1 Mortality Reviews Completed in 28 days (UHW and Llandough)



Hospital Site

Llandough Hospital

University Hospital of Wales

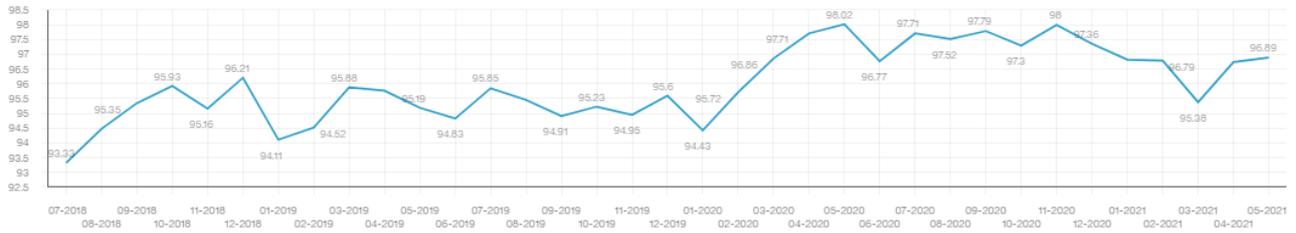
In the last report to Committee we identified an increase in mortality within 30 days of an emergency admission, in December 2020. This is almost certainly linked to an increase in the number of patients with Covid-19, in line with the second wave, and was discussed in more detail at the next meeting of the UHB Mortality Group.

Data for May 2021 is incomplete due to the time of writing the report and the inevitable lag in data input due to the current system which is dependent on paper forms being in-putted centrally. Level 1 reviews will be replaced by the Medical Examiner scrutiny of deaths and it is anticipated that a basic, electronic Level 2 Mortality form will be available soon, as part of the Once for Wales Concerns Management System.

Saunders Nathan
06/08/2021 14:36:47

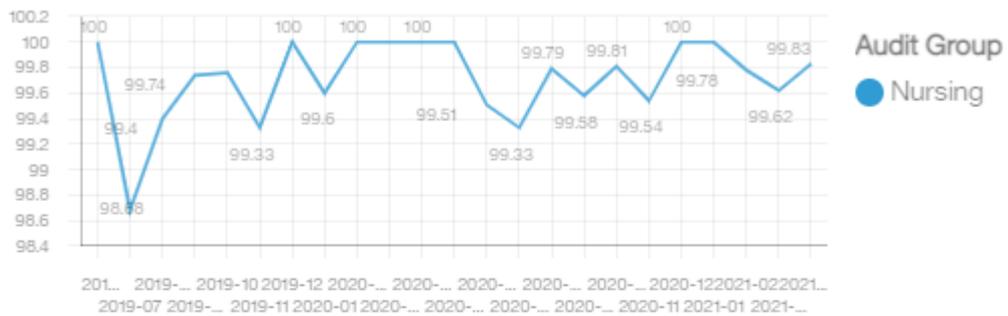
Hand Hygiene

HCMS Hand Hygiene Audit Scores

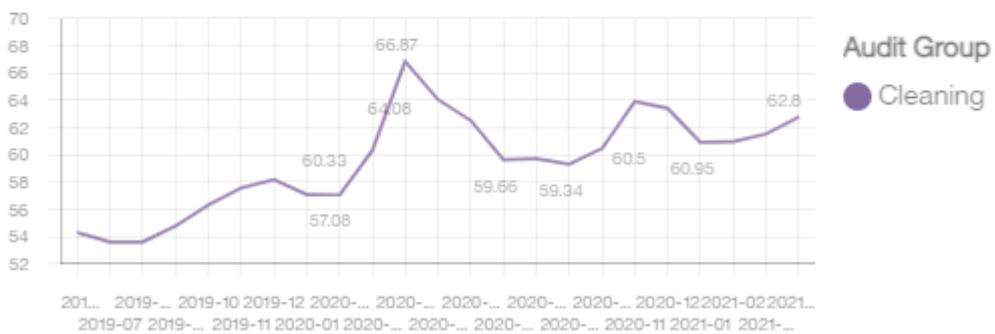


Cleaning scores

Credits for Cleaning Audit Score (High Risk & Very High Risk)



Credits for Cleaning Audit Score (High Risk and Very High Risk)



Saunders Nathan
06/08/2021 14:36:41

Infection Prevention and Control

Chart 2. University Hospital Llandough monthly rates of C. difficile per 1,000 hospital admissions, Apr 10 to May 21

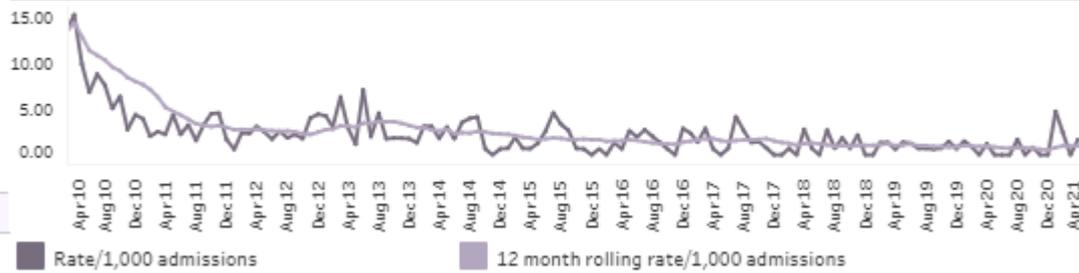


Chart 2. University Hospital Of Wales monthly rates of C. difficile per 1,000 hospital admissions, Apr 10 to May 21

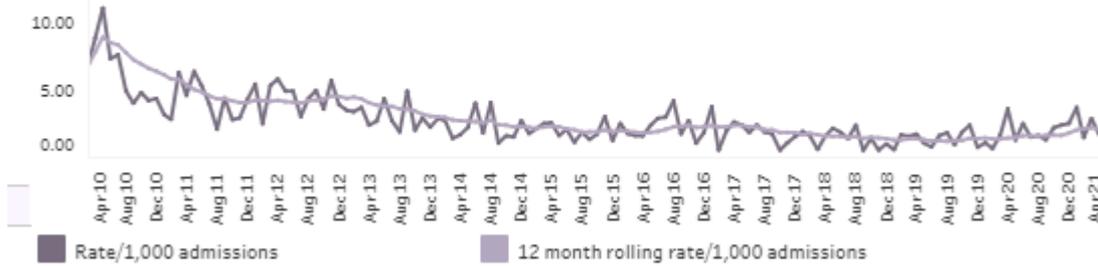
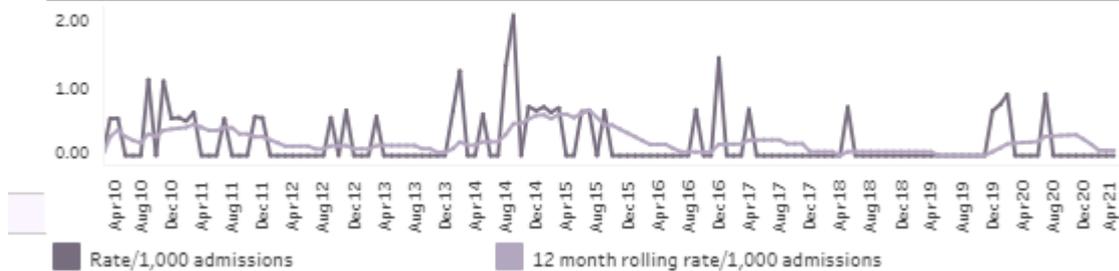


Chart 2. University Hospital Llandough monthly rates of MRSA bacteraemia per 1,000 hospital admissions, Apr 10 to May 21



Saunders Nathan
06/08/2021 14:36:47

Chart 2. University Hospital Of Wales monthly rates of MRSA bacteraemia per 1,000 hospital admissions, Apr 10 to May 21

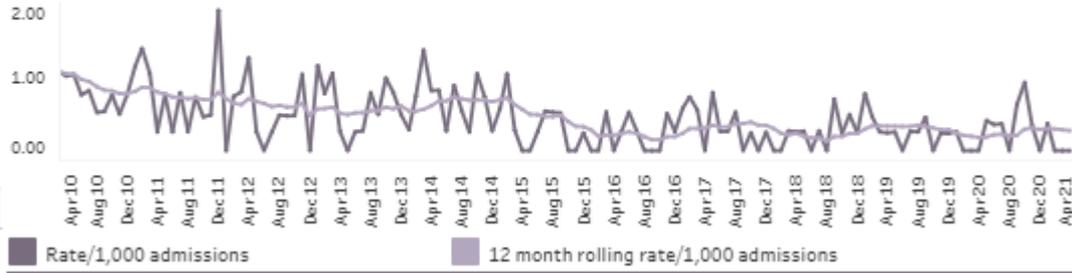


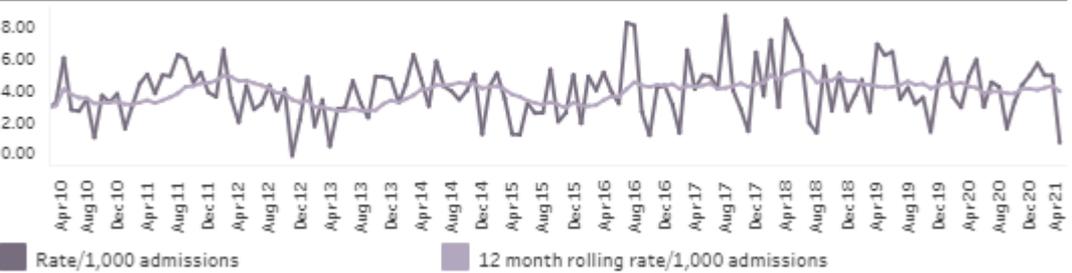
Chart 2. University Hospital Llandough monthly rates of MSSA bacteraemia per 1,000 hospital admissions, Apr 10 to May 21



Chart 2. University Hospital Of Wales monthly rates of MSSA bacteraemia per 1,000 hospital admissions, Apr 10 to May 21



Chart 2. University Hospital Llandough monthly rates of E. coli bacteraemia per 1,000 hospital admissions, Apr 10 to May 21



Saunders Nathan
06/08/2021 14:36:41

Chart 2. University Hospital Of Wales monthly rates of E. coli bacteraemia per 1,000 hospital admissions, Apr 10 to May 21



Chart 2. University Hospital Llandough monthly rates of Klebsiella sp bacteraemia per 1,000 hospital admissions, Apr 10 to May 21

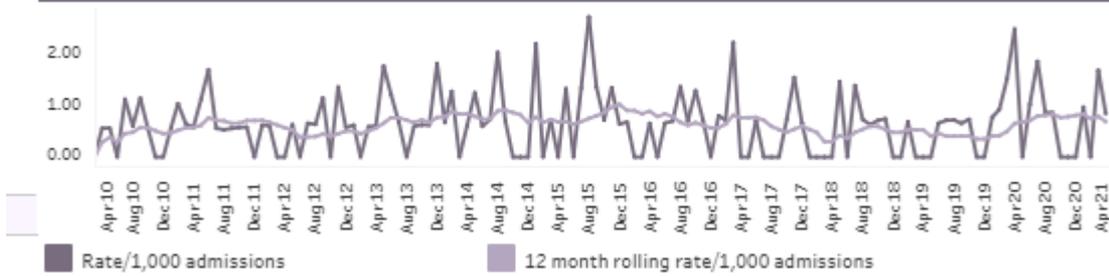
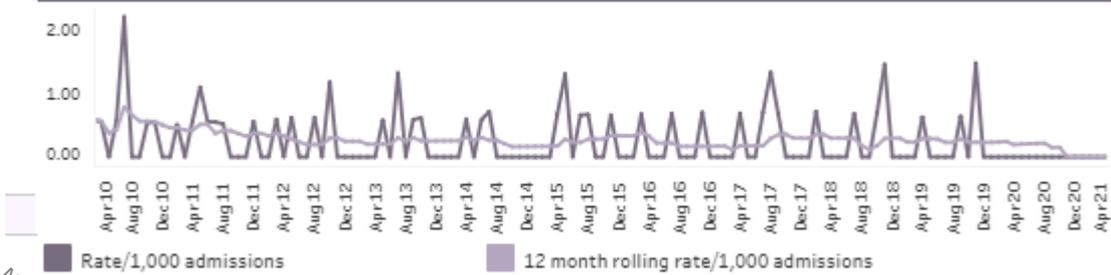


Chart 2. University Hospital Of Wales monthly rates of Klebsiella sp bacteraemia per 1,000 hospital admissions, Apr 10 to May 21

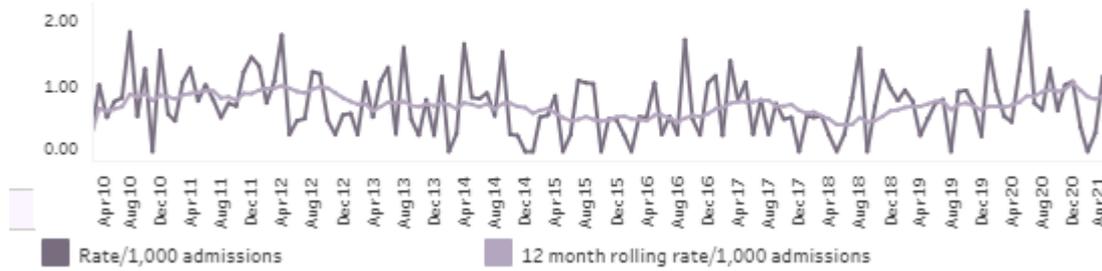


Chart 2. University Hospital Llandough monthly rates of P. aeruginosa bacteraemia per 1,000 hospital admissions, Apr 10 to May 21



Saunders Nathan
06/08/2021 14:36:47

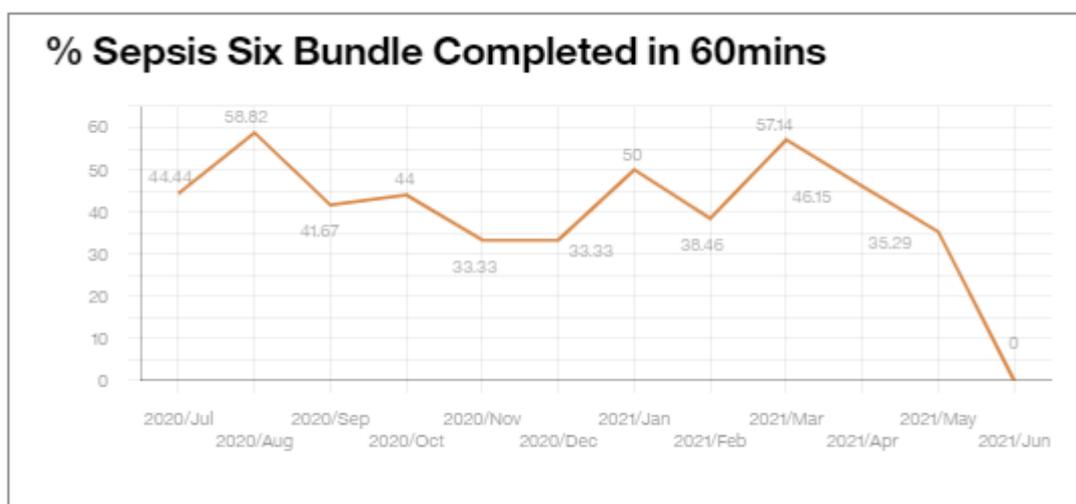
Chart 2. University Hospital Of Wales monthly rates of P. aeruginosa bacteraemia per 1,000 hospital admissions, Apr 10 to May 21



The UHB continues to make reductions in the number of *C'diff*, MRSA, *E. coli* and PAER cases, however the CAVUHB PAER rate per 100,00 is the highest in Wales. The number of *Klebsiella sp.* and SAUR bacteraemia cases has increased.

The IP&C Team are working with relevant Clinical Boards to identify possible areas for improvement. Monitoring of compliance against WG targets is overseen by the well-established IP&C Group, chaired by the Executive Nurse Director.

Sepsis



The Sepsis dashboard collects data using the Sepsis Star from the Emergency Unit and Ward Clinical Workstation, or from the Sepsis button on the EU version. The figures for compliance are from UHW, with no data at present being collected from UHL or elsewhere. This is an issue that the UHB Sepsis Group are working hard to address.

Three are ongoing education programmes for sepsis, although these have been hampered by the impact of the pandemic. The UHB Sepsis Group meets regularly with some useful developments underway, particularly the employment of antimicrobial pharmacists. The other development which will contribute to improvement in the treatment of Sepsis is the merger of the Critical Care Outreach Team and the Medical Rapid Response Team into the Patient At Risk Team (PART), who will be leading on the re-invigoration of sepsis education. Also, on the horizon is the prospect of getting an electronic observations system into the UHB, which would then enable the quicker detection of a high NEWS and alerts to encourage appropriate timely intervention. The Sepsis Group aims to celebrate World Sepsis Day on 13th September, which

will provide fresh impetus to get the staff and the public thinking about sepsis and driving the compliance figures up and the morbidity and mortality down.

Recommendation:

The Quality, Safety and Experience Committee is asked to **NOTE** the contents of the Quality Indicators report and the actions being taken forward to address areas for improvement.

Shaping our Future Wellbeing Strategic Objectives

This report should relate to at least one of the UHB's objectives, so please tick the box of the relevant objective(s) for this report

1. Reduce health inequalities	√	6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	√	7. Be a great place to work and learn	
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	
4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	√
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered

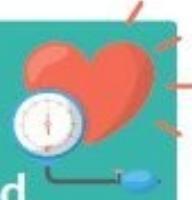
Please tick as relevant, click [here](#) for more information

Prevention	√	Long term	√	Integration		Collaboration		Involvement	
Equality and Health Impact Assessment Completed:	Yes / No / Not Applicable <i>If "yes" please provide copy of the assessment. This will be linked to the report when published.</i>								



April 2021 Falls Review Panel – Learning and Feedback

Standing / Lying BP should be part of the Multi Factorial Risk Assessment for Falls for all inpatients who can stand. Use the QR codes to refresh your knowledge.



Falls Policy



How to measure BP



Procedure reference cards

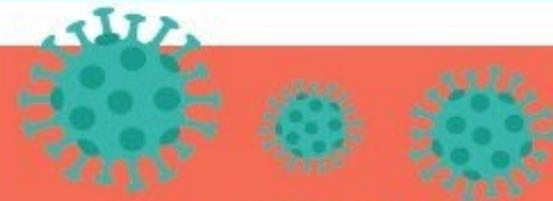
Multifactorial Risk Assessment and Interventions:

- ▶ Use the Intervention column to describe what actions are in place to mitigate identified risks
- ▶ Ensure completed on admission to clinical area, updated weekly, or if changes in patient's condition, or after a fall
- ▶ Complete as fully as possible to evidence the care that is provided
- ▶ Don't forget to assess vision, hearing, cognition / delirium (using 4AT)
- ▶ Ensure if a walking aid is required, it is provided and within easy reach

Watch out for Mobile Falls Simulation Training
Coming to your ward soon!

"Read About Me"

Please use this tool to share information about the patient and what is important to them.



If post Covid, remember the patient is more likely to experience unstable blood pressure, and an increase in confusion.

Post Covid – consider the significance of deconditioning. Safe mobilisation should be encouraged.



CARDIFF AND VALE UHB
Patient Safety & Quality

 @CV_UHBSafety

Please contact Annie Burrin for more information - Annie.Burrin@wales.nhs.uk



Report Title:	Pressure Damage Collaborative plan				
Meeting:	Quality and Safety Committee			Meeting Date:	15 th June 2021
Status:	For Discussion		For Assurance	For Approval	For Information x
Lead Executive:	Ruth Walker Executive Nurse Director				
Report Author (Title):	Clare Wade – Director of Nursing Surgery Clinical Board				

Background and current situation:

The purpose of this report is to provide assurance to the Committee that with the proposed plan for reducing health care acquired pressure damage with the Health Board

The Director of Nursing for Surgery Clinical Board is the Professional lead for the UHB.

To ensure that there is a Multidisciplinary approach to this scheme of work a Collaborative has recently been formed that encompasses both Primary and Secondary Care. The aim of the Collaborative is:

- reduce the incidence of healthcare acquired pressure damage with the Health Board
- speed up adoption of innovation into practice to improve clinical outcomes and patient experience

The Collaborative has secured input from the Patient Safety, Improvement and Organisational Learning Team to help progress existing work and help identification and to support learning and improvement. The Collaborative will help focus and drive forward improvements in care. Every team member is invested in solving the problems faced and developing innovative solutions. We have created a collaborative to structure a system to support our leadership methodology and continually communicate our vision and our plans.

Executive Director Opinion /Key Issues to bring to the attention of the Board/ Committee:

Pressure ulcers are painful and debilitating and, if left untreated, can lead to serious harm and death (National Patient Safety Agency, (NPSA) 2010; Whitlock et al, 2011). Every year up to 20% of patients in acute care in England and Wales are affected by pressure ulcers.

The costs of treating a pressure ulcer are estimated to range from £43 to £374 daily with hospital-acquired pressure ulcers increasing the length of stay by an average of five to eight days per pressure ulcer (Bennett, Dealey and Posnett, 2012). In Wales pressure ulcers affected 8.9% of all in hospital patients (Clark, Semple, Irwins et al, 2017).

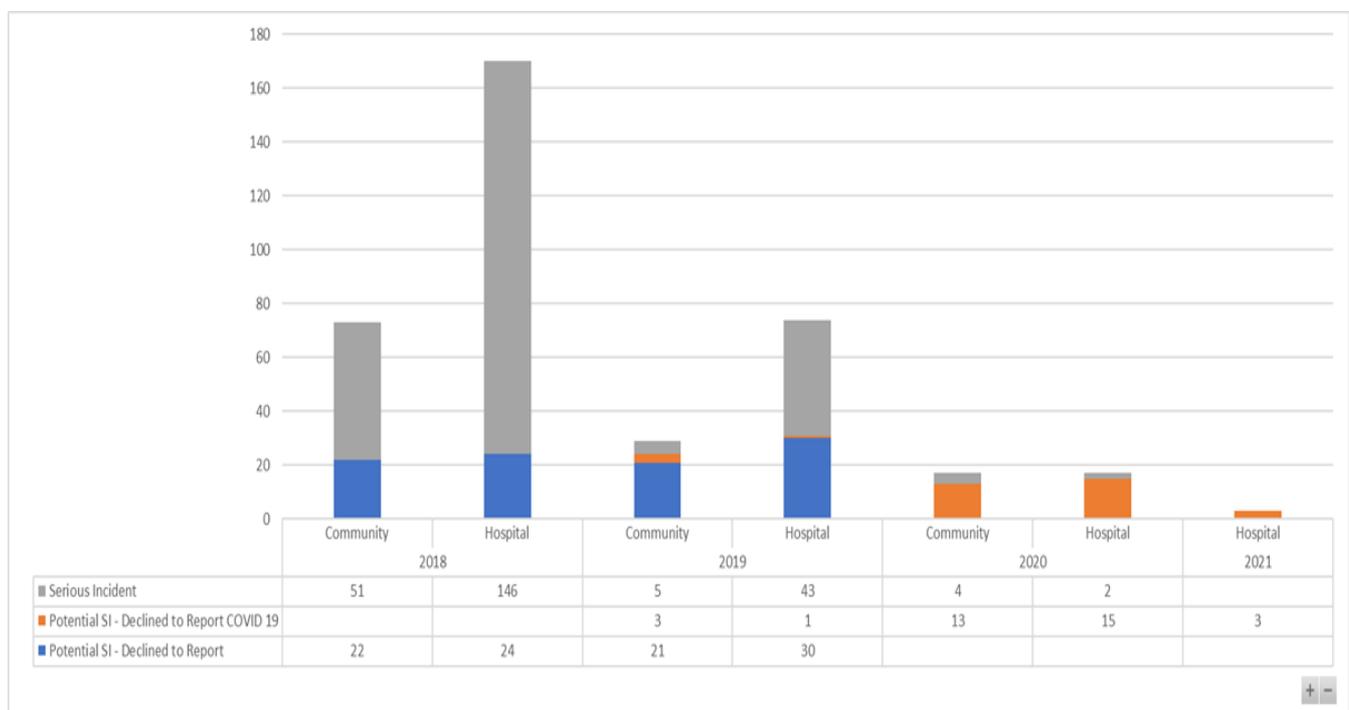
Extensive work through previous All Wales initiatives such as 1000 Lives Plus and Fundamentals of Care has helped raise the profile of pressure damage and driven the development of rigorous and practical ways of recording and preventing pressure ulcer incidents. Initiatives such as SKIN bundles were introduced in Wales in 2009 through Transforming Care and aimed to improve patient care by reducing

Saunders Nathan
06/08/2021 14:36:47

pressure ulcers. However, when pressure damage unfortunately occurs, the learning from such an incident must be effective if the risk to further patients suffering the same harm is to be reduced.

The recently formed Collaborative follows on from work that was carried out by the previous UHB pressure damage task and finish group however this group was stood down during the COVID pandemic.

Between April 2019 -March 2020, the UHB reported 48 Serious Incidents to Welsh Government in relation to Health Care Acquired Grade III, Grade IV or unstagable pressure damage. The below graph shows the decrease in the number of WG reportable pressure damage over the last 3 years. However, it should be noted that the SI reporting process for Heath Acquired Pressure Damage ceased during the height of the COVID pandemic. The Health Board has still captured this data however and carried out appropriate investigations to ascertain learning and improvement during this period.



The below graph shows the number and categories of Health Care Acquired pressure damage reported by the Heath Board since 2018. The highest reported category of health care acquired damage for all years is Grade 2 which makes up 58% of the incidents reported. Prior to April 2020 the Health Board had not seen a small increase year on year since 2018 in the number of health care acquired damage so despite the wide-ranging work that had been carried out by the UHB Task and Finish Group this had not impacted on the number of pressure ulcer reported across the Health Board. The Collaborative has commitment to reduce health acquired pressure ulcers for our patients both in hospital and in the community. The Collaborative will be looking to set a reduction goal in June 21 for the Health Board to work towards over the next 12 months.

Saunders Nathan
06/08/2021 14:36:47

Pressure Damage Classification	Incident Date								
	2018		2019		2020		2021		Grand Total
Grade 1: Non-Blanchable redness of intact skin	234	11.08%	246	10.17%	231	9.46%	132	9.72%	843
Grade 2: Partial thickness skin loss or blister	1262	59.75%	1459	60.31%	1396	57.17%	724	53.31%	4841
Grade 3: Full thickness skin loss (fat visible)	277	13.12%	267	11.04%	239	9.79%	127	9.35%	910
Grade 4: Full thickness skin loss (muscle/bone visible)	26	1.23%	26	1.07%	20	0.82%	18	1.33%	90
Suspected Deep Tissue Injury (SDTI)-depth unknown	143	6.77%	255	10.54%	350	14.33%	232	17.08%	980
Unstageable/Unclassified	170	8.05%	166	6.86%	206	8.44%	125	9.20%	667
Grand Total	2112		2419		2442		1358		8331

Assessment and Risk Implications

The Pressure Damage Collaborative since its formation in April 21 has already progressed with a information gathering session with key stakeholders. This work has led to the development of 7 subgroups follow the initial scoping episode that will be lead by experinced clinical leads from the HB under the following headings

- Information and Data
- Eduaction and training
- Incident Management and SI process
- heel offloading products.
- Pressure redistribution work stream
- Documentation
- Perfect Ward roll out

A work plan (Appendix 1 – draft) is currently being developed alongside a Driver Diagram (Appendix 2) to highlight the worksteams that will fall under each subgroup.

Recommendation:

Preventing skin damage should be an integral part of care delivery and requires a collaborative, interdisciplinary approach requiring each member of the team to take responsibility for assessment and management, including comprehensive skin inspection. The Collaborative will set an ambitious goal by raising the profile of pressure ulcer prevention and equipping staff with effective interventions holistic proactive and preventative approach to skin care.

The Quality, Safety and Experience Committee is asked to NOTE the contents of this report and the actions being taken forward to address areas for improvement.

Shaping our Future Wellbeing Strategic Objectives

This report should relate to at least one of the UHB's objectives, so please tick the box of the relevant objective(s) for this report

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people		7. Be a great place to work and learn	
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	
4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered

Please tick as relevant, click [here](#) for more information

Prevention	Long term	Integration	Collaboration	Involvement
Equality and Health Impact Assessment Completed: Yes / No / Not Applicable <i>If "yes" please provide copy of the assessment. This will be linked to the report when published.</i>				



Pressure Damage Project plan

Senior Reporting Officer: Ruth Walker
 Project Lead: Clare Wade
 Project Manager: TBC

Subgroups	Task Description	Task Lead	R/A/G	Start (date)	Finish (date)	June																															
						Tue-01-Jun	Wed-02-Jun	Thu-03-Jun	Fri-04-Jun	Sat-05-Jun	Sun-06-Jun	Mon-07-Jun	Tue-08-Jun	Wed-09-Jun	Thu-10-Jun	Fri-11-Jun	Sat-12-Jun	Sun-13-Jun	Mon-14-Jun	Tue-15-Jun	Wed-16-Jun	Thu-17-Jun	Fri-18-Jun	Sat-19-Jun	Sun-20-Jun	Mon-21-Jun	Tue-22-Jun	Wed-23-Jun	Thu-24-Jun	Fri-25-Jun	Sat-26-Jun	Sun-27-Jun	Mon-28-Jun	Tue-29-Jun	Wed-30-Jun	Thu-01-Jul	Fri-02-Jul
1. PROJECT SET-UP																																					
Aim - Establish clear project governance, aims and timescales.																																					
Subgroup Lead - Clare Wade																																					
1.1	Initial meeting with outline expectations of involvement in the project	CW	G	27-Apr	27th Apr																																
1.2	Information gathering from stakeholder	AJ	G	27-Apr	1st June																																
1.2	Identify achievements/constraints and risks relating to current processes.	CW	G	27-Apr	1st June																																
1.3	To establish workstream leads	CW	G	1st June	1st June																																
1.4	To establish key objectives of each workstream and leads for each action	CW	A	1st June	15th June																																
2. INFORMATION AND DATA																																					
Aim:																																					
Lead - Joy Whitlock and Aron White																																					
2.1	Safety cross at ward level	TBC		15-Jun																																	
2.2	Streamline data collection across UHB to ensure no duplication	TBC		15-Jun																																	
2.3	Establish a process that review themes and trends from PD data sources and allows organisational learning	TBC		15-Jun																																	
2.4	Development of pressure damage app	TBC		15-Jun																																	
2.5	Look at social media comms for staff	TBC		15-Jun																																	
2.6		TBC		15-Jun																																	
2.7		TBC		15-Jun																																	
2.8		TBC		15-Jun																																	
2.9		TBC		15-Jun																																	
3. Education and Training																																					
Aim -																																					
Subgroup Lead - Lisa Franklin and Melanie Jones																																					
3.1	Develop a range of PD educational resources for patients and carers	TBC		15-Jun																																	
3.2	Develop a centralised directory for staff to access up to date PD information and resources	TBC		15-Jun																																	
3.3	Gather staff feedback via engagement exercise to explore PD reporting and educational requirements	TBC		15-Jun																																	
3.4	Further develop UHB corporate/all Wales approach to structured staff education (including temporary staff) and undertake evaluation	TBC		15-Jun																																	
3.5	Re establish and refresh link nurse (PAM) role	TBC		15-Jun																																	
3.6	Implement mandatory PD passport	TBC		15-Jun																																	
3.7		TBC		15-Jun																																	
4. Incident Management and SI process																																					
Aim -																																					
Lead - Tara Cardew and Suzie Cheeseman																																					
4.1	Develop education package/coaching for incident managers?	TBC		15-Jun																																	
4.2	Coaching for novice incident managers	TBC		15-Jun																																	
4.3	Implement scrutiny panel model to standardise practice through CB's	TBC		15-Jun																																	
4.4	Review areas of low reporting to assess if there is any shared learning	TBC		15-Jun																																	
4.5		TBC		15-Jun																																	
4.6		TBC		15-Jun																																	
4.7		TBC		15-Jun																																	
4.8		TBC		15-Jun																																	
5. heel offloading products.																																					
Aim -																																					
Subgroup Lead - Vanessa Goulding																																					
5.1	Review implementation of foot assessment	TBC		15-Jun																																	
5.2	Review the body map assessment	TBC		15-Jun																																	
5.3	Complete review of clinical evidence of offloading products	TBC		15-Jun																																	
5.4	Establish process for podiatry to identify trends and themes across UHB in relation to HPU's	TBC		15-Jun																																	
5.5	Develop pathway for at risk patients	TBC		15-Jun																																	
5.6		TBC		15-Jun																																	
5.7		TBC		15-Jun																																	
5.8		TBC		15-Jun																																	
5.9		TBC		15-Jun																																	

Item	Date	Action	Owner	Status
1	27/04/2021	To set up sessions to look at " issues" collection over next 2 weeks to focus project plan	JW/AJ	
2	27/04/2021	Contact other HB across Wales to look at workstreams and improvement projects	JW/AJ	
3	27/04/2021	to share HCS for comments with group	CW	
4	27/04/2021	to invite attendee from LED	CW	
5	27/04/2021	To share previous driver diagram and cycle for improvement	JW/AJ	
6	27/04/2021	to invite attendee from Mental Health	CW	
7	27/04/2021	to invite attendee from PST	CW	
8	27/04/2021	To set up Pressure Damage Collaboration Group on Teams	CW	
9	27/04/2021	Deputy required to chair group in chairs absence	CW	
10	27/04/2021	Comments to be sent to LJ on All-Wales Wound Care Assessment and Treatment Record and Repositioning Chart	LJ	
11	01/06/2021	Bench mark with Velindre re Grade 1 and 2 work already carried out	JW/AJ	
12				
13				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Saunders,Nathan
06/08/2021 14:36:47

Status	Issue Identified 	Resolution Identified / Date Set 	Resolution Implemented 	Resolution Followed up & Checked 
--------	----------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------

No.	Date Raised	Raised by	Issue	Resolution	Planned Resolution Date	Status and Days Overdue
1	18-May					
2	18-May					
3	18/05/2020					
4	18/05/2020					
5	19/05/2020					
6	21/05/2020					
7	26/05/2020					
8	26/05/2020					
9	27/05/2020					
10	01/06/2020					
11	01/06/2020					
12	02/06/2020					
13	02/06/2020					
13	03/06/2020					
14	03/06/2020					
15	03/06/2020					
16	04/06/2020					
17	05/06/2020					
18	05/06/2020					
19	09/06/2020					
20	09/06/2020					

Saunders-Nairn
06/08/2021 14:36:47

21	09/06/2020					
18	01/07/2020					
19	01/07/2020					
20						

Saunders, Nathan
06/08/2021 14:36:47

Reducing Pressure Ulcer Damage Driver Diagram

Primary Drivers

Secondary Drivers

Aim

Reduce the incidence of healthcare acquired pressure damage (how much by when tba)

1. Improve pressure ulcer education and training for staff/patients/carers

- Develop a range of PD educational resources for patients and carers
- Develop a centralised directory for staff to access up to date PD information and resources
- Gather staff feedback via engagement exercise to explore PD reporting and educational requirements
- Further develop UHB corporate/all Wales approach to structured staff education (including temporary staff) and undertake evaluation
- Re establish and refresh link nurse (PAM) role
- Implement mandatory PD passport

2. Improve Serious Incident and incident reporting in relation to PU management

- Review areas of low reporting to assess if there is any shared learning
- Implement scrutiny panel model to standardise practice through CB's
- Review approach to incident reporting training and education
- Develop education package/coaching for incident managers

3. Improve the appropriate use of heel offloading products

- Complete review of clinical evidence of offloading products
- Review the body map assessment
- Establish process for podiatry to identify trends and themes across UHB in relation to HPU's
- Review implementation of foot assessment
- Develop pathway for at risk patients

4. Improve the appropriate use of pressure redistribution products

- Establish refreshed process/protocol for authorisation of specialised equipment
- Relaunch mattress pathway and selection process
- Carry out supply and demand review of equipment provision process

5. Improve and streamline PU documentation across the UHB

- Progress digital skin bundle/repositioning chart work
- Review intentional rounding process and PD documentation
- Implementation of All Wales Wound Care Assessment and Treatment Record
- Devise staff training plan to support roll out

6. Improve data and information resources across UHB regarding PU management

- Streamline data collection across UHB to ensure no duplication
- Establish a process that review themes and trends from PD data sources and allows organisational learning
- Incorporate PD data with the Perfect ward dashboard

Saunders, Nathan
06/08/2021 14:36:47

Report Title:	Assurance Report for Falls Prevention and Management						
Meeting:	Quality Safety and Experience Committee				Meeting Date:	15/06/2021	
Status:	For Discussion	X	For Assurance	X	For Approval		For Information X
Lead Executive:	Executive Director for Therapies and Health Science						
Report Author (Title):	Patient Safety and Organisational Learning Manager (Falls Lead)						

Background and current situation:

The UHB is required to comply with a number of directives, Standards and guidelines, all of which overlap and require action, monitoring and reporting through QSE Committee.

These include:

- Welsh Health Circular (2016) 022 Principles, framework and national indicators: Adult Inpatient Falls
- Health and Care Standards 2.3 Falls and 6.1 Promoting Independence
- National Audits: Falls and Fragility Fracture Audit Programme, National Hip Fracture Database, National Audit of Inpatient Falls
- NICE Guidance (CG 161¹, QS 86²)

The Falls Delivery Group comprises of internal and external stakeholders who meet quarterly. The patient safety team have appointed a part time Falls Lead, working within the Quality Improvement and Organisational Learning team on a fixed term basis.

Executive Director Opinion/Key Issues to bring to the attention of the Board/Committee:

The Business Intelligence team have provided support to the Falls Delivery Group and work continues to develop a Falls Dashboard. A suite of data are presented at the Falls Delivery Group which shows themes and trends of falls within the UHB.

Stay Steady Clinics have continued virtually during the pandemic. There is an urgent need for a single point of contact to easily refer people at risk of a fall to the Community Resource Teams. The Falls Delivery Group are working collaboratively with external stakeholders to achieve a functional single point of access.

The UHB has seen a rising trend in injurious falls which are usually reportable to Welsh Government. During the pandemic, Health Boards have not been required to report injurious falls as a Serious Incident, although the SI classification is captured with the Datix system. An updated serious incident framework has been issued from WG and future reporting is likely to be thematic rather than single incident reporting. .

There are now plans to provide mobile falls simulation training which will provide training in the clinical area, involving the MDT.

Saunders Nathan
06/08/2021 14:20

¹ NICE Clinical Guideline 161: Falls in Older People: Assessing Risk and Prevention (2013)

² NICE Quality Standard 86: Falls in Older People 2015

The National Audit of Inpatient Falls Interim 2020 Report³ published on 16th May 2021 recommends that training in Falls assessment, prevention and management be mandatory.

As recommended by the Royal College of Physicians the UHB have commenced a regular Falls Review Panel in order to provide scrutiny of completed falls investigation reports.

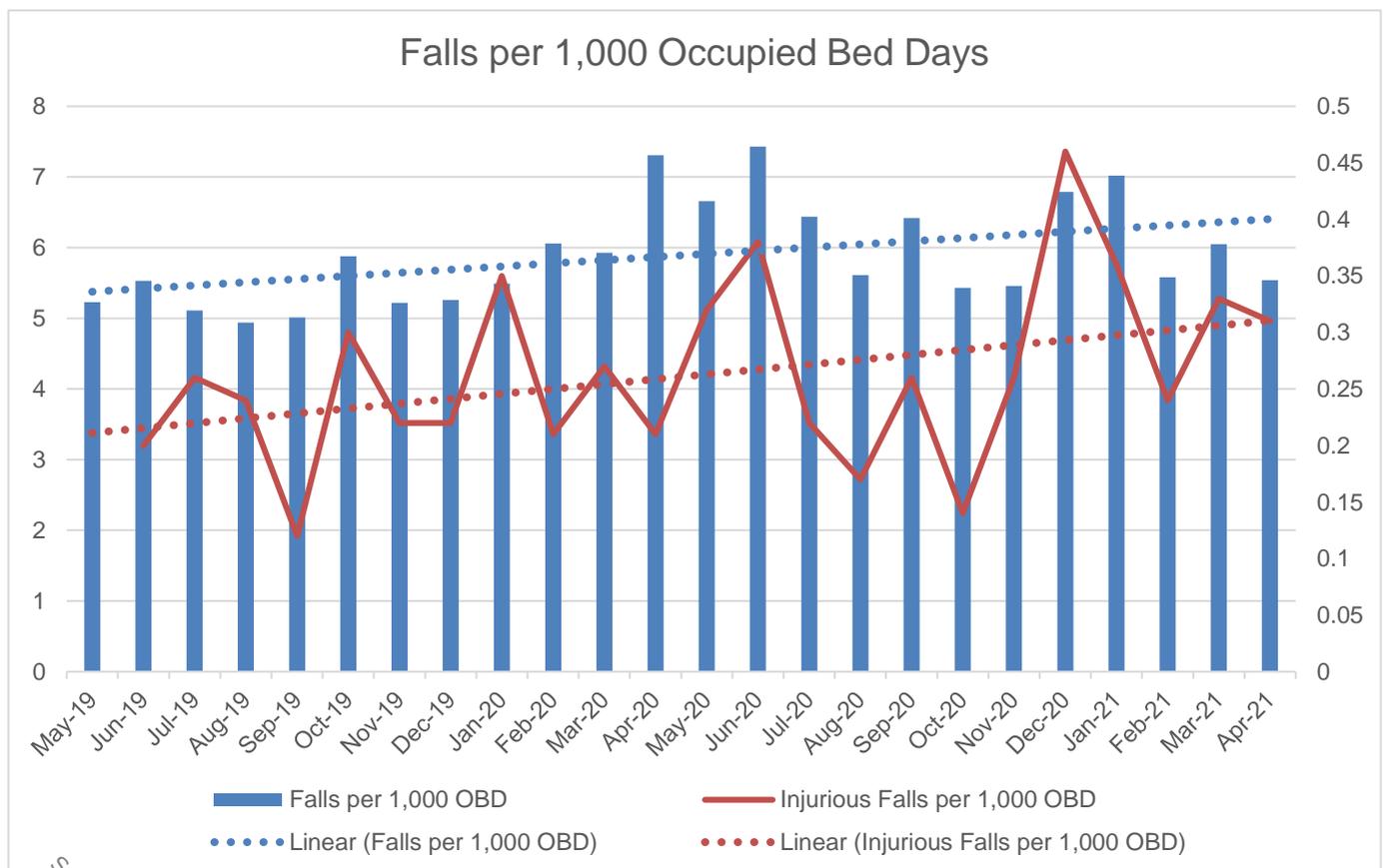
No benchmarking data is available for all falls, or those patients specifically who sustain head injuries.

Assessment and Risk Implications (Safety, Financial, Legal, Reputational etc.):

ASSESSMENT

Governance, Leadership and Accountability

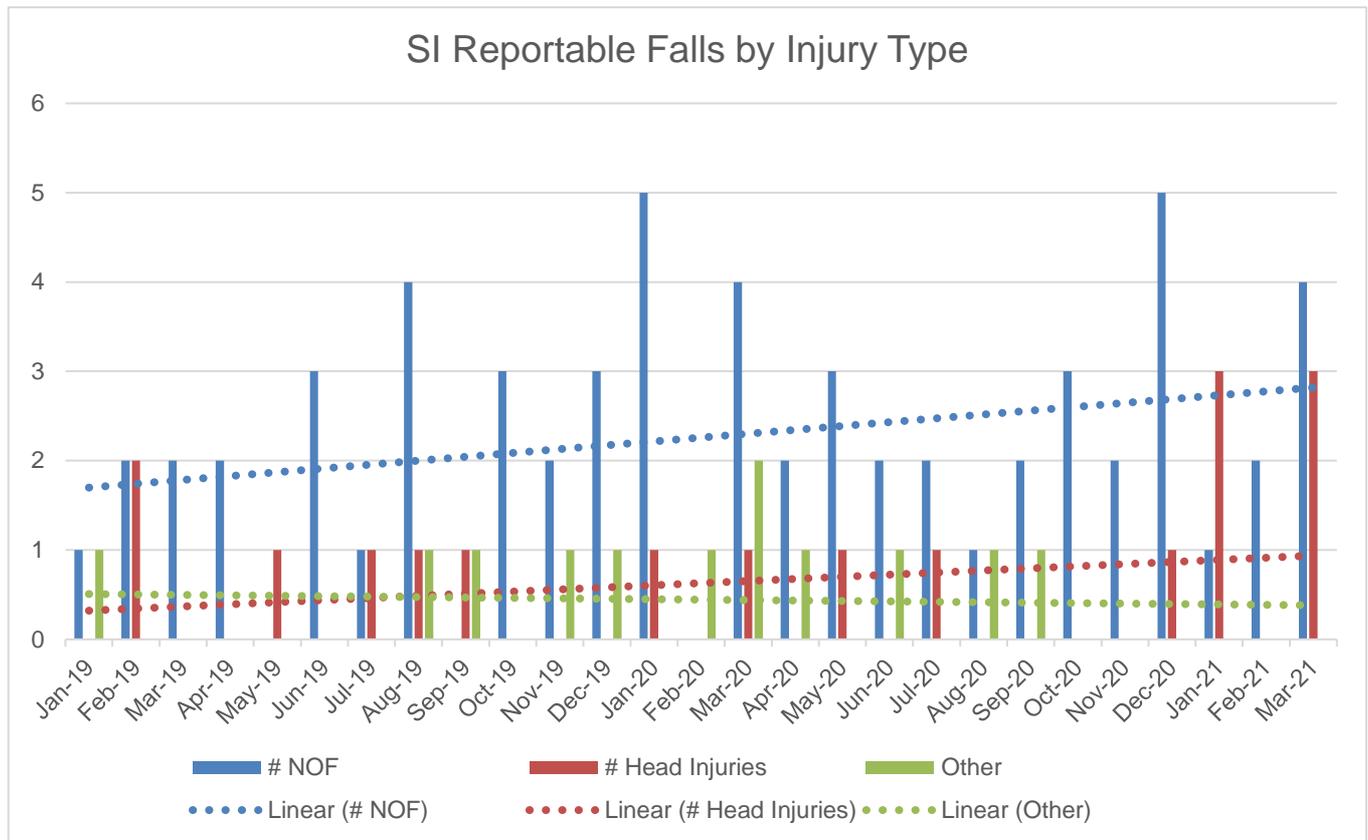
The Falls Delivery Group meets quarterly, chaired by the Consultant Nurse for Older People and Vulnerable Adults and attended by a wide variety of internal stakeholders, together with representatives from WAST, South West Fire and Rescue, Cardiff Council Telecare, and Cardiff Care and Repair. The Patient Safety Team Falls Lead commenced in post in January 2021. The Business Intelligence team have provided support to the Falls Delivery Group and work continues to develop a Falls Dashboard. A suite of data are presented at the Falls Delivery Group which shows themes and trends of falls within the UHB.



Stay Steady Clinics have continued virtually during the pandemic. There is an urgent need for a single point of contact to easily refer people at risk of a fall to the Community Resource Teams.

³ National Audit of Inpatient Falls 2020 Interim Report

The Falls Delivery Group are working collaboratively with external stakeholders to achieve a functional single point of access.



The UHB has seen a rising trend in injurious falls which are usually reportable to Welsh Government. During the pandemic, Health Boards have not been required to report injurious falls as a Serious Incident, although the SI classification is captured with the Datix system. A revised Serious incident reporting policy has been issued from WG and future reporting is likely to be thematic rather than single incident reporting. .

A thematic review of Serious Incident Investigations from January 2019 to March 2021 reveals the following themes:

- Deviation from UHB Falls Policy in relation to Multifactorial Risk Assessment and Interventions
- Deviations from UHB Falls Policy in relation to Post Falls Actions, i.e. Hoverjack/neurological observations
- Clinical acuity
- Lack of staff training in relation to falls

NICE Guidance states:

“All professionals dealing with patients known to be at risk of falling should develop and maintain basic professional competence in falls assessment and prevention.”

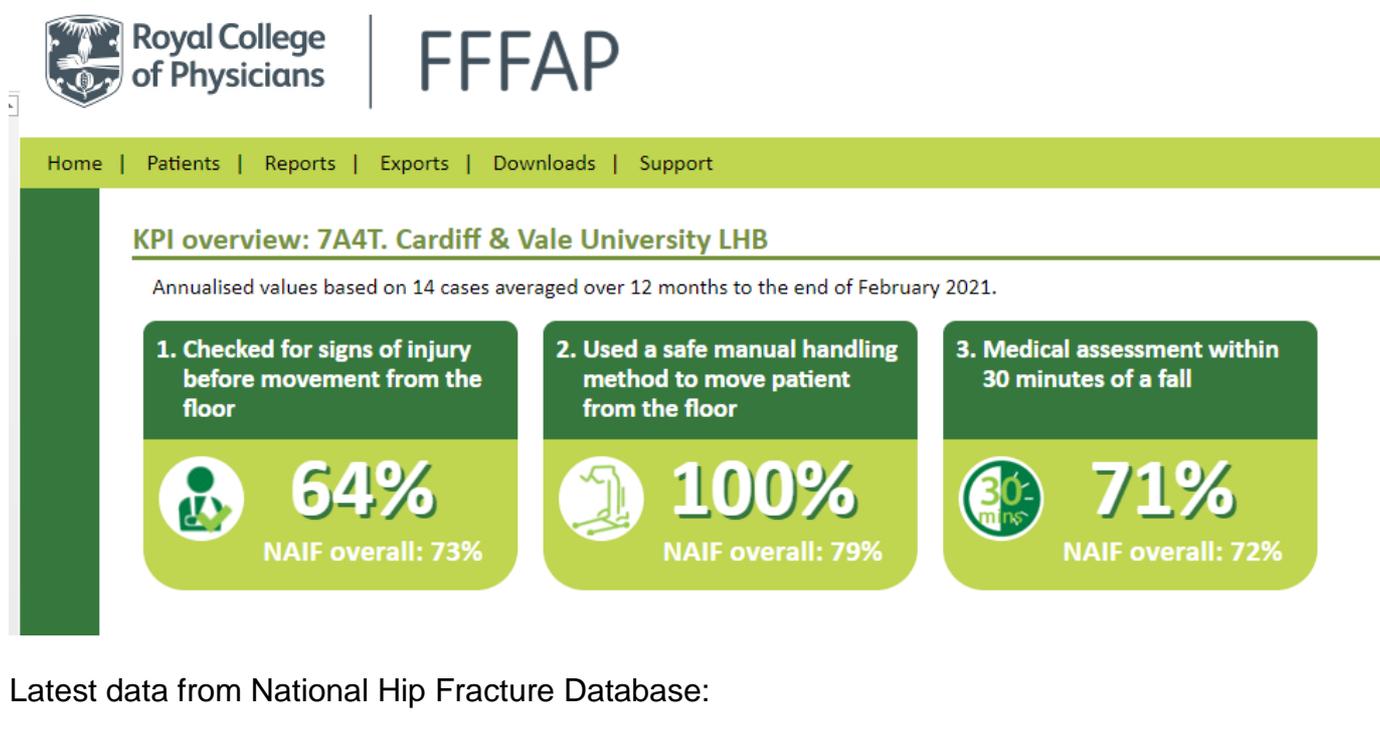
Training in falls prevention and management is not currently mandatory for any staff working in the UHB. Use of the Hoverjack lifting equipment is briefly covered in manual handling training.

A well evaluated programme of simulation training was devised as part of a LIPS project in 2018. Despite initial enthusiasm, attendance had been dwindling pre-pandemic due to difficulties in releasing clinical staff to attend. There are now plans to provide mobile falls simulation training which will provide training in the clinical area, involving the MDT.

The National Audit of Inpatient Falls Interim 2020 Report⁴ published on 16th May 2021 recommends that training in Falls assessment, prevention and management be mandatory.

The Falls Policy has been updated, and is currently out for comment prior to ratification at QSE.

Participation in the national audits continues, with latest data from the National Audit of Inpatient Falls:

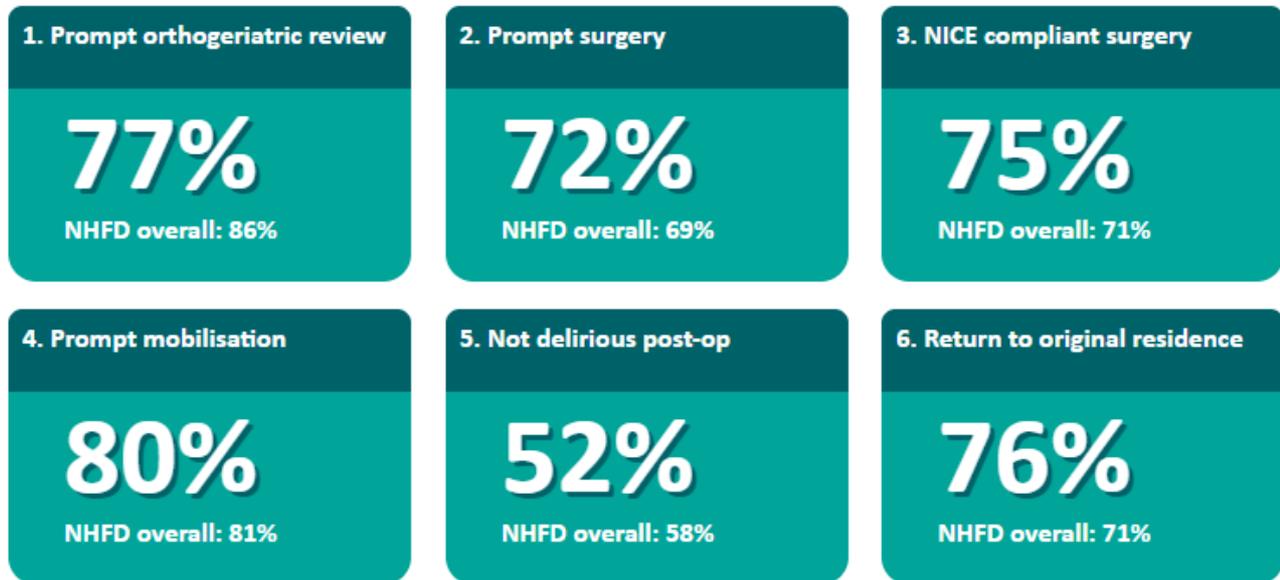


Saunders, Nathan
06/08/2021 14:36:42

⁴ National Audit of Inpatient Falls 2020 Interim Report

KPI overview: UHW. University Hospital of Wales

Annualised values based on 465 cases averaged over 12 months to the end of February 2021.



As recommended by the Royal College of Physicians the UHB have commenced a regular Falls Review Panel in order to provide scrutiny of completed falls investigation reports. Feedback is provided directly to Clinical Boards. It is anticipated that learning from these panels will be shared widely as appended at the end of this report. In addition this group escalates themes and trends to the National Forum for Inpatient Falls and has been working with the Delivery Unit on their plans to change the way Health Boards report falls to Welsh Government.

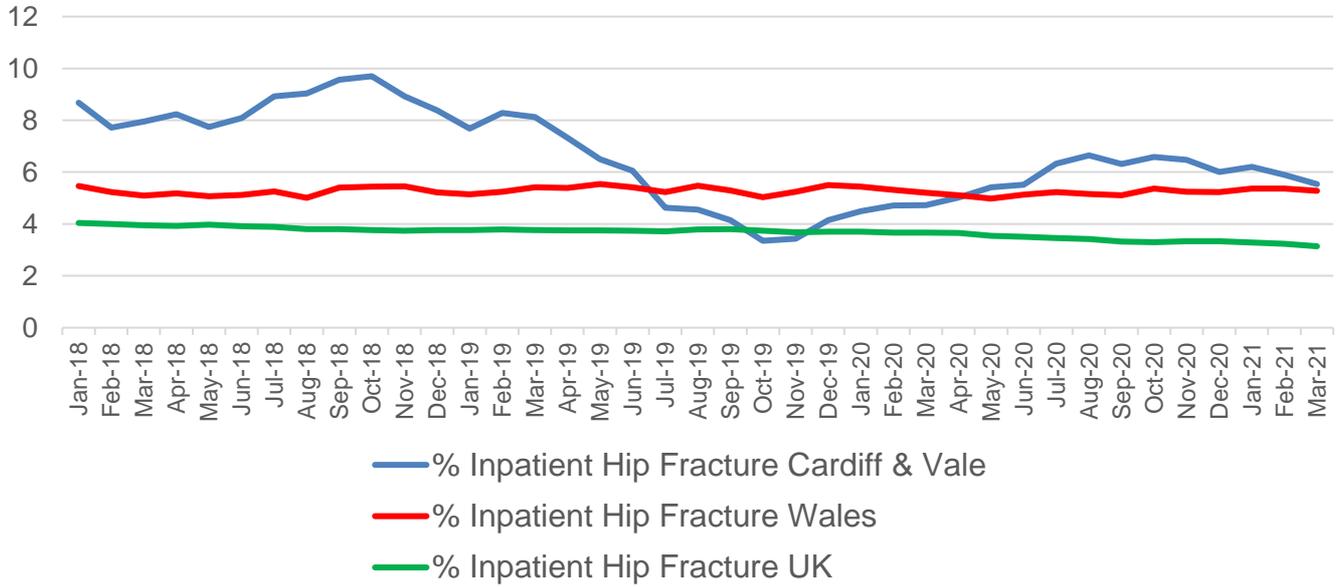
Local audits of compliance against best practice for falls prevention and management have not taken place during the pandemic, however, collaboration with the Perfect Ward project has resulted in the inclusion of falls audit questions being included in the first phase of roll out. The Perfect Ward application enables the Falls Delivery Group to analyse data from the clinical areas, which will inform our improvement work going forward.

Falls Resulting in Fatal Head Injuries

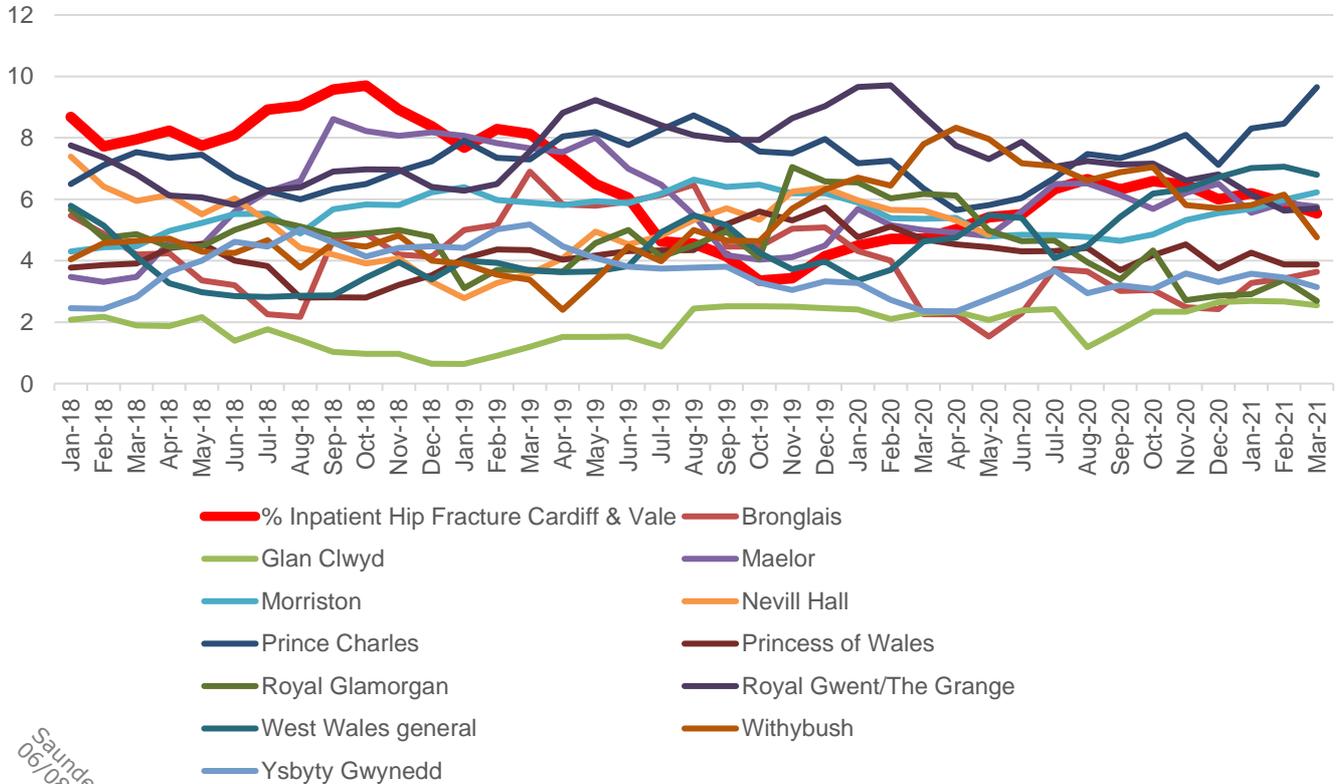
In response to a request from the Executive Lead for Falls, a review of inpatient falls causing head injuries has been undertaken:

Saunders Nathan
06/08/2021 14:36:47

Benchmarking Inpatient Hip Fracture as %age of all Hip Fractures recorded on national Hip Fracture Database

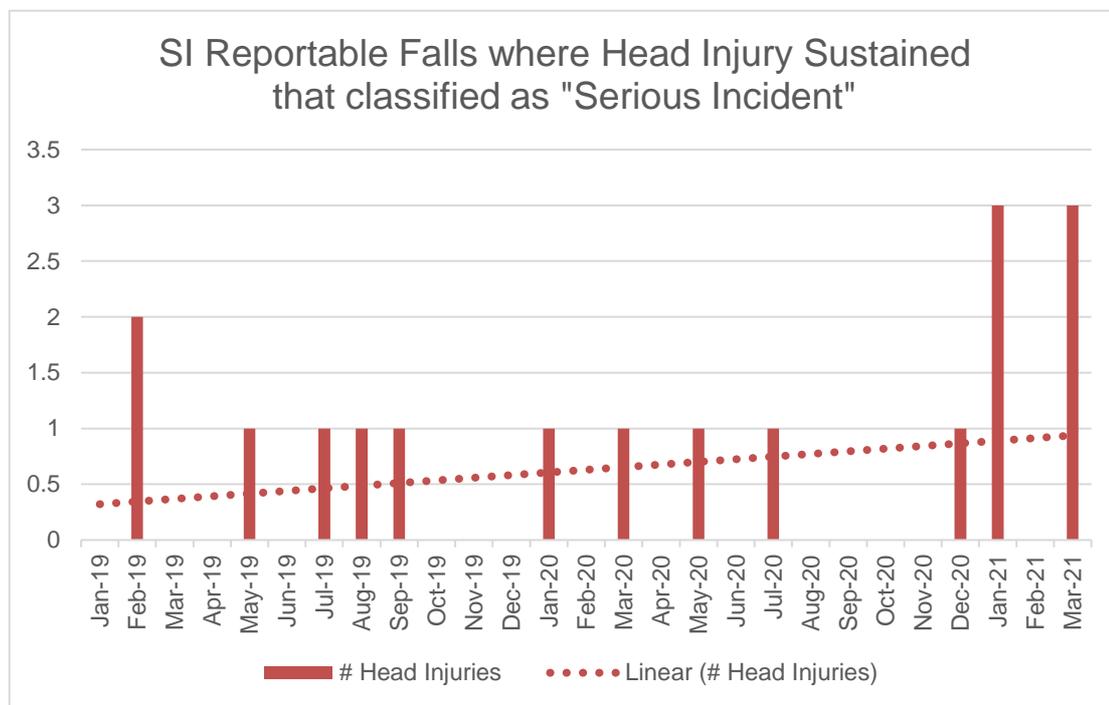


Benchmarking by Welsh Hospital - %age Inpatient Hip Fractures



Saunders/Nathan
06/08/2021 14:36:41

No benchmarking data is available for all falls, or those patients specifically who sustain head injuries. In Cardiff & Vale, an inpatient fall where a head injury is sustained that requires surgical intervention or results in death are reported to Welsh Government as a Serious Incident (with exceptions during pandemic).



Of the 17 inpatient falls resulting in head injury from January 2019 (as chart on page 3 above) only one was a fatality where the patient was taking Warfarin. In total there were 9 falls where the patient was prescribed anticoagulation therapy, of these nine patient, 3 died, one taking Warfarin (Feb 2019), one taking Rivaroxaban in March 2021 and one taking Clopidrel in March 2021.

Effective Care (Theme 3)

The falls lead in post from January 2021 will:

- Assess levels of reporting of falls throughout the UHB;
- Work with the Business Intelligence team to improve the falls dashboard and refine the suite of information reported to the Falls Delivery Group;
- Update falls prevention information on intranet and internet and work with Communications team to regularly publish education materials relating to falls;
- Complete pilot of RCP Hot Debrief Tool, report to Falls Delivery Group and consider scaling up use of the hot debrief tool to UHL once pilot evaluated;
- Participate in training needs analysis for falls education ;
- Promote Falls Prevention Awareness Day 22nd September 2021;
- Improve provision of preventative information out outpatient clinics and on discharge from hospital inpatient stays;
- Explore efficacy of sensor devices used throughout the UHB;
- Participate in internal ward inspections and ward accreditation programme.

Saunders Pathan
06/08/2021 14:36:41

Recommendation:

Training in Falls assessment, prevention and management be mandatory, monitored on ESR.

Shaping our Future Wellbeing Strategic Objectives

This report should relate to at least one of the UHB’s objectives, so please tick the box of the relevant objective(s) for this report

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people		7. Be a great place to work and learn	
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	
4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered

Please tick as relevant, click [here](#) for more information

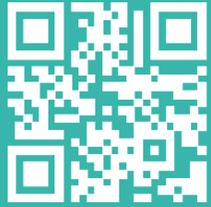
Prevention	Long term	Integration	Collaboration	Involvement
Equality and Health Impact Assessment Completed:	Yes / No / Not Applicable <i>If “yes” please provide copy of the assessment. This will be linked to the report when published.</i>			

Unintentional Blank Page



April 2021 Falls Review Panel – Learning and Feedback

Standing / Lying BP should be part of the Multi Factorial Risk Assessment for Falls for all inpatients who can stand. Use the QR codes to refresh your knowledge.



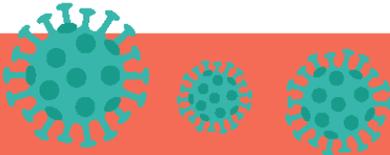
Falls Policy How to measure BP Procedure reference cards

Multifactorial Risk Assessment and Interventions:

- ▶ Use the Intervention column to describe what actions are in place to mitigate identified risks
- ▶ Ensure completed on admission to clinical area, updated weekly, or if changes in patient's condition, or after a fall
- ▶ Complete as fully as possible to evidence the care that is provided
- ▶ Don't forget to assess vision, hearing, cognition / delirium (using 4AT)
- ▶ Ensure if a walking aid is required, it is provided and within easy reach

Watch out for Mobile Falls Simulation Training
Coming to your ward soon!

“Read About Me”
Please use this tool to share information about the patient and what is important to them.



If post Covid, remember the patient is more likely to experience unstable blood pressure, and an increase in confusion.

Post Covid – consider the significance of deconditioning. Safe mobilisation should be encouraged.



Saunders Nathan
06/08/2021 14:36:47



Report Title:	Gosport War Memorial Hospital; the Report of the Gosport Independent Panel – progress update			Agenda Item no.	2.8
Meeting:	Quality, Safety and Experience Committee			Meeting Date:	June 15 th 2021
Status:	For Discussion	For Assurance	x	For Approval	For Information
Lead Executive:	Executive Nurse Director/Executive Medical Director				
Report Author (Title):	Assistant Director Patient Safety and Quality				

Background and current situation:

The purpose of this paper is to provide the Committee with a further assurance report in relation to the main findings of the Report of the Gosport Independent Panel. The Committee has received reports previously in February [2019](#) and in September 2019, which provided a level of assurance in relation to the systems and processes that are in place within Cardiff and the Vale UHB to monitor the appropriate use of opioid analgesics particularly in rehabilitation or respite settings.

Executive Director Opinion/Key Issues to bring to the attention of the Board/Committee:

It was agreed that a further report was required to examine the systems and processes in place in relation to:

- The prevalence of and controls in place in relation to anticipatory prescribing and to prevent the use of opioids without appropriate clinical indication - with specific focus on rehabilitation and respite settings

A further update is also provided in relation to:

- Mortality rates in community hospitals, rehabilitation settings and respite care
- Trends and themes in death certification

The report of the Gosport independent Panel was published in June 2018 and can be read [here](#)

Assessment and Risk Implications (Safety, Financial, Legal, Reputational etc.):

There were three areas which required a level of assurance with regards to systems and processes in place across the UHB:

- **The prevalence of and controls in place in relation to anticipatory prescribing and to prevent the use of opioids without appropriate clinical indication - with specific focus on rehabilitation and respite settings**

Saunders Nathan
06/08/2021 14:36:41

In the previous report to the Committee, a range of further actions was agreed:

Action required:

- **A section on anticipatory prescribing will be added to the UHB Medicines Code**

This has been delayed due to the competing priorities caused by the Covid-19 pandemic. However, a Standard Operating procedure for Anticipatory prescribing has been agreed by the Medicines Management Group and the Medicines Code will be updated in due course.

The UHB works to the All Wales care Decisions Guidance so prescribing of this nature would be a team decision, with family and patient involvement – there would also be agreement on reversibility.

There is a wide range of education and training across all levels of healthcare professional groups including students, junior doctors, nurses and pharmacists. There is a prompt in the prescribers guide in relation to anticipatory prescribing and all prescribers are governed by the Standards set by their professional bodies.

- **Strengthen local audit arrangements in relation to anticipatory prescribing practice in line with NICE Quality Standard 144 – Care of dying adults in the last days of life**

The National End of Life (EOL) Audit is a UK wide audit. Last year, it was not undertaken due to competing demands posed by the Covid-19 pandemic. This year, it will re-commence and is now being extended to Mental Health in Older People services. Anticipatory prescribing practice is audited as part of the EOL audit. The EOL audit included a staff related measure to assess knowledge, expertise and confidence in prescribing.

The role of the Medical examiner also introduces another independent level of assurance with regards to the appropriateness of care leading up to the death of any patient. Currently this is limited to in-patients but also included the deaths of patients in hospices and will extend, in time, to all community deaths.

- **Put in place suitable monitoring arrangements in relation to anticipatory prescribing in relevant commissioned services**

General Practitioners are responsible for prescribing in community palliative care patients.

The prescribing of controlled drugs is routinely monitored by prescribing advisors reporting to the The Local Intelligence Network (LIN). Anticipatory prescribing practice will now be included in the Annual Workplan of the LIN.

Care home prescribing practices are monitored by the Primary care Pharmacy Team. The Marie Curie Service employs a Band 8A Palliation Pharmacist.

- **Mortality relates in community hospitals, rehabilitation settings and respite care**

Since the previous report to Committee in September 2019, the UHB has established a multi-disciplinary Mortality (Learning from Deaths) Group. This is now well embedded with a high level of engagement across the UHB. It is Chaired by the Assistant Medical Director for Clinical

Governance and Patient Safety with regular support from the Welsh Medical Examiner and his officers.

UHB – wide Mortality data is examined in detail at every meeting.

• **Trends and themes in death certification**

Currently the Medical Examiner System has been introduced in Wales on a non-statutory basis. It is anticipated that the service will be fully implemented in Cardiff and the Vale UHB, by September 2021. This will provide an independent scrutiny of all deaths that are not referred directly to the coroner. This will robustly address the issue of early identification of trends in death certification. It is anticipated that approximately 20% of cases reviewed by the ME’s office will be referred back to Health Boards for further review. The UHB has already established a process between the Medical Examiner’s office and the UHB so that any cases which are highlighted to the UHB by the ME’s office, are subject to further internal review and scrutiny (and will be reported on a regular basis to the Mortality Group).

Recommendation:

The Quality, Safety and Experience Committee is asked to **NOTE** the contents of the report and **AGREE** that the necessary level of assurance has been provided in relation to outstanding issues.

Shaping our Future Wellbeing Strategic Objectives

This report should relate to at least one of the UHB’s objectives, so please tick the box of the relevant objective(s) for this report

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people		7. Be a great place to work and learn	
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	
4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered

Please tick as relevant, click [here](#) for more information

Prevention	Long term	Integration	Collaboration	Involvement
------------	-----------	-------------	---------------	-------------

Equality and Health Impact Assessment Completed:

Yes / No / Not Applicable
If "yes" please provide copy of the assessment. This will be linked to the report when published.

Kind and caring
Caredig a gofud

Respectful
Dangos parch

Trust and integrity
Ymddiriedaeth ac uniondeb

Personal responsibility
Cyfrifoldeb personol



Report Title:	HEALTHCARE INSPECTORATE WALES ACTIVITY				
Meeting:	Quality, Safety and Experience Committee			Meeting Date:	15.6.21
Status:	For Discussion		For Assurance	<input checked="" type="checkbox"/>	For Approval
Lead Executive:	Executive Nurse Director				
Report Author (Title):	Head Patient Safety and Quality Assurance				

Background and current situation:

The purpose of this report is to provide the Quality, Safety and Experience Committee with an overview of the reviews/inspections carried out by Healthcare Inspectorate Wales (HIW) since the last over-arching report to the Committee in December 2020. The paper seeks to assure the Committee that action is already being implemented in response to the findings of inspections and that appropriate monitoring of progress against the actions is being undertaken.

HIW is the independent inspectorate and regulator for health care in Wales. The core role of HIW is to review and inspect the NHS and Independent Healthcare organisations in Wales so that assurance can be given to patients, public, Welsh Government (WG) and healthcare providers that services are safe and of good quality.

Inspections are a means of providing assurance that services are meeting the Health and Care Standards (2015) and are meeting any other relevant professional standards and guidance. Inspections are a structured process and are underpinned by the view of Francis (2013), who emphasised the importance of undertaking direct observations of a service and care provided. Unannounced inspections undertaken by HIW allow them to see services in the way they usually operate and focus on the following themes:

- Quality of the patient experience
- Delivery of safe and effective care
- Quality of management and leadership
- Delivery of a safe and effective service

Executive Director Opinion /Key Issues to bring to the attention of the Board/ Committee:

HIW stepped down their usual inspection programme at the start of the outbreak of Covid-19 maintaining a scaled down service of assurance and inspection. On October 20th HIW informed the health board of a planned programme of Quality Checks from November 2020 to January 2021.

Since the last HIW activity report in April 2021, there has one Two Tier 1 Quality checks to Owl Ward on 12th May 2021.

Saunders,Nathan
06/08/2021 14:36:47

Assessment and Risk Implications (Safety, Financial, Legal, Reputational etc:)

Update on HIW activity during the COVID-19 outbreak

HIW ceased their routine inspection and review programme from March 17th 2020 due to the Covid-19 pandemic. HIW have however continued to monitor and follow up on any significant concerns regarding safety and quality of care. They have continued to:

- Monitor intelligence relating to healthcare in Wales and use this to identify patterns and concerns
- Meet and exercise their essential statutory duties regarding the regulation of Ionising Radiation (Medical Equipment) Regulations
- Deliver the second opinion appointed doctor service, however, this service is delivered remotely
- Work with key stakeholders and partners to ensure they can monitor the quality and safety of healthcare services in Wales
- Together with counterpart regulators of the Ionising Radiation (Medical Exposure) Regulations in England, Northern Ireland and Scotland, HIW published a response to the developing COVID-19 epidemic which you can read [here](#)
- HIW have also made changes to the way they operate the Review Service for Mental Health in Wales during this period. You can read the updated guidance and amended methodology for the service [here](#)

On 6th July 2020, HIW announced its intention to revise their approach to assurance and inspection for the foreseeable future. A pilot of this new approach was undertaken from August to October 2020 which allowed HIW to deploy their workforce in a more agile way, responding to risks and issues while taking account of revised operating models during the pandemic. Following the pilot phase feedback was sought which reflected positively on the tiered approach and following some fine tuning a further planned programme of Quality Checks was announced in October 2020.

A key feature of the new approach is the use of a three tiered model of assurance and inspection that reduces the reliance on onsite inspection activity as the primary method of gaining assurance. This will include;

- Tier 1 activity which will be conducted entirely offsite and will be used for a number of purposes but, at this stage, primarily where issues cannot be resolved via the standard concerns process and where the risk of conducting an onsite inspection remains high.
- Tier 2 will introduce a combination of offsite and limited onsite activity,
- Tier 3 will represent a more traditional onsite inspection.

HIW have published a Quality Insight bulletin – COVID 19, which has captured the positive themes, good practice and emerging risks and is available on link below.

https://hiw.org.uk/quality-insight-bulletin-covid-19?_ga=2.19908280.1648384767.1610967625-75638883.1566898668

Quality Checks

Teenage Cancer Trust Unit.

On the 31st of March 2021 a quality check was undertaken on the Teenage Cancer Trust Unit

The Teenage Cancer Trust Unit (TCTU) is the principle treatment center for cancer patients aged between 14 and 25 from across South and Mid Wales area. The Unit has eight inpatient beds and also provides day and ambulatory care services. The findings report was very positive and no areas for improvement were identified.

Social aspects of life are particularly important to this young group of people. HIW was provided with evidence that adaptations had been made to the environment to ensure that socialisation continued safely. All inpatients have a television at their bedside and the unit has its own WIFI which helps with virtual interaction with family and friends which is encouraged. The second floor of the unit offers additional designated social area for patients which includes larger TVs, video games and pool tables etc. these have remained in use during the pandemic, although the social area has been subject to restrictions e.g for use by day care patients only within day time hours, and out of hours inpatients are able to access this space adhering to social distancing rules at all times. All equipment within this area is thoroughly cleaned after use.

During the quality check, HIW evaluated how well the service manages and controls the risk of infection to help keep patients, visitors and staff safe. Infection control policies, infection rates and risk assessments were reviewed. Key systems including the use of personal protective equipment (PPE) were also considered and provided satisfactory assurance.

A formal admissions pathway is in place with patients being admitted onto a designated ward outside of the unit for COVID-19. Screening before being admitted onto the unit following a negative COVID-19 test is undertaken, occasionally additional, ongoing screening is required in line with local risk assessment. Any patients diagnosed with an infection whilst on the unit undergo a root cause analysis exercise to ensure learning, this is reviewed at the monthly departmental Health Care Acquired infection (HCAI) meeting, and escalated to the Clinical Board.

Evidence was provided of sufficient numbers of appropriately trained staff on the unit to provide safe and effective care. Although the unit had endured some challenges during the pandemic, with the reallocation of staff, short term sickness and with staff isolating, the unit was able to maintain adequate staffing in line with the Nurse Staffing Levels Wales Act. Good senior management support within the directorate was evident, and a visible lead nurse presence on the ward on a daily basis. Weekly meetings held with ward managers and senior nurses provide a further opportunity for discussion and support. Measures are in place to provide additional support to staff, including referral to occupational health and sign posting to resources available within the health board to support staff wellbeing.

HIW was provided with information on how staff are kept up to date with changes e.g. Virtual team meetings take place to share information or any concerns with senior management which is well attended. Staff Performance, Appraisal and Development Reviews (PADR) are undertaken on a regular basis. Training statistics were provided which shows a high compliance rate for mandatory training.

A link to the published report is below

<https://hiw.org.uk/sites/default/files/2021-05/20210505teenagaecancertrusten.pdf>

Hazel Ward – Hafan y Coed.

Healthcare Inspectorate Wales (HIW) undertook a remote quality check of Hazel Ward, Hafan Y Coed on the 18th of March 2021. Hazel ward is currently a 13 bed, mixed gender, rehabilitation and recovery ward for people experiencing a range of mental health illnesses.

HIW were provided with evidence that Hazel Ward conducted necessary risk assessments and updated relevant policies and procedures to meet the additional demands of the COVID-19 pandemic. Evidence was also provided that social distancing measures are in place, and both staff and patients wear masks as required, posters are displayed in the ward to educate and remind patients of social distancing rules.

The ward manager shared with HIW how the current restrictions have significantly impacted on rehabilitation activities on the ward, resulting in patients being unable to join staff for shopping trips etc. Walking groups and other community activities put on hold which resulted in impacted negative impact on patients' behaviours and staff have noted increased frustrations in the patient group. The report reflected positively that staff had adapted to the changes and created soothing boxes for some patients which included resources to help calm and control behaviours. In addition staff had created an exercise board competition amongst staff and patients, themed 'Around the World' cooking classes, and the garden area was being re-developed by patients which help alleviate boredom and frustration within the patient group.

Evidence was provided with regards to the policies and procedures in place for the prevention and control of infection. These included both the standard Infection prevention and control precautions and the further guidance issued relating to COVID-19, which are reviewed and updated regularly and staff informed of any updates.

HIW were reassured that there are systems in place to ensure all staff were aware of and discharged their responsibilities for preventing and controlling infection. This was evidenced by the COVID 19- policies and procedures in place. In addition, FFP31 mask training had been delivered for staff, instruction posters displayed in clinical areas informing staff of PPE requirements, importance of cleaning touch points regularly, using appropriate wipes, and ensuring that hands are being washed by staff and patients as often as possible.

A review of the staff vacancies and absence data did not indicate any staffing issues. Staffing resources are planned in advance and reviewed daily, and bed flow meetings take place weekly. There is a ward social media group in place which helps ensure sufficient staff numbers were on shift to meet the care needs of the patients on Hazel Ward. The social media communication highlights any deficiencies and staff are able to work extra shifts or extending their shift.

The Mental Health Act administration team carry out double scrutiny alongside a consultant psychiatrist for all section papers on admission. All consent to treatment certificates are also scrutinised by a consultant psychiatrist. Page 8 of 12 Consent to treatment and medication charts are checked on a weekly basis by the ward pharmacist during patient reviews which reflected positively in the report. HIW were also satisfied that incidents are reported appropriately

Compliance data for staff mandatory training was provided. Whilst there were a number of areas showing a high rate of compliance, this was not reflected in all training topics. During the review of the training statistics there were issues identified which need to be reviewed.

Improvements were identified for the following areas:

- A ligature risk assessment to be undertaken and any remedial work by estates to be completed. – *Ligature risk assessment undertaken on the 4/5/21*
- The HB must provide up to date cleaning audit – *Up to date clearing audits provided to HIW*
- Health Board to review training data and ensure staff are up to date with skills and knowledge to provide safe and effective care – *All staff allocated a study day to ensure they have access to a PC to complete online mandatory training. Staff are booked on face to face training as the training is reinstated.*

The improvement plan was accepted by HIW

A link to the published report is available in the link below

<https://hiw.org.uk/sites/default/files/2021-05/20210511hafanycoeden.pdf>

Owl (surgical ward) Noah's Arc

A Quality Check was undertaken on the 12th of May, findings of the inspection will be reported in the August QSE committee meeting following feedback from HIW..

Update on thematic reviews:

WAST

As part of Healthcare Inspectorate Wales' (HIW) annual reviews programme for 2020-21, a local review of the Welsh Ambulance Service Trust (WAST) is being undertaken. The focus of the review is to consider the impact of ambulance waits outside Emergency Departments (ED) on patient safety, privacy, dignity and their overall experience. A copy of the Terms of Reference will be available on the HIW website on the link below.

<https://hiw.org.uk/local-review-welsh-ambulance-service-trust-delayed-handover>

[The UHB is working with HIW to encourage relevant staff to participate in a survey in relation to ambulance handovers. This has been promoted through all available UHB communication channels.](#)

Mental Health Crisis Prevention in the Community

HIW have announced their intention to carry out a National Review Of Mental Health Crisis Prevention in the Community. It is anticipated that the review will be completed and published by Autumn 2021. The Terms of Reference can be found [here](#)

Saunders,Nathan
06/08/2021 14:36:47

Recommendation:

The Quality, Safety and Experience Committee is asked to:

- **NOTE** the level of HIW activity across a broad range of services.

AGREE that the appropriate processes are in place to address and monitor the recommendations.

Shaping our Future Wellbeing Strategic Objectives

This report should relate to at least one of the UHB’s objectives, so please tick the box of the relevant objective(s) for this report

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	x	7. Be a great place to work and learn	
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	
4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	x
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered

Please tick as relevant, click [here](#) for more information

Prevention	Long term	Integration	x	Collaboration	X	Involvement	
------------	-----------	-------------	---	---------------	---	-------------	--

Equality and Health Impact Assessment Completed:

Not Applicable
If “yes” please provide copy of the assessment. This will be linked to the report when published.



Report Title:	Board Assurance Framework – Patient Safety				
Meeting:	Quality, Safety & Experience Committee			Meeting Date:	15 th June 2021
Status:	For Discussion		For Assurance	X	For Approval
Lead Executive:	Director of Corporate Governance				
Report Author (Title):	Director of Corporate Governance				

Background and current situation:

The purpose of the report is to provide Members of the Quality, Safety and Experience Committee with the opportunity to review the Patient Safety risk on the Board Assurance Framework which links specifically to this Committee.

Executive Director Opinion /Key Issues to bring to the attention of the Board/ Committee:

The Board Assurance Framework provides the Board with information on the key risks impacting upon the delivery of the Strategic Objectives of Cardiff and Vale University Health Board.

The attached Patient Safety risk (last considered by the Board in May 2021) is considered to be a key risk to the achievement of the organisation's Strategic Objectives. This risk has been adjusted to take into account recovery and the impact on patient safety this will bring.

There are also a number of risks on the Corporate Risk Register which relate to Patient Safety.

Assessment and Risk Implications (Safety, Financial, Legal, Reputational etc:)

There are currently nine key risks on the BAF, agreed by the Board in May 2021, which are impacting upon the Strategic Objectives of Cardiff and Vale Health Board. Patient Safety is one of those key risks and specifically identifies:

'There is a risk to patient safety due to COVID 19 Recovery and this has resulted in a backlog of planned care and an aging and growing waiting list'.

It is good practice for Committees of the Board to also review risks on the BAF which relate to them. The role of the Committee in relation to the risk is to review it, check that the controls are in place and working and agree any further actions required in order to mitigate the risk. The Committee can then provide further assurance to the Board that the risk is being managed or mitigated as much as possible at the current time. The Executive Director Leads for this risk are the Executive Medical Director, the Executive Nurse Director and the Executive Director of Therapies and Health Sciences.

Saunders Nathan
06/08/2021 14:36:47

Recommendation:

The Quality, Safety and Experience Committee is asked to:

Review the attached risk in relation to Patient Safety to enable the Committee to provide further assurance to the Board when the Board Assurance Framework is reviewed in its entirety.

Shaping our Future Wellbeing Strategic Objectives

This report should relate to at least one of the UHB's objectives, so please tick the box of the relevant objective(s) for this report

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	x	7. Be a great place to work and learn	x
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	
4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered

Please tick as relevant, click [here](#) for more information

Prevention	x	Long term		Integration		Collaboration		Involvement	
Equality and Health Impact Assessment Completed:	Not Applicable								



1. Patient Safety - Lead Executives Stuart Walker, Ruth Walker and Fiona Jenkins

Risk	<p>There is a risk to patient safety:</p> <p>Due to post COVID 19 recovery and this has resulted in a backlog of planned care and an ageing and growing waiting list.</p> <p>Or because of sub-optimal workforce skill mix or staffing ratios, related to reduced availability of specific expert workforce groups, or related to the need to provide care to a larger number of patients in relation to post COVID 19 recovery.</p>		
Date added:	April 2021		
Cause	Patients not able to access the appropriate levels of planned care during COVID 19 creating both longer and ageing waiting lists for planned care.		
Impact	Worsening of patient outcomes and experience, higher death rate.		
Impact Score: 5	Likelihood Score: 5	Gross Risk Score:	25
Current Controls	<ul style="list-style-type: none"> • Recovery Plans being developed and implemented across all areas of Planned Care • Maintaining Training/Education of all staff groups in relation to delivery of care • Use of Spire Hospital • Inhouse and insources activity • Additional recurrent activity taking place • Recruitment of additional staff • Hire of additional mobile theatres 		
Current Assurances	<ul style="list-style-type: none"> • Recovery Plans reported to Management Executive, Strategy and Delivery Committee and the Board. • CAHMS position reviewed at Strategy and Delivery Committee • Mental Health Committee aware of more people requiring support. • Review of clinical incidents and complaints continues as business as usual and has been aligned with core business and reviewed at Management Executives 		
Impact Score: 5	Likelihood Score: 4	Net Risk Score:	20
Gap in Controls	Local Authority ability to provide packages of care and challenge around discharge		
Gap in Assurances	Discharging patients is out of the Health Boards control		

Saunders, Nathan
06/08/2021 14:36:47

Actions		Lead	By when	Update since March 21
1. Recovery plan in place and constantly being reviewed		Steve Curry	31.03.22	Plan in place which is continually been reviewed in relation to demand and capacity – see separate risk on BAF: the risk of inadequate planned care capacity
2. Waiting list position plan to be presented to Quality, Safety and Experience Committee to see if harm has occurred to those on the waiting list and what we are doing to prevent it going forward.		Steve Curry	30.06.21	To be presented to QSE Committee
3. CAHMS impact to be presented to Board Development in June due to demand and support for children increasing		Steve Curry	30.06.21	To be presented to June Board Development session
4. Review of hospital acquired COVID 19 and COVID deaths being undertaken		Ruth Walker	30.09.21	Review has commenced and will be reported once complete
Impact Score: 5	Likelihood Score: 2	Target Risk Score:		10 (High)

Saunders, Nathan
06/08/2021 14:36:47

Saunders, Nathan
06/08/2021 14:36:47

Report Title:	Health Care Standards Strategy and Action Plan				
Meeting:	Quality, Safety and Experience Committee			Meeting Date:	15.06.2021
Status:	For Discussion	For Assurance	For Approval	For Information	
Lead Executive:	Executive Nurse Director				
Report Author (Title):	Head of Patient Safety and Quality Assurance				

Current Situation:

The Health and Care Standards set out the Welsh Government’s framework of standards to support the NHS organisations in providing effective, timely and quality services across all healthcare settings.

The standards provide a consistent framework that enable health organisations to look across the range of their services in an integrated way, to ensure that the care that they provide is of the highest standard and they are doing the right things, in the right way, in the right place, at the right time with the right staff and to allow service users to understand what they can expect

The current set of Health and Care Standards came into force on 1 April 2015 and incorporates a revision of the “Doing Well, Doing Better” Standards for Health Services in Wales (2010) and the ‘Fundamentals of Care Standards (2003).

Background:

In December 2017 the Committee agreed an ongoing approach to align the Health and Care Standards to existing groups or committees within the UHB. The aim was to support a system that promotes continuous monitoring and development of the services underpinning each of the Health and Care Standards and to reduce variation across the UHB. It has previously been agreed that this process would be undertaken over a three-year period and that in 2018/19 seventeen standards would be aligned to committees and the Clinical Boards would undertake self-assessments against the remaining seven standards. The process was subject to Internal Audit assessment and was awarded reasonable assurance.

Executive Director Opinion/Key Issues to bring to the attention of the Board/Committee:

In 2020, the Health and Care Standards self- assessment was not undertaken due to the challenges of the evolving pandemic. An update paper on the current improvement plan was presented to the December 2020 QSE Committee. For 2021, the identified organizational leads/Groups for the 16 corporate standards were asked to submit a short, structured SBAR assessment of their current position and an outline of the main improvements planned/required for 2021/2022.

Executive sign off has been achieved and the 16 annual corporate assessments have been shared with Independent Members in line with agreed plan.

Sminders, Nathan
08/08/2021 14:36:47

The process has been subject to Internal Audit assurance and has been awarded a rating of reasonable assurance.

ASSESSMENT

The 16 corporate Health and Care Standards that are aligned to groups and committees across the health board have been subject to ongoing scrutiny throughout the year. Performance against the individual components of each of these standards will have been monitored and where necessary the requisite improvements will have been implemented and reviewed. An annual assessment of performance and identification of the 2021/22 actions is undertaken by the corporate leads in conjunction with each of the groups and committees. These assessments have been subject to Executive review and sign off by the Independent Member.

Each self-assessment is multi-factorial and considers a number of components relating to the individual standard. To reduce variation between Clinical Boards a scoring matrix has been developed for each standard with definitions aligned to four scores:

- Getting Started
- Getting There
- Meeting the Standard
- Leading the Way

A review of the 16 corporate Health and Care standards self assessments and scoring has been compared to the previous self-assessment in 2018/19 and shows the following:

Standard 2.2 – Safeguarding and 6.1 - Planning Care to Promote Independence have both maintained their scoring of 'Leading the Way'.

The vast majority (10 standards self assessments) have maintained their previous scoring, seven of which are scored as 'Getting There' and three 'Meeting the Standard'.

Two self assessment standards showed a lower scoring, 2.3 Falls prevention, although the scoring is lower than for 2018/19, a dedicated Health Board Falls Lead was appointed in January 2021 and significant progress has been made to date, several key deliverables have been identified within the self assessment SBAR for the coming year.

Standard 7.1 – Workforce was previously self-assessed in 2018/19 and scored as 'Leading the Way', although this year's self assessment was scored as 'Meeting the Standard', many of the elements met the 'Leading the Way' criteria. However, through evaluation of relevant strategies e.g. Workforce chapter of the UHB IMTP (Integrated Medium Term Plan), WOD Delivery Plan, UHB Employment Policies, and learning from the first wave of Covid-19 and the NHS Wales Staff Survey results, areas for further improvements were identified and therefore self-assessed as 'Meeting the Standard', several key deliverables are identified for 2021/22.

Saunders, Nathan
06/08/2021 14:36:47

The Corporate assessment of all of the health and care standards are included in the appendices:

		Standard	Previous score	Current Score	Progress
1.1	Appendix 1	Health promotion. Protection and improvement	Partial-progressing towards the standard and Meeting the standard	Meeting the standard	
2.1	Appendix 2	Managing risk and promoting health and safety	Meeting the Standard	Meeting the Standard	
2.2	Appendix 3	Preventing Pressure Damage	Getting there	Getting there	
2.3	Appendix 4	Falls Prevention	Meeting the Standards	Getting there	
2.4	Appendix 5	Infection Prevention and Control and decontamination	Getting there	Getting there	
2.5	Appendix 6	Nutrition and Hydration	No Score	Meeting the standard	
2.6	Appendix 7	Medicines Management	Getting there	Getting there	
2.7	Appendix 8	Safeguarding	Leading the Way	Leading the Way	
2.8	Appendix 9	Blood Management	Getting there	Meeting the standards	
2.9	Appendix 10	Medical devices	Getting there	Getting there	
3.2	Appendix 11	Communicating Effectively	No Score	Getting there	
3.4	Appendix 12	Information Governance and Communications Technology	Getting There	IG - Meeting the Standard IT – Getting there	 
5.1	Appendix 13	Timely Care	Getting there	Getting there	
6.1	Appendix 14	Planning care to promote Independence	Leading the Way	Leading the Way	

3/16/09/2021 14:36:47
 Saunders, Nathan

6.2	Appendix 15	Peoples Rights	Meeting the standard	Meeting the standard	
7.1	Appendix 16	Workforce	Leading the Way	Meeting the standard	

Recommendation:

The committee are asked to:

Note the progress made against each of the Health and Care Standards

Approve the Corporate Priorities for 2021/22

Shaping our Future Wellbeing Strategic Objectives

This report should relate to at least one of the UHB's objectives, so please tick the box of the relevant objective(s) for this report

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people		7. Be a great place to work and learn	
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	
4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered

Please tick as relevant, click [here](#) for more information

Prevention		Long term		Integration		Collaboration		Involvement	
Equality and Health Impact Assessment Completed:	Yes / No / Not Applicable <i>If "yes" please provide copy of the assessment. This will be linked to the report when published.</i>								

Saunders,Nathan
06/08/2021 14:36:47

Report Title:	Falls: Policy and Procedure for the Prevention and Management of Adult In-patient Falls				
Meeting:	Quality, Safety and Experience Committee			Meeting Date:	15/06/2021
Status:	For Discussion	For Assurance	For Approval	√	For Information
Lead Executive:	Executive Director of Therapies and Health Science				
Report Author (Title):	Patient Safety and Organisational Learning Manager				

Background and current situation:

Health care professionals have a duty of care to minimise risks to their patients. Cardiff and Vale University Health Board (UHB) aims to take all reasonable steps to ensure the safety and independence of its patients, and respects the rights of patients to make their own decisions about their care.

In-patient falls are the most frequently reported incident for the UHB (and this is true throughout the UK). With the UHB's patient population increasing in age and complex multi-morbidity, the challenge to reduce the number of falls and injuries from falls is significant.

Adult patients in hospital may be at risk of falling for many reasons including a history of falls, medically unwell, dementia or delirium, the effects of their treatment or medication, poor mobility, visual and other sensory impairments along with their general wellbeing.

The Falls Policy was last ratified in 2016 and has been reviewed and updated. Appendix 5 to the Policy has been updated to clarify risk of anticoagulation and circumstances in which computerized tomography (CT) scanning is indicated. In addition there are a number of typographical and layout changes in order to reduce the size of the document and to aid its use by clinical staff.

Executive Director Opinion /Key Issues to bring to the attention of the Board/ Committee:

This is an existing policy and procedure that required a review and update of content.

Assessment and Risk Implications (Safety, Financial, Legal, Reputational etc:)

Wide consultation has taken place to ensure that the policy/procedure meets the needs of our stakeholders and the Health Board. The consultation undertaken specific to this document was as follows:-

- The document was shared virtually with the Falls Delivery Group who approved the content of the document.
- The Policy has also been posted on the UHB Intranet (Documents for consultation) with a consultation period due to end on 21st June 2021

Saunders, Nathan
06/08/2021 14:36:47

The primary source for dissemination of the Policy and Procedure within the UHB will be via the intranet and clinical portal. It will also be made available to the wider community and our partners via the UHB internet site. In addition, the updated policy will be widely shared via the use of UHB social media channels and the Staff Connect app.

Appendices can be found at:

http://nww.cardiffandvale.wales.nhs.uk/portal/page?_pageid=253,73860407,253_73860420&_ad=portal&_schema=PORTAL

Recommendation:

The Committee is asked to:

- **APPROVE** the Policy and Procedure for the Prevention and Management of Adult In-patient Falls subject to any changes required following consultation; and
- **APPROVE**, subject to approval of any changes that may be required following consultation, the full publication of the Policy and Procedure for the Prevention and Management of Adult In-patient Falls in accordance with the UHB Publication Scheme

Shaping our Future Wellbeing Strategic Objectives

This report should relate to at least one of the UHB's objectives, so please tick the box of the relevant objective(s) for this report

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people		7. Be a great place to work and learn	
3. All take responsibility for improving our health and wellbeing	√	8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	√
4. Offer services that deliver the population health our citizens are entitled to expect	√	9. Reduce harm, waste and variation sustainably making best use of the resources available to us	√
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	√

Five Ways of Working (Sustainable Development Principles) considered

Please tick as relevant, click [here](#) for more information

Prevention	√	Long term		Integration		Collaboration	√	Involvement	√
------------	---	-----------	--	-------------	--	---------------	---	-------------	---

Equality and Health Impact Assessment Completed

Yes

If "yes" please provide copy of the assessment. This will be linked to the report when published.

Reference Number: Version Number: 3	Date of Next Review: Previous Trust/LHB Reference Number: T 395
Falls: Policy and Procedure for the Prevention and Management of Adult In-patient Falls	
Policy Statement <p>To ensure the Health Board delivers its aims, objectives, responsibilities and legal requirements transparently and consistently, we will, by the issue of this policy and procedure, work to ensure that the risk of harm to adult patients caused by falls is minimised.</p>	
Policy Commitment <p>We are committed to ensuring that this policy and procedure regarding the prevention and management of falls is followed by our staff when they are caring for adult patients who may be at risk of falls.</p>	
Supporting Procedures and Written Control Documents <p>The supporting procedure describes the following with regard to falls prevention and management -</p> <ul style="list-style-type: none"> • The identification of those adult patients who may be at risk of falls • Actions to be taken to prevent falls where possible • Actions to be taken if a patient falls <p>Other supporting documents are:</p> <p>Mental Capacity Act 2005 Code of Practice Assessing and Prescribing Levels of Special Nursing Observations Restraint in the Care Management of Adults with Impaired Mental Capacity policy Bedrails Procedure Incident, Hazard and Near Miss Reporting Policy NICE CG 161 Welsh Health Circular (2016) 002</p>	
Scope <p>This procedure applies to all healthcare professionals employed by the UHB, including those on honorary contracts, who are involved in the care of in-patients. It also applies to academics, healthcare support workers, students and locums.</p>	
Distribution	

Submitted by: Nathan
 08/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	2 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

This policy and procedure will be made available on the UHB intranet, clinical portal and internet sites.

Review

This policy and procedure will be reviewed by the falls steering group every three years or sooner if appropriate.

Equality Impact Assessment

An Equality Impact Assessment (EqIA) has been completed and this found there to be no impact.

Note: if an EqIA has not been completed indicate why

Health Impact Assessment	
Policy Approved by	Quality Safety and Experience Committee
Group with authority to approve procedures written to explain how this policy will be implemented	Falls Delivery Group
Accountable Executive or Clinical Board Director	Executive Director for Therapies and Health Science
<p><u>Disclaimer</u></p> <p>If the review date of this document has passed please ensure that the version you are using is the most up to date either by contacting the document author or the Governance Directorate.</p>	

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	3 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

Summary of reviews/amendments			
Version Number	Date Review Approved	Date Published	Summary of Amendments
1	10/05/2011	13/06/2011	New Document
UHB 2	Jan 2012	09/03/2012 15/08/2012 26/09/2012 30/11/2012	Updated Appendices Appendix 23 added 15/08/12 Appendix 11 updated to UHB policy Appendix 9 updated to v 5.1
UHB 2.1	Aug 2014	19/08/2014	Updated Appendices: Appendices 1,2, 3, 4, 7, 8, 15a, 15b, 21, 22, & 23 New Appendices: Appendix 24 - Familiarisation with flat-lifting and use of Hoverjack
UHB 2.2	Jan 2015	23/01/2015	Update Appendix 5
UHB 3	13/09/2016	26/10/2016	New policy and procedure- This is a New Policy which has been added to the existing Procedure using the same UHB Number New appendices Appendix 16 Amended Frop-Com Form 2.doc Appendix 17 L&S BP Procedure Poster Appendix 18 L&S Procedure Reference Cards Appendix 19 Basic Bedside Vision Assessment Appendix 20 Delirium Screen the 4A's

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	4 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

Contents

Reference Number:.....	1
Version Number: 3.....	1
1 Introduction	5
2 Responsibilities	5
3 Abbreviations	7
4 Underpinning Key Principles.....	8
5 Framework for assessment.....	10
6 Standard Guidance for Falls Prevention Actions and Interventions for All Adult In-patients	11
7 Multi-Factorial Assessment and Multi-Factorial Actions and Intervention	12
8 Additional Targeted Interventions	13
9 Ongoing Multi-Factorial Assessment, Actions and Interventions.....	14
10 Consider Unintended Consequences	15
11 Immediate Actions following an Adult In-patient Fall	16
Neurological Observations	17
Escalation procedures.....	18
12 Triple Immobilisation.....	18
13 Screen for a possible or actual fracture	19
14 Reporting and record keeping	20
15 Resources.....	20
16 Training.....	20
17 Implementation	21
18 Equality	21
19 Audit.....	21
20 Distribution.....	21
21 Review	21
22 Appendices	22

Saunders,Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	5 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

1 Introduction

Health care professionals have a duty of care to minimise risks to their patients. Cardiff and Vale University Health Board (UHB) aims to take all reasonable steps to ensure the safety and independence of its patients, and respects the rights of patients to make their own decisions about their care.

In-patient falls are the most frequently reported incident for the UHB (and this is true throughout the UK). With the UHB's patient population increasing in age and complex multi-morbidity, the challenge to reduce the number of falls and injuries from falls is significant. A previous or recent fall is an indicator of the risk of a future fall.

Adult patients in hospital may be at risk of falling for many reasons including a history of falls, medically unwell, dementia or delirium, the effects of their treatment or medication, poor mobility, visual and other sensory impairments along with their general wellbeing. Although most falls result in no physical harm or minor physical injuries like scrapes and bruises, falls do sometimes result in catastrophic injury, including death. Fear of falling is a common presentation but is outside of the scope of these procedures.

2 Responsibilities

All healthcare staff who are involved with the care of in-patients have a responsibility to familiarise themselves with and follow the content of this policy and procedure.

Where staff are unsure about the reduction of risk strategies, they must seek advice from a senior colleague.

Clinical Board Quality and Safety Leads are responsible for ensuring:

- that staff are aware of this policy and procedure, how to access it and what to do if they have related queries about it
- falls incidents are reviewed on a regular basis at quality and safety meetings
- the development and completion of annual departmental in-patient falls improvement plans as part of the Health and Care Standards
- the incident reporting policy is adhered to

Directorate/Locality Management Teams are responsible for:

- ensuring that an assessment of staff training needs in relation to this policy and procedure is carried out and, where appropriate, staff are required to undertake relevant training, including refresher training
- monitoring implementation of this policy procedure and present and act on their findings

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	6 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

Lead Nurses / Senior Nurses are responsible for:

- ensuring that the policy and procedure is monitored and that any associated governance issues are highlighted through an appropriate route and corrective actions taken
- ensuring falls compliance tools audit is completed on a regular basis determined by Clinical Board Quality Safety and Experience meetings and reported to the Falls Delivery Group

Consultants /Ward Sisters/Charge Nurses/Allied Health Professional Team Managers are responsible for ensuring that:

- The clinical environments are safe and environmental risk assessments are undertaken on an annual basis
- All frontline care staff are trained in falls Multi Factorial Assessment (MFA) and Multi Factorial Interventions (MFI) to an appropriate level for the services they provide
- Information including the leaflet in Appendix 3 is available for staff to provide to patients, attorneys, deputies, relatives and carers, as appropriate
- A post falls debriefing is held and a multidisciplinary post falls discussion takes place following any fall

The multidisciplinary team and/or individual registered healthcare professionals must:

- take decisions about reducing harm from falls in the same way as decisions about other aspects of treatment and care, as outlined in the UHB Consent to Examination or Treatment Policy 2016
- where the patient lacks mental capacity to make the decision and in the absence of an attorney (LPA) or Court appointed deputy with the appropriate authority, decide which Multi-Factorial interventions are in the patient's best interests

Workforce and Organisational Development Directorate is:

- Responsible for ensuring training is developed or commissioned to meet the needs of the clinical teams in falls Multi Factorial Assessment and Multi Factorial Interventions, falls awareness and for complex manual handling risk assessments

Estates is:

- To consider falls prevention when designing new areas and to respond in a timely manner to environmental risk factors identified by ward staff

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	7 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

Directorates and Clinical Boards are responsible for:

- Ensuring that adherence to this policy and procedure is monitored by a variety of processes, including structured and ad-hoc case note review.
- Adult in-patient falls procedures will be considered as part of the UHB and Clinical Board/Directorate Clinical Audit plan.
- The UHB has a commitment to the national audit programme.

The Nursing and Midwifery Board and the Health and Care Professions Council Forum is responsible for

- Ensuring that this policy and procedure is updated as necessary; that relevant training is available; and to provide information, support and training to UHB staff as required.

The Quality Safety and Experience Committee is responsible for

- Monitoring, reviewing and, where necessary, approving amendments to this policy and procedure.

3 Abbreviations

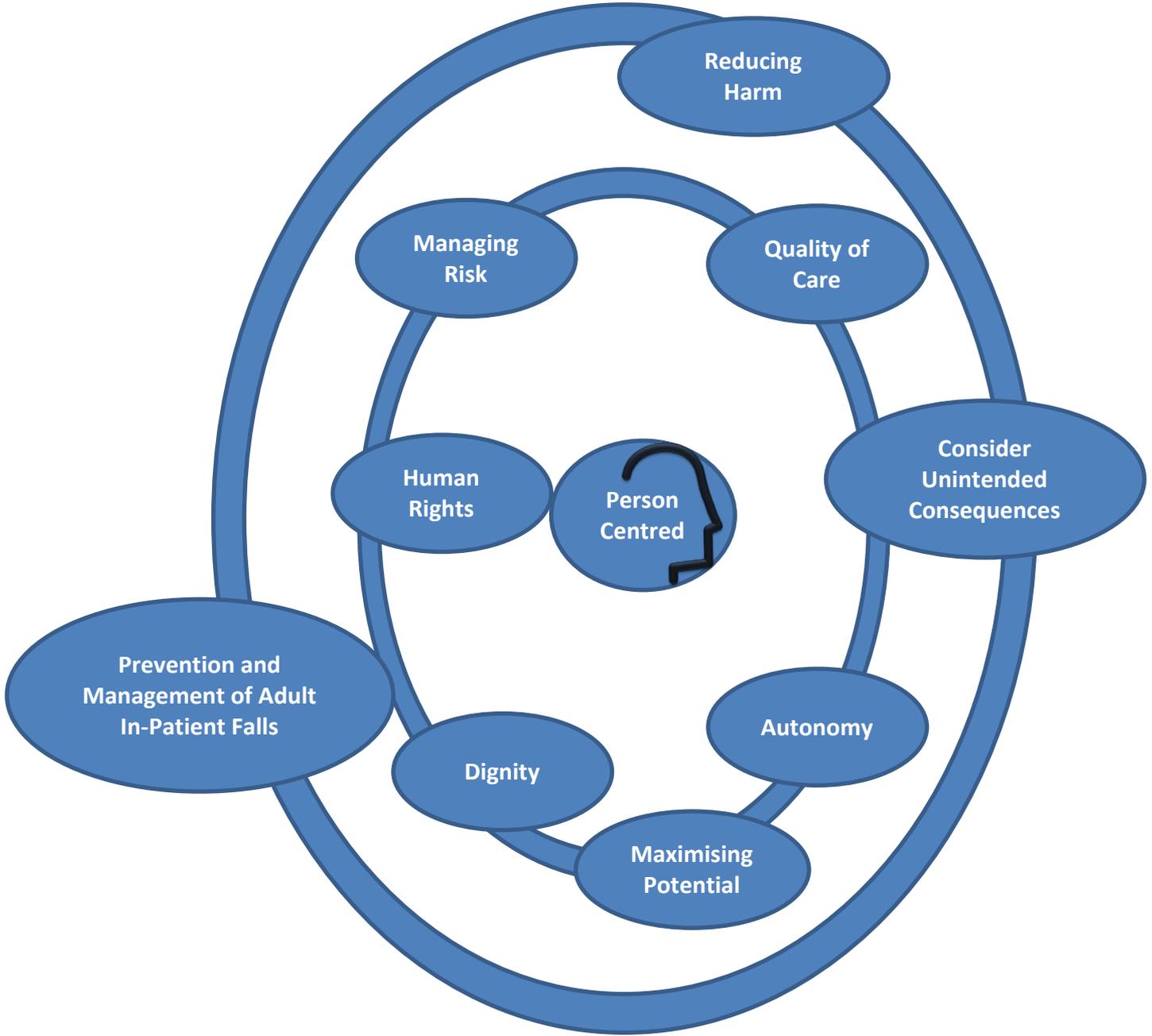
MDT	Multi-Disciplinary Team
MFA	Multi-Factorial Assessment
MFI	Multi-Factorial Interventions
H@N	Hospital at Night

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	8 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

4 Underpinning Key Principles

The underpinning key principles are illustrated below:



Risks are to be modified where possible, promoting safety and quality and complying with national requirements. The procedure accompanies the flow-chart at Appendix 1.

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	9 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

The MFA must be completed in conjunction with the MFI care plan. This documentation forms parts of the Patient Risk Assessment booklet.

Evidence and best practice guidance for reducing the risk of falling sets out the following approach, with regular review and monitoring:

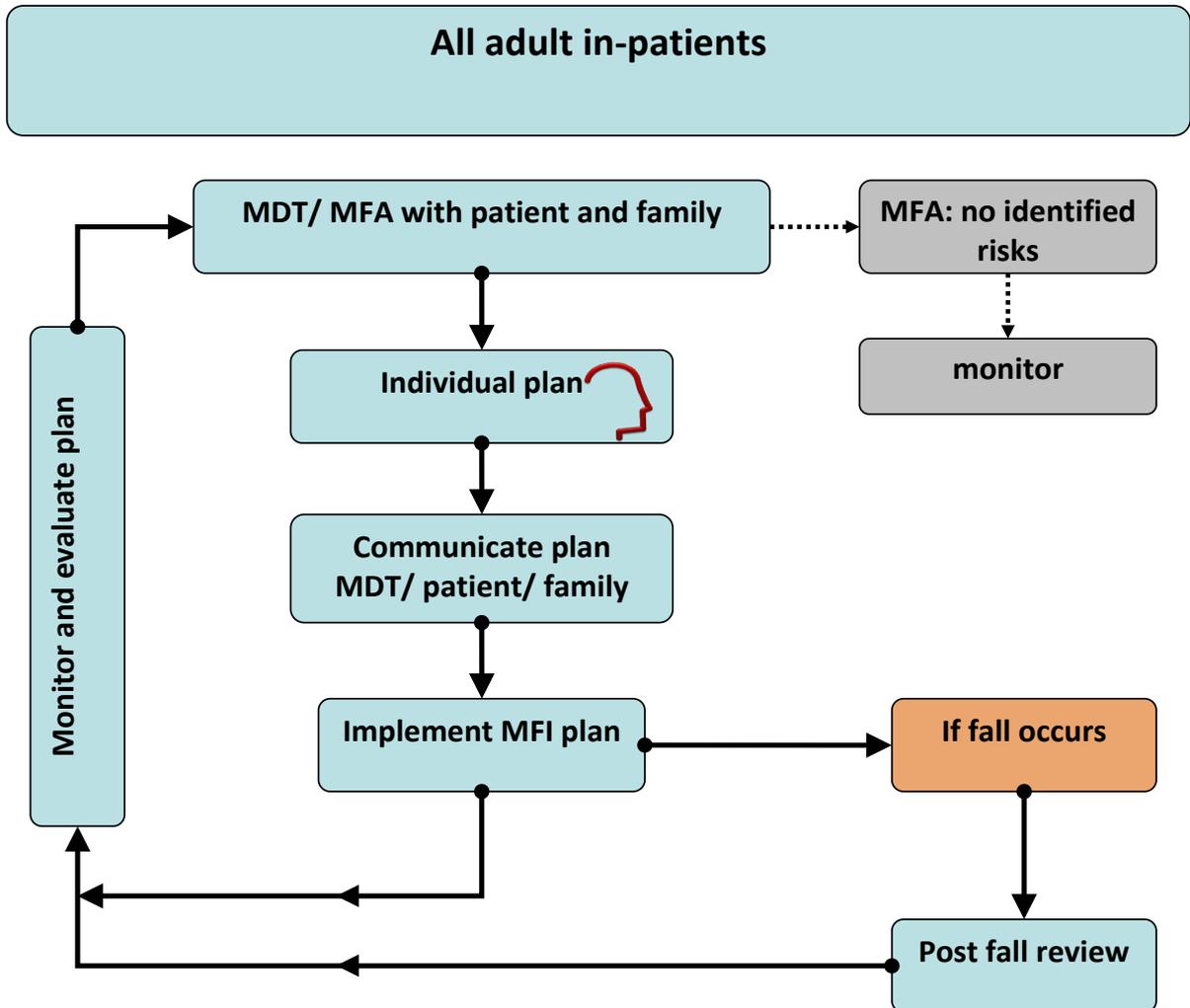
- Implementation of standard falls prevention strategies for all adult in-patients
- Patient information leaflet (Appendix 3) (available in English and Welsh) should be available to all adult in-patients, family, carers, etc
- Undertake MFA of the potential factors that could cause a fall
- Implement an MFI care plan to mitigate the risks identified
- Undertake a post-falls assessment for all patients who fall on the ward

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	10 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

5 Framework for assessment

An MFA will be undertaken on admission/ transfer in conjunction with an MFI care plan.



Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	11 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

6 Standard Guidance for Falls Prevention Actions and Interventions for All Adult In-patients

The NICE Clinical Guideline “Falls in Older People: assessing risk and prevention (2013) provided recommendations for falls prevention and includes standard guidance to be given to all adult in-patients. These are incorporated into the MFA as mandatory actions.

These mandatory actions must be carried out for all adult in-patients regardless of age as they are routine measures.

Call bell

- Must be working and in reach (where appropriate).
- Where the patient is unable to use the call bell a specific plan must be made appropriate to the patient's needs. This must be recorded within the clinical notes.
- If a call bell is unavailable in particular areas, an appropriate alternative needs to be in place.

Advise on safe transfer/mobility

- Promote consistent messages.

Advice on safe footwear

- Footwear should be well-fitting, supportive and non-slip.
- Anti-embolic stockings should not be worn on their own as they are a slip hazard.
- Bare feet are not encouraged.



Information leaflet

- Make the Falls Prevention in Hospital leaflet (Appendix 3) available to the patient and their family.

Patient is anticoagulated or at risk of bleeding

- Be aware
- Incorporate this information into ward safety briefings (if patient falls and is at risk of bleeding the ward doctor must be informed immediately)

Environment and or equipment

- Ensure the patient is orientated to the ward environment
- Advise on risks from drips/tubing/aids as unfamiliar equipment might be a trip/ balance hazard
 - Promote use of dimmed lighting during the hours of darkness and ensure there is adequate lighting during the day
 - Avoid bright glaring light

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	12 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

- Ensure bed brakes are locked and the bed is in an appropriate low position (except when giving care/transferring or to enable independent transfers).
- Ensure that the chair is an appropriate design and at the appropriate height for the patient
- Ensure spillages are reported and cleared

Post anaesthetic/procedure

Advise about transfer/mobilising following anaesthetic or other procedure as the patient may feel dizzy and should request assistance mobilising. This advice is applicable to people of all ages

Falls History

Identify how many falls the patient has had in the last 12 months. Each fall increases risk and is a trigger for reassessment. Falls history may be available from a variety of sources including but not exclusive to, the patient, relatives, carers, GP, Welsh Clinical Portal, PARIS, case notes.

Trolley/ Bedrail Assessment

Must be completed for all patients and re-assessed:

- With a change in condition
- with change in model of trolley/ bed
- On transfer to a different clinical area
- At least weekly in acute care

7 Multi-Factorial Assessment and Multi-Factorial Actions and Intervention

The MFA/MFI is contained in the Patient Risk Assessment Booklet (Appendix 2) and is required to be completed for all adult in-patients. Additional elements of the MFA to reduce harm from adult in-patient falls:

History of Falls

- Falls in hospital
 - Fallen since last assessment? If yes and on anticoagulants liaise with doctor

Bone health/ fracture history

- Low trauma/ fragility fracture
- Osteoporosis/ lives in care home

Underlying medical conditions

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	13 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

- Physical/ physiological review (including Lying /Standing BP which should be completed for all patients who can stand and recorded on the NEWS chart)
- Prescribed medication

Cognitive/ mental state

- Delirium screen \geq 65 years old (e.g. 4AT – see Appendix 16)
- Cognitive assessment – (e.g. Abbreviated Mental Test)

Mobility needs

- Gait & balance
- Mobility aids
- Footwear and foot health

Sensory impairment

- Vision and or hearing (use an assessment tool, e.g. Appendix 15, rather than just enquiring whether patient wear glasses or uses hearing aid)
- Numbness, weakness or spatial or perceptual problems

Essential care issues

- Continence
- Nutrition, hydration
- Communication

Promote MDT falls review

8 Additional Targeted Interventions

These interventions may constitute restraint and if patients lack capacity to agree, [the restraint in the care management of adults with impaired mental capacity policy and procedure](#) must be followed.

Chairs

As chairs are provided in different styles and heights, each patient will require an individual assessment to ensure the chair is appropriate to meet their needs

Ultra-Low Beds

- Consider for those patients that have fallen from the bed and are at risk of further falls from the bed
- Indicated for patients who are at risk of climbing over or around bedrails
- May be required to assist with safe transfers if the patient is of a petite stature
 - If an ultra-low bed is considered necessary, in the first instance assess availability of ultra-low beds within the ward

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	14 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

- If there is no available ultra-low bed available on the ward, order from the bed supplier (Medstrom 0844 811 3676)
 - If none are available, discuss with the Senior Nurse or, if Out of Hours, the Site Practitioner
 - Document in clinical notes
 - Report unavailability of bed on the Datix incident reporting system

Safe Use of Bedrails

Undertake assessment of use as per [UHB bedrails procedure](#) and document decisions using the Bed Rails Decision making aid which is contained within the Patient Risk Assessment Booklet (Appendix 2).

Floor safety mat

Risk benefit analysis required as can be trip hazard for patient and staff

Assisted Technology Solutions

These do not necessarily prevent falls but may assist staff in the management of individual patient risk. Consider assisted technology solutions e.g. sensor alarms. Any equipment should be trialled and evaluated on an individual basis considering suitability.

- Assistive technology must not compromise the individual's dignity or independence
- Assistive technology should not impact on other patients comfort e.g. repeated alarm noises

9 Ongoing Multi-Factorial Assessment, Actions and Interventions

- Proportionate and timely multidisciplinary assessment
- Appropriate review using the MFA/MFI.
 - Re-assess after a fall or any change in condition; this could be an indication of becoming increasingly unwell or re-enabled with new component risks
 - In Acute Care: reassess at least weekly
 - In Long stay: if fallen since last assessment and known to be at risk, reassess in one week; if has not fallen since last review, re-assess in one month
 - Involve the patient and family in the assessment. Information may be obtained from the patient's health professionals in the community and/or the care setting

Occasional additional equipment use

- Hip protectors: Do not use hip protectors in the in-patient setting.

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	15 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

- Head protection: particularly for those with a history of falling forward and or head/facial injury. The recommended product is Aremco 'Scrum type helmet' or 'skullguard helmet' available via oracle

Patient and family perspective

- With patient consent, involve family in care planning
- Ask about other risks and other interventions
- If patient lacks capacity to make decisions about falls prevention, then follow Mental Capacity Act and if you need to make a best interests decision, consult with family/friends, etc.

Other interventions can be considered for an individual patient in order to mitigate modifiable risks.

10 Consider Unintended Consequences

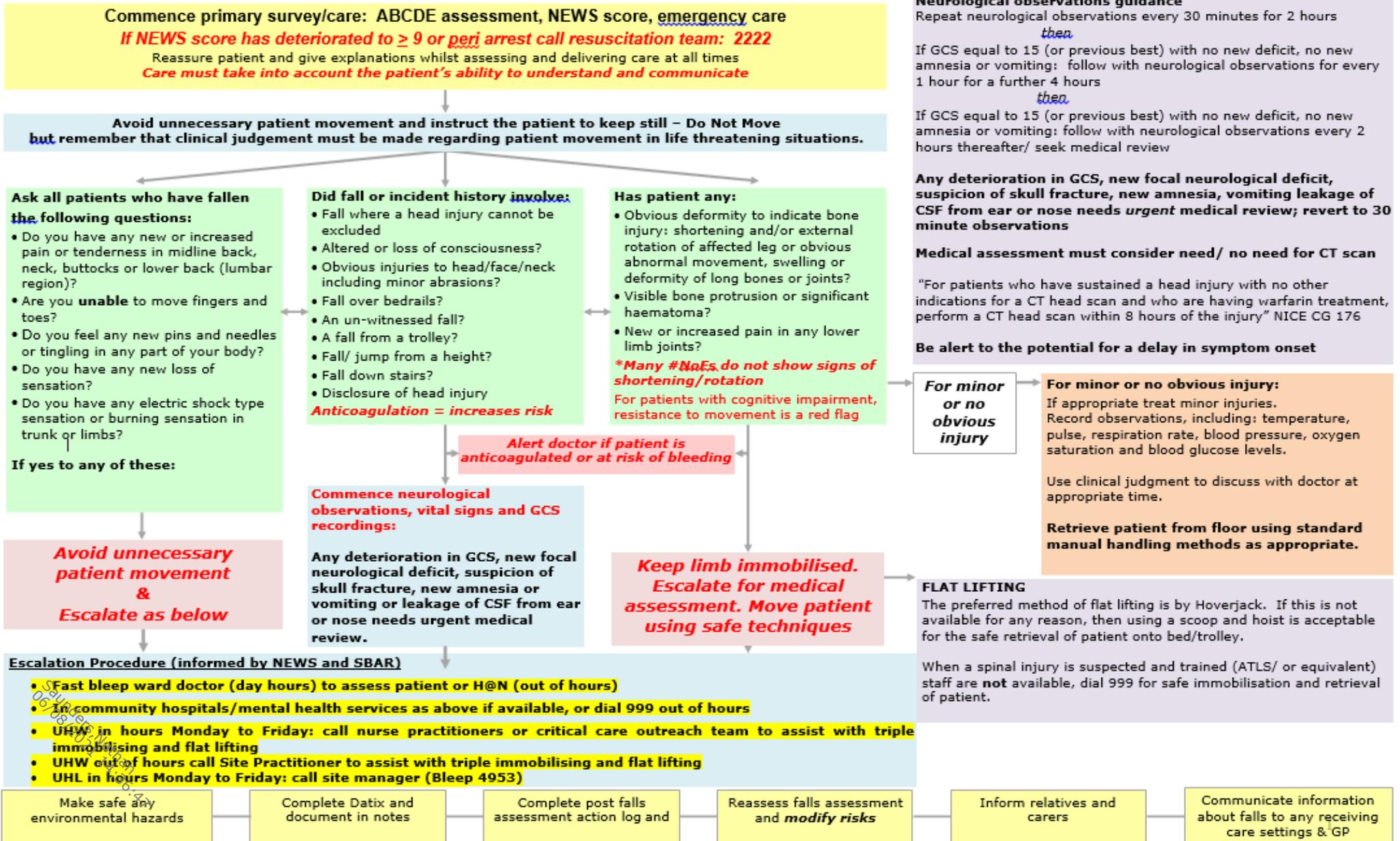
Be aware that attempts to reduce the incidence of falls may cause unintended undesirable consequences potentially more harmful to the patient than a fall.

For example, with advancing age, it becomes increasingly likely that even a brief, clinically mandated period of rest could cause a serious decline in muscle strength and functional capacity, i.e., a “tipping point” from which some may not fully recover (*English & Paddon-Jones, 2010*). Therefore, maintaining a level of mobility or physical activity for people who fall or are at risk of falls is a fundamental level of care that must be actively considered by the multidisciplinary team and can be enhanced by specific physiotherapy exercises.

Saunders, Nathan
06/08/2021 14:36:47

11 Immediate Actions following an Adult In-patient Fall

Immediate actions following adult in-patient fall:



This procedure is to be adhered to following an adult in-patient fall, ensuring that safe and quality care is given to a patient and to comply with national requirements. The flow chart for immediate actions post fall (Appendix 5) gives a sequential approach to the screening and assessment for suspected:

- Spinal injury
- Head injury
- Fractured femur including fractured neck of femur

As assessments are undertaken concurrently, it is important to recognise and prioritise care of the most significant injuries.

The importance of recognising a possible/actual significant injury following an in-patient fall is a vital component of post-falls management. A missed significant injury followed by inappropriate patient handling can result in catastrophic life-changing injuries, including death for the patient and risks to the University Health Board (UHB).

Although catastrophic injuries are rare events, screening and assessment following all adult falls will determine if a patient requires further medical assessment and specialist care.

Assess the scene (make safe if necessary) and mechanisms of injury; quickly establish what happened if possible.

The patient's ability to understand and communicate must be considered

For patients with cognitive impairment, it is recommended that a member of staff/carer who knows the patient assesses them for injury.

For patients who are unable to answer questions due to cognitive impairment, observation for spontaneous limb/ torso movement, gripping ability following physical prompt, facial grimacing, vocal noise, response to physical stimulus to arms and legs and moving a hand in front of face should all inform clinical judgement about moving the patient to assess or treat.

For patients who are unable to answer questions but can follow simple instructions a grip/squeeze test is a first option for assessment and if patient is unable to complete this, or if not moving limbs spontaneously, treat with caution and escalate for further assessment.

Neurological Observations

- Commence neurological observations and a full set of vital signs and record on appropriate chart (Appendix 6)
- Repeat neurological observations every 30 minutes for 2 hours
then
- If GCS equal to 15 (or previous best) with no new deficit, no new amnesia or vomiting: follow with neurological observations for every 1 hour for a further 4 hours

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	18 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

then

- If GCS equal to 15 (or previous best) with no new deficit, no new amnesia or vomiting: follow with neurological observations every 2 hours thereafter/ seek medical review

Any deterioration in GCS, new focal neurological deficit, suspicion of skull fracture, new amnesia, vomiting, leakage of CSF from ear or nose needs *urgent* medical review; revert to 30 minute observations

Medical assessment must consider need/ no need for CT scan

NICE Clinical Guideline Head Injury: assessment and early management (2019) states:

“For patients who have sustained a head injury with no other indications for a CT head scan and who are having warfarin [note: should this be changed to “anticoagulants? What about LMWH/Clexane?”] treatment, perform a CT head scan within 8 hours of the injury”

Remember! Be alert to the potential for a delay in symptom onset (in older patients this can be >72 hours)

Escalation procedures

The escalation procedure is informed by NEWS and SBAR

- Fast bleep ward doctor (day hours) to assess patient or H@N (out of hours)
- In community hospitals/mental health services as above if available, or dial 999 out of hours
- UHW in hours Monday to Friday: call nurse practitioners or critical care outreach team to assist with triple immobilising and flat lifting
- UHW out of hours call Site Practitioner to assist with triple immobilising and flat lifting
- UHL in hours Monday to Friday: call site manager (Bleep 4953)
- UHL out of hours call the Site Practitioner (Bleep 4980)

12 Triple Immobilisation

Triple immobilising and log-rolling are specialised procedures that require knowledge and expertise and **must** only be undertaken by trained and competent staff, for example with Advanced Trauma Life Support or who have received specific training. Log-rolling requires 4 people minimum plus 1 to manage the scoop.

During the log-rolling procedure, further examination of the patient can take place.

Saunders, N. Minan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	19 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

Information to familiarise and raise awareness for ward staff of safe retrieval procedures is found in the appendices 7 to 10.

- Triple immobilising, log-rolling and flat-lifting using
- Hoverjack and scoop for suspected spinal injuries
- Safe retrieval for suspected lower limb fracture, including neck of femur using Hoverjack
- Hoverjack Quick Guide (Appendix 7)
- A pictorial PowerPoint presentation is also available that demonstrates the above procedures (Appendix 9)

13 Screen for a possible or actual fracture

Though a fall from a height is more likely to result in a fracture; all patients must be screened due to the risk of osteoporosis:

Identify if the patient has any:

- Obvious deformity to indicate bone injury; shortening and/or external rotation of affected leg or obvious abnormal movement, swelling or deformity or long bones or joint?
- Visible bone protrusion or significant haematoma?
- New or increased pain in any lower limb joints?

Remember! Shortening and rotation of an affected leg in a hip fracture does not occur in all patients

If following careful assessment of patient, there is no obvious injury or minor injury:

- Treat minor injuries
- Record observations, including temperature, pulse, respiration rate, blood pressure, oxygen saturation and if the patient has diabetes, check blood glucose level
- Use clinical judgement as to when to discuss with doctor, for example, a minor skin tear would not require urgent medical attention

Remember! Retrieve patient from floor using standard manual handling methods as taught on manual handling training

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	20 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

14 Reporting and record keeping

Any incidents, accidents, or situations where an adult in patient falls MUST be reported using Datix – please see the Incident, Hazard and Near Miss Reporting Policy. N.B. The accepted definition of a fall is “an event which results in a person coming to rest inadvertently on the ground or floor or other lower level” (WHO 2021).

Additionally:

- Complete the post falls action log within the generic assessment booklet
- Document in the patient’s clinical notes
- Reassess multifactorial assessment and modify (if appropriate) multifactorial interventions
- If appropriate, and with the patient's consent or in patient’s best interests, notify designated family member
- For injurious falls, commence completion of the Injurious Falls Investigation (Appendix 12)
- Consideration must be given to a need for a full root cause analysis investigation
- Communicate falls history at patient safety briefing / board or ward round as appropriate
- Communicate falls history to any receiving care environment including GP if returning home

15 Resources

The training resource implications for the implementation of these procedures will be absorbed into existing training.

The provision for ultra-low beds is partially incorporated into the Total Managed Bed Contract. Other equipment such as floor safety mats, will be managed within the individual ward/department budget.

16 Training

Awareness is raised through e-learning and further education and training is provided through local induction and nurse foundation programme. The UHB manual handling training programme provides instruction on safe handling of the fallen patient.

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	21 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

17 Implementation

Directorates/Localities are responsible for implementing these procedures. The Patient Safety Team Falls Lead, Lead Physician for Adult Falls, Consultant Nurse for Older Vulnerable Adults and Mental Capacity Act Manager will provide advice and support as required.

18 Equality

Cardiff and Vale UHB is committed to ensuring that, as far as is reasonably practicable, the way we provide services to the public and the way we treat our staff reflects their individual needs and does not discriminate against individuals or groups. We have undertaken an Equality Impact Assessment and received feedback on these procedures and the way it operates. We wanted to know of any possible or actual impact that these procedures may have on any groups in respect of gender (including maternity and pregnancy as well as marriage or civil partnership issues), race, disability, sexual orientation, Welsh language, religion or belief, transgender, age or other protected characteristics. The assessment found that there was no impact/little impact to the equality groups mentioned. Where appropriate we have taken the necessary actions required to minimise any stated impact to ensure that we meet our responsibilities under the equality and human rights legislation.

19 Audit

Adherence to this procedure will be monitored by a variety of processes, including structured and ad-hoc case note review. Adult in-patient falls procedures will be considered as part of the UHB and Clinical Board/Directorate Clinical Audit plan and the UHB has a commitment to the national audit programme.

It is anticipated that the use of the “Perfect Ward” app in the clinical areas will provide falls data for incorporation into audit. Until Perfect Ward is available in all inpatient areas, the Ward Compliance Audit Tool (Appendix 17) may be used by ward managers to assess compliance with this policy.

20 Distribution

This procedure will be made available on the UHB intranet, clinical portal and internet sites.

Saunders, Nathan
06/08/2021 14:36:47

Document Title: Policy and Procedure for the Prevention of Adult inpatient Falls	22 of 22	Approval Date:
Reference Number: UHB 045		Next Review Date:
Version Number:		Date of Publication:
Approved By: Quality, Safety and Experience Committee		

21 Review

This procedure will be reviewed by the Falls Delivery Group every three years or sooner if appropriate.

22 Appendices

Appendix 1	Flow Chart A3 Prevention
Appendix 2	Patient Risk Assessment Booklet
Appendix 3	Falls Prevention in Hospital (English) Falls prevention in Hospital (Welsh)
Appendix 4	AU Falls Assessment
Appendix 5	Flow Chart Immediate Actions
Appendix 6	Neurological Observation Chart
Appendix 7	Hoverjack Quick Guide
Appendix 8	Flat lifting procedure for suspected lower limb fracture, including fractured neck of femur.docx
Appendix 9	Familiarisation with Flat Lifting and use of Hoverjack
Appendix 10	Triple Immobilising Document
Appendix 11	Low Trauma Fractures and Osteoporosis Doc
Appendix 12	Injurious Falls Investigation Tool
Appendix 13	L&S BP Procedure Poster
Appendix 14	L&S Procedure Reference Cards
Appendix 15	Basic Bedside Vision Assessment
Appendix 16	Delirium Screen the 4A's
Appendix 17	Ward Compliance Audit Tool

23 References

English K L and Paddon-Jones D (2010) *Protecting muscle mass and function in older adults during bed rest*. Current opinion in clinical nutrition and metabolic care. 13(1) p.34

National Institute for Care and Clinical Excellence (2013) Clinical Guideline 161: *Falls in Older People: assessing risk and prevention*.

World Health Organisation (2021) *Falls: Key Facts*. Accessed at: <https://www.who.int/news-room/fact-sheets/detail/falls> on 10th May 2021

Saunders, Nathan
06/08/2021 14:36:47



Please complete this template for all injurious falls classified as moderate, major or severe harm. All Inpatient fractured femur and neck of femur should be classified as at least major harm.

Patient's Name	Anna Smith
Hospital Number / NHS Number	A123456
Date of Birth	01/01/1954
Date of Death (if applicable)	Click here to enter a date.
Hospital and Ward / Area of Fall	Stroke Rehabilitation Unit
Date and time of fall	12/03/2021 09:21
Date and Time admitted to ward	08/03/2021 18:45
Specific location of fall	Fell at bedside
Datix Incident ID	123456
Reason for Admission to Ward	Rehabilitation post stroke
Where was patient admitted from	Emergency Department Click here to enter text.
Relevant Past Medical History	Morbidly obese BMI 42, smoker, Type 2 diabetes on Metformin. Essential hypertension on amlodipine. On Apixiban
Did the previous care setting communicate all risk factors on handover?	Yes
What injury was sustained?	Fractured Left Neck of Femur
Treatment required post fall	Surgical repair
Outcome post fall	Was increasing mobilisation with assistance of one and zimmer frame and daily physio input
Was fall from: <ul style="list-style-type: none"> • Bed? • Chair? • Whilst mobilising? • Other? Describe 	Fell at bedside after mobilising back from bathroom
Describe how the fall occurred. If from bed: <ul style="list-style-type: none"> • What model of bed? • Did patient have raised bedrails? Which sides? • State rail length • Did patient fall over the bedrails? • Did patient fall from bottom of bed? 	Had been assessed as requiring assistance of one and zimmer frame. Assisted to bathroom by HCSW and left to preserve dignity. Was requested to call for help when ready to mobilise back to bed space. Did not call for help, mobilised without assistance but describes legs giving way as she was nearing bed. Witnessed by HCSW who was unable to reach her in time. Did not bang her

Saunders Nathan
06/08/2021 14:35:47

Annie Burrin, Patient Safety and Organisational Learning Manager (Falls)



If unsure, what does the injury / position of the patient lead you to believe?	head. Patient told staff that she had felt strong enough to manage by herself.
Multifactorial Assessment (MFA) Multifactorial Interventions (MFI)	
Standard Guidance:	
<ul style="list-style-type: none"> Was the call bell working and in reach? 	Yes
<ul style="list-style-type: none"> Advise on safe transfer / mobility and promote consistent messages 	Yes Documented in MFA and notes
<ul style="list-style-type: none"> Was the patient advised on safe footwear? 	Yes
<ul style="list-style-type: none"> What was the patient wearing on their feet at time of fall? 	Describe: Well fitting slippers
<ul style="list-style-type: none"> Had the patient been provided with "Reducing Harm from Falls" leaflet? 	No - not available on ward
<ul style="list-style-type: none"> If patient on anticoagulants, was this included on safety briefing / handover? 	Yes
Environment / Equipment:	
<ul style="list-style-type: none"> Was patient oriented to ward? 	Yes
<ul style="list-style-type: none"> Was the patient advised on risks from drips / tubing / aids? 	Yes
<ul style="list-style-type: none"> Were any slip / trip risks mitigated? 	Yes
Post Anaesthetic Procedure:	
<ul style="list-style-type: none"> Was patient advised about transfer / mobilising following anaesthetic procedure? 	Yes
Was bedrail assessment completed?	Yes / No
Bedrail assessment completed as per guidance. <ul style="list-style-type: none"> On admission? On transfer to different clinical area? On transfer to a different model of bed? Review and re-assessment weekly / monthly: Review and reassess on change in clinical condition 	Please describe: Bed rail assessment on admission to ward on 8/3/21. Half rail on right hand side up at patient's request to aid getting out of bed. Bed rail assessment completed in line with guidance and not a factor in this fall.
Were the bedrails raised / lowered as specified in bedrails assessment?	Please describe: Raised as specified in bedrails assessment but patient was not in bed at time of fall
To be reviewed at least weekly, and: <ul style="list-style-type: none"> Following very fall 	Date MFA last completed: 11/03/2021



<ul style="list-style-type: none"> • Change in patient's condition <ul style="list-style-type: none"> ◦ Increasing level of frailty / acuity or improvement • Following transfer to a different clinical area • Prior to discharge to consider interventions that may reduce the risk of a fall. 	<p>Was completion in accordance with Policy? Yes. Completed on admission on 8/3/21 and updated 11/3/21 when plan for mobilisation changed</p>
<p>Update and record Fall and Fracture History Details of past history of falls / fractures prior to admission to ward. History of low trauma fractures; osteoporosis / lives in care home</p>	<p>Describe as fully as possible. Include dates and settings of falls: Fell in October 2018 at home and fractured left wrist. Did not require surgery.</p>
<p>Underlying Medical Causes</p> <ul style="list-style-type: none"> • On medications that lower blood pressure or cause dizziness? • Medically unwell, e.g. scoring on NEWS, fallen or at risk of seizures? 	<p>Describe as fully as possible. On Amlodipine for essential hypertension. Medication review completed 9/3/21. Standing / lying BP performed 10/3/21 – no evidence of postural hypotension.</p> <p>Orthostatic hypotension assessment is mandatory on all inpatients over the age of 65 or those over 50 with risk factors. Date of last standing / lying BP assessment: 10/03/2021</p>
<p>Cognitive / Mental State:</p> <ul style="list-style-type: none"> • Agitated; restless; impulsive; disorientated or confused? • Diagnosis of dementia? • THINK DELIRIUM and its cause 	<p>Has the 4AT assessment been completed? Are behaviours new or chronic? Was the patient able to follow advice and instruction? 4AT assessment undertaken during ward round on 9/3/21 – no delirium. Does not appear to have any cognitive issues.</p>
<p>Prescribed Medication:</p> <ul style="list-style-type: none"> • Prescribed sedatives, hypnotics, antipsychotics or diuretics? 	<p>When was the last documented medication review undertaken? 9/3/21</p>
<p>Mobility:</p> <ul style="list-style-type: none"> • Needs help to stand and / or walk? • Tries to walk unaided but unsafe, e.g. to toilet? • Uses walking aids? • Foot problems? 	<p>Date of last Mobility Assessment: 11/03/2021</p> <p>Describe as fully as possible. Increasing mobility with assistance of daily physio – mobility assessment updated by physio 11/3/21. Mobilising well with zimmer and assistance of 1, mainly for assistance to stand. No foot issues, had been having regular podiatry care (self funded at home address) prior to admission.</p>

Saunders, Nathan
06/08/2021 14:36:47



<p>Sensory Deficits:</p> <ul style="list-style-type: none"> • Sight and/or hearing impairment? • Glasses or hearing aid unavailable? • Numbness, weakness or spatial perception problems? 	<p><i>Describe as fully as possible.</i> Wears glasses for near sightedness. Prescription checked May 2020. Has glasses with her and was wearing them at time of fall. No hearing issues. Left sided weakness as a result of stroke.</p>
<p>Essential Care and Assessment Issues:</p> <ul style="list-style-type: none"> • For example; continence; nutrition; hydration or communication needs? 	<p><i>Describe as fully as possible.</i> No continence issues. Communicates well, although speech slightly affected by stroke.</p>
<p>Patient and Family Perspective:</p> <ul style="list-style-type: none"> • Other risk highlighted by patient and / or family? 	<p><i>Describe as fully as possible.</i> Family unable to visit c/o covid restrictions but daughter had contacted ward manager to say that her mother will be unlikely to ask for help as she is very independent.</p>
<p>Were referrals made:</p> <p>To ward doctor:</p> <ul style="list-style-type: none"> • All medical issues • Use of medication to promote bone health <p>To therapists:</p> <ul style="list-style-type: none"> • For mobility • For foot care • For activities of daily living issues <p>To pharmacists or doctor:</p> <ul style="list-style-type: none"> • Medication reviews 	<p><i>Describe as fully as possible.</i> MDT assessment on 9/3/21 after admission to ward as detailed above</p>
<p>Targeted Interventions:</p> <ul style="list-style-type: none"> • Ultra-low beds • Floor safety mats • Intentional rounding (how often) • Closer observation / move to more observable area • Movement sensors • Enhanced Observation (specify Level 1-4) 	<p><i>Describe as fully as possible.</i> Intentional rounding 4 hourly and regular reinforcement of use of call bell.</p>
<p>Immediate Post Falls Actions</p>	
<p>Was an immediate Post Falls Assessment documented?</p>	<p>Yes</p>
<ul style="list-style-type: none"> • Was the patient asked to keep still on floor before being moved? 	<p>Yes</p>

Saunders, Nathan
06/08/2021 14:36:47



<ul style="list-style-type: none"> Was the patient screened for a spinal injury? 	Yes
<ul style="list-style-type: none"> Was the patient screened for a head injury? 	Yes
<ul style="list-style-type: none"> Was the patient screened for a long bone or other fracture? 	Yes
Who was involved in this assessment?	Name and role of all present: RN Minnie Mouse and Ward SHO Dr D Houser
What manual handling method was used to move the patient following the fall?	Hoverjack
Is there documented evidence that the patient had a medical assessment following the fall?	Yes - within 30 minutes
Was the patient on anti-coagulants or at risk of bleeding?	Yes
<ul style="list-style-type: none"> If yes, what time was the ward doctors informed? 	12/03/2021 09:25
<ul style="list-style-type: none"> If yes, what actions were required? 	Dr on ward at time of fall, attended immediately and assisted to move patient using Hoverjack. Neuro obs performed as on Apixiban but all normal and witness falls with no trauma to heads therefore no CT scan requested
<ul style="list-style-type: none"> If yes, what time was the CT Head scan performed? 	Click here to enter a date.
Was a head injury excluded?	Yes
If yes, where is this recorded?	Dr's entry in medical notes
If no, give times and scores of neurological observations :	
Time 24 hr clock	09:30
GCS score	15
Time 24 hr clock	10:00
GCS score	15
Time 24 hr clock	10:30
GCS score	15
Time 24 hr clock	11:00
GCS score	15
Time 24 hr clock	12:00
GCS score	15
Time 24 hr clock	13:00
GCS score	15
Time 24 hr clock	14:00
GCS score	15
Time 24 hr clock	15:00
GCS score	15
When were neuro observations discontinued and why?	Dr's review - documented in notes. Discontinued at 15:00 as transferred to theatre for surgical repair of #NOF
Please specify if any of the post falls actions were not completed and why	All post falls actions completed
Any other factors that should be considered?	Describe as fully as possible Ward may have re-considered need for sensor equipment or more frequent intentional rounding after daughter



	informed them her mother would be very unlikely to ask for help
Staffing:	
Describe establishment for registered and unregistered staff at time of fall:	Establishment = 3 RN and 4 HCSW
Describe registered and unregistered staff on duty at time of incident:	3 RN and 4 HCSW
Were any staff on a break or off ward at time of fall? If so, please explain circumstances	2 RN were engaged with administering IV medication to another patient in different area of ward. HCSW was present in 4 bedded ward area but was not able to reach patient in time to prevent fall
Were any staff at handover?	No
Were there any other circumstances that contributed to the ward acuity? Describe as fully as possible	2 Student Nurses (First year) present on ward as well as 1 Physio. Ward round in progress, SHO, Registrar and Consultant all present.
What escalation score did you report?	Ward fully staffed with normal acuity
Was enhanced observation required for any other patient on the ward? Please describe, specifying Level of Enhanced Observation 1-4 and if any extra staff had been utilised to facilitate this	4 patients had been cohorted in another bay who all required enhanced observation (1 HCSW was allocated to remain in this bay at all times). The bay where this patient fell was occupied by 3 patients with no cognitive issues who were able to mobilise with assistance. HCSW was present as she had just left the patient in the toilet with instructions to pull call bell when ready to mobilise back to bed
If enhanced observations were required but not possible due to lack of staff, please describe mitigating actions, e.g. cohorting patients, intermittent observations?	<i>n/a</i>
Were there any slip/trip obstructions or defects within the environment?	No
Date and time family were informed of fall	Same day by telephone at 11:00
Recorded: 1. As a complaint 2. Reported to HM Coroner 3. Reported to WG as SI (include date and details)	WG SI criteria but not reporting currently c/o Covid
If reported to WG, has family been informed?	Click here to enter text.



Is family aware that an SI meeting will be held?	Yes
Does family wish to meet UHB staff following SI meeting to discuss findings and recommendations?	Yes – they would like to be informed of the outcome of the investigation and are unhappy that they warned the ward that their mother would be unlikely to call for help
Any further information / notes?	Click here to enter text.
What were the findings of investigation?	Falls prevention leaflet not available on ward. There may have been an opportunity to revise the level of enhanced observation required for this patient when the family informed staff that their mother would be unlikely to call for help
Immediate remedial actions (e.g. broken bed)	Ward Manager to ensure Falls Leaflet is given to all newly admitted patients as well as verbal sharing of information.
Investigation undertaken by (state name, role and date)	RN P Safety, Senior Nurse, 16/3/21
<i>N.B. The information contained in this template informs the SI meeting and subsequent recommendations</i>	
Serious Incident Meeting Update:	
SI Meeting date	16/03/2021
What learning / actions have been generated from this incident?	<ul style="list-style-type: none"> Written information on falls prevention should be available to all patients on admission to ward Information shared by family should be entered into 'This is me' document and risk assessment updated appropriately
Recommendations:	<ul style="list-style-type: none"> The Falls Prevention leaflet should be available in all adult inpatient areas (except maternity) Case study and learning to be included in falls training sessions, with particular emphasis on information provided by patient or those that know them best
What is the plan for disseminating the learning:	Please describe fully: To be included in falls training sessions as described above. Case study and learning to be shared via Falls Newsletter and displayed in ward areas

Saunders, Nathan
06/08/2021 14:36:47



GIG
CYMRU
NHS
WALES

Bwrdd Iechyd Prifysgol
Caerdydd a'r Fro
Cardiff and Vale
University Health Board

Injurious Falls Investigation Template

Saunders, Nathan
06/08/2021 14:36:47

Annie Burrin, Patient Safety and Organisational Learning Manager (Falls)
Page 8 of 8

March 2021
Version 2



MINUTES

CHILDREN & WOMEN'S CLINICAL BOARD
QUALITY, SAFETY & EXPERIENCE COMMITTEE
Tuesday 23rd March 2021, 8.30am via Microsoft Teams

Preliminaries	Lead
<p>1.1 Welcome & Introductions Suzanne Hardacre, Head of Midwifery/Directorate Lead Nurse, Obstetrics & Gynaecology Directorate (Chair) Martin Edwards, Assistant Clinical Director, Children's Hospital for Wales Services Directorate Laura McLaughlin, Risk Manager, Obstetrics & Gynaecology Directorate Rhodri John, Directorate Manager, Obstetrics & Gynaecology Directorate Angela Jones, Senior Nurse, Resuscitation Services Janice Aspinall, RCN Health & Safety Rep Karenza Moulton, Lead Nurse, Children's Hospital for Wales Services Directorate Sarah Davies, Interim Governance Midwife, Obstetrics & Gynaecology Directorate Matthew McCarthy, Patient Safety Facilitator Rachael Sykes, Health & Safety Advisor Becci Ingram, General Manager, Children's Hospital for Wales Services Directorate Kate Leney, Service Manager, Obstetrics & Gynaecology Directorate Diana Wakefield, Safeguarding Team Paula Davies, Lead Nurse, Children Young People & Family Health Services Directorate Louise Young, Risk & Governance Manager, Children Young People & Family Health Services Directorate</p> <p>In Attendance Kirsty Hook, Board Secretary Robert Warren, Head of Health & Safety</p>	
<p>1.2 Apologies for absence Cath Heath, Clare Rowntree,</p>	
<p>1.4 To note the Minutes of the previous Q&S meeting held on 23rd February 2021 The minutes of the meeting held on Tuesday 23rd February 2021 were agreed to be an accurate record.</p>	
<p>1.5 To note and update the action log of the meeting of 23rd February 2021</p> <p>PEWS Chart Work is progressing and a meeting is arranged for 14th April to agree and review the chart and have a clear plan for implementation.</p> <p>NICU Improvement Plan Completed, work is ongoing and will be circulated as soon as an electronic version is available.</p> <p>CAMHS Delivery Unit Report PD agreed to share the report and a presentation of the action plan will be provided at the next meeting. Reassurance was provided that the detailed action plan is already in place and a number of actions have been completed.</p> <p>eDatix System Work is progressing across all Directorates and there has been a significant reduction in the number of open incidents within the system and incidents closed as appropriate. MM agreed to review and advise if there are any specific areas that need to be focused upon, and happy to help where required.</p>	<p>KM/ME</p> <p>KM</p> <p>PD</p> <p>MM</p>

	<p>SaTH Okenden Report Closed</p> <p>2mins of your Time Awaiting an update from Patient Experience Team on the national service user reports. SH agreed to follow up again with the Patient Experience Department.</p>	SH
PART 2 – HEALTH & SAFETY		
2.1	<p>Robert Warren, new Head of Health & Safety was welcomed to the meeting. An update was provided with regards to an independent external H&S review is due to commence on 29th March 2021 which will formulate an agenda for the work to be undertaken going forward across the Health Board. Contact has been made with the Clinical Boards outlining the scope of the review, and requesting feedback on representatives from the Clinical Boards as contacts for the review.</p> <p>To note the latest Health & Safety Report The latest report was shared for information.</p> <p>X1 RIDDOR was reported to the HSE at the end of January 2021 with regards to a slip/fall of a nurse on a PPE apron. The investigation has been undertaken and concluded. Staff have been reminded to be vigilant.</p> <p>X1 RIDDOR reported at the end of March, which is currently under investigation in relation to an anaesthetist who sustained a dirty needlestick injury. This has been reported as a dangerous occurrence to the HSE.</p> <p>Discussion ensued with regards to a number of incidents, specifically within O&G which remain open as a results of estates issues, where no response has been received. It was suggested that regular meetings be undertaken with Estates to discuss and review outstanding issues in order to resolve open incidents. It was agreed that a meeting would take place outside of the meeting to review how these can be closed.</p>	LM/RS
2.2	<p>Feedback from UHB Operational H&S Meeting</p> <ul style="list-style-type: none"> Review scheduled to commence on 29th March 2021 Fit Testing Practice audit is due to commence shortly. An audit programme has been developed and further updates will be provided as to when the audits will commence. RS agreed to touch base with the relevant Fit Testing leads. <p>To note the draft UHB Operational H&S Minutes for information The draft minutes were shared for information and it was agreed that the final minutes would be circulated.</p> <p>V&A in the CHFV Discussions are ongoing with Carl Ball to support issues being experienced within the CHFV, and support will be provided where necessary.</p>	
2.3	<p>To note the latest COSSH Report Noted for information. All were asked to review and update where necessary.</p>	
2.4	<p>Fire Safety Report The fire safety report has been shared for information.</p>	
2.5	<p>Feedback from H&S Staff Side Workplace inspections are due to recommence shortly.</p> <p>Concerns were raised with regards to opening of a 3rd Theatre on Delivery Suite and increased pressures in relation to reduced staffing. It was noted that discussions are ongoing within the Directorate and monitoring continues. Robust plans are in place, SH shared that further discussions were taking place outside of the meeting.</p>	

2.6	To note the H&S Newsletter Shared for information and onward sharing.	
-----	-------------------------------------------------------------------------------------	--

GOVERNANCE, LEADERSHIP AND ACCOUNTABILITY

3.2	<p>Health and Care Standards – key areas from Directorate QSE Reports (including any Exception reports and required escalation of key QSE issues, Long waiting patients update)</p> <p>O&G Directorate</p> <ul style="list-style-type: none"> • COVID Vaccine will be offered to women with high risk conditions on C1, Obstetric Assessment Unit and Labour Ward. • Time taken to complete RCA investigations needs improvement as currently not meeting Health Board standards. Work is taking place within the Directorate to improve on current processes. • Issues with regards to the Maternity Lifts are ongoing and have been escalated to the Board. The risk is also included on the risk register. • Awaiting phase 2 of the HIW Review and the Performance Board has been delayed until Spring. • X1 pressure sore reported, not present on admission, healed on discharge and pressure passport completed. • X1 patient fall reported in obstetrics and all actions were taken to mitigate further risk. • Ongoing babies don't bounce audit within Obstetrics and there has been an improvement since the last audit. Work continues to improve further and reiteration to all staff with regards to ongoing compliance and completion. • Significant increase in request for midwives to attend family court. Court prep training is being arranged in order to provide support to staff. • Ongoing Anti D investigation (received later than recommended after birth) which is progressing, supported by blood transfusion. • Pharmacy are likely to run out of the fluid bags: POTASSIUM CHLORIDE / GLUCOSE / SODIUM CHLORIDE (GV332) INTRA-VENOUS INFUSION 20mmol/L / 5% / 0.45% - 500ml (that run alongside variable rate insulin infusions) before resupplies are available at the end of the month. Emergency stock has been secured. • Scanning capacity has increased, from 1st May the Health Board will be able to provide serial scans for all smokers as part of recommendation from NICE. • Community Midwives IT upgrade, allowing better access to maternity systems and PARIS. • Virtual MSLC Meetings will resume to a normal quarterly timetable. • Benign gynae outpatient list has improved. Due to continued reduction in theatre time, inpatient waiting lists have increased however these are regularly being monitored. • Concerns themes have been identified in relation to general attitude and behaviours in clinical areas and support is being provided on professional behaviours by the Clinical Supervisors of Midwives • Recruitment continues across a number of areas within the Directorate. <p>CHFW Directorate</p> <ul style="list-style-type: none"> • Staff vaccinations continue and lateral flow testing has been offered, no requests have been received to date. • X2 RCA's progressing and have been shared for noting. Action plans are being produced. • LC action plan – sepsis pathway is being developed in conjunction with EU. Single observation chart is also being worked through as noted in item 1.5. • SBAR being developed for CAMHS patients and additional funding is being explored for children admitted in mental health crisis to the CHFW. X11 patients admitted last week, x2 of which are still awaiting tier 4 beds. • Continence is a further area of risk and work is progressing with CYPFHS to develop a robust plan on way forward. • IPC challenge noted in relation to an MRSA cluster in NICU which is being investigated and work is continuing on the best way forward. Weekly meetings are taking place with IPC and environmental testing is being reviewed, with the possibility of staff testing if required. Audits have been completed across the service and there are no specific themes that have been identified. • X1 medication error reported. Noted that route of medication is a theme that has been identified and work is taking place to audit. 	
-----	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Saunders-Nathan
06/08/2021 14:06:47

- HDU is closed due to roof damage from a controlled drop. Work is taking place and a report is awaited from the Estates Department as to action required and timescale.
 - Nurse staffing act will include Paediatric surgical and medical wards from November this year. Triangulation process is being progressed.
 - Cleft palate surgery is taking place at the CHFV, transferred from Morrision Hospital at present. Excellent results and compliments on the service and care provided.
 - Workforce planning model is being undertaken in order to review the most appropriate model of staffing through Summer and into Winter
 - Outpatient position has improved significantly, however there remains some long waiters for joint clinics. Currently 19 patients awaiting a TCI for over 36week waits, number of which are for joint clinics.
- Inpatient position 252 patients waiting over 36weeks, with a significant number waiting over 52weeks as a result of reduced capacity (now at 70-80%). Clinical prioritisation is continuing and a recovery plan has been developed. Gastro diagnostic waits continue to grow as a result of reduced capacity, however some positive news with regards to an endoscopy trial in paediatric theatres has been undertaken and the management of the scopes will be managed within the CHFV which will significantly reduce the risks of the scopes being transported across the site.
- Young patient (LAC) care package is being developed and whilst this is awaited the child remains on the ward in the CHFV.
 - Number of compliments have been received in month, in particular with regards to the cleft service. This is a very positive outcome of COVID.
 - Student streamlining recruitment event is being arranged.

CYPFHS Directorate

- V&A incidents have been experienced and are being managed. Advice has been sought from H&S with regards to verbal abuse.
- Re-emergence of issues and incidents have been experienced at Shire Newton site and currently visits have been stopped at present and work is progressing with advice from H&S and Police to look at when the visits can recommence
- Staff relocated to Woodland House from Global Link last week and work is being taken forward to implement screens where required for all staff and a rota system is in place for homeworking to maintain social distancing.
- Immunisations into schools is being progressed. Awaiting further information of when the staff that have been deployed can be returned to normal service, in order for plans to be implemented.
- Emotional support and wellbeing support need to be reinstated, working with schools and to resume drop in clinics, as soon as possible once redeployed staff are released.
- Increased safeguarding across services impacting on Health Visiting, School Nursing and LAC services.
- Top risks at present regarding CAMHS – high number of concerns in the system at present. Internal waiting list has reduced to 62 from 366 which is a significant improvement, however noting that the complexities of the young people presenting and families at crisis point is increasing, which is impacting on admission to hospital which links in with the work being undertaken in partnership with CHFV Services with regards to pathway and staffing model. Discussions have also taken place with Adult Mental Health in relation to an in reach and outreach model, which would be part of a transformation bid. It was agreed that this briefing would be shared with the clinical board.
- Issues being experienced within the Continence service and links taking place with CHFV Services and Primary Care Services around the requirement of a robust pathway and care model.
- Appointed a digital transformation lead to support with agile working equipment which will enable an increase in compliance with compatible equipment for attend anywhere and other apps.
- Issues with regards to Nurse Transcribing and ND Services. New appointment made to Directorate Community Pharmacist and electronic prescribing will be progressed, as well as systems to reduce risks for transcribing and need for this whilst this is developed.

Saunders-Nganga
06/06/2021 11:56

	<ul style="list-style-type: none"> Hep A RCA will be shared with the family once the timeline and action plan is finalised. Links will also be made with Public Health to share learning. Ongoing chronology for Child Death which is subject to Child Practice Review. Medical workforce gaps, specifically within the ND service which is being reviewed for an urgent action plan and the needs for a temporary solution to be implemented in the interim. Lateral flow testing is commencing for the Special Schools which is a significant pressure. Work is ongoing to review options for how this can be co-ordinated going forward. 	
3.3	<p>Exception Reporting / New Risks to be considered for the Clinical Board Risk Register</p> <p>There were no specific exceptions to report with regards to new risks, apart from those already mentioned as part of the Directorate updates. It was noted that a significant amount of work has been undertaken across the Clinical Board with regards to a review of all risks within the Directorates which is almost complete, and will then inform the production of the final Clinical Board risk register.</p> <p>It was agreed that the final risk register will be shared at the next meeting for noting and final ratification.</p>	
3.4	<p>Business Continuity Update</p> <p>No specific issues to note.</p>	
SAFE CARE		
4.1	<p>Update on Serious Incidents</p> <p>Noted for information. No new SI's reported to the Delivery Unit since the last meeting. There are a few closure forms progressing which will be shared at the next meeting for closure.</p> <p>Work is ongoing within CHFV with regards to Medication Errors as part of the Health by Nation project. Small tests of change are being trialled and it was agreed that an update would be shared at the next meeting.</p>	
	<p>SI's/RCA's for discussion</p> <p>RCA & Timeline Patient KM (Datix No 322177)</p> <p>Case relates to an incident involving a piece of glove that was retained following a speculum examination. The investigation has been completed and the Root Cause identified that there was no formal check undertaken following the examination to ensure that the glove was removed or was intact.</p> <p>Lessons learnt were noted that the use of a glove should be seen in the same context as any other foreign body that is used in a procedure. The same process of accounting for swabs and instruments checking should be undertaken and clearly documented at the end of any procedure.</p> <p>Decision has been made that to continue with current practice, however acknowledging that there is now a checking procedure that has been added to the form following completion of the examination, which has been agreed in conjunction with Cervical Screening Wales.</p> <p>It was agreed that this case was approved and the improvement plan would be shared with the clinical board.</p>	LM
4.2	<p>SI's/RCA's/Closure Forms for noting</p> <p>RCA Patient RJ (Datix No 356916)</p> <p>The report was noted for information and outlines the case of an 11month old who attended for neurological review and condition deteriorated, including reduced movement in the lower limbs, which was not picked up sooner. Unfortunately, the patient subsequently passed away, however it was noted that that this was not as a result of the reduced movement but as a result of her oncology condition. The case was investigated in order for lessons learnt to be identified due to the lack of the reduction in movement as this would have caused significant reduction in movement. The case was discussed in detail as part of the Extra Ordinary meeting last week. It was agreed that the case</p>	

<p>was approved and the improvement plan will be shared with the clinical board for completion. Work is progressing with regards to the documentation and process for locum consultant.</p>	<p>KM</p>
<p>Discussion ensued with regards to the charts used within PICU and it was agreed that this would be included within the action plan, however acknowledging that this is different to the PEWS Chart. It was agreed that the RCA report can now be shared with the family and shared widely for lessons learnt across the Directorate.</p>	<p>KM</p>
<p>RCA Patient BS (Datix No 318893) The report was noted for information and outlines a case involving a newborn baby who was taken to the Operating Theatre for closure of Exomphalos Minor. There was a discrepancy in relation to the required resuscitation process between anaesthetics and neonatology. This case was discussed in detail as part of the Extra Ordinary meeting last week. It was agreed that the case was approved and the improvement plan will be shared with the clinical board for completion.</p>	<p>KM</p>
<p>Discussions have taken place with regards to the process for resuscitation calls between Anaesthetics and NICU and it was noted that immediate actions were implemented and clear information is now available within theatres as to how to raise the call. There are also differences around the national standards for Anaesthetics and Neonatal Services which were highlighted as part of the investigation. Clarity has been sought and procedures have been implemented to resolve the issues of equipment dependent on the scenario. Surgery Clinical Board have also completed an action plan which will be shared for information and noting of any further lessons learnt.</p>	<p>MM</p>
<p>AJ requested that the case be shared for information in order to review the equipment and ensure that this is appropriate from a resuscitation perspective.</p>	<p>KM</p>
<p>The RCA report can now be shared with the family and shared widely for lessons learnt across the Directorate.</p>	<p>KM</p>
<p>RCA & Action Plan Patient MB (Datix No 325106) The report was noted for information and outlines a drug error in administration of Oxytocin leading to hypertonicity of the uterus. This caused a fetal bradycardia. This necessitated a category 1 caesarean section for a woman having her 5th baby under general anaesthetic. This case was discussed in detail as part of the Extra Ordinary meeting last week. A number of learning points and recommendations were highlighted with regards to the practice of preparation of Oxytocin, which was immediately changed following the incident. It was acknowledged that audit is ongoing to ensure that there are no further issues.</p>	<p>SD MM/SD</p>
<p>It was agreed that the case was approved and agreed that the RCA report can now be shared with the family and shared widely for lessons learnt across the Directorate. MM agreed to send through the closure form template through for completion.</p>	<p>SD MM/SD</p>
<p>RCA & Action Plan Patient ANR (Datix No 300836) The report was noted for information and outlines the case of a patient was induced for recurrent antepartum haemorrhage. She went on to develop sepsis during the induction process and required an emergency Caesarean section. This case was discussed in detail as part of the Extra Ordinary meeting last week. Lessons learned included:</p> <ul style="list-style-type: none"> • Since this case occurred there has been increase in time allocation for obstetric consultant ward rounds for all antenatal inpatients. • Since this case occurred there has been increase in resident consultant cover out of hours in the evenings and at weekends. • Systems for the regular review of guidelines to ensure they remain relevant and in date must be robust. 	<p>SD MM/SD</p>

Saunders Martin
06/08/2021 14:05:44

	<p>It was agreed that the case was approved and agreed that the RCA report can now be shared with the family and shared widely for lessons learnt across the Directorate.</p> <p>Timeline & Action Plan Patient ZR (Datix No 121683) The report was noted for information and outlines the case of a patient who presented in early labour of a breech presentation, as labour progressed baby was born in a poor condition and admitted to the Neonatal Unit, the abnormality was not recognised on the fetal heart monitoring. On follow up, there was no identification of brain injury and the baby has since been discharged. This case was discussed in detail as part of the Extra Ordinary meeting last week. Root cause identified as non-recognition of abnormal CTG which is a theme identified as part of other investigation. It was agreed that these cases will be shared as part of the audit process, for sharing of lessons learnt and ongoing monitoring. It was agreed that a completion date column would be added as part of the timeline.</p> <p>It was agreed that the case was approved and agreed that the RCA report can now be shared with the family and shared widely for lessons learnt across the Directorate.</p>	SD
4.3	<p>Infection Prevention Control Update No update received. SH agreed to follow up with IPC outside of the meeting.</p>	SH
4.4	<p>Safeguarding No update received, as the representative had to leave the meeting. SH agreed to follow up outside of the meeting with Safeguarding</p>	SH
4.5	<p>Patient Safety Alerts (internal/external)/Welsh Health Circulars</p> <ul style="list-style-type: none"> • Urgent Field Safety Notice – MDS-20-3801 – BD Venflon • Do Not Attempt Cardio Pulmonary Resuscitation (DNACPR) Notices • Becton Dickinson FSN and MHRA Alert • Internal Safety Notice 2021 Mar 003 Ketamine / Esketamine <p>All alerts have been shared and all appropriate actions undertaken. There were no specific exceptions to note.</p> <p><i>Postscript - Internal Safety Notice 2021 Mar 003 Ketamine / Esketamine - there is a piece of work going on looking to rationalise what we keep to prevent it happening again if possible. AL has engaged with the relevant teams in the Clinical Board to progress.</i></p>	
TIMELY CARE		
5.1	<p>Performance with National targets/the NHS Outcomes and Delivery framework relating to timely care outcomes No issues to note.</p>	
INDIVIDUAL CARE		
6.1	<p>Update on latest 2 minutes of your Time feedback No formal reports have been received.</p> <p>A number of lovely compliments have been received across the Clinical Board and some were noted/shared as part of item 3.2.</p> <p>To note that a review of visiting and signage is also being undertaken within O&G.</p>	
ITEMS TO BE RECORDED AS RECEIVED AND NOTED FOR INFORMATION BY THE COMMITTEE		
7.1	<p>Medicines Safety Briefing – March 2021 Noted for information.</p>	
7.2	<p>Paediatric Medicine Safety Update – February 2021</p>	

	Noted for information.	
7.3	Letter from CNO – Peer Review of Clinical Supervision for Midwives in Wales (KPI 6) Shared for information. Will be carried out as part of All Wales Supervisor Group and meeting is taking place with the group to ensure that the peer review is fit for purpose.	
7.4	NBS Performance Report – January 2021 Noted for information.	
7.5	Mortality Review Group Papers The papers were shared for information. Representatives for the Clinical Board have been agreed for attendance at future meetings. Postscript from the Mortality Group meeting held on 10 th March, the following update was noted; The group has signed off the Stage 2 review form. The updated form to all the CB's for consultation. (The form included in the papers is not the updated version). The ME service will be commencing in the coming months and it will be covering all age groups. There is acknowledgement that there is a separate process occurring within Child Health to review all paediatric deaths, so the stage three reviews may not be relevant. However, it requested that the themes and trends of deaths from Child Health from their subsequent meetings is shared with the Mortality group for information.	
7.6	Extra Ordinary Q&S Meeting (RCA's/SI's) Minutes 19.02.21 Noted for information.	
ANY OTHER BUSINESS		
8.1	No items to note.	
DATE AND TIME OF NEXT MEETING		
The next meeting is scheduled for Tuesday 27th April 2021, 8.30am, Microsoft Teams		
2021 Meeting Dates		
The meetings for 2021 will follow the same pattern as this year and take place on the 4th Tuesday of each month between 8.30 – 10am . All meetings will be held via Microsoft Teams – links will be circulated.		
25 th May		
22 nd June (H&S Focus)		
27 th July		
24 th August		
28 th September (H&S Focus)		
26 th October		
23 rd November		
21 st December		

Saunders, Nathan
06/08/2021 14:36:47



MINUTES

CHILDREN & WOMEN'S CLINICAL BOARD
QUALITY, SAFETY & EXPERIENCE COMMITTEE
Tuesday 27th April 2021, 8.30am via Microsoft Teams

PRELIMINARIES	Action Lead
<p>1.1</p>	<p>Welcome & Introductions Cath Heath, Director of Nursing (Chair) Rhodri John, Directorate Manager, Obstetrics & Gynaecology Directorate Clare Rowntree, Clinical Board Director Karenza Moulton, Lead Nurse Children's Hospital for Wales Services Directorate Laura McLaughlin, Risk Manager, Obstetrics & Gynaecology Directorate Louise Young, Risk Manager, Children Young People and Family Health Services Directorate Martin Edwards, Asst Clinical Director, Children's Hospital for Wales Services Directorate Matthew McCarthy, Patient Safety Facilitator Natalie Vanderlinden, Designated Education Clinical Lead Officer (DECLO) Sarah Spencer, Deputy Head of Midwifery, Obstetrics & Gynaecology Directorate Anthony Lewis, Clinical Board Pharmacist Paula Davies, Lead Nurse, Children Young People and Family Health Services Directorate Becci Ingram, General Manager Children's Hospital for Wales Services Directorate Suzanne Hardacre, Head of Midwifery, Obstetrics & Gynaecology Directorate</p> <p>In Attendance Kirsty Hook, Risk Governance & Patient Experience Facilitator Sarah Harries, Consultant Anaesthetist (Item 2.1) Michael Adamson, Consultant Anaesthetist (Item 2.1) Sam Skelton, Manual Handling Advisor (Item 2.2)</p>
<p>1.2</p>	<p>Apologies for absence Angela Jones</p>
<p>1.3</p>	<p>To note the Minutes of the previous Q&S meeting held on 23rd March 2021 The minutes of the meeting held on 23rd March 2021 were agreed to be an accurate record.</p>
<p>1.4</p>	<p>To note and update the action log of the meeting of 23rd March 2021</p> <p>PEWS Chart Meetings have taken place and an agreement of the chart between EU and Paeds has been decided. Further meeting has been undertaken to get it designed and hope to take through a PDSA cycle through Island Ward and EU as a pilot prior to wider dissemination and implementation. It was noted that some consultants have seen, but not shared widely as yet. It was felt that once the mock up is complete, this will be shared prior to implementation. It was agreed that this action could be closed by exception, the final chart will be shared at a future meeting for noting. KM</p> <p>NICU Improvement Plan (NBS) KM agreed to circulate for information following the meeting. KM</p> <p>CAMHS Delivery Report Katie Simpson, CAMHS Service Manager & Ceri Lovell, Senior Nurse to present the report. KH to make contact to agenda for May's meeting. KH</p>

	<p>eDatix Guidance will be disseminated through shortly in relation to the closure of old incidents for all Clinical Board. Go live date for the new incident module is 1st July 2021 and training will be completed in advance of this date. Positive to note that within the Clinical Board the incident q's are reducing and thanks were expressed to all for their continual commitment to the process.</p> <p>It was noted that the new Directorate name for Community Child Health is causing some confusion on the system. LY requested that a reminder be sent to all for more vigilance when reporting to ensure that the correct area is being selected. MM also agreed to look at a pop up for regular reporters, and update the system for CHF Services from Acute Child Health.</p> <p>2 mins of your Time There has been nothing undertaken since March. The department are keen to take forward some work with the Clinical Board to review the format amend to ensure that they are fit for purpose and more meaningful to the services.</p> <p>RCA BM The action plan has been shared as part of today's agenda. Surgery action plan to be shared for information. MM to review and forward for information.</p> <p>Safeguarding attendance SH to meet with safeguarding team and will update following this meeting. Closed by exception.</p>	<p>ALL MM</p> <p>MM</p> <p>SH</p>
GOVERNANCE, LEADERSHIP AND ACCOUNTABILITY		
2.1	<p>Presentation – COVID UKOSS UHW 2020 Mike Adamson & Sarah Harries were welcomed to the meeting to present the data that has been submitted to UK Obstetric Surveillance System (UKOSS) for all women that have been admitted with confirmed COVID19 infection in pregnancy.</p> <p>In total 65 patients were admitted which is 1.2% of CAV Deliveries. The data was compared against the national data across the UK, and it was noted that CAV data is in line with the trend across the UK. Majority of patients diagnosed with COVID was within the 3rd trimester and this is mirrored across the UK. 15% of increased preterm births compared to 18% across UKOSS.</p> <p>The national data with regards to the trends of risk factors related to patients with a positive test, although the same trends are seen whether they are symptomatic or asymptomatic. Increases in trends were identified towards the end of pregnancy due to the increases in screening and that most patients are seen more frequently towards the end of their pregnancy.</p> <p>Work is progressing to the maternity recovery plan; however, it was noted that monitoring will continue in order to further understand any trends going forward.</p>	
2.2	<p>Reintroduction of the manual handling link worker programme Sam Skelton, manual handling advisor was welcomed to the meeting and provided an update on the reintroduction of the manual handling link worker programme across the UHB.</p> <p>Review was undertaken across the UHB on the previous programme that was being held, and following this review it was determined that a more robust governance process was needed. Benchmarking was undertaken across Wales, specifically with Hywel Dda Health Board and produced the Manual Handling Competency Based Assessor. Reverted back to classroom training every four years following a bi-annual manual handling assessment. Pilot programme will commence in June 2021 and training compliance will be monitored at the start and end of the programme. X1 manual handling workplace assessor per 30 staff. Criteria for the assessor was shared. It was agreed that information will be shared for information following the meeting for review.</p>	

2.3 **Health and Care Standards – key areas from Directorate QSE Reports (including any Exception reports and required escalation of key QSE issues)**

Obstetrics & Gynaecology Directorate

- Relaunch of Safer Pregnancy Campaign, and work is taking place with Comms for daily safer pregnancy messages.
- PGD to allow vaccination team to vaccinate pregnant women.
- X7 Obstetrics, x2 Gynae RCA investigations are ongoing. There are x6 timelines and x6 Birth Injury Tools (BIT) that are progressing. X2 BIT on agenda for discussion
- X3 Pressure damage incidents reported within Gynaecology. No specific concerns to note from the reviews undertaken. Noted that with regards to one case on admission to ITU discussions have taken place with Critical Care however it was noted that there is a discrepancy as to when within the 8hr window this developed/was evident. Review of the documentation is being undertaken as it was found that the assessment was not documented/undertaken on admission.
- No falls reported in month
- Infection control update noted, there were no specific exceptions to note for the meeting.
- Guidelines are being updated for Delivery Suite and Labour Ward for fluid balance
- No reported medication incidents. A SOP has been developed for prescription of Pethidine for homebirth via the Directorate Pharmacist
- Safeguarding incident which is currently being investigated. It was agreed that an update would be provided at the next meeting on the findings of this.
- Perfect Ward Package accreditation is being progressed.
- MSCL meeting has taken place and a virtual maternity voice event has been undertaken.
- X1 IG incident reporting last month relating to a medical student who accessed a relatives notes. This is currently being investigated.
- Guidelines are being updated and there is now a plan in place for all guidelines to be added to the WISDOM platform.
- New patient information has been produced outlining the changes in in visiting.
- RCM Wales survey of staff wellbeing from Feb 2021. Feedback shared with HOM and SMM team- action plan for sharing with staff.
- 8 formal concerns received in month, with 23 informal concerns received. 6 compliments received in month. Main themes for concerns relate to attitude and behaviour and waiting lists.

Children Young People & Family Health Services (CYPFHS) Directorate

- No current issues with PPE and lateral flow testing. Processes are in place and robust.
- Big challenges with regards to HPV Programme in schools. It is felt that only circa 50% can be achieved whilst the staff continue to be redeployed to the Mass Immunisation Programme. Further work is being undertaken to understand how this could be increased if the workforce is returned by end May 2021. Discussions are ongoing with PCIC.
- Safeguarding is also affected as workforce is only managing to attend initial case conferences and not always attending the follow up. Discussions are taking place to discuss any concerns with the safeguarding team.
- Meetings have taken place with regards to risk management and how this will work within the new structure and risk management training is being provided across all areas.
- CAMHS – pressures continue within the CHFW and this is reflected with the work taking place within the Community and the complexity of cases and numbers being received at present.
- Archiving – no robust systems in place due to the move from global link and an options appraisal is being undertaken in order to look at options to reduce the risks associated across all services. One option being explored is digitalisation.
- Resus guidance and staff are attending training relating to bag valve masks, advised that pocket mask can no longer be used. Discussions have taken place with Resus and further risk assessments will be undertaken as to the exact requirements for the bag valve masks. Being purchased for CCNS service, however individual risk assessments will be undertaken in areas such as health visiting prior to any routine purchase.

- Blended diet – clinical pathway in place and a draft policy. The pathway remains the same however the policy is being reviewed and it was agreed that this would be brought to a future meeting for ratification.
- LAC – increase in children going into care
- Information Governance requests with regards to release of unredacted records. Advice has been sought and a covering letter has been drafted to accompany any unredacted records due to the sensitivity of information released.
- CCNS rostering arrangements being reviewed. Alternative rostering systems are being reviewed and a draft report is awaited.
- Cardiff University have approached HV to support Post-natal depression pilot study. Data has been requested on the provision of numbers of families. Further approval is being sought prior to data being shared.
- Psychology parent support projects. Task and finish group is being developed to review processes and noted that within other areas this is evaluating well.
- Activity report not available today, but will be reported going forward. Significant pressures within ND and Continence Waiting Lists. Within ND there has been an increase in nursing time in order to improve flow through the service. Reduction in CAMHS Waiting lists following waiting list initiative, working with Helios.
- Vacancies within a number of services at present, and work is progressing on recruitment. Vacancies in HV are increasing and the next HV cohort is anticipated for September, risks will be managed.
- High number of concerns, 18 ongoing at present specifically within CAMHS and continence psychology support. Main theme relates to waiting list times.

Children's Hospital for Wales Services (CHFV) Directorate

- Increased visiting on NICU and PICU in line with IP&C guidance and Maternity guidance. This has been positively received.
- X2 ongoing notes reviews in PICU following Child Deaths. No escalation required as yet.
- Risk register updated to include CAMHS children within the CHFV. This has been escalated to the Clinical Board due to risk scoring. Work is ongoing to look at different options in management of these patients going forwards to mitigate the risks. Rapid Tranquilisation policy for CAMHS has been approved, robust process in place from EU to CHFV. Concerns raised with regards to SIMA trained. Staff not "safe hold" trained, this has been impacted due to current situation within the CHFV and requests have been made for escalated priority for staff. A meeting is being undertaken with Carl Ball to discuss and take forward the training as soon as possible. Current situation - x5 children where Tier 4 beds required and are currently DTOC due to social services input being required. Meeting has been arranged with Cardiff LA to look at possible resolution/support for these children.
- Eating disorders – discuss the best pathway for the patients and requirement of any additional support needed for inpatient requirements. Need to understand the impact of this to assess the risks associated.
- Robust pathway for CAMHS being developed and meetings taking place to discuss pathway from Community and Acute services.
- Jungle remains closed and Rainbow will move to Jungle whilst the refurbishment of the oncology ward is undertaken. A plan is in place in order to manage any increase in capacity for any high-risk children whilst the refurbishment is completed.
- Lower GI discharge planning meeting is taking place and discuss total bowel management service.
- X1 ungraded pressure sore has been reported. KM to discuss further with MM outside of the meeting in relation to any further actions required.
- MRSA Outbreak on NICU. No children reported with MRSA, screening is taking place for all NICU staff and work is being taken forward with regards to swabbing of visiting teams who attend NICU. Regular meetings are taking place and updated action plan completed.
- Full PPE has been stepped down in ICU. Approved by IP&C and in line with other critical care areas.
- X9 medical errors reported and work continues to review themes and trends across all areas.

Saunders, N
06/08/2021 11:10

	<ul style="list-style-type: none"> • SBAR completed with regards to the Nurse Staffing Act. CHFV on track with triangulation processes. Level 5 patients have increased significantly and this is likely to impact on the next triangulation process. • CAU Draft SOP on the proposal of reduced hours which has been shared widely. Meeting with EU to be undertaken to discuss the SOP with the aim to reduce hours from 22nd May 2021. • Outpatient footprint remains a concern, with inability at present to run the full physio service due to trauma clinic. • Repairs for PICU roof, final report is awaited on next steps, however it was noted that PICU and NICU are running as normal. • 6 formal complaints, x1 very complex concern regarding safeguarding issues. X1 compliment received in month for NICU. • Eating Disorders discussion to be arranged to agree the most appropriate pathway between Community and Acute services and understand the impact of the increase for the service. It is an area of risk across both Directorates which will require additional resource in order to take forward the service. 	
2.4	<p>Exception Reporting / New Risks to be considered for the Clinical Board Risk Register</p> <p>CHFV Directorate - CAMHS Inpatients</p> <p>The risk assessment has been updated to reflect the risks associated with numbers of CAMHS patients currently at CHFV, score has increased. Mitigations are in place to support the management and process for these patients, however a longer-term resolution is required. It was noted that a meeting is also arranged with the local authority to discuss how these patients can be suitably discharged where appropriate.</p> <p>It was agreed that the updated risk register would be sent through to the Clinical Board for noting and adding to the Clinical Board Risk Register as necessary.</p>	KM
2.5	<p>Long Waiting Patients Update</p> <p>O&G</p> <p>Inpatients – current waiting list is 1100 patients with longest wait at 104 weeks due to lack of theatre sessions and work is going forward with Surgery Clinical Board in order to review how this can be improved, change risk-based decisions and working differently to be explored. All patients are regularly reviewed in order to ensure that prioritisation is robust.</p> <p>Outpatients – current waiting list 1200 patients with longest wait on average 16 weeks wait</p> <p>Cancer Pathway x3 breaches being reported per week, however noted that there is no harm coming to patients. Work is progressing in order to ensure robust monitoring and accuracy going forward.</p> <p>CHFV</p> <p>Paeds Surgery inpatients - 450 children on waiting list. 300 waiting over 36weeks, 180 waiting over 52weeks. All 52week level 4 children are regular reviewed based on clinical need. Work is taking place with Surgery Clinical Board to increase theatre capacity where possible.</p> <p>Significant improvement in the outpatient position for children waiting over 36 weeks. 43 children waiting endoscopy, 40 of which have been waiting over 8weeks. Following discussion relating to the risks of transportation of scopes, cleaning and storage is now undertaken within the CHFV which has improved the running of the lists.</p> <p>55 children awaiting MRI, meeting taking place with Radiology and Theatres regards to when the x2 additional lists can be operational. Current issue is in relation to anaesthetic support which is being reviewed.</p>	
2.6	<p>Business Continuity Update</p>	

	No specific issues to note with regards to business continuity.	
SAFE CARE		
3.1	<p>Update on Serious Incidents</p> <p>Report to be circulated for information following the meeting. X1 no surprises case reported to Welsh Government relating to the MRSA Outbreak Screening being undertaken.</p> <p>7 open SI's, and x2 closure forms are being reviewed for submission.</p> <p>Incident reporting continues to be stable and the open incidents are reducing. Number of incidents open over 7 days within CHFW and requests were made for these to be reviewed as soon as possible in order to ensure that they are being reviewed appropriately. It was noted that these incidents are relating to recent CAMHS concerns, and it was agreed that some could be linked together as they relate to the same patient. KM agreed to review and action appropriately, acknowledging that a number of actions have already taken place to mitigate any risks associated with the incidents.</p>	
3.2	<p>SI's/RCA's/Closure Forms for noting</p> <p>Birth Injury Tool (In125473) – Patient JH</p> <p>The birth injury tool was noted for information. The background to the case was provided and noted that there was appropriate antenatal care provided throughout the pregnancy. Plan made for induction of labour and labour progressed. Further plan made to go to theatre for forceps delivery which was successful, where baby was born in good condition. Baby subsequently had an eye injury, and on review of the case it was noted that baby was not in an optimum position and a CS delivery should have been considered.</p> <p>Baby has recovered well from the eye injury and there are no ongoing concerns noted. A meeting is arranged with the patient to discuss her concerns and the outcome of the report. The tool has been shared widely across the Directorate as part of sharing lessons learnt.</p> <p>Birth Injury Tool (In117713) – Patient MM</p> <p>The birth injury tool was noted for information. The background to the case was provided. Uncomplicated pregnancy, labour progressed quickly through first stage. Baby was delivered by forceps following a shoulder dystocia. Incidental findings found a fractured clavicle; however, no further treatment was required. No concerns highlighted through the care provided and no further treatment required. There are no ongoing concerns to note.</p> <p>The tool has been shared widely across the Directorate as part of sharing lessons learnt.</p> <p>Closure Form & Improvement Plan In127525</p> <p>Noted for information. RCA has been discussed in detail as part of a previous Clinical Board extra ordinary meeting. Learning from the incident has been discussed at both Directorate and Clinical Board quality and safety meetings. Learning will also be shared via the Health Board's Medicines Safety Executive Group. Learning from the incident will be shared with other centres in Wales via the Maternity Network.</p> <p>Closure Form In119212</p> <p>Noted for information. RCA has been discussed in detail as part of a previous Clinical Board extra ordinary meeting. Learning from the incident has been shared as part of the Children and Women QSE meeting.</p> <p>The Health Board will share the learning from this case via the Maternity Network.</p> <p>Closure Form & Improvement Plan In111422</p> <p>Noted for information. RCA has been discussed in detail as part of a previous Clinical Board extra ordinary meeting. Learning from this incident has been shared at both Directorate and Clinical Board level via audit and QSE meetings. Learning is also being fed into PROMPT training.</p>	

	<p>Action Plan (In121312) Patient BS</p> <p>The RCA report was discussed in detail at the last meeting. The action plan is now finalised and is being shared for information and completion. There were no specific exceptions to note from this meeting.</p>	
3.3	<p>Wales Reporting of Never Events, Serious Incidents and the carrying out of Immediate Reviews for patients receiving Maternity care and Neonatal in-patient care guidance</p> <p>Circulated for information. SI framework draft is now available from Welsh Government in readiness for implementation. MM noted that there are some concerns relating to classification of incidents and links between Neonatal and Maternity. It was agreed that this would be reviewed outside of the meeting and any issues/exceptions would be noted at the next meeting if required.</p>	MM/SH
3.4	<p>Infection Prevention Control Update</p> <p>There was no update available. KH agreed to discuss with CH in relation to receipt of updates and attendance from IP&C at future meetings.</p>	KH
3.5	<p>Safeguarding</p> <ul style="list-style-type: none"> • An Evaluation of the Delivery of Group 2 Ask and Act Training in NHS Wales Report • 7 Minute Briefing • Safeguarding Allegation/Concerns About Practitioners and Those in Positions of Trust Procedure (previously Professional Abuse Procedure) <p>The documents were noted for information and onward sharing as appropriate. There were no exceptions to note for this meeting. SH agreed to discuss safeguarding attendance at the meetings going forward.</p>	SH
3.6	<p>Patient Safety Alerts (internal/external)/Welsh Health Circulars</p> <ul style="list-style-type: none"> • Internal Safety Notice 2021/Apr/008 Blood Gas Syringes • Rare clotting events after AstraZeneca vaccine • Internal Safety Notice 2021/Mar/003 Esketamine <p>All alerts have been shared widely and all appropriate actions undertaken. There were no specific exceptions to note.</p>	
INDIVIDUAL CARE		
4.1	<p>Update on latest 2 minutes of your Time feedback</p> <p>Discussed as part of item 1.5. No further exceptions to note.</p>	
ITEMS TO BE RECORDED AS RECEIVED AND NOTED FOR INFORMATION BY THE COMMITTEE		
5.1	<p>To note the Medicines Safety Briefing April 2021</p> <p>Noted for information.</p> <p>New Directorate Pharmacist, Ceri Thomas commences this month for CYPFHS Directorate.</p> <p>New All Wales Paediatric Drug Chart will be implemented. Piloted in other centres across Wales and AL to contact procurement to progress the roll out as soon as possible. Antimicrobial Stewardship is the main change, starting with the SMART methodology.</p>	
5.2	<p>To note the Paediatric Medicine Safety Update March 2021</p> <p>Noted for information.</p>	
5.3	<p>NBS Performance Report – February 2021</p> <p>Noted for information. Agreed that the improvements would be discussed at the next meeting with regards to avoidable repeats. KH agreed to add to the next meeting agenda.</p>	KH

5.4	Final Flu Profile 2020/21 Noted for information. Congratulations were shared with all for the significant contribution made by all staff involved in the 2020/21 Flu campaign.	
5.5	ALN Act /DECLO Role Deferred to the next meeting. It was agreed that a formal update would be provided at the next meeting.	NV
ANY OTHER BUSINESS		
6.1	NICE Guidance – New Clinical Board Process It was noted that a new monitoring system is being implemented within the Clinical Board in order to ensure that there are robust records in place for recording of NICE Guidance received and compliance against the guidance. NICE Guideline – Neonatal Infection New guidance received and it was agreed that this would be shared for information and onward action as appropriate. Discussion ensued with regards to a new NICE guidance relating to the use of Lucamed Sorbact to reduce CSSI rates. Concerns were raised with regards to the potential cost pressures associated with the required dressing. SH agreed to follow up.	AL/KH SH
DATE AND TIME OF NEXT MEETING		
<p>The next meeting is scheduled for Tuesday 25th May 2021, 8.30am, Via Microsoft Teams</p> <p>2021 Meeting Dates The meetings for 2021 will follow the same pattern as this year and take place on the 4th Tuesday of each month between 8.30 – 10am. All meetings will be held via Microsoft Teams – links will be circulated.</p> <p>22nd June (H&S Focus) 27th July 24th August 28th September (H&S Focus) 26th October 23rd November 21st December (H&S Focus)</p>		

Saunders, Nathan
06/08/2021 14:36:47



Minutes
Specialist Services Clinical Board
Quality, Safety & Experience Committee
Date and time: 8am, Friday 29th January 2021
Teams Meeting

In Attendance: Claire Main (CMain), Interim Director of Nursing, Specialist Services (Chair)
Catherine Wood (CW), Interim Director of Operations
Gemma Ellis (GE), Nurse Consultant, Critical Care
Suzie Cheesman (SC), Q&S Facilitator
Angela Jones (AJ), Resus
Sharon Daniels (SD),
Sarah Doherty (SD),
Steve Gage (SG), Pharmacy
Ceri Phillips (CP), Lead Nurse, Cardiothoracics
Mary Harness (MH), Senior Nurse, Haematology
Hywel Pullen (HP), Head of Finance
Tom Holmes (THol), Consultant, Critical Care
Tom Hughes (TH), Clinical Director, Neurosciences
Sarah Matthews (SM), Senior Nurse, N&T
Jonathan Elias (JE), Senior Nurse, Critical Care
Khalid Hamandi (KH), Consultant Nephrologist
Colin Gibson (CG), ALAS
Rachel Barry (RB), Lead Nurse, Neurosciences

PART 1: PRELIMINARIES		ACTION
1.1	<u>Welcome & Introductions</u> CMain welcomed everyone back to the meeting – no meeting since November due to operational pressures.	
1.2	<u>Apologies for absence</u> Judith Burnett, Lisa Higginson, Gareth Jenkins, Rafael Chavez, Caroline Burford, Sian Williams, Guy Blackshaw, Hywel Roberts and Sian Rowlands.	
1.3	<u>To review the Minutes of the previous meeting 20th November 2020</u> The minutes were agreed as an accurate record. <u>Matters Arising</u> CMain went through any outstanding actions that were still relevant since the last meeting. <ul style="list-style-type: none"> • Page 2 Item 1.3 – number of actions relating to closure forms. These have all been actioned. Closure forms on agenda to be discussed. • Item 2.2 - Any of the alert actions will be picked up under that agenda item. • Item 2.2 Page 3 PSN056 Oct 2020 foreign body aspiration – closed off. • Item 2.6 HCAI actions – will be discussed under that agenda item. • Item 2.6 Page 5 - Update on agenda relating to routine screening in renal. • Item 3.2 Page 6 - Mortality review group update – Caroline Burford not available to attend today but has provided a brief update. The medical examiner role will not be formalised in 2021 and will now be delayed to 2022. Caroline will attend the next Q&S meeting to provide a further 	GW

Saunders Nathan
06/08/2021 14:36:47

	<p>update. CMain noted that Caroline has been working with each Directorate and getting their information together.</p> <ul style="list-style-type: none"> • Page 7 ongoing covid risks – ongoing action within the Health Board, will review as we go through. Need to keep monitoring any covid risks and if moving patients into high risk areas they need to be flagged as a risk. • Item 3.3 Cardiac services – CP will update later on under Directorate exceptions. 	
PART 2: SAFE CARE		
2.1	<p><u>Closure Forms</u> SC provided an update to the group. 3 closure forms have been closed since the last meeting (that were discussed). 2 of these have been closed by WAG. The closure form relating to the fall has not been closed as yet.</p> <p><u>Serious Incidents</u> 6 open SIs:</p> <ul style="list-style-type: none"> • In103961 - 1 old incident from 2019 (initials LP). This was thought to be a malfunction with the balloon pump. It went to inquest as well. Maria Roberts has been leading on this one and will feed back with regards to what is left to do. No date for an inquest yet but coroner is chasing. • In108123 - Cardiac waiting list death (PJ) – this one should be finalised soon. Richard Parry is leading on this and will be back in next week. • In116055 - 5 cardiac surgery patients that died after contracting covid – Richard Parry is also looking at this one and will progress when he is back in next week. CP keen to catch up re this one as well. • In124739 - Young man who had his leg crushed – finishing off RCA. SC will send it to Raj Krishnan first. It is likely that the family want an answer as to what the impact was of the delay. This one is likely to need an expert view. • 2 IP&C outbreaks – should be able to close by next month. <p>SC informed the group that the Delivery Unit and WAG have stood down Serious Incident reporting again. Only reporting never events, ,in patient suicides, maternal deaths, neonatal deaths, homicides, and incidents of high impact / likely to happen again including child related deaths (for local decision).</p> <p><u>Inquests</u> Meeting yesterday to go through the inquests and all are on track. Most are statement requests for Critical Care.</p> <p><u>New Staff in the Patient Safety Team</u> Tracey Johnson is a new Patient Safety Facilitator helping to cover Specialist Services for 6 months, working 3 days a week. Tara Cardew is taking over from Maria Roberts as Head of Patient Safety. Annie Burrin has also joined the Corporate Q+S Team as the Patient Safety and Organisational Learning Manager. Her main work streams are Falls and Safety Solutions.</p>	
2.2	<p><u>Alerts/Patient Safety Notices</u></p> <ul style="list-style-type: none"> • FSN Tracoe 3 November • FSN – MPS-18-1209 BD syringe and needles • MHRA targeted letter TL/2020/05 gastric bands • ISN Ref 2021 / Jan / 001 Copan throat swab • ISN 012 Gold Top Tubes • ISN 2020 011 T34 Battery update • Medical Directors letter 16th Nov 2020 	

Saunders, Nathaniel
06/08/2021 14:36:47

	<ul style="list-style-type: none"> • Corsel Report 1 • Corsel Report 2 <p>CMain noted that there were a large number of alerts that have been included that have all previously been circulated. CMain has had assurance on those relevant to the Specialist areas. The most significant was the Copan throat swab which was giving a false positive reading. This has been removed from all clinical areas. Not aware of an adverse events.</p> <p>Directorates to read all alerts and action where appropriate if not already done so. CG referred to pump batteries and re-iterated the need for areas to use the correct batteries.</p>	<p>Dir's</p> <p>Dir's</p>
2.3	<p><u>Closure Forms</u> Discussed above.</p>	
2.4	<p><u>Change to routine screening in Renal – bought back to meeting for update (Action from 20th November minutes)</u> SM updated the group. Patients thought at higher risk of MSSA and MRSA are haemodialysis patients. Button holing is used whereby a dialysis needle is put in the same spot every time until a button hole is created. Patients with temporary lines or button holes were routinely screened which meant a lot of screening for a random movement of results. After checking other areas and looking at the research they have now moved to only doing swabs if something is there i.e. any wetness or redness, or a problem at the site. An eradication treatment is then given for 6 months. It has reduced the number of infections so successful so far. IP&C were fully involved in the process and a step by step approach is being used. Patients seem happy with the new protocol as well. Update to be provided when the data has been collated or there is an early indication of changes.</p>	<p>N&T</p>
2.5	<p><u>Healthcare Associated Infections</u></p> <ul style="list-style-type: none"> • <u>Specialist HCAI report</u> • <u>HCAI review to end of December 2020</u> • <u>Flu update</u> <p><u>Each Directorate gave an update on their IPC position</u></p> <p><u>Cardiothoracics</u> CP updated the group. The concerns moving forward with running two services is that B1 is the only acute cardiology area, so there are significant capacity issues. Trying to protect the area as best they can. In the process of finalising a plan to move forward. Another constraint is the new student cohort that will be joining shortly. All areas have had to take a significant increase in the number of students (CCU are taking 6 and B1 are taking 8) which means a 14 wte increase. This is causing some concern with regards to the ability to socially distance. They will be screening staff mindfully as well due to the risk of asymptomatic carriers. It is a complex situation – working through it.</p> <p><u>Neurosciences</u> RB updated the group. They are starting the outbreak process on T4. RB noted that neurosurgery and neurology are split between T4 and B4 (high care and main ward) and that there was an outbreak on T4 a week ago. This resulted in the request to close T4 which has caused significant problems. They have worked through a plan which means that they would admit on T4 at</p>	

risk. Most high care admissions with element of risk will be admitted to B4. Working through a plan to address the skill mix as staff on B4 are not use to high skill mix of patients that go to T4. Yesterday, there was an outbreak on the South side of B4 so currently the only admitting area is the North end of B4. They have taken steps to reduce the movement of staff around the wards. Monitoring the situation very closely. The concern is that if they have an influx of patients the position could change rapidly. RB and CM meeting later on to discuss further.

N&T

ES updated the group. No cases on B5 at the moment and still swabbing on admission. With regards to the community and the Satelite Diaylsis Unit, there are currently 4 positive patients. Looking at IP& in general, it has been nearly a year C.difficile free and no new cases of MRSA and MSSA. All but 5 staff now vaccinated in the Satellite Units and starting the vaccination of patients this week.

Haematology

MH all ok at the moment.

Critical Care

JE updated the group. Concern raised around the staffing impact on T4. Also, significant issue in relation to 10 beds being closed due to an electrical failure on ITU. Increased rate in infections – THolmes has pulled together a summary of actions and a meeting is being arranged to discuss further. Number of issues ongoing working through them.

HCAI Report

CMain noted that the February report had been circulated. Various pilots taking place throughout the Health Board at the moment. A couple of areas testing the lateral flow and staff testing, which they are monitoring for a meaningful impact on staff identification. Quick testing in EU. Can only pick up asymptomatic cohort. This could have an impact on placing patients appropriately. In UHL, they are looking at testing day 0 and day 3. There has been a number of community required incidences. SC informed the group that Annie from the Patient Safety Team had shared an article about an English trust looking at a Duty of Candor letter to come. GW has circulated this article to the group.

Major Trauma

CWill updated the group. On A4 North (which is under Specialist for staffing but are Medical beds) there are now 3 covid positive patients, which means they are sharing the same reception desks, staff room and corridor space as polytrauma. Polytrauma is under pressure around the corridor. CMain will pick this up after the meeting and take it to the IP&C meeting later on. Ongoing facilities on A4. THolmes noted that there was more footfall in relation to the public, especially around patients on end of life pathways. THolmes recommended doing another iteration on the policy for critical care of people coming in and grieving families etc. Once the policy has been updated, THolmes will share it with the group.

JB noted that there were no outbreaks on Critical Care and that the Risk Assessment Tool was still being used really well. Working closely with virology.

Flu Update

CMain noted that the Board had done really well with regards to the amount of staff vaccinated. Covid vaccinations for staff have been disseminated across

	<p>areas. No data on areas and compliance but looks like a very good uptake. Rookwood is being targeted tomorrow. The Pentwyn Mass Vaccination Centre is opening shortly and the Centre in Barry will be opening soon as well. The UHB is a temporary clinic. Primary Care vulnerable patients will be contacted through their practice.</p>	
<p>PART 3: GOVERNANCE, LEADERSHIP & ACCOUNTABILITY</p>		
3.1	<p><u>Feedback from UHB QSE Committee</u> SC will check and share papers if needed.</p>	
3.2	<p><u>Exception reports and escalation of key QSE issues from Directorate QSE groups</u></p> <p><u>Critical Care Electrical Issue</u> Electrical issue in Critical Care as mentioned above. Hopefully the issue is being sorted today by the contractors.</p> <p><u>Neurosciences Rookwood Move</u> To note, on target for new facility to be handed over on 15th February 2021, with a view to commissioning it in May.</p> <p><u>Cardiac</u> CP flagged again the issues on B1 and the constraints of trying to run a level 1 area. Also, the North side has no buzzer system so a temporary buzzer system has been running. No arrest call buzzer system. Waiting for new call system. CMain will try to pick this up. They will still continue the clear guidance that only admission on acute cardiology on B1. Concerned re impact to delivering a tertiary service with only one area. Contact on call consultant continues. Will look to strengthen this later on as well.</p> <p><u>Pharmacy</u> SG flagged that there were a number of ongoing medicines shortages but that Pharmacy were keeping areas informed. No pattern.</p> <p><u>NEWS Version 2</u> AJ noted that NEWS version 2 needs to be implemented by the end of next week. CM confirmed that all areas are using this version.</p> <p><u>IT Issues</u> KH raised concern around the current IT issues that the organisation is experiencing. CM noted that it has been raised at an Executive level. The issues have partly been related to the migration to Office 365 but there is also a request to look at the stability of the service. CW noted that the issue has been raised to Steve Curry at OPG. Concern relation to patient safety as well. CW is hoping to receive feedback at OPG on Tuesday.</p>	
<p>PART 4: ITEMS TO BE RECORDED AS RECEIVED AND NOTED FOR INFORMATION BY THE COMMITTEE</p>		
4.1	<ul style="list-style-type: none"> • <u>Patient Safety and Quality Newsletter</u> • <u>Workshop dates – Employee Wellbeing</u> <p>Attachments for information.</p> <p><u>Staff Hub</u> The staff hub in Lakeside will be operational soon and will be somewhere for staff to have their breaks etc. Looking at developing facilities for staff to have rest bite. RB noted that she has signposted a lot of staff to Health & Health</p>	



MINUTES
Specialist Services Clinical Board
Quality, Safety & Experience Committee
Date and time: 8am, Friday 12th March 2021
Teams Meeting

In Attendance: Claire Main (CMain), Interim Director of Nursing, Specialist Services (Chair)
Catherine Wood (CW), Director of Operations
Guy Blackshaw (GB), Clinical Board Director
Richard Parry (RP), Q&S Facilitator
Ceri Phillips (CP), Lead Nurse, Cardiothoracics
Catherine Wood (CW), Interim Director of Operations
Angela Jones (AJ), Resus
Steve Gage (SG), Pharmacy Lead
Khalid Hamandi (KH), Consultant Nephrologist
Lisa Higginson (LH), Lead Nurse, N&T
Rachel Barry (RB), Lead Nurse, Neurosciences
Tracy Johnson (TJ), Patient Safety
Chris Williams (CW), Senior Nurse, Major Trauma
Colin Gibson (CG), ALAS
Hywel Roberts (HR), Consultant, Critical Care and QSE Medical Lead
Caroline Burford (CBur), Consultant, Critical Care
Richard Wheeler (RW), Consultant, Cardiothoracics
Keith Wilson (KW), Consultant, Haematology
Lisa Simm (LS), Interim Directorate Manager, Neurosurgery
Joanne Bagshawe (JB), Senior Nurse, Inherited Blood Disorders
Annie Burrin (AB), Patient Safety
Judith Burnett (JB), Senior Nurse, Critical Care

Present: Carla English (CE), Head of Covid Investigations
Rhian Barlow (RB), Heart Failure Nurse, Cardiology

PART 1: PRELIMINARIES		ACTION
1.1	<u>Welcome & Introductions</u>	
1.2	<u>Apologies for absence</u> Nicola Foreman, Suzie Cheesman, Rafael Chavez and Sian Williams.	
1.3	<u>To review the Minutes of the previous meeting 29th January 2021</u> The minutes were agreed as an accurate record, subject to Colin Gibson and Rachel Barry needing to be added to the attendance list. <u>Matters Arising</u> <u>Item 1.3 –</u> <ul style="list-style-type: none"> Caroline Burford will provide an update at today’s meeting re the Mortality Review Group. <u>Item 2.2 -</u> <ul style="list-style-type: none"> Directorates were asked to read all alerts and action where 	

Saunders Nathan
06/08/2021 14:36:47

	<p>necessary.</p> <ul style="list-style-type: none"> Directorates were asked at the last meeting to ensure that the correct batteries were being used. <p><u>Item 2.4</u></p> <ul style="list-style-type: none"> Change to routine screening in renal – N&T to provide update when the data has been provided or early indication of changes. <p><u>Item 4.1</u></p> <ul style="list-style-type: none"> Staff wellbeing and routes to support staff on agenda to be discussed. 	
PART 2: SAFE CARE		
2.1	<p><u>Open Inquests</u> Open Inquests for information nothing to flag.</p> <p><u>Open Serious Incidents</u> First two CP:</p> <ul style="list-style-type: none"> In103961 LP - RCA completed and recommendations circulated. In process of pulling improvement plan together to move to closure. This incident crosses over a number of Directorates so linking in with other areas. In 108123 PJ - RCA not quite complete. RP noted that the RCA is written and at the point where it can be shared with individuals involved. Close to completion. In116055 PM - further information has been received and is in process. In 124739 FS - Incident relates to the Major Trauma Service and is close to completion. In127196 RB - clarification around patients named in wider outbreak report. Carol Evans was checking details with Carla English. All being processed. In127697 N&T outbreak - in process. 	
2.2	<p><u>Alerts/Patient Safety Notices</u></p> <ul style="list-style-type: none"> ISN 2021 Feb 006 <u>Nasogastric Tubes</u> – all Directorates confirmed action had been taken where necessary. <u>MDS 20 3801 Venflon</u> – Risk of leakage around injection port. Directorates to ensure necessary action is taken. <u>ISN 2021 Feb 002a Revised Valved FFP3 Masks</u> – Changes to use in sterile areas. Critical Care have had some issues. HR noted that there is a risk from exile air from sterile procedures. The recommendations section suggests discontinuing the use of the valve of FFP3 masks, however HR raised concern that if they ban the use of valved masks this could cause significant issues as 50% of the staff in Critical Care are using them and find them comfortable to wear. There is only one alternative and this only fits 50% of staff. There are also problems with the hood as manufacturers have discontinued the product. Banning the use of 8833 masks in Critical Care would be a huge problem. It was suggested that the valve could be covered with a surgical mask however JD from H&S confirmed that IP&C would not support the wearing of the mask on top. Procurement are looking at bringing in a disposable unvalved mask. CM noted that she had spoken to Yvonne Hyde regarding the wording of the alert in support of Hywel's point. Annie Burrin in Patient safety is awaiting a response from IP&C. It was agreed that the wording does need to be clarified as the mask may not need to be banned in all areas. Noted that 	

Saunders Nathan
 06/08/2021 14:36:47

	<p>this is mainly an issue in Critical Care and no other areas.</p> <ul style="list-style-type: none"> • <u>ISN 2021 Feb 004 Safe Specimen Handling in Primary Care</u> – this only affects a few areas in the community teams. Alert circulated to all. • <u>Ref 2021 Jan 001 New Datix System</u> – discussed previously. Moving to new system so areas need to close what is in the existing system to avoid having to input all of the information again. Further training will be provided. • <u>SBAR Covid testing in EU and Assessment Unit</u> – A number of tests have become available since the start of the covid 19 pandemic. The SBAR details how the Lumina Point of Care testing will work and how it will be implemented. Also what the back-up system is if out of action. • <u>Public Health Link 27th Jan 2021</u> – CEM CMO 2021 04 – SARS-COV-2 Virus – this was circulated back in January. All Directorates aware and managed within processes. 	
2.3	<p><u>Closure Forms</u> None discussed.</p>	
2.4	<p><u>Acute Heart Failure Nurse - Acute Heart Failure pilot / proposed future development</u> Rhian Barlow, Acute Heart Failure Specialist Nurse, presented to the group.</p> <p>The heart failure audit data is reported nationally and there has been a disparity between the UHW and UHL sites. Funding was sought for the Acute Heart Failure Nurse role to improve this disparity. Also there has been the appointment of the Acute Cardiologist part time at UHL to provide medical support on this site. Looking at a business case to secure permanent funding.</p> <p>Achievements to date were discussed. Improved quality of care through increased compliance with national standards and NICE recommendations of care in a more-timely fashion. Despite covid restrictions, there has been an increase in patients followed up in AHFN clinics. New AHF clinics started at UHL Jan 2020 allowing early FU less than 3 weeks to reduce readmissions.</p> <p>Next steps – applying for funding to continue what they have achieved so far. Roll it out at UHW in collaboration with Medicine. Work with Primary Care to increase community-based care.</p> <p>GB noted that this was a fantastic service and over time will save / prolong many lives. NG thanked CP for her hard work in securing the funding and noted that heart Failure has been included in the Cardiothoracic IMTP to develop heart failure as a Health Board. Cardiothoracics have produced an SBAR which they will send to the Clinical Board. It was suggested that a patient story is included in the business case. Also concern was raised regarding the single handed service at the moment and it was noted that this needs to be included in the business case. CP noted that the increased collaboration with Medicine at UHL has been really positive.</p> <p>SG asked where Pharmacy fits in with these new treatments coming in. It was noted that using existing processes we have can help to improve the titration of these patients. RW noted that the service</p>	

Saunders, Nathaniel
06/06/2021 14:30

	<p>needs bolstering in nursing and clinician support and also at UHW as well.</p> <p>Thanks was expressed to Rhian for all her hard work along with thanks to the wider team.</p>	
2.5	<p><u>Carla English – Patient Safety and Quality, Covid themes presented to the Mortality Review Group</u></p> <p>Carla English was introduced to the group. Carla is the Head of Covid investigations in Patient Safety. Carla discussed the incidences and outbreaks with the group.</p> <p>There have been 60 ward closures between the 17th April - 23rd February 2021. Themes of outbreaks predominantly in the Nightingale areas in UHL and UHW areas that couldn't be rested such as Stroke. There has been a staggered approach of outbreaks. In January a lot of areas have continually been in outbreaks. Data demonstrates that the need of the services have prolonged the outbreak as there have sometimes been nothing they can do to mitigate this.</p> <p>Compared to rest of Wales we were an outlier in January. Our rates came down and then spiked again in February. Changes were made and rates greatly improved. The UHB is now down to baseline and below other Health Boards currently.</p> <p>Excess mortality as a Health Board is roughly 15%. In Patient Safety they have been validating every patient that passes away from covid. There has been a daily reporting mechanism to Welsh Government. Investigations are under way and there is an upcoming enquiry. The key part is a Health Board timeline. They have taken learning from reviews and put it into learning based action plans.</p> <p>With regards to Legal and risk, if a patient has a hospital acquired infection they will receive £5000 and £60,000 if seriously affected.</p> <p>Challenges – gathering the necessary information is a challenge.</p> <p>Themes discussed – patients testing negative and becoming positive up to 5 days into admission. Continued admissions “at risk” into outbreak areas.</p> <p>Lessons learnt – staff should not come to work if symptomatic, early isolating of positive patients from multi patient bays is key. Test prior to transfer. Keeping track of positive staff.</p> <p>Action taken – staff social distance and PPE. Rates are monitored through the daily IP&C Cell and fortnightly PPE Cell meetings. There has been an increased visibility of the IPC team on all areas and not just affected areas.</p> <p>Currently discussions re potential wave 3. Continue with partner working. Action plans and risk documentation need to be looked at.</p> <p>The Clinical Board thanked Carla for her helpful presentation. It was noted that it is important that everyone is aware what is being done in the background. Planning for wave 3. RW noted that the data was very powerful and extremely worrying as we head through the year.</p>	

Saunders Nathaniel
06/08/2021 14:30:47

	<p>B1 remain powerless in face of third wave. Reconfiguration of UHW 1 is a massive project for this year. If no infrastructure change then the numbers could well be repeated in the next 6 months. Lack of areas to isolate is a huge issue. There is no prospect of the return of cardiothoracic surgery until there are infrastructure changes. HR noted that the lessons from infection control need to be factored into new plans for UHW 2. Carla would welcome any feedback / helpful ideas.</p> <p><u>Mortality Review Group Work</u> CB informed the group that the medical examiner role was meant to be going live from the 1st April for all deaths but is now delayed. From 16th March the medical examiner will be looking at UHL cases but not UHW cases. Trial run cases now. Importantly for clinicians, the medical examiner role will mean the take-over of stage 1 mortality reviews. If the medical examiner identified the need for a further review of a case, reasons will be highlighted through a patient email system. It is up to each department to share out the stage 2 reviews how they see fit. Raj has a clear plan with regards to how stage 2 reviews need to be undertaken but also feedback to the department and patient safety team. The All Wales template will be circulated in the next couple of weeks. CB noted that she did email out after the last meeting to see what processes are in place now. Directorates were encouraged to respond if they haven't already done so. CM noted that it is important that the same process is followed throughout the UHB.</p>	
2.6	<p><u>Healthcare Associated Infections</u> <u>Specialist HCAI report</u> CMah referred to the report embedded in the agenda. Currently B5 is affected by a covid outbreak which is ongoing. As of this morning B1 is opening later on today. The outbreak is officially over which is good news. Testament to B1 staff who managed in very difficult circumstances. Also dealing with some other non covid infections such as an MDRO outbreak on Rookwood. C.difficile outbreak on C5. Two patients have the same type of C.difficile. Meetings currently ongoing around this. With regards to HCAI reduction targets, apart from C.difficile there has been a general overall increase in most organisms. C.difficile 16% reduction which is encouraging. As a Health Board, the UHB has seen the highest amount of C.difficile in the last two years – this is concerning however there has not been a huge increase within Specialist however still work to be done.</p>	
PART 3: GOVERNANCE, LEADERSHIP AND ACCUNTABILITY		
3.1	<u>Feedback from UHB QSE Committee</u>	
3.2	<u>Staff Wellbeing Initiatives in place in Directorates</u> Carried over to next meeting.	GW
3.3	<p><u>Exception reports and escalation of key QSE issues from Directorate QSE groups</u></p> <p><u>Office 365</u> HR fed back that he couldn't open the embedded papers in the agenda if using the Office 365 web-based version – look to create a Teams channel and share documents that way.</p> <p><u>Neurosciences</u></p>	

	RB reiterated the environmental issues in Rookwood, noting that the move of Rookwood to UHL is now fast approaching and likely to be the end of May beginning of June. It was agreed that this is very positive and should help with regards to the challenges of IP&C going forward.	
PART 4: ITEMS TO BE RECORDED A RECEIVED AND NOTED FOR INFORMATON BY THE COMMITTEE		
4.1	None	
PART 5: ANY URGENT BUSINESS		
5.1	<p><u>Any Urgent Business</u></p> <p><u>Lateral Flow testing</u> CM circulated an email regarding Lateral Flow testing yesterday – if anyone wants to implement this in their areas or have any questions please come back to her. Lateral Flow testing is an initiative that has arisen post covid.</p> <p><u>Inpatient Vaccinations</u> Concern was raised around some patients missing their vaccinations due to being inpatients. It was noted that there is a Health Board process and Pharmacy will be contacting all of the leads for their areas and will co-ordinate the number of patients etc. Query around whether it would be the Vaccination team or Pharmacy contacting the leads. Patients need to be identified as needing the vaccine.</p> <p><u>MS Service</u> SG informed the group of service capacity problems that are affecting patients' access to treatments that should be available under NHS following positive Technology Appraisals by NICE or AWMSG. These medicines include fampridine (MS symptoms), ocrelizumab (for primary progressive MS), and Epidiolex (cannabidiol) for forms of epilepsy. The CAV Convention is being applied to try and agree a safe and effective shared approach to prescribing sodium valproate due to the risk of developmental disorders in children exposed in utero to this drug. Directorates to raise awareness.</p>	<p>Dir</p> <p>Dir</p>
PART 6: DATE OF THE NEXT MEETING		
6.1	Friday 2 nd April to be cancelled as Good Friday – next meeting to be confirmed.	

Saunders,Nathan
06/08/2021 14:36:47



**CLINICAL DIAGNOSTICS AND THERAPEUTICS CLINICAL BOARD
QUALITY SAFETY AND EXPERIENCE SUB-COMMITTEE**

MINUTES OF THE MEETING HELD ON 10TH MARCH 2021

Present:

Sue Bailey (Chair)	Clinical Board Director of Quality, Safety and Patient Experience
Edward Chapman	Head of Clinical Engineering/ Medical Devices Officer
Louise Long	Public Health Wales Microbiology
Saul Harris	Clinical Scientist/Deputy to Clinical Board Medical Device Officer, Clinical Engineering
Nia Came	Head of Adult Speech and Language Therapy
Jo Fleming	Quality and Safety Lead, Radiology
Maria Jones	Sister, Outpatients
Judyth Jenkins	Head of Dietetics
Alun Roderick	Laboratory Service Manager, Haematology
Sion O'Keefe	Head of Business Development/ Directorate Manager of Outpatients/Patient Administration
Bolette Jones	Head of Media Resources
Lesley Harris	Professional Head of Radiography UHL
Robert Bracchi	Medical Advisor to AWTTTC
Timothy Banner	Head of Patient Services, Pharmacy
Sian Jones	Operational Service Manager

Apologies:

Meriel Jenney	Clinical Board Director
Matthew Temby	Clinical Board Director of Operations
Suzie Cheesman	Patient Safety Facilitator
Paul Williams	Clinical Scientist, Medical Physics
Seetal Sall	Point of Care Testing Manager
Emma Cooke	Head of Physiotherapy
Nigel Roberts	Laboratory Service Manager, Biochemistry
Tara Cardew	Head of Patient Safety

Secretariat:

Helen Jenkins	Clinical Board Secretary
---------------	--------------------------

PRELIMINARIES

CDTQSE 21/043 Welcome and Introductions

Sue Bailey welcomed everyone to the meeting held via Microsoft Teams.

CDTQSE 21/044 Apologies for Absence

Apologies for absence were **NOTED**.

CDTQSE 21/045 Approval of the Minutes of the Last Meeting

The minutes of the previous meeting held on 10th February 2021 were **APPROVED**.

CDTQSE 21/046 Matters Arising/Action log

The action log was **RECEIVED** and it was noted that a number of actions had been completed. The outstanding actions were updated as follows:

CDTQSE 20/112 Contractors' Policy

Jonathan Davies has returned from secondment and Sue Bailey will discuss the concerns around the policy with him.

Action: Sue Bailey/Jonathan Davies

CDTQSE 20/422 AWTTTC IT Paper

Darrell Baker is progressing the paper with the IT Team. Robert Bracchi to contact Darrell Baker for an update.

Action: Robert Bracchi

CDTQSE 21/005 Foot Risk Assessment Tool

Mathew King to discuss the issues pertaining to the tool with Aimee Cox.

Action: Mathew King

GOVERNANCE, LEADERSHIP AND ACCOUNTABILITY

CDTQSE 21/047 Patient Story

A rolling programme for directorates to present patient stories is now in place from April for the remainder of the year.

CDTQSE 21/048 Feedback from UHB QSE Committee

The UHB QSE Committee Minutes of 15th December 2020 were circulated. Concerns were raised at the Committee regarding the backlog of patients waiting in Radiology.

CDTQSE 21/049 Health and Care Standards

The Health Board is intending to discuss the plan for this year's self-assessment process to the UHB QSE Committee in February.

Saunders Akinin
06/08/2021 14:36:47

CDTQSE 21/050 Risk Register

Any revisions to directorates' risk registers to be submitted to Helen Jenkins.

CDTQSE 21/051 Exception Report

Timothy Banner reported a risk relating to the breakdown of a walk-in fridge in Pharmacy. He is concerned with a lack of response from Estates Maintenance team. Sue Bailey will discuss the details with him following the meeting and how this can be escalated.

Action: Sue Bailey/Tim Banner

It was also noted that there is a major leak through the pharmacy roof.

HEALTH PROMOTION PROTECTION AND IMPROVEMENT

CDTQSE 21/052 Initiatives to Promote Health and Wellbeing of Patients and Staff

The Clinical Board has organised for Aftathought to provide virtual Mental Health Awareness sessions to staff.

The Clinical Board is also linking in with Cardiff and Vale College for mental health first aider training for managers.

Video training packages are being produced for values and behaviours training.

A poster is available on Teams relating to March Sleep Month.

Maria Jones reported that flu vaccinations are still available for staff.

The UHB is concerned that there are staff who are hesitant to receive the Covid vaccination. Any staff who are hesitant need to be supported.

SAFE CARE

CDT QSE 21/053 Concerns and Compliments Report

For February 2021 the Clinical Board is reporting an Amber status. The Clinical Board received 9 formal concerns with early resolution reached for 67%. There was 1 breach in response times. 8 compliments were received.

All departments are reporting a green status with the exception of Radiology which received 3 formal concerns and reported a breach in response times. However, 66% of the concerns were dealt with by early resolution. The breach is due to awaiting information from another Clinical Board.

There is an identified theme from a number of the concerns received relating to difficulties in booking and arranging appointments. Booking lines are busy and patients are reporting difficulties getting through.

CDTQSE 21/054 Ombudsman Reports

Nothing to report.

CDTQSE 21/055 RCA/Improvement Plans for Serious Complaints

Nothing to report.

CDTQSE 21/056 Patient Safety Incidents

SI Report

The Clinical Board is reporting 3 open SIs:

In12236 relates to a case in Cardiac Theatre. The report is being finalised.

In92837 relates to an incident involving treatment delays of a neuroscience patient. An action plan has been completed and requires sign off.

In82274 relates to a choking episode. The report is complete. The closure form will be brought to the next meeting and learning from the RCA investigation will be shared.

Action: Sue Bailey

CDTQSE 21/057 New SI's

Nothing to report.

CDTQSE 21/058 RCA/Improvement Plans

Nothing to report.

CDTQSE 21/059 WG Closure Forms – Sign Off

Nothing to report.

CDTQSE 21/060 Regulation 28 Reports

Nothing to report.

CDTQSE 21/061 Patient Safety Alerts

ISN 2021 006 Nasogastric Tubes

This alert relates to the risk of misplacement and is relevant to Dietetics. It was noted that a Welsh Government meeting is being held at the end of March.

Field Notice BD Venflon™ Pro Safety (VPS) Needle Protected I.V. Cannula

The design of the port of the cannula is causing leakage. This has affected CT and work is being undertaken with the Procurement Team to put in place a contract for a non-ported cannula.

CDTQSE 21/062 Addressing Compliance Issues with Historical Alerts

Nothing to report.

CDTQSE 21/063 Medical Device Risks/Equipment and Diagnostic Systems

Edward Chapman is the new Medical Device Safety Officer for this Clinical Board, with Saul Harris deputising. Saul Harris reported an issue of a potential shortage of BD giving sets. He is awaiting a list from Procurement to understand where these have been purchased so any likely impact can be assessed.

CDTQSE 21/064 IP&C/Decontamination Issues

Regular lateral flow testing for staff is now taking place on some wards in the UHB. The Clinical Board is keen that staff within this Clinical Board that are working on these wards are able to participate in this.

Staff are reminded to continue to follow social distancing and IPC measures even if they have been vaccinated.

CDTQSE 21/065 Point of Care Testing

Nothing to report.

CDTQSE 21/066 Key Patient Safety Risks

Safeguarding

Documents and information relating to safeguarding are uploaded in the Safeguarding Hub on Teams.

Mental Capacity Act

Nothing to report.

CDTQSE 21/067 Health and Safety Issues

An external review will be undertaken on Health and Safety. This will include fire safety and estates issues. There are no further details available at present.

CDTQSE 21/068 Regulatory Compliance and Accreditation

Departments are sustaining compliance against their metrics however Covid has impacted on performance.

Cellular Pathology were subject to a UKAS inspection this month and maintained their UKAS Accreditation.

The Haematology UKAS inspection is due to be held on 21st and 22nd April. Unclear yet if this will be a virtual or face to face inspection.

CDTQSE 21/069 Policies, Procedures and Guidance

Nothing to report

EFFECTIVE CARE

CDTQSE 21/070 Clinical Audit

Nothing to report

CDTQSE 21/071 Research and Development

Sion O'Keefe reported that the Clinical Board will be appointing a new R&D Lead in March.

A recruitment exercise is underway for R&D support in Radiology.

CDTQSE 21/072 Service Improvement Initiatives

The Outpatients Transformation Programme is being restructured with workstreams linked to pathways and recovery plans across the Health Board.

Electronic Test Requesting uptake has increased to 38%. Funding is being sourced from the NHS collaborative to increase uptake to 90%.

Digital Transformation meetings are being implemented. It needs to be ensured that work from wider UHB Groups is filtered into this Clinical Board.

The Clinical Board is seeking a Digital Lead role.

CDTQSE 21/073 NICE Guidance

Nothing to report.

CDTQSE 21/074 Information Governance/Data Quality

A Data Quality meeting is being set up through the Chief Operating Officer's office.

DIGNIFIED CARE

CDTQSE 21/075 HIW/CHC, DECI (Dignity and Essential Care Inspections) Reports and Improvement Plans

Nothing to report.

CDTQSE 21/076 Initiatives to Improve Services for People with:

Dementia

Nothing to report.

Sensory Loss

2 Deaf Awareness and Sign Language Workshops are being held in May. There are still 6 slots available.

CDTQSE 21/077 Initiatives Specifically Related to the Promotion of Dignity

Nothing to report.

CDTQSE 21/078 Equality and Diversity

A breakfast briefing is being held on gender equality. Information is available in the Safeguarding Hub.

TIMELY CARE

CDTQSE 21/079 Initiatives to Improve Access to Services

Nothing to report.

CDTQSE 21/080 Performance with National Targets/the NHS Outcomes and Delivery Framework Relating to Timely Care Outcomes

Whilst it is estimated that there will be over 5000 patients waiting 8 weeks or over for diagnostics in January, the forecast for February 2021 is below 4000.

It is predicted that for the end of January there will be 118 patients waiting 14 weeks or over for Therapies.

CDTQSE 21/081 Delayed Transfers of Care

Nothing to report.

INDIVIDUAL CARE

CDTQSE 21/082 National User Experience Framework

Nothing to report.

Saunders-Munro
06/08/2021 14:36:47

STAFF AND RESOURCES

CDTQSE 21/083 Staff Awards and Recognition

Nothing to report.

CDTQSE 21/084 Monitoring of Mandatory Training and PADRs

Sue Bailey will circulate the Health and Safety mandatory training statistics.

Violence and Aggression Module C compliance is low. The clear message was issued that managers should review their staff competencies to determine the level of competence that is appropriate for their staff members and inform LED of any changes.

Fire safety training compliance needs to be improved. Sue Bailey can provide virtual group sessions if required by departments.

ITEMS TO BE RECORDED AS RECEIVED AND NOTED FOR INFORMATION BY THE SUB-COMMITTEE

The following minutes were received:

Clinical Board Health and Safety Group Minutes February 2021
Outpatients/Patient Admin QSE Minutes February 2021

ANY OTHER BUSINESS

Nothing further to report.

DATE AND TIME OF NEXT MEETING

The next meeting will be held on 14th April 2021 at 2pm via Microsoft Teams.

Saunders, Nathan
06/08/2021 14:36:47



**CLINICAL DIAGNOSTICS AND THERAPEUTICS CLINICAL BOARD
QUALITY SAFETY AND EXPERIENCE SUB-COMMITTEE**

MINUTES OF THE MEETING HELD ON 14TH APRIL 2021

Present:

Sue Bailey (Chair)	Clinical Board Director of Quality, Safety and Patient Experience
Alun Roderick	Laboratory Service Manager, Haematology
Suzie Cheesman	Patient Safety Facilitator
Jonathan Davies	Health and Safety Adviser
Maria Jones	Sister, Outpatients
Nia Came	Head of Adult Speech and Language Therapy
Robert Bracchi	Medical Advisor to AWTTTC
Jo Fleming	Quality and Safety Lead, Radiology
Bolette Jones	Head of Media Resources
Judyth Jenkins	Head of Dietetics
Jacqueline Sharp	Physiotherapy (for Emma Cooke)
Sion O'Keefe	Head of Business Development/ Directorate Manager of Outpatients/Patient Administration
Lesley Harris	Professional Head of Radiography UHL
Mathew King	ADOTH/Head of Podiatry
Timothy Banner	Head of Patient Services, Pharmacy
Sian Jones	Operational Service Manager
Seetal Sall	Point of Care Testing Manager

Apologies:

Matthew Temby	Clinical Board Director of Operations
Edward Chapman	Head of Clinical Engineering/ Medical Devices Officer
Paul Williams	Clinical Scientist, Medical Physics
Emma Cooke	ADOTH/Head of Physiotherapy
Nigel Roberts	Laboratory Service Manager, Biochemistry
Louise Long	Public Health Wales Microbiology

Secretariat:

Helen Jenkins	Clinical Board Secretary
---------------	--------------------------

PRELIMINARIES

CDTQSE 21/085 Welcome and Introductions

Sue Bailey welcomed everyone to the meeting held via Microsoft Teams.

CDTQSE 21/086 Apologies for Absence

Apologies for absence were **NOTED**.

CDTQSE 21/087 Approval of the Minutes of the Last Meeting

The minutes of the previous meeting held on 10th March 2021 were **APPROVED**.

CDTQSE 21/088 Matters Arising/Action log

The action log was **RECEIVED** and it was noted that a number of actions had been completed. The outstanding actions were updated as follows:

CDTQSE 20/112 Contractors Policy

Concerns relating to the Contractors Policy will be raised through the Clinical Board Health and Safety Group.

CDTQSE 21/005 Foot Risk Assessment Tool

The foot risk assessment tool will now be combined with the UHB pressure damage documentation. This action is now closed.

CDTQSE 21/030 Choking Episode Closure Form

This will be reviewed at the next meeting

Action: Sue Bailey

GOVERNANCE, LEADERSHIP AND ACCOUNTABILITY

CDTQSE 21/089 Patient Story

Carol Evans, Laboratory Director, Biochemistry presented a patient story based on a complaint relating to a spurious and incorrect high potassium result due to the way in which a blood sample was stored and transported. She also shared feedback on the RCA that was undertaken and the learning from this complaint. A patient had blood tests taken at his surgery one afternoon for routine checks and a day later the police arrived at his door advising him to attend hospital immediately as his results were abnormal. The police were called as his GP had been unable to contact him.

When the blood sample had been taken it should have been kept at room temperature. However, it was sent to the wrong laboratory and stayed there overnight where it was placed in a fridge. When it turned up the next day it was not noticed that this was what had happened to the specimen, resulting in an abnormal potassium result which was actually spurious due to the way the specimen had been handled. This set up a train of work that involved the laboratory, primary care teams and transport.

The laboratory testing process is divided into:

- The pre-analytical phase which happens outside of the laboratory where samples are collected and sent to the laboratory.

- The analytical phase which is tightly controlled. Quality control procedures and SOPs are in place, staff are trained and are competency assessed.
- The post analytical phase.

This story focuses on the pre-analytical phase. This is where most errors occur. Steps that take place outside of the laboratory are difficult to control. Sometimes there is no universal standard operating procedure in place and often staff do not have competency assessments so there is a non-standardised practice that may involve lots of different people.

Key learning from the complaint was that standards needed to be set so that everyone understands good practice and what is to be expected when samples come into the laboratory. Firstly, the length of time for specimens to come in for processing i.e. to be centrifuged, and this should happen within 6 hours. The way the sample is transported to the laboratory is important. This should happen at ambient temperature within 18-25 degrees. If the sample is delayed or the temperature is too cold this can result in spurious potassium results.

A National Pathology Transport Project had been set up and KPIs had been set for transporting specimens to the laboratory. As part of this they had procured military grade transport boxes which are temperature controlled. If they are set to ambient temperature they can transport samples at a well-defined temperature. They should be able to record the temperature in the vehicles and can monitor if samples are not being transported at the right temperature. This was implemented in the UHB.

At this time Carol Evans attended a meeting held in NHS England Getting it Right First Time Scheme which looked at delays and not transporting samples at the right temperature and how this can cause problems. The meeting raised the issue of seasonal trends.

Carol Evans undertook a comparison from samples transported by phlebotomists from surgeries in Primary Care and samples that are transported using the military grade transport boxes. It was disappointing to see that the courier transport reported much higher potassiums and learned that the military grade transport boxes had not been installed correctly and if left on overnight were flattening the van batteries so were being turned off. The boxes were also set at lower than ambient temperature. The couriers were also transporting other items, some of which required refrigeration and the temperature of the van was not readjusted for the samples. The software to monitor the temperature had also not been installed as the Cloud was not enabled.

In terms of actions taken, an engagement exercise was undertaken with the courier to explain why safe sample handling was important and how this can affect the patient. A patient story was shared with the courier service and this is now incorporated as part of their drivers' PADRs. The issue has been addressed and they also set up a programme of manually monitoring the temperature of the boxes. The results for the following 3 months identified the problem was resolved.

The issue has been highlighted to the National Pathology Programme. The Cleric software is still awaited.

A safe specimen handling patient safety notice has been issued to Primary Care. The laboratory now monitors monthly KPIs for potassium results and provide feedback to any outliers involved in the process.

The group commended the laboratory on the thorough RCA that has been undertaken and the efforts taken to instigate real change. Robert Bracchi commented that as a GP he has encountered this issue many times and is pleased that this work has been undertaken.

Carol Evans noted that Cardiff and Vale is the only Health Board that has taken up the offer of the use of the military style transport boxes. There is reluctance until the software is in place.

Sue Bailey thanked Carol Evans for attending. She noted that Podiatry will be presenting a patient story next month.

CDTQSE 21/090 Feedback from UHB QSE Committee

The UHB QSE Committee was held yesterday. The minutes are not yet available.

CDTQSE 21/091 Health and Care Standards

Carol Evans, Assistant Director for Patient Safety attended the meeting to present the Draft QSE and Patient Experience Framework 2021-2026.

7 key themes/enablers have been identified:

- Safety culture
- Leadership and prioritisation
- Patient experience and involvement
- Patient safety learning and communication
- Staff engagement and involvement
- Data and insight
- Professionalism
- Quality Governance

Carol Evans will share a copy of the presentation slides. The final version of the framework will be submitted to the UHB QSE Committee in June.

It was noted that the UHB is currently undertaking a safety culture survey. The link to the survey has been circulated across the Clinical Board.

CDTQSE 21/092 Risk Register

Any revisions to directorates' risk registers are to be submitted to Helen Jenkins.

Robert Bracchi raised the risk relating to AWTTTC software Tableau which is used by AWTTTC and accessed by other Health Boards. Public Health Wales hold the licence which is extended to March 2022, but Public Health Wales are exploring other software options and AWTTTC are awaiting their decision.

Sue Bailey noted that the new revised Covid workforce risk assessments for staff have been issued. She advised that this is for revised risk assessments for staff who have been shielding and now returning to the workplace or for new staff.

Judyth Jenkins reported that the paediatric metabolic service risk assessment has been revised and will be resubmitted.

CDTQSE 21/093 Exception Reports

Sue Bailey has escalated that the repair work to the fridge in Pharmacy has not yet been undertaken.

HEALTH PROMOTION PROTECTION AND IMPROVEMENT

CDTQSE 21/094 Initiatives to Promote Health and Wellbeing of Patients and Staff

Covid Vaccination Uptake by Staff

This Clinical Board is reporting the highest uptake of the vaccination at 18th March 2021 with 84%. This exceeds the uptake target of 80%.

Healthcare scientists staff group are reporting the highest uptake at 86%. Work is needed to improve uptake amongst medical staff.

Ramadan information has been circulated and it was noted that having the vaccination does not invalidate the Ramadan fast.

SAFE CARE

CDT QSE 21/095 Concerns and Compliments Report

For March 2021, the Clinical Board reported an Amber status. 22 concerns were received which is the highest volume received during the period April 2020 to March 2021.

The highest number of concerns were attributed to Radiology which received 11 concerns. However, there were 0 breaches in response times and 18% were managed within early resolution timeframes. The department also received 2 compliments.

Speech and Language Therapy reported a green status, receiving 0 concerns and 1 compliment.

The main theme highlighted from the concerns received relates to difficulties in arranging and cancelling appointments.

Saunders, S. M. M.
06/08/2021 14:36:47

CDTQSE 21/096 Ombudsman Reports

Nothing to report.

CDTQSE 21/097 RCA/Improvement Plans for Serious Complaints

Nothing to report.

CDTQSE 21/098 Patient Safety Incidents

SI Report

The Clinical Board is reporting 3 open SIs:

In12236 relates to a case in pacing theatre. The report is being finalised.

In92837 relates to an incident involving a neuroscience patient. This involves 3 Clinical Boards and a meeting will be held to finalise the actions and bring this incident to a close.

In82274 relates to a choking episode. The closure form will be brought to the next meeting and learning from the RCA investigation will be shared.

Action: Sue Bailey

CDTQSE 21/099 New SI's

There is a potential SI relating to a Dermatology case where there was a significant delay in a pathology report being issued.

CDTQSE 21/100 RCA/Improvement Plans

Nothing to report.

CDTQSE 21/101 WG Closure Forms – Sign Off

Nothing to report.

CDTQSE 21/102 Regulation 28 Reports

Nothing to report.

CDTQSE 21/103 Patient Safety Alerts

ISN 2021 003 Ketamine/Esketamine

Currently both Ketamine and Esketamine are stocked and used in the UHB.

Esketamine is twice as potent as Ketamine and the alert is to raise awareness to all staff involved in the prescription and administration of Ketamine and Esketamine that they are not interchangeable and also of the risk of drug error.

Field Safety Notice: PICO70 Arterial Blood Sampler

There is a remote possibility that use of the affected products may result in a bacterial blood infection. The bloodstream infection may be asymptomatic but may also progress to sepsis or life-threatening septic shock. Immunosuppressed patients are at particular risk.

The alert has been widely circulated and the Clinical Board has been in communication with Children and Women Clinical Board as this relates to paediatric blood specimens. Neonatal have confirmed they do not use PICO70 they use PICO50.

CDTQSE 21/104 Addressing Compliance Issues with Historical Alerts

Nothing to report.

CDTQSE 21/105 Medical Device Risks/Equipment and Diagnostic Systems

All equipment purchased from resilience funding has been received.

CDTQSE 21/106 IP&C/Decontamination Issues

Nothing to report.

CDTQSE 21/107 Point of Care Testing

Seetal Sall reported that work is being undertaken on rolling out point of care devices and putting an action plan in place across the Health Board with the Public Health Wales Lead. A few sites identified within ED and MEAU at UHL and maternity services to follow. Surgical Assessment Unit have also been in contact. Support is being received from the IT Network team to set up the devices.

Lateral flow testing for Covid is available for staff. Lateral flow devices will be brought within the testing cell to ensure good governance around the inputting of results.

CDTQSE 21/108 Key Patient Safety Risks

Safeguarding

12 months training compliance data has been provided for the 3 safeguarding mandatory training modules. Compliance for this Clinical Board currently sits at 69%. Access to training has been an issue on ESR this week due to a local IT issue.

There is an App where safeguarding procedures can be easily accessed. The Safeguarding department is seeking assurance that staff are aware of this.

The Safeguarding Allegation Policy and all documentation will be placed on the Clinical Board safeguarding information hub.

Mental Capacity Act

It was reported that Julia Barrell, Mental Capacity Act Manager has retired.

CDTQSE 21/109 Health and Safety Issues

Nothing to report.

CDTQSE 21/110 Regulatory Compliance and Accreditation

The Terms of Reference for the Regulatory Compliance Group have been updated and were **APPROVED**.

A UKAS inspection is being held in Haematology next week.

A meeting has been held with SMPU to discuss the pace of progress being made against their longest incidents and non-conformances. An action plan has been produced to close off their longest outstanding metrics.

Suzie Cheesman is sending HIW a list of longstanding IRMER incidents that they have not yet closed off.

CDTQSE 21/111 Policies, Procedures and Guidance

Nothing to report.

EFFECTIVE CARE

CDTQSE 21/112 Clinical Audit

Nothing to report.

CDTQSE 21/113 Research and Development

Rhys Morris has been appointed as the new R&D Lead for the Clinical Board.

An R&D Performance meeting was held earlier today with the R&D and Medical Director's office.

Mathew King raised the issue that there are opportunities for commercial income in R&D in Podiatry that can be explored. Sion O'Keefe will clarify if commercial revenue will be included in the new Clinical Board R&D lead's role.

Action: Sion O'Keefe

It was agreed to invite Rhys Morris to attend a future meeting to feedback on his vision and strategy for R&D in the Clinical Board.

Action: Helen Jenkins

CDTQSE 21/114 Service Improvement Initiatives

Sion O'Keefe reported that meetings relating to digital services have been recently set up to deliver the digital strategy. There is good representation on these meetings from this Clinical Board. It needs to be ensured that these forums are aligned and this Clinical Board will need to understand its role in these developments.

Emma Cooke is undertaking rehabilitation modelling work and Mathew King is trying to establish where there are restrictions and barriers from a digital capability perspective. If there is anyone interested in contributing to this to contact Mathew King.

Sion O'Keefe also reported that the Outpatients Transformation Programme will be focusing on work relating to bookings, referrals and guidance for patients and use of virtual appointments.

CDTQSE 21/115 NICE Guidance

Nothing to report.

CDTQSE 21/116 Information Governance/Data Quality

A Data Quality Meeting was arranged for today but is being rescheduled. Sion O'Keefe will feedback at the next meeting.

Action: Sion O'Keefe

DIGNIFIED CARE

CDTQSE 21/117 HIW/CHC, DECI (Dignity and Essential Care Inspections) Reports and Improvement Plans

Nothing to report.

CDTQSE 21/118 Initiatives to Improve Services for People with:

Dementia

Nothing to report.

Sensory Loss

Nothing to report.

CDTQSE 21/119 Initiatives Specifically Related to the Promotion of Dignity

Nothing to report.

CDTQSE 21/120 Equality and Diversity

The Race Equality Action Plan has been circulated. This is currently out for consultation.

TIMELY CARE

CDTQSE 21/121 Initiatives to Improve Access to Services

Nothing to report.

CDTQSE 21/122 Performance with National Targets/the NHS Outcomes and Delivery Framework Relating to Timely Care Outcomes

A significant improvement has been made in waiting times. There are around 2100 patients waiting 8 weeks or over for diagnostics for March. This has reduced from 7000 that were waiting in May 2020.

There are 250 patients waiting 14 weeks and over in Therapies. A number of the Therapies services are reporting 0. In May 2020 there were 1500 waiting.

CDTQSE 21/123 Delayed Transfers of Care

Nothing to report.

INDIVIDUAL CARE

CDTQSE 21/124 National User Experience Framework

User Experience Framework questionnaires are currently not being undertaken due to Covid.

STAFF AND RESOURCES

CDTQSE 21/125 Staff Awards and Recognition

Sue Bailey congratulated Darrell Baker and Emma Cooke on receiving High Sherriff Awards.

A reminder was issued that the deadline for nominations for the HSJ Awards has been extended to 30th April.

The Clinical Board will be hosting a virtual Staff Recognition Awards ceremony via Teams on 15th July. The process and details on how to nominate have been circulated. Clinical Board is looking for directorate representatives to link in with the planning.

Action: Directorates

CDTQSE 21/126 Monitoring of Mandatory Training and PADRs

Nothing to report.

ITEMS TO BE RECORDED AS RECEIVED AND NOTED FOR INFORMATION BY THE SUB-COMMITTEE

The following minutes were received:

Biochemistry Quality Minutes March 2021.

ANY OTHER BUSINESS

Radiology is proposing a change relating to the use of Mannitol from Klean-Prep as an oral prep for patients undergoing CTI and MRI. Mannitol is an off-licence product but is custom practice at sites around the UK and in other Health Boards in Wales.

The primary reason for the change to Mannitol is due to side effects patients experience with Klean-prep such as diarrhoea, nausea and vomiting. There is evidence that Mannitol is better tolerated by patients as the laxative effect is eliminated. The change will benefit and improve the patient experience and also the quality of scans. The change requires further review with pharmacy and radiology and if satisfactory appointment letters will be amended to advise patients that Mannitol is an off-licence product and that they can raise any queries at their appointment.

The Group reviewed the proposal and approved for work on this change to be progressed.

DATE AND TIME OF NEXT MEETING

The next meeting will be held on 12th May 2021 at 2pm via Microsoft Teams.

Saunders, Nathan
06/08/2021 14:36:47



GIG
CYMRU
NHS
WALES

Bwrdd Iechyd Prifysgol
Caerdydd a'r Fro
Cardiff and Vale
University Health Board

**SURGERY CLINICAL BOARD
QUALITY AND SAFETY GROUP
Tuesday 16th March 2021, 08:00-10:00 hours
MS Teams**

MINUTES

Present:

Richard Hughes	Consultant Anaesthetist (Chair)
Clare Wade	Director of Nursing
Adrian Turk	Pharmacist
Adam Wright	General Manager Perioperative Care
Andy Jones	Lead Nurse Surgery, Urology, Ophth & ENT
Barbara Jones	Educational Lead, Perioperative Care Directorate
Catherine Doyle	Consultant Anaesthetist
Catherine Evans	Patient Safety Facilitator
Carol Evans	Asst Director Pt Safety and Quality
Hayley Dixon	General Manager ENT, Ophthalmology & Dental
Helen Luton	Lead Nurse T&O
Jon Barada	Theatre Manager
Michelle Harding	Interim Deputy Directorate Manager
Sue Mogford	Senior Nurse
Rafal Baraz	Consultant Anaesthetist
Rowena Griffiths	Governance & Quality Lead Manager
Richard Coulthard	Consultant Urologist, Ward A5
Terry Stephens	Procurement Nurse, Procurement
Vince Saunders	Infection Prevention and Control Nurse

In attendance:

Zoe Brooks	Surgery Clinical Board Secretary
David Poland	Audit Wales
Timothy Davies	Risk and Regulation Officer

PRELIMINARIES (Chair)		
SCB/QS: 21/31	Welcome and Introductions Members were welcomed to the meeting and introductions were made.	
SCB/QS: 21/32	Apologies for Absence Mark Bennion Quality & Safety Lead, Perioperative Care Angela Jones Senior Nurse – Resuscitation Ceri Chinn Lead Nurse Peri-operative Care	
SCB/QS: 21/33	Minutes of meeting held 19th January 2021 The Group approved the minutes of the previous meeting.	

SCB/QS: 21/34	Action Log Please see Action Log for update	
SCB/QS: 21/35	<p>Risk Register</p> <p>Director of Nursing – CW introduced the Risk and Regulation Officer- TD to the Group and reported that TD had been invited to give an overview of his role as a Risk and Regulation Officer.</p> <p>TD highlighted that he had started in post back in November 2020 as one of the two Risk Regulation Officer within the Health Board. It was noted that TD focused mainly around Risk and his colleague around regulation. The Group were informed that these posts were created as a result of an internal audit.</p> <p>TD reported that the past six months had been around looking at the higher reported risks that had been escalated to the corporate risk register. Equally, it was noted that a lot of work had taken place with the Clinical Boards to look at processes and mechanisms around risk policy.</p> <p>The Group were informed that this work had demonstrated that risk is being identified across the Health Board and evidence that risk is being managed. TD raised concerns however, in relation to the recording and the frequency review, although acknowledging that Covid demands could be a contributing factor to this.</p> <p>It was noted that the Health Board had recently developed a Risk Statement; which had been revised in version two of the Risk management and Board assurance framework strategy; this document is available on the Intranet and Internet.</p> <p>TD also reported that a new Risk Management Procedure had been established, which had been developed as a result of training Risk Leads throughout the Health Board.</p> <p>It was highlighted that training around Risk management is available once a week on a Friday via Teams; TD encouraged the members to link in to this training and communicate out to their teams.</p> <p>The Chair thanked TD for attending this meeting and asked the group if they had any questions.</p> <p>Director of Nursing – CW highlighted that the risk register when managed can be beneficial to the Clinical Board's and reported that Peri-op directorate had been in a position over the years to purchase items identified as part of the risk register.</p>	
PART 1: GOVERNANCE, LEADERSHIP AND ACCOUNTABILITY		
SCB/QS: 21/36	Patient Story – General Surgery	
<p>Lead Nurse Surgery, Urology, Ophth & ENT – AJ presented on a serious incident of a 79-year-old patient.</p> <p><i>Saunders, Nathan 30/08/2021 14:36:47</i></p>		

	<p>It was reported that the patient was an elective admission for radical cystoprostatectomy, who was admitted to PESU 31st May 2020, during the first lockdown. The patient underwent surgery on the 1st June 2020, performed by consultant urologist and 2 ST level trainees. Following 48 hours on PACU, the patient returned to PESU on the 4th June 2020 where he developed post-operative ileus, managed conservatively.</p> <p>It was noted that on the 8th June the ward received a telephone call at approx.04.30am from the patient's wife, who had concerns regarding an email the patient had sent her in the early hours regarding an inability to go on and funeral arrangements. On inspection of the patient following the telephone call, patient appeared to be asleep and wife was reassured.</p> <p>F2 on call reviewed patient for tachycardia at approx. 04.45am and patient heard closing toilet door in four bedder shortly after. AJ reported that after nurse had checked twice if patient was back in bed, the nurse opened the toilet door to find the patient had sadly hung himself in the bathroom.</p> <p>The Group were informed that following this event an investigation had taken place and a coroners inquest was planned for June 2021.</p> <p>A number of concerns were raised such as staffing levels and Covid and an action plan had been established, these being: -</p> <ul style="list-style-type: none"> • Education of the role of the Site manager • Review of guidance for identifying patients at potential risk of suicidal ideation and use of appropriate risk assessment documentation. • Reflection exercise of staff involved in event. <p>Patient Safety Facilitator – CE highlighted that as a result of this incident suicide awareness training had been developed and would be delivered across the Health Board.</p>	
<p>SCB/QS: 21/37</p>	<p>Matters Arising</p> <p>Risk Assessment form for Ophthalmic Theatres – Deposition of silicone oil droplets in the vitreous – Director of Nursing CW reported that these documents were for information purposes.</p> <p>Pharmacist – AT noted that the FSN affects products made for the Health Board by Bath Aseptic Unit including bevacizumab intravitreal syringes, made in BD syringes, for ophthalmology. It was highlighted that Bath ASU's risk assessment form had been signed off to allow them continue to supply us. In addition, BD syringes are supplied with Aprokam (intracameral cefuroxime) we use and Mydrane, another intracameral injection ophthalmology wish to use. Thea Pharmaceuticals, the manufacturer of these two products have also highlighted this FSN to us, but are at pains to note they are unable to supply alternative syringes with their products but to remain vigilant for side effects.</p>	

Saunders, Niall
06/08/2021 14:36:47

SCB/QS: 21/38	<p>Feedback from UHB QSE Committee:</p> <p>Asst Director Pt Safety And Quality – CE reported on the recent meeting. Highlighting the following: -</p> <ul style="list-style-type: none"> • It was reported that the Clinical Board Assurance report was being revised; to look at a more focused and detailed report to look at what is required from the Clinical Boards. It was noted that Woman and Children are scheduled to attend the next UHB meeting. • CE highlighted that HIW activity had increased; as previously stood down due to Covid. The Group were informed that one of the Health Boards Mass Vaccinations centres had recently been audited, where a number of concerns were raised around. It was noted the majority of audits demonstrated that environmental risk assessments and IP&C assessments were not being carried out. <p>Director of Nursing -CW raised a query around the IP&C assessment and asked whether this was a generic assessment or a COVID specific assessment</p> <p>CE highlighted that there was currently no standardised format across the Health Board and she was liaising with Health and safety to ensure environmental checks were being carried out.</p>	
SCB/QS: 21/39	<p>Health and Care Standards – sign of self-assessment/ ongoing review of implementation/ improvement plan:</p> <p>The Group were informed that a decision had been made for this year’s Health and Care Standards Self-assessment that Clinical Boards would not be involved in the process due to current demands. Asst Director Pt Safety And Quality -CE reported that the patient safety Team would work closely with the Clinical leads for assurance.</p> <p>Director of Nursing – CW added that the Clinical Board will continue to have some involvement with the Corporate standards and areas will be approached to provide relevant information.</p>	
SCB/QS: 21/40	<p>Regulatory compliance and external accreditation (where relevant):</p> <p>WHO Checklist</p> <p>A PowerPoint presentation was received and noted by the Group.</p> <p>Consultant Anaesthetist - Dr C Doyle gave an overview of the amendments made within the WHO checklist. The importance of the checklists was explained and the Group were informed that this form was developed with the aim to diminish any never events.</p>	

Saunders, Niamh
06/08/2021 14:36:47

	<p>CD reported that the amendment to this form was as a result of the NCEPOD highs and lows report 2018, which found that no space was provided to record blood glucose levels, neither at sign-in nor at sign-out. Including diabetes in surgical safety checklists was also associated with more appropriate management of diabetes in the theatre recovery area (182/216 (84.3%) vs 65/102 (63.7%).</p> <p>The following amendments were highlighted: -</p> <ul style="list-style-type: none"> • Covid question added to sign in. • Glycaemic control section added to both sign in and sign out. • Throat pack inserted question added to time out. • Debrief added to sign out. <p>Full details can be found within the presentation.</p> <p>The Group were informed that this form had been circulated to a number of anaesthetists for comment. It was agreed that the WHO Checklist would be circulated widely and amended to reflect any feedback; to be progressed outside of this meeting and sent to the Chair for final sign off. Action: CD/RH/ CW</p>	
<p>SCB/QS: 21/41</p>	<p>Exception reports and escalation of key QSE issues from Directorate QSE groups and specialities</p> <ul style="list-style-type: none"> • Directorates <p>Lead Nurse T&O – HL reported on the following for Trauma and Orthopaedic: -</p> <ul style="list-style-type: none"> • The Group were informed that Orthopaedics work was to re-commence at the beginning of April; continue with the work being carried out pre-Christmas. • It was noted that a meeting took place with cardiothoracic regarding PACU provision in UHL for elective patients; training package has been developed and is in place. • HL expressed the need to progress Trauma Clinic moving back to UHW. It was reported that the Clinical Board was working hard to engage with Estates to find a suitable location. <p>Theatre Manager – JB reported on the following for Peri-Op</p> <ul style="list-style-type: none"> • UHW Main Theatre - In133668 – It was reported that a patient had had an NG tube sutured into their nose following surgery. A review of the incident has taken place and options are being reviewed as to reduce the possibility of this re-occurring. • SSSU - Field safety notice distributed regarding contamination of intra ocular syringes with silicone oil droplets. It was noted that a risk assessment had been completed and discussed with procurement; actions underway to obtain suitable alternative products. • CHFW - It was reported that a child had suffered a skin abrasion following surgery. The abrasion was on the left cheek, away from the surgical site. 	

Saunders, Nathan
06/08/2021 14:36:47

An investigation has been undertaken and a mini RCA completed and added to the DATIX form.

- An incident was reported in which a drill bit snapped whilst being used on a patient. It was considered safer to leave the drill embedded in the bone rather than cause additional damage trying to remove it. A review is underway to examine the sterility/processing procedures for single use drill bits.
- Pneumothorax Serious Incident closure form submitted to Patient Safety Team. It was highlighted that some actions remain outstanding; plans are in place to ensure they are completed.
- UHL - A clinical audit was undertaken within the department, which demonstrated that all areas are compliant with the team brief safety process.

Consultant Anaesthetist – RB raised concerns around incidents of teeth damage during patients being anaesthetised. It was noted that there was a lack of clarity in relation to who is responsible financially. It was suggested that in these events the re-dress team are contacted.

RB also asked for clarity around cancelling patients who had self-isolated for 14 days prior to surgery. It was noted that a recent Colorectal list the 3rd patient potentially needed to be cancelled, however a decision was made to carry out the surgery, which meant the members of staff involved worked later into the evening. It was also highlighted that there was limited space in recovery following the surgery.

Director of Nursing – CW reported that this was something that the Clinical Board was trying to avoid and felt that the benefits of the Green zone was to prevent this for occurring, however felt that this was a difficult situation to be in and asked that any issues regarding these events be escalated to Senior Support/management on for beds/ flow for that day who should be able to assist.

Lead Nurse Surgery, Urology, Ophth & ENT – AJ reported on the following: -

- Ophthalmology potential never event, following an investigation this was escalated to an SI.
- Concerns were raised in relation to ward staffing, in particular Ward C7. It was noted that off ward nurses were supporting extra capacity areas, which had caused a strain on their original wards as well as the members of staff; ways of supporting this is being discussed as the return date for these members of staff had been extended.
- Lateral Flow testing of staff had begun in SSU and B2 South; AJ agreed to update on any findings at future meeting.
- It was noted that there were ongoing discussions around Vascular centralisation, as this progressed; looking at staffing requirements.
- Breast surgery in UHL had commenced during the period, it was reported that this had been going well.
- Revised to the AGP procedures – AJ to circulate once final draft is completed. **Action: AJ**

Saunders, Nathan
06/08/2021 14:36:47

	<ul style="list-style-type: none"> AJ raised the lack of staff changing facilities at both sites, Director of Nursing CW asked that the Group to remind staff of the Safe Haven Facilities. <p>Pharmacy Adrian Turk reported on the following: -</p> <ul style="list-style-type: none"> It was reported that the BD Safety Notice silicone droplets, came to the department's attention by an external manufacturer. At highlighted that there was no alternative supplier available, therefore a risk assessment had been conducted to continue on with its use, which was vital for some surgery's within Ophthalmology. Concerns were raised around the distribution of the Medication Safety Executive (MSE) briefing, AT asked the Group if this was something that they receive. It was noted that the 50th addition was available. The Group were informed that the MSE briefing contained information on the drug error incident, where there was confusion over Ketamine and Esketamine and it was re-iterated that these are not the same. It was noted that this did not occur within Surgery Clinical Board. 	
PART 2: HEALTH PROMOTION PROTECTION AND IMPROVEMENT		
SCB/QS: 21/42	<p>Initiatives to promote health and wellbeing of Patients and Staff:</p> <p>SCB H&S/IP&C Meeting The Director of Nursing- CW reported that this meeting took place on the 17th February, where the main focus was around IP&C outbreak concerns on the wards.</p> <p>Infection Prevention and Control Nurse- VS reported a significant improvement with regards to outbreaks, throughout the Health Board.</p> <p>Decontamination Group update & Water safety Group Update</p> <p>It was noted that no meetings had taken place during the period.</p> <p>The Chair queried whether the water dispenser is now in situ.</p> <p>Educational Lead, Perioperative Care Directorate – BJ confirmed that this has now been resolved.</p>	
SCB/QS: 21/43	<p>Bring forward –progress on relevant improvement plans (previously approved/discussed):</p> <p>No feedback reported</p>	
PART 3: SAFE CARE		
SCB/QS: 21/44	<p>Patient Safety Incidents</p> <p>The following reports were received and accepted by the Group.</p> <ul style="list-style-type: none"> Overall Trends 	

	<ul style="list-style-type: none"> • New SIs (include reference numbers for specific SIs) • RCA/Improvement plans • WG closure form status • WG closure forms – sign off • Regulation 28 reports (of relevance) <p>Patient Safety Facilitator - CE Gave an overview of the reports highlighting that there were 13 open SI's for Surgery Clinical Board. It was also noted that 3 closure forms were submitted in February and were awaiting sign off.</p> <p>The Group were informed that there were a number of inquests taking place in the next coming months; with the inquest for the 79-year-old patient involved in the patient story at the beginning of the meeting, scheduled to take place on the 17th June. It was noted that a number of witnesses would be required.</p> <p>CE reiterated the importance of old SI's being closed out as soon as possible, in readiness for the new system.</p>	
<p>SCB/QS: 21/46</p>	<p>Patient Safety Alerts</p> <p>There were a number of alerts brought to this meeting for information and assurance, that they have been actioned appropriately.</p> <ul style="list-style-type: none"> • Field Safety Notice - BD Syringes and Needles Amendment to Instructions for Use. • ISN 2021 001 - Copan Swabs Contamination Risk • PPE Changes • Nasogastric Tubes • BD Venflon™ Pro Safety (VPS) Needle Protected I.V. Cannula <p>It was noted that these alerts had been circulated and a list of users had been identified. Assurance was given that these have been actioned.</p>	
<p>SCB/QS: 21/47</p>	<p>Health Care Associated Infections</p> <p>Director of Nursing – CW raised concern in relation to the increase in the number of C.difficile cases reported during the period; although not a significant increase, two cases had been reported on Ward B2 in February 2021, where only zero to one had been reported each month since April 2020.</p> <p>It was noted that a review of B2 was underway as other HCAI had been reported over the months. AJ agreed to bring any findings back to the next meeting.</p> <p>Action: AJ</p>	

Saunders, Nathan
06/08/2021 14:36:47

	<p>Infection Prevention and Control Nurse- VS highlighted that these figures were an improvement on last year's position and added that C.difficile was increasing within the Health Board within other Clinical Boards also.</p> <p>VS reported that the flu vaccine uptake rate for Surgery was at 62.6% as of February 2021.</p> <p>The Group were informed that full details can be found within the report.</p>	
<p>SCB/QS: 21/48</p>	<p>Any key patient safety risks:</p> <p>Q&S performance data</p> <p>The report was received and noted by the Group for information.</p> <p>Falls reduction and Pressure and tissue damage reduction and prevention reports</p> <p>Director of Nursing – CW reported that there had been a number of Injurious falls within the T&O that were progressing via the SI process</p> <p>Corporate Meds management minutes</p> <p>Corporate Medicines Management (cMMG) minutes February and March 2021 was received and noted by the group.</p> <p>The Group were informed that an E-learning package for insulin is being taken forward by an All Wales Diabetes group, specifically nurse training.</p> <p>It was noted that March 21 minutes of cMMG had yet to be released, however Pharmacist- AT highlighted that a new drug for type 2 diabetes management (semaglutide) has been added to the growing number of options available; the diabetes drug dapagliflozin has also been approved as an adjunct in the management of chronic heart failure, so care is needed to ensure what indication this drug is treating.</p> <p>It was also noted that Buvidal (depot buprenorphine either weekly or monthly) has been approved for wider use as an opioid substitute by Welsh Government, and therefore care is needed when prescribing analgesia to patients with a history of substance misuse. Consultant Anaesthetist - RB has been asked to disseminate this information to all anaesthetic colleagues.</p> <p>Safeguarding – any key issues; action being taken No Update</p> <p>Medical devices/equipment issues No Update</p> <p>Blood management January report received and noted by the Group for information.</p>	

Saunders, Nathan
06/08/2021 14:35

	<p>Director of Nursing – CW asked that this report is circulated appropriately and recommendations to be actioned locally.</p> <p>Q&S Workplan 2021 -2022</p> <p>Report received and noted by the Group.</p> <p>It was noted that there would be a slight amendment to patient story in May to include Dental, as General Surgery were scheduled twice.</p>	
SCB/QS: 21/49	<p>Mortality data analysis</p> <p>Lead Nurse – AJ reported that the Mortality Group had met during the period, however no significant issues to report.</p>	
PART 4: EFFECTIVE CARE		
SCB/QS: 21/50	<p>Monitoring of CB Clinical Audit plan</p> <p>Director of Nursing – CW highlighted that Audit plan for next year April 2021 onwards were being established. It was noted that key information and plans had been sent to Quality and Safety Leads; CW agreed to share the finalised Plan at the next meeting in May 2021.</p>	
SCB/QS: 21/51	<p>Implementation of key NICE Guidance</p> <p>No Update</p>	
SCB/QS: 21/52	<p>Research and development update</p> <p>No Update</p>	
PART 5: DIGNIFIED CARE		
SCB/QS: 21/53	<p>HIW/CHC, DECI (dignity and essential care inspections) reports and improvement plans</p> <p>It was noted that HIW inspections had taken place, however not within Surgery Clinical Board.</p>	
SCB/QS: 21/54	<p>Initiatives to improve services for people with:</p> <p>Dementia Sensory loss Learning Disabilities</p> <p>No Update</p>	
SCB/QS: 21/55	<p>Any initiatives specifically related to the promotion of dignity</p> <p>Director of Nursing – CW reported that the Clinical Board as a result of the additional year end funding, had purchased equipment to improve patient dignity on the wards.</p>	
PART 6: TIMELY CARE		
SCB/QS: 21/56	<p>COVID Risk Register</p> <p>The Group received and noted the Covid risk register.</p>	

	<p>Director of Nursing – CW highlighted that the highest 3 to 4 risks had been escalated to the Executives and continue to be sent on a monthly basis. CW gave an overview of the items within the risk register.</p> <p>Performance with national targets Director of Nursing – CW suggested that data on the ten longest waiting patients for each Directorate be presented at the next meeting and to be a regular agenda item with feedback for each speciality. CW to link in with Denis Williams. Action: CW</p>	
PART 7: INDIVIDUAL CARE		
SCB/QS: 21/57	<p>Feedback from surveys – relevant improvement plans</p> <p>No Feedback</p>	
PART 8: Staff and Resources		
SCB/QS: 21/58	<p>Staff awards and recognition</p> <p>It was noted that a number of Surgery Stars 2020 awards had been distributed during the period. Director of Nursing – CW expressed that it had been fantastic to recognise all the hard work that these individuals have done during the year.</p>	
SCB/QS: 21/59	<p>Staffing levels</p> <p>The Group were informed that a meeting is held monthly where staffing levels are reported to the Nursing Director.</p> <p>Director of Nursing – CW reported that staffing levels continue to be monitored and safe staffing data is shared with Welsh Government twice yearly.</p>	
DATES OF NEXT MEETING		
18 th May 2021 – 8-10PM – Ms Teams		

Saunders, Nathan
06/08/2021 14:36:47



**Mental Health Clinical Board
Quality, Safety & Experience Committee
25th February 2021 at 9.30am
MS Teams**

Present:

Mark Warren	Director of Nursing, MH Services (Chair)
Neil Jones	Deputy Clinical Board Director, MH Services
Rob Kidd	Clinical Psychologist, MH Services
Arpita Chakrabarti	Clinical Director, MHSOP
Paul Cantrell	Clinical Director, Adult MH Services
Jayne Bell	Consultant Nurse, Adult MH Services
Jessica Powell	OT Clinical Lead, Adult MH Services
Catherine Evans	Patient Safety Facilitator

Julie Voyce (Minutes)

Apologies:

Joanne Wilson
Nicola Evans
Mick MCGeoch
Keithley Wilkinson
Joy Witlock

1.1 Welcome and introductions	Actions
1.2 Apologies for Absence	
1.3 Minutes of the Last Meeting	
Minutes dated 22/10/2021	
• Not available	
1.4 QSE bring forward/review of Action Log	
• No action log	

MINUTES

GOVERNANCE, LEADERSHIP AND ACCOUNTABILITY	
2.1 Feedback from UHB QS&E Committee (15/12/20)	
<ul style="list-style-type: none"> RK has uploaded attachment onto MS Teams – attachment 3 	
2.2 Health and Care Standards- sign off self-assessment/ongoing review of implementation/improvement plan	
<ul style="list-style-type: none"> 2.2 no requirement for actions as yet – attachment 4 	
2.3 Regulatory compliance	
2.4 Risk Register – review and revision	
<ul style="list-style-type: none"> Risk register from Clinical Boards – Arran Fowler, Corporate Team has requested regular updates. MW informed the group that IW has recently submitted the Risk Register to the Corporate Centre. NJ is expecting an internal audit on Risk Registers – these have been requested Action: MW check the position with IW before circulating to the group. Action: RK to send 16/02/21 UHB update link to JV to circulate 	<p>MW</p> <p>RK</p>
2.5 Exception reports and escalation of key QSE issues from Directorate QSE groups	
<ul style="list-style-type: none"> Exception Reports discussed and key messages from Directorate Groups. PC informed there is nothing to add at the moment, at the next Q&S meeting a comparative analysis of demography was agreed an Agenda item moving forward. Addressing the needs, locality, and looking at GP allocation boundaries within each CMHT locality Health and Care Standards tabled – recently UHBQ&S – NJ – shared Risk Register. Action: MW to share for comment RK – suggested it would be beneficial for colleagues to contribute with demography, and queried if DC could possibly help with demography The closing date of the secondment in place of DC closed at the end of last week. The post will support DC’s work on transformation. Interviews are being held on 19/03 and will support the Adult Directorate work. PC discussed sharing with everyone the comparators across Wales and Nationally. PC noted that the current benchmarking is crude, there are vast differences between localities, including a significant difference between Cardiff and Vale. The information shared will be useful for other Directorates. JP – the needs for each of the localities for wider therapies are being considered 	<p>MW</p>

Saunders Number
06/08/2021 11:06:47

MINUTES

<ul style="list-style-type: none"> • Discussion held around the Directorate meetings structures and sub directorate levels to be considered. AC – confirmed that there is only one Q&S in MHSOP, with no sub level meetings presently and looking at re-starting the sub meetings soon. MW asked about the filtering down of information. AC confirmed that staff forums and service level meetings are held and that anyone can attend these • PC – reiterated the need for consistency with regards Q&S meetings and suggested the down up approach is the most efficient for scrutiny, with reports from each department. Action: NJ to contact Bala/Raj to enquire of thoughts about this moving forward • RK – suggested the use of MS Teams to broadcast Q&S Reports to a wider audience, and it was noted that the clinical senate has not been well attended in the past. Agreed - Look at UHB examples. • Discussion held around setting time aside specifically for Q&S, as other departments in the UHB • JB – noted that there seems to be a gap in communication between senior nurses and staff, and ways of improving this need to be looked at. PC agreed that communication is presently ineffective, and an aim for useful service delivery and change is required. To be added to the Agenda of the next meeting • JB – raised the point of accountability to Health Inspectorate Wales, and informed the group ward managers are sent the minutes of meetings. JB addressed the importance of an overall accountability and scrutiny by HIW. • RK – raised a concern with regards care aims and training which has been delayed due to the pandemic. • RK – informed the group the Board that oversee the Integrated Autism Service have requested information, and an assurance of work being carried out. RK – recommended a quarterly feed of this into Q&S. MF has been looking at this. Action: MW to send document out with the minutes of meeting • RK – informed the group of the new facility Microsoft Stream file conversion, where minutes of meetings, once recorded, can be transferred automatically. <p>Action: AC to enquire with Jess Corrigan MHSOP minutes for 01/02. AC to forward to group.</p> <p>AC – raised that there are huge gaps in vacancies with social services staff. The Neuro Psychology Consultant for Wales post has been approved (and funded) by WHSCC. This is an across Wales post</p>	<p style="text-align: center;">NJ</p> <p style="text-align: center;">MW</p> <p style="text-align: center;">AC</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------

Saunders, Nathan
06/08/2021 14:36:47

MINUTES

<ul style="list-style-type: none"> AC raised that Helen Joy, Representative of the patient's forum, has informed AC of a fear of attending medical appointments and anxiety. MHSOP are looking into this Reports – no feedback this meeting 	
HEALTH PROMOTION AND PROTECTION AND IMPROVEMENT	
3.1 Initiatives to promote health and wellbeing of Patients and Staff	
<ul style="list-style-type: none"> MW - provided an explanation of the introduction of new legislation around smoking, which will affect hospital premises and commence on 1st March 2021. MW – explained that legislation will be different for community and hospital premises, with certain exemptions for patients being treated at MH inpatient services. NJ requested that information is circulated to staff. JB raised the matter of the existing smoking shelters for patients and designated areas with regards distance from building, and compliance with legislation. Action: MW to pick this matter up with IW <p><i>CE joined the meeting</i></p>	<p>MW</p>
SAFE CARE	
4.1	
<ul style="list-style-type: none"> Safe care, RCA and plans to improve were discussed. Attachments 7 & 8 2 cases EB and DH discussed <p><u>DH</u></p> <ul style="list-style-type: none"> Recommendations are safeguarding training for all MHSOP staff – 60% compliance, and should be completed by the end of December MHSOP Suicide Workbook training/refreshment for all staff responsible for in-patients, and hoping to complete by the end of December JB – confirmed a Primary Nurse in Charge pathway is in place now. This is to be implemented by the end of October Nursing Observations are to be improved – Marianne Seabright is looking at ward rounds where whole teams are present CE – highlighted the need to have an improvement plan, to be updated prior to inquests, with the need to be reviewed regularly Action: MHSOP team to review and provide an update on DH <p><u>EB</u> Update required. Action: AC to look at uncompleted and chase up Adult Directorate</p>	<p>MHSOP</p>

MINUTES

<ul style="list-style-type: none"> • CE reiterated the importance not only of implementation but continuing practice using plans and incorporating audit into day to day. Action: MW will send from the group outstanding actions to circulate to the wider group – audit needs to be incorporated. • MW – noted that WAG have raised that there are approximately 39 open cases to close. There has been reasonable progress, and there are open cases with the Coroner also. CE confirmed cases are with C Evans to be signed off and close • MW – Regulation 28 Reports from Coroner have not been received 	
4.2	
<ul style="list-style-type: none"> • MW – has received a letter, with regards Section,136 Procedures, from the Coroner enquiring of what happens to a patient's property, that is removed, in the Section 136 Suite. MW is preparing joint response with SW Police 	
4.3	
<ul style="list-style-type: none"> • No patient safety alerts – no pharmacy in attendance 	
EFFECTIVE CARE	
5.1	
<ul style="list-style-type: none"> • CIB Directorate NICE Guidance – R&D no update 	
5.2	
5.3	
DIGNIFIED CARE	
6.1	
<ul style="list-style-type: none"> • HIW Inspections on hold due to Covid-19 	
6.2	
<ul style="list-style-type: none"> • Sensory loss – no update 	
TIMELY CARE	
7.1	
<ul style="list-style-type: none"> • none 	
7.2	

MINUTES

<ul style="list-style-type: none"> • none 	
INDIVIDUAL CARE	
8.1	
<ul style="list-style-type: none"> • none 	
8.2	
<ul style="list-style-type: none"> • MW reported that an acknowledgment and thanks were received from the wider UHB around the good management of MHSOP, during the Covid-19 pandemic 	
STAFF AND RESOURCES	
9.1	
<ul style="list-style-type: none"> • Apologies received – no update 	
9.2	
<ul style="list-style-type: none"> • MW confirmed that a cohort of new nurses will commence at HYC next month 	
9.3	
SUB GROUP REPORTS	
<ul style="list-style-type: none"> • 10.0 Clozapine Policy – attachment 10 • 10.1 Bouvidal – NJ confirmed that this has now been replaced. Action: NJ to check there is an SOP across addiction services. • Dry charts have been updated 	NJ
ANY OTHER BUSINESS	
<ul style="list-style-type: none"> • JB – explained the process of rolling out the suicide prevention training. There are 3 models. All Health Board staff will be eligible to carry out the 1st module. 	
DATES OF FUTURE MEETINGS	
<ul style="list-style-type: none"> • Next meeting to be held 22nd April at 9.30 am – MS Teams 	



Att 6c Psychology
OS Draft Minutes 2



Att 6b MHSOP
Neuro Minutes 01.0.



Agenda 25



Att 11 Newland



Att 10 Clozapine
Policy draft 2020 Fin



Att 9 Plaudit
Report.docx

Submitted by: Nathan
 05/08/2021 14:36:47



GIG
CYMRU
NHS
WALES

Bwrdd Iechyd Prifysgol
Caerdydd a'r Fro
Cardiff and Vale
University Health Board

Minutes
Medicine Clinical Board
Quality, Safety & Experience Committee
25 February 2021 14:30 – 16:00
Venue: Teams Meeting

Attendees:

Rebecca Aylward, Director of Nursing, MCB (Chair)
Aled Roberts, Clinical Board Director, MCB
Jane Murphy, Director of Nursing, UHL & Community Hospitals
Matt Cornish, General Manager, Specialised Medicine
Carly Simpson, Senior Nurse, Integrated Medicine
Suzie Cheesman, Patient Safety Facilitator, Patient Safety & Quality Team (SC)
Sarah Follows, General Manager, Acute and Emergency Medicine
Barbara Davies, Lead Nurse, Specialised Medicine
Derek King, Clinical Nurse Specialist, Infection Prevention & Control
David Pitchforth, Senior Nurse, Integrated Medicine
Vicci Page, Service Manager, Specialised Medicine
Tracy Johnson, Practice Development Nurse
Annie Burrin, Patient Safety and Quality
Hannah Mastafa, General Manager, Specialised Medicine
Shannon Bakan, Service Manager, Specialised Medicine
Craig Davies, Interim Assistant Directorate Manager
Sally Gronow, Deputy General Manager, Integrated Medicine
Lisa Waters, Senior Nurse, Acute & Emergency Medicine
Wayne Parsons, Lead Nurse, Acute & Emergency Medicine
Sian Brookes, Senior Nurse, Integrated Medicine
Angela Jones, Senior Nurse
Elinor Gerrard, Senior Nurse, Integrated Medicine
Natasha Whysall, Senior Nurse, Integrated Medicine
In attendance: Sheryl Gascoigne, MCB Secretary (Minutes)

Preliminaries		Action
A1	Welcome & Introductions	
A2	Apologies for absence Kath Prosser, Quality & Governance Lead, Medicine Jeff Turner, Consultant Gastroenterologist, Specialised Medicine Carol Evans, Assistant Director, Patient Safety & Quality Geraldine Johnston, Director of Operations Keithley Wilkinson, Equality Manager Diane Walker, Lead Nurse, Integrated Medicine Iain Hardcastle, General Manager, Integrated Medicine	
Part 1: Quality & Safety		
GOVERNANCE, LEADERSHIP AND ACCOUNTABILITY		
1	Minutes of the previous meeting – received and accepted.	
1.2	Matters arising	

Saunders, Nathaniel
06/08/2021 14:36:47

	Clinical Audit Hero's Confirm if Simon Barry received a Clinical Audit Hero award.	
1.3	Patient Story – Acute and Emergency Medicine A 21 year old female was seriously injured in an RTA. Lifesaving intervention was given at the scene and the patient was taken by helicopter to the Emergency Department at UHW and further resuscitated. The patient was later transferred to ITU for on-going treatment. The patient had 4 surgical procedures, physiotherapy, dietary intervention and steadily improved. The patient was discharged home with continuing care. Prior to the Major Trauma Centre launching, modelling data year 1 showed 298 patients in year 1 with an incremental increase in subsequent years. Since the launch, the Major Trauma Centre has had 24 patients. The Major Trauma Centre network is working well.	
1.4	Feedback from UHB QSE Committee The minutes will be circulated when approved.	
1.5	Directorate QSE minutes – exception reporting Minutes noted and accepted.	
1.6	Papers for noting/feedback/sharing with wards HIW Annual Report 2019-2020 Action: All to read the report and note the sections about C&V which shows recognition of excellent work that the Emergency and Assessment team at Cardiff and Vale have done. Action: SG to arrange for the report to be emailed to the group as it cannot be opened from the agenda.	ALL SG
1.7	Joint working with WAST and Serious Incident Reporting	
HEALTH PROMOTION PROTECTION AND IMPROVEMENT		
2.1	Covid: Risk Register update/review any amendments required It had previously been agreed to combine Covid and Directorate risk registers. Top 3 risks have been discussed. Corporate are currently reviewing the risk registers. Action: Discuss further at the next meeting. Update on Clinical Board Covid Outbreak position Healthcare acquired Covid investigations – HCAI Covid reviews and IP&C outbreaks Today's Covid meeting outlined numbers of staff and patients affected by out-breaks. A risk assessment is to be carried out for each patient who had hospital acquired Covid. RA is sourcing additional resource to assist with this work. The Patient Safety Team are looking at all Covid related deaths. Action: RA will circulate the report. Action: TC to provide the name of a nurse in her area who could assist. Action: this should be discussed at Directorate QSE meetings. Action: RA will update RC if RCA's for Sam Davies ward need to be done.	ALL RA TC ALL RA
2.2	Central monitoring for A7, B7, Heulwen Agreed with end of year funding. Awaiting installation programme.	
SAFE & CLINICALLY EFFECTIVE CARE		
3.1	Serious Incidents Update:	

	<p>Delivery Unit and reporting of Serious Incidents during the ongoing Covid Pandemic</p> <p>There are currently 4 open SI's.</p> <ol style="list-style-type: none"> 1. SS – ongoing. 2. DC – awaiting the Coroner to confirm if an inquest will be held. 3. TP – RCA with RA for sign off. 4. WAST incident relating to a gentleman who had a delay in WAST getting to him. The patient was then taken to the Emergency Unit. <p>Action: SC and RA to discuss this further outside the meeting. All agreed this should be a Corporate SI (not Medicine).</p> <p>RCA's have been completed for all of the above.</p>	SC / RA
3.2	<p>Infection Prevention and Control update</p> <p>Overview of the Clinical Boards IP&C information for August 2020:</p> <p>18 <i>C difficile</i> infections from April to March (4 new cases today)</p> <p>4 cases of MRSA this year so far (2 last year) goal is 0</p> <p>14 cases of MSSA this year (11 last year)</p> <p>28 cases of <i>E. Coli</i> bacteraemia far (26 last year) goal is 24</p> <p>4 cases of <i>Pseudomonas</i> bacteraemia this year (10 last year) goal is 0</p> <p>4 cases of <i>Klebsiella</i> bacteraemia this year (19 last year) goal is 12</p> <p>Outbreaks for September</p> <p>There have been significant outbreaks in MCB since Oct 2021. Current outbreak areas are being managed by Deputy Executive Nurse Director, and the Multi-factoral Team. Some staff have generally stopped wearing visors, which is causing concern. It is still in the guidance that visors/ goggles should be worn in amber and red areas. Lead nurses challenge when they see staff not wearing them when in close patient contact. Staff at LSW B side are reminded constantly to wear goggles/visors. This is to protect staff from Covid. Even when vaccinated, this is only 95% effective. If staff refuse to wear visors/goggles this is a health and safety breach which could be resolved through disciplinary channels. If staff are not wearing visors/ goggles, speak to the individual, follow up with a letter, then if they are still non-compliant, follow the disciplinary route. Corporate should be requested to send further messages about visor/goggles use and displaying posters would be useful. Covid transmission is higher in hospital, than in community.</p> <p>Action: All to reinforce the use of good IP&C practice in all clinical areas and remind staff to change PPE between patients to avoid transmission.</p> <p>Outstanding RCA's must be completed – action for improvement.</p>	ALL
3.3	<p>Point of Care Testing - any actions required following circulation of information from POCT team.</p> <p>No issues raised.</p>	
3.4	<p>Medical devices/equipment issues – no issues.</p> <p>Action: All to be mindful of sharing equipment and taking equipment to different areas/wards.</p>	ALL
3.5	<p>Lumira Standard Operating Procedure for ratification</p> <p>Discussion took place regarding using this point of care testing for asymptomatic patients, to enable bed space to be sought swiftly. The SOP</p>	

	<p>which still has comments on it. The SOP should stay live as staff learn. Lumira test accuracy will change over time.</p> <p>Action: Nick Manville to send the updated version to RA who will circulate it.</p> <p>Action: Discuss and update in directorate QSE and then report by exception at the MCB QSE.</p>	NM/ RA A&E
3.6	<p>Patient Safety – shared for information and cascading as required</p> <p>Notices/MDA's/ISN's</p> <p>ISN Ref 2021/Jan/001 Copan Throat Swabs</p> <p>ISN Ref 2021/Feb/002 Valved FFP3 masks</p>	
3.7	<p>Clinical Audit Plan 2021</p> <p>Request that all audits should feature on clinical audit plan. A1 link is carrying out a falls audit.</p> <p>Action: to be discussed at Directorate QSE's.</p>	ALL
DIGNIFIED CARE		
4.1	<p>HIW Report MEAU</p> <p>Deferred to next meeting.</p>	
4.2	<p>Lakeside Wing – Quality and Safety Inspection. Staff feedback and Datix reporting</p> <p>Main themes: team work and organisation on the wards. Sustaining a 77 patient capacity area.</p> <p>Action: RA will follow up with the Assistant Director of Patient Safety and Quality on when the report will be received. RA will ensure the report and patient feedback is on the next meeting agenda.</p>	RA
TIMELY CARE		
5.1	<p>Standard Operating Procedure Immediate Release</p> <p>New version of the document presented for ratification. All agreed it was an unrealistic timeframe having to respond and confirm a safe space within 2 minutes, or this is classed as a decline to immediate release. This is a standard ask per Health Board. This has been escalated to be looked into. This procedure is instigated by WAST.</p> <p>Action: SC will email her comments to RA when she has read the document. Await SC's comments, then agree the procedure.</p>	SC/ RA
INDIVIDUAL CARE		
6.1	<p>National User Experience Framework</p> <p>Feedback from 2 minutes of your time survey – relevant improvement plans.</p>	
6.2	<p>DTOCs – no update.</p>	
6.3	<p>Compliments</p> <p>On 6/11/20 the patient was an emergency admission by ambulance to UHW after becoming unwell with a high temperature and flu like symptoms. He was rapidly taken to the assessment area for tests which confirmed he was Covid+ and very unwell. He was transferred to Heulwen and put on CPAP and said a nurse called Angela and a duty doctor were especially kind to him. He was overwhelmed by their professionalism, compassion and empathy. His condition rapidly deteriorated, he was prepped for transfer to ITU, but eventually stayed on CPAP and improved. The patient's wife was informed of how ill he was. The patient thoroughly trusted all the staff involved in his care and said they were amazing. He was transferred to A7 South by very caring Porters. After a few days he was moved to A7N and continued to improve. Amazing Physiotherapists called Owain and Connell,</p>	

	<p>were so inspiring and motivated him to get stronger. Nurse Vicky Batten played a large part in the patient's physical and mental recovery.</p> <p>The patient wanted to express his sincere thanks to all staff who attended him. The only staff name he could remember was Kissinger. Prior to this, the patient had been recovering from Stage 4 Non-Hodgkins Lymphoma and again during that time all the doctors and nurses were amazing and he is forever in the NHS's debt.</p>	
6.4	<p>Safeguarding A significant number of cases have been closed, with the overall position being good.</p>	
6.5	<p>Concerns update Managing concerns during the Covid period has gone well, response rate continues to be well maintained. Need to close down longstanding open concerns.</p>	
Staff and Resources		
7.1	<p>Staff well-being It is important over the next few months to look after self and others to ensure all OK and reflect. B7 feedback is that it has been useful to have Nikki's visits over the last few weeks. Chaplaincy team have been useful as well. Staff are tired, however, they remain upbeat and positive. Action: AR will contact the wellbeing team to continue the visits.</p>	AR
PART 2: Items to be recorded as Received and Noted for Information by the Committee		
AOB	<ul style="list-style-type: none"> • SC's husband fell in Cardiff recently and rang CAV 247 which was a very positive experience and swiftly carried out. • Tracey Johnson has joined the Patient Safety Team for 6 months and will be covering MCB along with SC. AB is working in the Patient Safety Team and has responsibility for falls. Looking at inpatient prevention and management and will be contacting staff shortly. • Farewell to TC who will be joining the Patient Safety Team, and thanks for all TC has done over time in Medicine. • Farewell to WP and thanks for amazing contribution and patient care and wished him well in new role in March. • Action: BD will send communication regarding Montreal Cognitive Assessment (MoCA) to SG to send to the meeting group. <p>Date and time of next meeting – TBC</p>	BD

Saunders, Nathan
06/08/2021 14:36:47



GIG
CYMRU
NHS
WALES

Bwrdd Iechyd Prifysgol
Caerdydd a'r Fro
Cardiff and Vale
University Health Board

Minutes
Medicine Clinical Board
Quality, Safety & Experience Committee
15 April 2021 14:30 – 16:00, via MS Teams

Attendees:

Rebecca Aylward, Director of Nursing, MCB (Chair)
Aled Roberts, Clinical Board Director, MCB
Kath Prosser, Quality & Governance Lead, Medicine
Suzie Cheesman, Patient Safety Facilitator, Patient Safety & Quality Team
Angela Jones, Senior Nurse
Barbara Davies, Lead Nurse, Specialised Medicine
Derek King, Clinical Nurse Specialist, Infection Prevention & Control
Vicci Page, Service Manager, Specialised Medicine
Ceri Richards-Taylor, Lead Nurse, Integrated Medicine
David Pitchforth, Lead Nurse, Integrated Medicine
Annie Burrin, Patient Safety and Quality
Ruth Cann, Senior Nurse, Integrated Medicine
Gemma Taylor, Practice Development Nurse, Integrated Medicine
Sam Baker, Practice Development Nurse, Integrated Medicine
Natasha Whysall, Senior Nurse, Integrated Medicine
Rebecca Whitar, Consultant, Emergency Medicine
Elinor Gerrard, Senior Nurse, Integrated Medicine
Jane Murphy, Director of Nursing, UHL & Community Hospitals
Carol Evans Deputy Assistant Director Patient Safety and Quality
Sian Brookes, Senior Nurse, Integrated Medicine
Jenna McLaren, Senior Nurse, Acute & Emergency Medicine
Gill Spinola, Senior Nurse, Specialised Medicine
Carly Simpson, Senior Nurse, Integrated Medicine
Matthew McCarthy, Patient Safety Facilitator
In attendance: Sheryl Gascoigne, MCB Secretary (Minutes)

Preliminaries		Action
A1	Welcome & Introductions	
A2	Apologies for absence Geraldine Johnston, Director of Operations Jeff Turner Consultant Gastroenterology, Specialised Medicine Manju Kalavala, Consultant, Dermatology, Specialised Medicine Sarah Cornes-Payne, Senior Nurse, Diabetes, Integrated Medicine Jayne Salisbury, Safeguarding Nurse Advisor Sarah Follows, General Manager, Acute & Emergency Medicine Iain Hardcastle, General Manager, Integrated Medicine	
Part 1: Quality & Safety		
GOVERNANCE, LEADERSHIP AND ACCOUNTABILITY		
1.1	Minutes of the previous meeting – received and accepted.	
1.2	Matters arising Tara Cardew to provide the name of a nurse in her area who could assist - no progress to date. TC has now moved roles on secondment.	

	Lead Nurse BD clarified that she was unable to source the name of the member of staff.	
1.3	<p>Patient Story – Integrated Medicine A male patient, who was on an end of life care pathway, was moved from a cubicle on A7 to a cubicle on A1 in order to create 'red' Covid-19 capacity. Clinicians raised a concern with the Clinical Board regarding this move as they had built up a relationship with the family, particularly as this patient was end of life. At the time, this was felt to be the right course of action for the patient and the organisation, however, it is widely accepted and acknowledged that continuity of care is disrupted when patients are moved. This was a thought-provoking story, thinking of teams, building relationships with patients and their families. Risks increase every time a patient is moved. Integrated Medicine have begun to monitor the amount of patient moves and why.</p> <p>Concerns were also raised regarding the level of moves across sites. Acknowledged that patient moves are being reviewed and a pull model is being established as part of the 'Right Bed First Time' work.</p> <p>Action: DP will share the report he has prepared on patient moves.</p> <p>A presentation was delivered to the ops group recently regarding the impact on patients. The reason for moves were not documented during the first Covid wave. UHB principles/ criteria are needed regarding moving patients. There are more discharges during the week than at weekends.</p> <p>Action: Further discussions are required prior to winter and a potential third wave of Covid-19, regarding moving patients and dealing with IPC issues.</p> <p>Action: Recognised that there is also a need to look at patient moves from the Emergency/Assessment Unit and MEAU overnight.</p>	DP ALL RA
1.4	<p>Feedback from UHB QSE Committee - last UHB meeting 16th February, minutes will be approved next meeting 13th April.</p> <p>CE provided an overview of the last meeting. Children and Women presented their annual Quality paper. An update on HIW was discussed. The Gosport review taken to the UHB QSE committee at end of 2009, and the ongoing actions as a result of this. Thromboprophylaxis policy was approved.</p>	
1.5	<p>Directorate QSE minutes – exception reporting No minutes at present. Directorates do not hold meetings in April.</p>	
1.6	<p>Review of Terms of Reference Email KP if there are any amendments to be made.</p>	ALL
HEALTH PROMOTION PROTECTION AND IMPROVEMENT		
2.1	<p>UHB 5 year QSE Framework (Carol Evans) A workshop was held in September 2020 in preparation for completing the UHB's 5 year Quality Framework. 7 themes were used for group work at the workshop. Prior to the workshop, it was felt the QSE framework in place is very detailed and focuses on harm. Going forward, the focus will be on big enablers in the organisation which will take patient safety to the next level: safety culture, leadership and prioritisation; patient experience and involvement; patient safety learning and communication; staff engagement and involvement; data and insight; professionalism, quality governance.</p> <p>Key outcomes from the workshop was that staff had the same view of quality and safety agreeing all should now be working to zero avoidable harm. Moving away from looking at what has gone wrong and looking at what is mostly going right. Leadership is key.</p> <p>England are developing a Patient Safety Partner (PSP) framework. Angela Hughes is working on the 'What matters to you' campaign.</p>	

Saunders, Nathan
06/08/2021 14:36:47

	<p>Workshop highlighted:</p> <ul style="list-style-type: none"> - Good practice needs to be shared across the organisation. - A lot of work will be undertaken on the principles of High Reliability Organisations (HROs). - The need to engage more with middle grade doctors and therapists. - The need to establish a patient safety network. - Working with Lightfoot regarding 'Signals from Noise'. - All staff should have the appropriate level of patient safety training. <p>Perfect Ward – could be used to implement some of this work as the Perfect Ward gives the opportunity to embed good working practices at ward level.</p> <p>CE will share the presentation with all.</p> <p>All were requested to complete the safety survey emailed recently.</p>	<p>CE</p> <p>ALL</p>
2.2	<p>CAVQ1 work – using Data to Target Improvement (Matthew McCarthy) This is part of the QSE framework discussed earlier.</p> <p>Patient safety data is often reported once a month, people have to send emails to obtain data in their area.</p> <p>CAVQI commenced in Child Health with funding support from the Health Foundation working in partnership with Cardiff University to look at incident data tied in other data sources. The project was successful and quality improvement could be targeted based on the data sourced, however this was a manual process. In order for this to be successfully rolled out a dashboard was designed that pulls this key information into one place. The dashboard has proved to be a great asset and people are very happy to use it. The Quality Improvement Team are currently working with both Paediatrics and Adult ED over the next few months and going forward will continue to develop the dashboard.</p>	
2.3	<p>Update on Clinical Board Covid-19 Outbreak position</p> <p>Healthcare acquired Covid-19 investigations – HCAI Covid-19 reviews and IP&C outbreak</p> <p>Deferred to next month, no outbreaks at present. Next month will update on Health acquired Covid-19 from Jacqui Westmoreland Senior Nurse for Covid-19 investigations.</p>	JW
SAFE & CLINICALLY EFFECTIVE CARE		
3.1	<p>Serious Incidents update: KP advised that there were no Serious Incident ready for closure this month. There are currently 5 open Serious Incidents for the Clinical Board, two of which are with the Patient Safety Team for closure. The remaining three, one investigation and improvement plan has been completed and await Coroners inquest. The remaining two, both catastrophic injurious injuries, investigations are in progress and will be subject to inquests.</p>	
3.2	<p>Infection Prevention and Control update 165 days since last MRSA 27 days since last MSSA 4 days since last <i>C difficile</i> 12 days since last <i>E. Coli</i> bacteraemia 157 days since last <i>Pseudomonas</i> bacteraemia 26 days since <i>Klebsiella</i> bacteraemia.</p> <p>Outbreaks – none. In March 9 wards had Covid-19 outbreaks with 774 bed days lost.</p>	

Saunders, Nathan
06/08/2021 14:36:47

	<p>C4C scores – all wards compliant in last 4-week period demonstrated good results.</p> <p>Achieved Klebsiella bacteraemia reduction goal for 2020. Staph Aureus up 25%. E. Coli bacteraemia reduced by 39% on previous year. C difficile increased by 15% on previous year. Acknowledged that the increased number of antibiotics prescribed during Covid-19 could have had a bearing on the increase.</p> <p>PVC audits - show a total compliance of 68.25% of all audits carried out. 34% was lowest PVC audit result. Audits need to improve in all areas.</p> <p>Flu - remains below threshold of baseline activity and trend is decreasing.</p> <p>Covid -19 - Cardiff UHB 31.6 per 100,00 over 7 days.</p> <p>Ongoing discussions between Clinical Boards and IP&C regarding ward reconfigurations and the allocation and governance of reporting healthcare acquired infections.</p> <p>KP raised the draft ISN Ref2021/Apr/007 Intravenous Cannula's and the request from Radiology for non-ported cannula's for all CT/MRI examinations. This would have the potential to increase the number of MSSA cases. In addition, this could cause increased stress and pain for a patient to have an additional cannula inserted. Further comments received noted whether on a UHB level does there need to be consideration on the use of only one single cannula type. Also, not all scans require contrast and clinicians maybe unaware at the time of request whether contrast is required until vetted by a Radiologist.</p> <p>Annie Burrin advised that this ISN is only draft and would require sign off Corporately.</p>	<p>IPC/CBs</p> <p>ALL</p>
3.3	Point of Care Testing - any actions required following circulation of information from POCT team - no issues raised.	
3.4	Medical devices/equipment issues – no issues raised.	
3.5	<p>Patient Safety – shared for information and cascading as required Notices/MDA's/ISN's</p> <ul style="list-style-type: none"> - FSN -MDS-21-4072 Infusion sets for Alaris Pumps - CPhO-MedsLet-2021-10-Medicines Shortage letter Enalapril 5 mgs. - NatPSA-2021-001 MHRA Supply disruption of sterile infusion sets and connectors manufactured by Becton Dickinson (BD). 	
3.6	Review of draft revised Injurious Falls Template – for information. Any comments reply to Annie Burrin.	ALL
DIGNIFIED CARE		
4.1	Lakeside Wing – Quality and Safety Inspection/action plan SB to provide an update at the May QSE meeting. DP will inform SB of this.	SB/ DP
4.2	Perfect Ward/Ward Accreditation Moving forward quickly on this. 17 wards being nominated across UHB that will take part in the Perfect Ward audit. Perfect ward is only one element of the accreditation. Looking at what accreditation will look like for bronze, silver and gold.	
TIMELY CARE		
5.1	CAV 24/7 update This has been operational for nearly a year and is a phone first approach to the Emergency Department, developed by clinicians as a response to the	

	<p>first wave of Covid-19 to see patients in a timely manner. A third of patients arrive via ambulance, third via CAV 24/7, third self-present. CAV 24/7 triage provides patient background prior to arrival. Self-presenters are usually younger people. Updated communication is being prepared to make this demographic aware.</p> <p>CAV 24/7 has positively impacted patient experience. CAV 24/7 will feature in the next best practice as an exemplar of best practice across the UK.</p>	
INDIVIDUAL CARE		
6.1	<p>National User Experience Framework Feedback from 2 minutes of your time survey – relevant improvement plans.</p> <p>None to date.</p>	
6.2	<p>DTOCs – 43 for UHW, 30 for UHL. DTOC weekly meetings have re-commenced.</p>	
6.3	<p>Compliments Received from the wife of a patient who had been in UHW for 12 weeks. He was nursed on numerous wards' including ITU, A7, B7 and received the best care. The family praised UHW staff. The patient was seriously ill with Covid-19, spent over two weeks on a ventilator and suffered a Stroke. He was treated with dignity and respect and the family are thankful to staff and it is through their efforts that the patient was discharged home. Staff kept family informed and gave excellent support to the family. The patient's wife wrote 'all the staff at UHW do an amazing job, and I just personally wanted to thank you all for your ongoing care and positivity during these difficult times'.</p>	
6.4	<p>Safeguarding – no update. Jane Salisbury will present at next meeting.</p>	
6.5	<p>Concerns update 78% concerns response noted for March. Currently looking at upskilling staff to support concerns responses. Previous training has proved helpful and JM happy to arrange further sessions if required. Training has been given regarding investigations. Action: contact JM if a further session is required.</p>	ALL
Staff and Resources		
7.1	<p>Staff well-being - no issues discussed.</p>	
7.2	<p>Equality – The Race Equality Action Plan for Wales For information. Consultation period ends in June. Keithley Wilkinson would like to deliver a presentation at the QSE meeting in May.</p>	
PART 2: Items to be recorded as Received and Noted for Information by the Committee		
AOB	<p>DNA CPR – these are still being looked into. Stuart Walker has sent out, via his MD blog, extensive information around the issue and what has been asked is for audits to be undertaken and returned by 7/5/21.</p> <p>DP shared a concern regarding a patient who was prescribed medication containing gelatine who was a vegetarian. All staff to be aware of medication and how this can affect patients. Matthew McCarthy raised this at the Medicines Management Safety Meeting – proposal on the best way forward is to put something out in the newsletter such as Omeprazole containing animal product and that staff can contact the manufacturer for further information. This is not considered a safety issue, it is a requirement of the patient to advise if they do not want certain products.</p> <p>Date and time of next meeting – 20th May 2021 14:30 via Teams.</p>	

Saunders, Nathan
06/08/2021 14:38:47



GIG
CYMRU
NHS
WALES

Bwrdd Iechyd Prifysgol
Caerdydd a'r Fro
Cardiff and Vale
University Health Board

Minutes

Medicine Clinical Board

Quality, Safety & Experience Committee

20 May 2021 14:30 – 16:00, via MS Teams

Attendees:

- Aled Roberts, Clinical Board Director, MCB (Chair)
- Geraldine Johnston, Director of Operations
- Suzie Cheesman, Patient Safety Facilitator, Patient Safety & Quality Team
- Angela Jones, Senior Nurse
- Barbara Davies, Lead Nurse, Specialised Medicine
- Derek King, Clinical Nurse Specialist, Infection Prevention & Control
- Vicci Page, Deputy General Manager, Specialised Medicine
- Sally Gronow, Deputy General Manager, Integrated Medicine
- Sam Barratt, Deputy General Manager, Integrated Medicine
- Ceri Richards-Taylor, Lead Nurse, Integrated Medicine
- David Pitchforth, Lead Nurse, Integrated Medicine
- Annie Burrin, Patient Safety and Quality
- Ruth Cann, Senior Nurse, Integrated Medicine
- Gemma Taylor, Practice Development Nurse, Integrated Medicine
- Sam Baker, Practice Development Nurse, Integrated Medicine
- Natasha Whysall, Senior Nurse, Integrated Medicine
- Rebecca Whitarcar, Consultant, Emergency Medicine
- Elinor Gerrard, Senior Nurse, Integrated Medicine
- Jane Murphy, Director of Nursing, UHL & Community Hospitals
- Carol Evans Deputy Assistant Director Patient Safety and Quality
- Manju Kalavala, Consultant, Dermatology, Specialised Medicine
- Jayne Salisbury, Safeguarding Nurse Advisor
- Sarah Follows, General Manager, Acute & Emergency Medicine
- Iain Hardcastle, General Manager, Integrated Medicine
- Sian Brookes, Senior Nurse, Integrated Medicine
- Jenna McLaren, Senior Nurse, Acute & Emergency Medicine
- Gill Spinola, Senior Nurse, Specialised Medicine
- Carly Simpson, Senior Nurse, Integrated Medicine

In attendance: Sheryl Gascoigne, MCB Secretary (Minutes)

Preliminaries		Action
A1	Welcome & Introductions	
A2	Apologies for absence Rebecca Aylward, Director of Nursing, MCB Kath Prosser, Quality & Governance Lead, Medicine Jeff Turner Consultant Gastroenterology, Specialised Medicine Lyndsey MacDonald, Consultant, Acute & Emergency Medicine Cath Morris, Senior Nurse, Acute & Emergency Medicine Sarah Cornes-Payne, Senior Nurse, Diabetes, Integrated Medicine	
Part 1: Quality & Safety		
GOVERNANCE, LEADERSHIP AND ACCOUNTABILITY		
1.0	Minutes of the previous meeting – received and accepted.	

Saunders, Nathaniel
06/08/2021

1.1	Matters arising	
1.2	Patient Story – Acute & Emergency Medicine	
1.3	Feedback from UHB QSE Committee –	
1.4	Directorate QSE minutes – exception reporting	
1.5	Risk Management Overview	
HEALTH PROMOTION PROTECTION AND IMPROVEMENT		
2.0	Doctrina meaning learning; The quarterly newsletter of the Welsh Risk Pool's learning Advisory Panel	
2.1	Healthcare acquired Covid investigations update	
SAFE & CLINICALLY EFFECTIVE CARE		
3.0	Serious Incidents update:	
3.1	<p>Infection Prevention and Control update days since last MRSA days since last MSSA days since last <i>C difficile</i> days since last <i>E. Coli</i> bacteraemia days since last <i>Pseudomonas</i> bacteraemia days since <i>Klebsiella</i> bacteraemia.</p> <p>Outbreaks –</p> <p>C4C scores –</p> <p>Achieved <i>Klebsiella</i> bacteraemia reduction goal for 2020. Staph Aureus up%. <i>E. Coli</i> bacteraemia reduced by% on previous year. <i>C difficile</i> increased by% on previous year. Acknowledged that the increased number of antibiotics prescribed during Covid-19 could have had a bearing on the increase.</p> <p>Audits -</p> <p>Flu -</p> <p>Covid -19 -</p>	
3.2	Point of Care Testing - any actions required following circulation of information from POCT team	
3.3	Medical devices/equipment issues –	

Saunders Nathzi
06/08/2021 14:36:47

3.4	Field Safety Notice: Ref: P3/FSCA/009 Sapimed Rectoscopes, Procoscopes and related devices supplied by P3 Medical Ltd ISN 2021/Feb/005 Fresenius Ported Giving Sets: Leakage of Cytotoxic Fluids ISN 2021/Apr/008 Blood Gas Syringes ISN 2021/May/007 Ported Cannula Product recall	
3.5	Combined Insulin prescription chart and updated glucose monitoring chart	
3.6	Patient Safety Spring Newsletter	
DIGNIFIED CARE		
4.0	Lakeside Wing – Quality and Safety Inspection/action plan	
TIMELY CARE		
5.0	Update on Emergency Medicine 4 and 12 hour performance	
5.1	Update on RTT position	
INDIVIDUAL CARE		
6.0	National User Experience Framework Feedback from 2 minutes of your time survey – relevant improvement plans.	
6.1	DTOCs –	
6.2	Compliments Endoscopy I felt strongly that I had to contact the unit to offer my thanks again for the level of care I received. From being greeted at reception to leaving the unit I was made to feel totally welcome and, considering what I was there for, relatively relaxed. As an, unfortunately, much experienced colonoscopy patient due to my genetic condition, I have plenty of experiences to compare and this time around really stood out. Names I feel are worthy of particular mention are as follows: Scott (nurse) - a very pleasant nature who really listened and empathised. He also took time to continue to ask how I was as I moved through the unit, which is the sign of a true professional and very much appreciated. Paul (I think was his name, the nurse that put my canula in) - extremely pleasant and always smiling, which just helped to ease any nerves. Natalie (nurse) - was in the procedure room and had a perfect level of caring, humour and professionalism that helped make the procedure so much easier. Dr Ramaraj - while being totally professional also managed to create a more 'welcoming' atmosphere in the room through her relationship with both myself and the two nurses in attendance. This is a REAL skill as so many times I've experienced very clinical & regimented environments that do not help when it comes to being at ease, for what is not the most pleasant of	

Saunders Nathan
06/08/2021 14:30:40

	<p>experiences. Also, and I have to say it was the least uncomfortable I've ever felt after a colonoscopy.</p> <p>The other nurse in the procedure room, who's name I'm afraid I've forgotten (Melanie?), who also helped contribute to the top level of care I feel I received.</p> <p>Please pass on my thanks to all the staff who are a credit to themselves, the Unit and the hospital. We're always quick to complain when we believe things don't meet our expectations but not quick enough to recognise when they exceed them.</p> <p>Emergency & Acute Medicine I presented to the Emergency Department with chest pain, which turned out to be a PE. I was seen by a nurse practitioner who progressed my tests, diagnosis and treatment professionally, very efficiently and she was lovely. Every contact I had in the unit was dealt with by professional people who cared. Thank you so much for looking after me so well.</p>	
6.3	Safeguarding –	
6.4	Concerns update	
Staff and Resources		
7.0	Staff well-being –	
PART 2: Items to be recorded as Received and Noted for Information by the Committee		
AOB	Date and time of next meeting – 17 June 2021 14:30 via MS Teams.	

Saunders, Nathan
06/08/2021 14:36:47

Report Title:	Annual Board Effectiveness Survey 2020-2021 - Quality Safety and Experience Committee					
Meeting:	Audit and Assurance Committee			Meeting Date:	15/06/2021	
Status:	For Discussion	X	For Assurance	x	For Approval	For Information
Lead Executive:	Director of Corporate Governance					
Report Author (Title):	Interim Head of Corporate Governance Corporate Governance Officer					

Background and current situation:

Effective Board and Committee meetings are a key part of an effective governance structure and it is important to ensure that Cardiff and Vale University Health Board's (CVUHB's) organisational governance is compliant with the provisions of its Standing Orders which state that:

10.2.2 The Board shall introduce a process of regular and rigorous self- assessment and evaluation of its own operations and performance and that of its Committees and Advisory Groups. Where appropriate, the Board may determine that such evaluation may be independently facilitated.

CVUHB has undertaken a review of the Board and its sub-committees, using survey questions derived from best practice guidance, including the NHS Audit Handbook, and using the following principles:

- the need for sub-committees to strengthen the governance arrangements of the Health Board and support the Board in the achievement of the strategic objectives,
- the requirement for a committee structure that strengthens the role of the Board in strategic decision making and supports the role of Independent Members in challenging executive management actions,
- maximising the value of the input from Independent Members , given their limited time commitment,
- supporting the Board in fulfilling its role, given the nature and magnitude of the Health Board's agenda.

For the 2020-2021 self-assessment, a survey was disseminated via Survey Monkey to all Board members enabling an efficient yet effective reflection on Board effectiveness and mirroring the method used for the Committees.

The purpose of this report is to present the findings of the Annual Board Effectiveness Survey 2020-2021, which relate to the Quality Safety and Experience Committee and to present the action plan 2020-2021 developed to address the areas identified for improvement.

Executive Director Opinion/Key Issues to bring to the attention of the Board/Committee:

The survey questionnaire for the annual Board/Committee effectiveness survey 2020-2021 was issued in early April 2021 and attained a positive response rate overall,

saunders.Nathan
06/08/2021 14:36:47

- The overall findings are positive which provides an assurance that the governance arrangements and Committee structure in place are effective, and that the Committees are effectively supporting the Board in fulfilling its role,
- The individual findings of the Annual Board/Committee Effectiveness Survey 2020-2021 relating to the Quality Patient Experience Committee are presented at **Appendix 1** for information,
- Out of the questions posed, room for improvement was identified in 5 areas and a Board Effectiveness Action Plan 2020-2021 has been developed to address them which is presented at **Appendix 2** and outlines proposed actions to strengthen and develop the areas identified, it is suggested that this action plan be progressed via Board, Development sessions. Assurance is provided by work already in train in many of these areas as referenced in the action plan,
- The individual Board/Committee findings will be presented to each relevant Committee for assurance.
- When considering the findings, they should be considered in the context that the survey was issued to the 22 Members of the Board and only those who were members of the relevant Committees were in a position to respond. Further work will be undertaken in 2021-2022 to encourage Board members to complete the survey.

Assessment and Risk Implications (Safety, Financial, Legal, Reputational etc.):

To ensure effective governance the Board Effectiveness Survey is undertaken on an annual basis, in accordance with the provisions of the Standing Orders for NHS Wales.

The next self-assessment will be undertaken in March/April 2022 to coincide with the end of financial year reporting requirements of the Annual Governance Statement 2021-2022.

Recommendation:

The Committee are requested to:

- NOTE** the results of the Annual Board Effectiveness Survey 2020-2021, relating to the Quality Safety & Experience Committee,
- NOTE** the action plan developed for 2020-2021, which will be progressed via Board Development sessions.

Shaping our Future Wellbeing Strategic Objectives

This report should relate to at least one of the UHB's objectives, so please tick the box of the relevant objective(s) for this report

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	X	7. Be a great place to work and learn	X
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	X
4. Offer services that deliver the population health our citizens are entitled to expect	X	9. Reduce harm, waste and variation sustainably making best use of the resources available to us	
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered

Please tick as relevant, click [here](#) for more information

Prevention		Long term	X	Integration		Collaboration		Involvement	
Equality and Health Impact Assessment Completed:	Not Applicable								

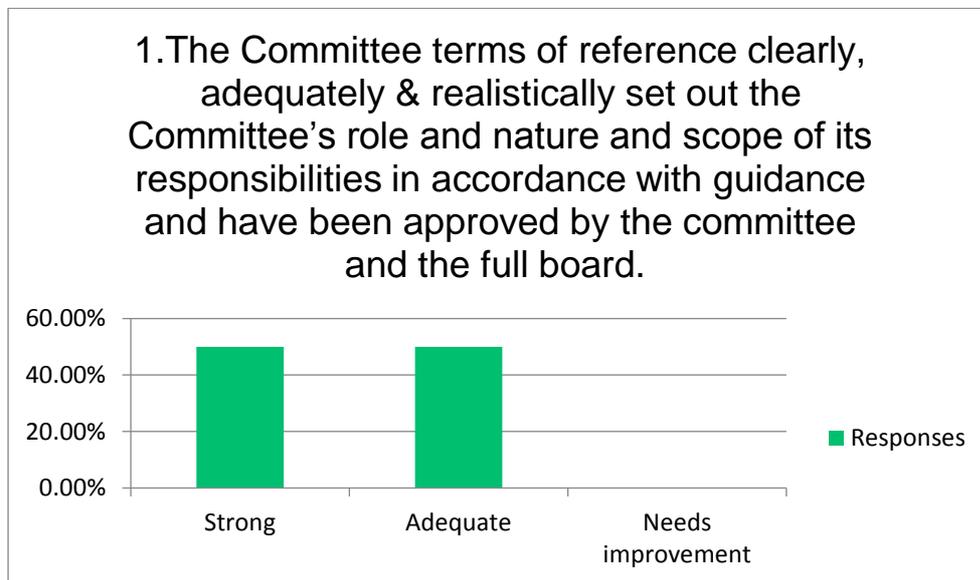


Saunders, Nathan
06/08/2021 14:36:47

Annual Board Effectiveness Survey 2020-2021

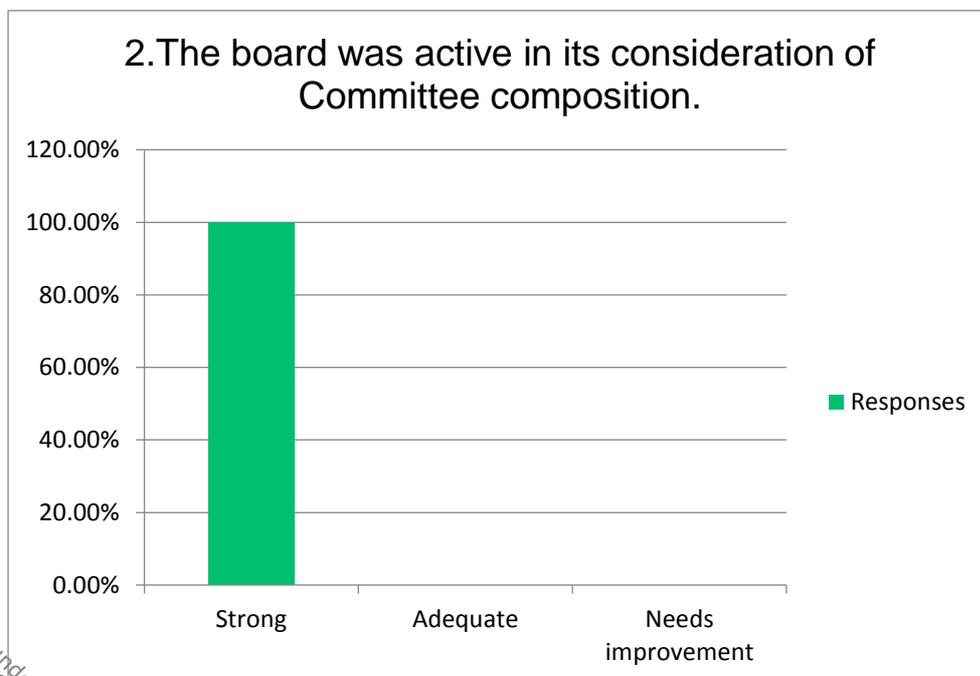
Quality, Safety and Experience Committee Self Evaluation 2020-2021

- 4 responses received



Comments received:

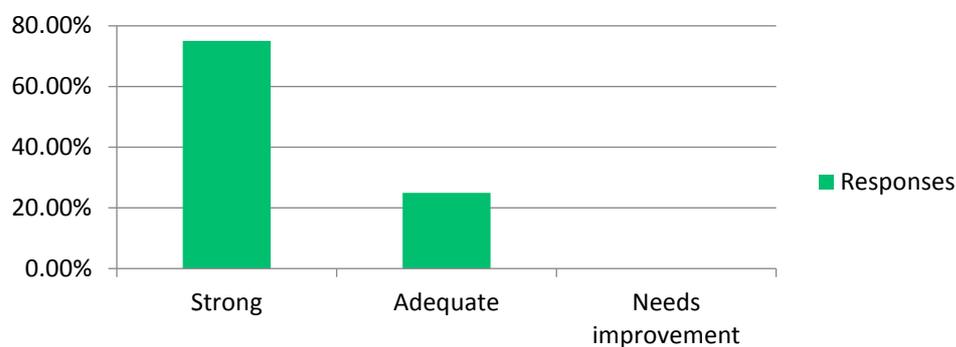
- A key priority area and focus for us



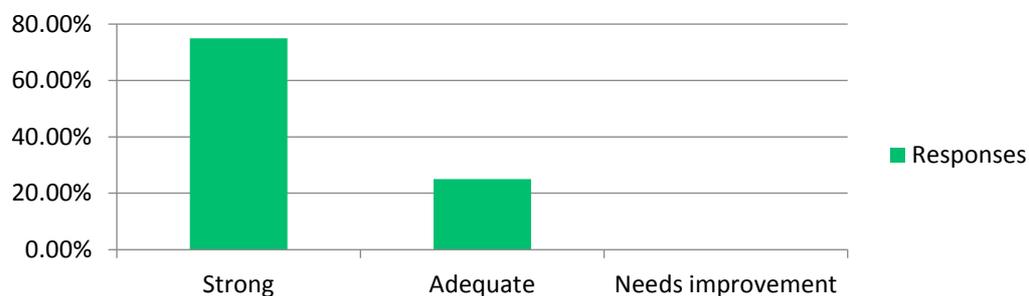
Comments received:

- Always interested and attentive to these issues

3. The Committee actions reflect independence from management, ethical behaviour and the best interests of the Health Board and its stakeholders.



4. The Committee meeting packages are complete, are received with enough lead time for members to give them due consideration and include the right information to allow meaningful discussion. Minutes are received as soon as possible after meetings.

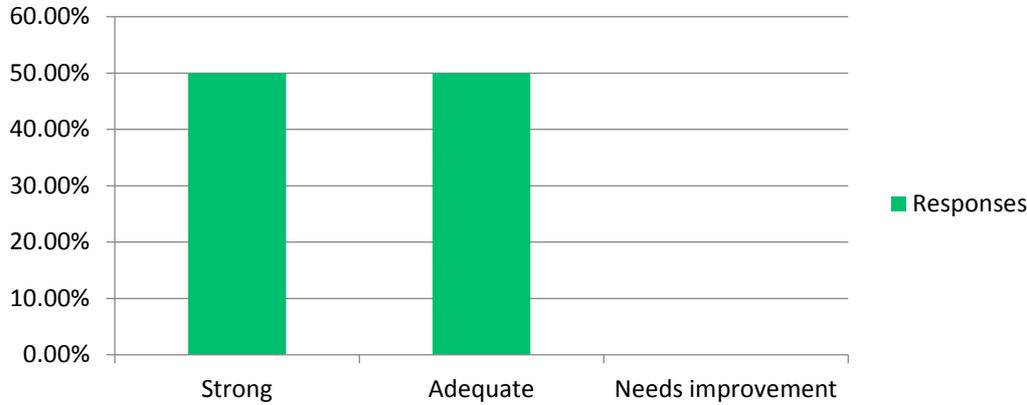


Comments received:

- Yes but a lot of papers and lengthy

Saunders, Nathan
06/08/2021 14:36:47

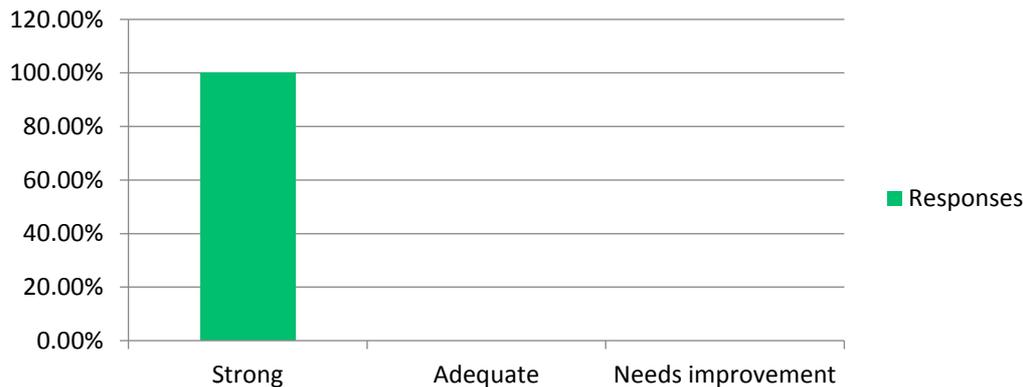
5. Committee meetings are well organised, efficient, and effective, and they occur often enough and are of appropriate length to allow discussion of relevant issues consistent with the committee's responsibilities.



Comments received:

- Meetings often run over the time allocated on the agenda
- Agenda remains heavy and full

6. Appropriate internal or external support and resources are available to the Committee and it has sufficient membership and authority to perform its role effectively.

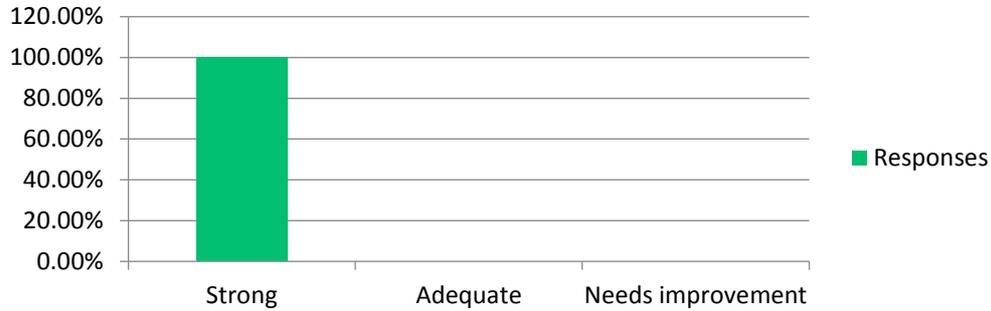


Comments received:

- Good support from patient experience team and others

Saunders, Nathan
06/08/2021 14:36:47

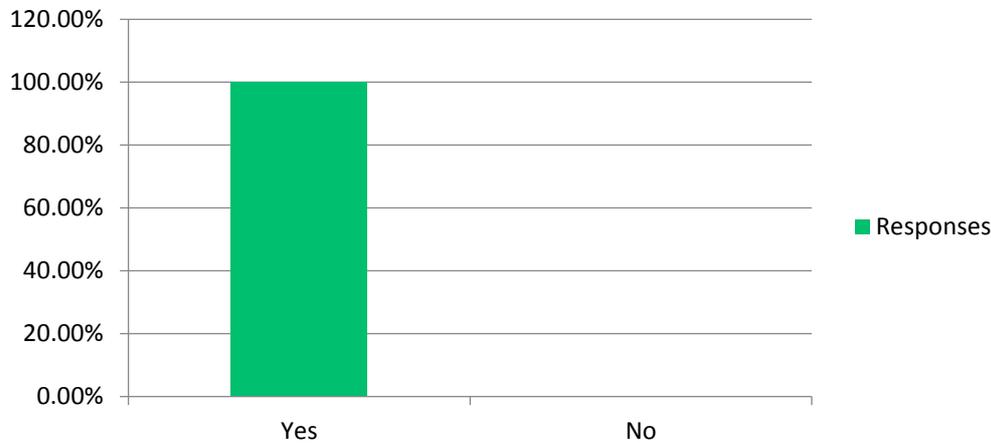
7.The Committee informs the Board on its significant activities, actions, recommendations and on its performance through minutes and regular reports and has appropriate relationships with other committees.



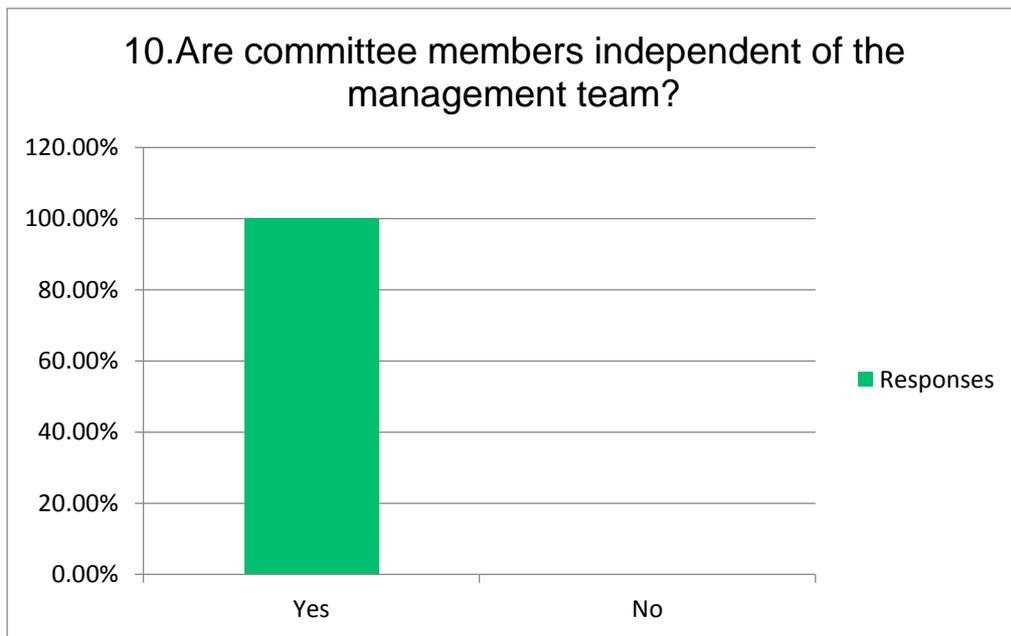
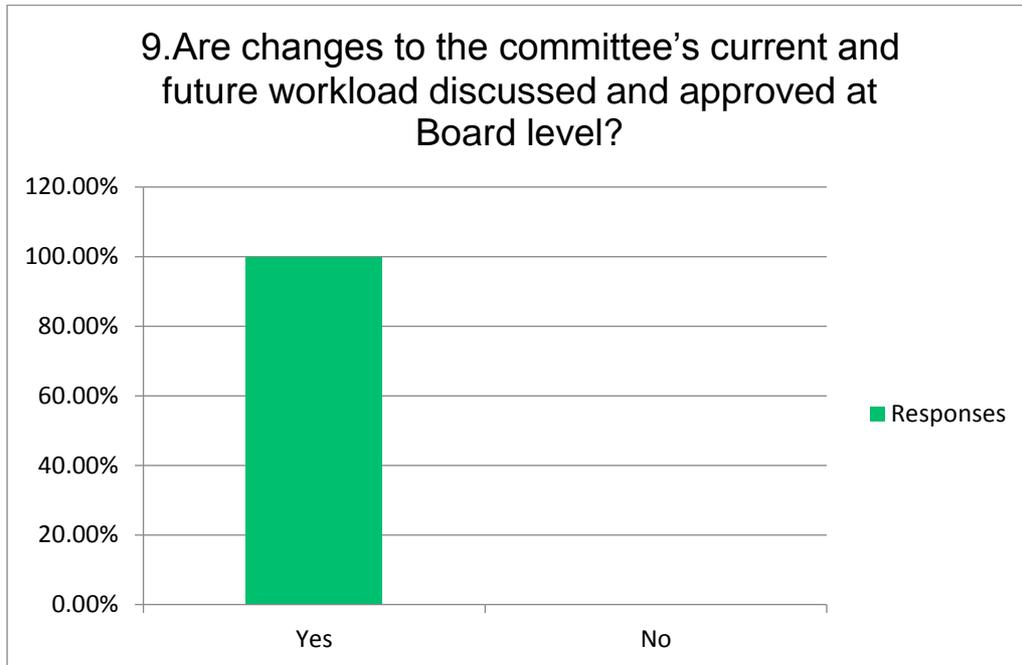
Comments received:

- Yes minutes attached to board and chair can raise issues for Board attention

8.Are the terms of reference reviewed annually to take into account governance developments and the remit of other committees within the organisation?



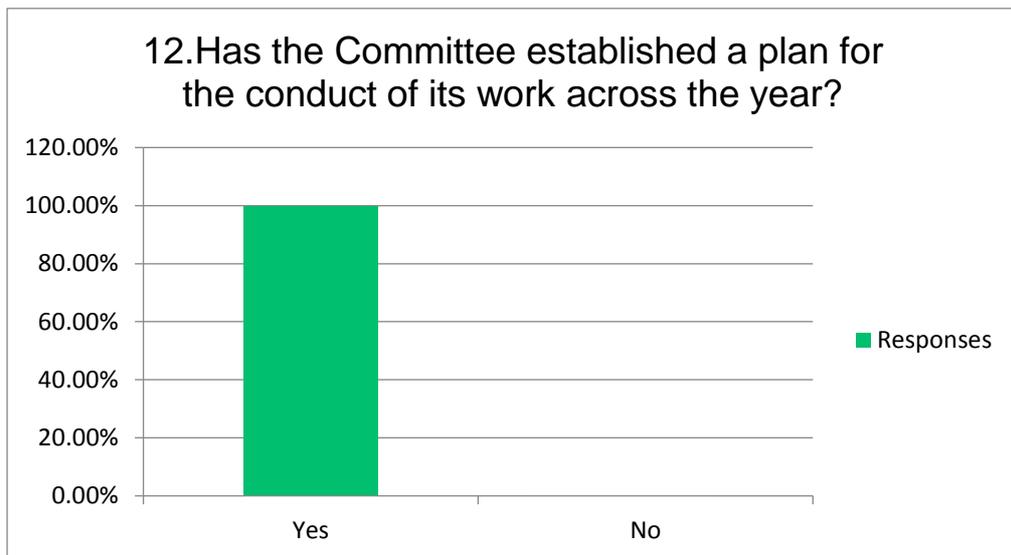
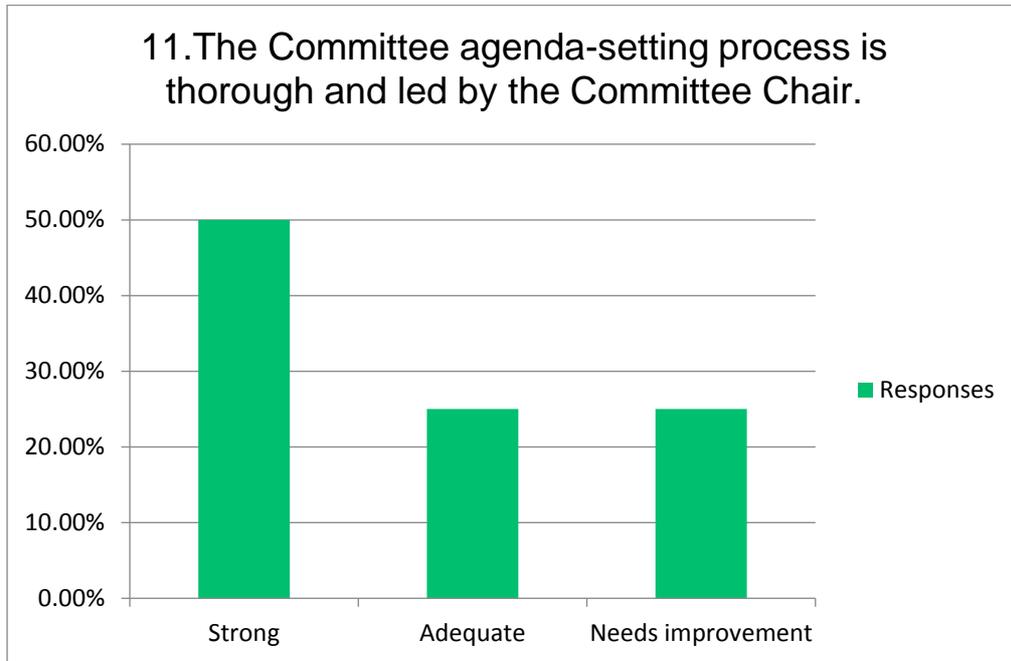
Saunders,Nathan
06/08/2021 14:36:47



Comments received:

- Strong challenge for assurance from IMs

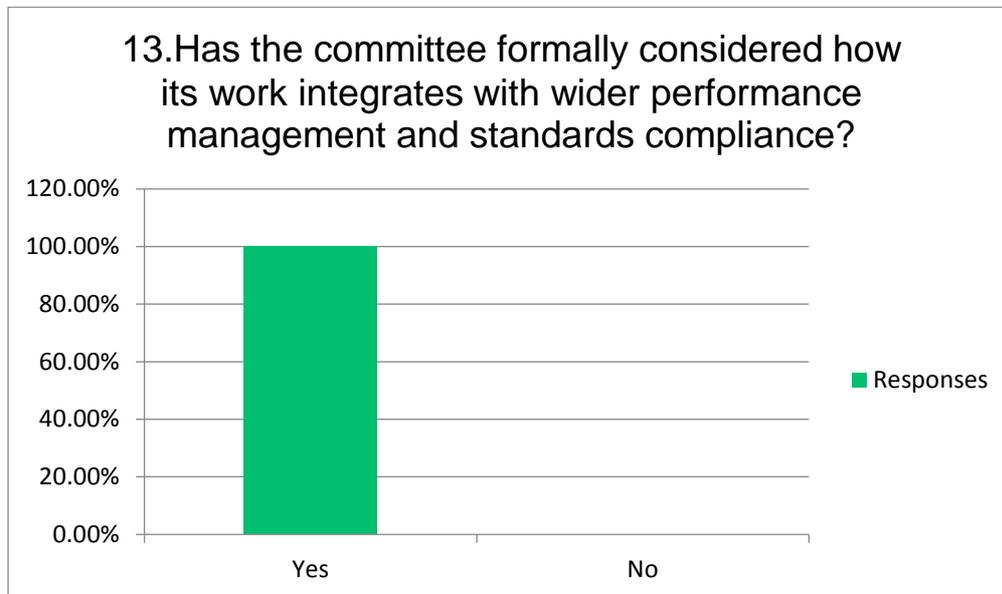
Saunders, Nathan
06/08/2021 14:36:47



Comments received:

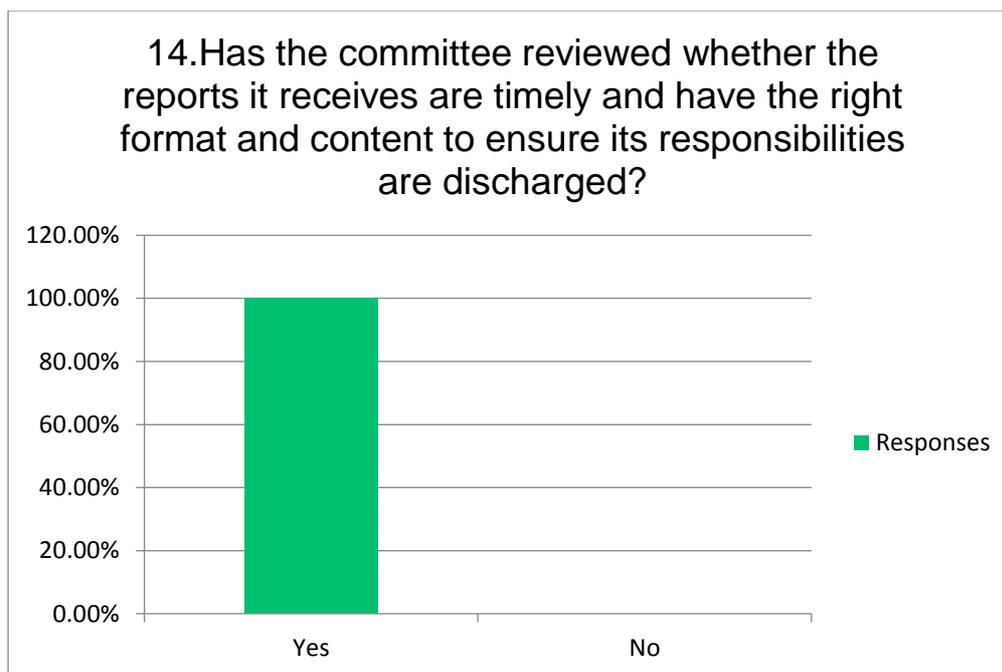
- Always a forward plan

Saunders, Nathan
06/08/2021 14:36:47



Comments received:

- Yes, consideration undertaken

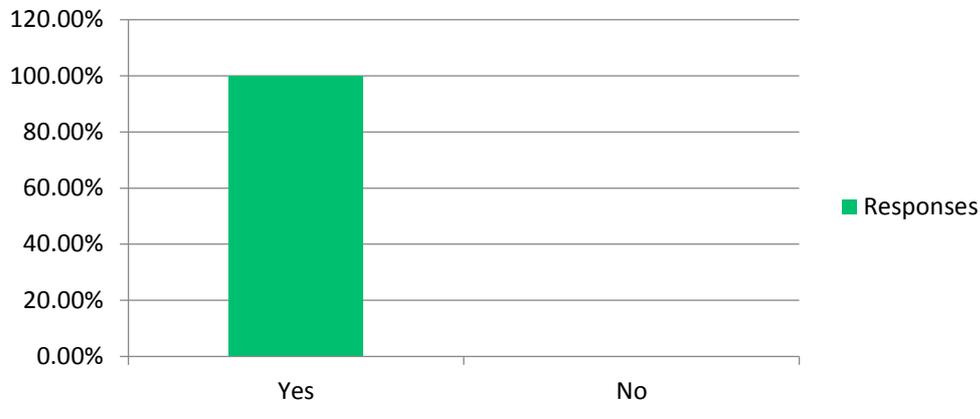


Comments received:

- Yes adjustments requested as need arises

Saunders,Nathan
06/08/2021 14:36:47

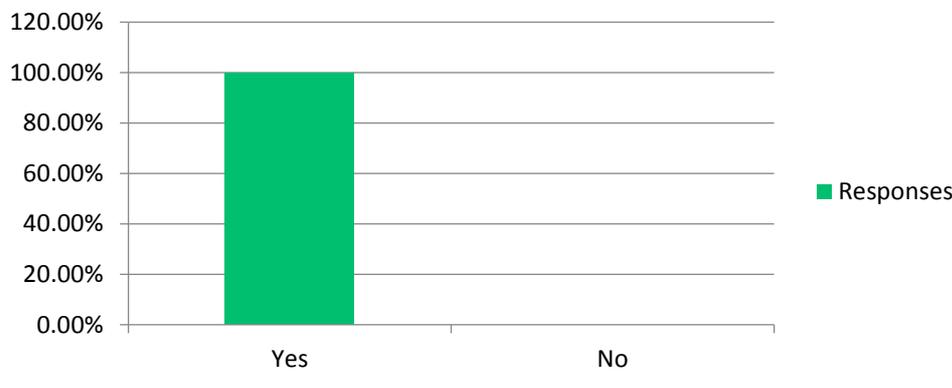
15.Does the Board ensure that Committee members have sufficient knowledge of the organisation to identify key risks and to challenge line management on critical and sensitive matters?



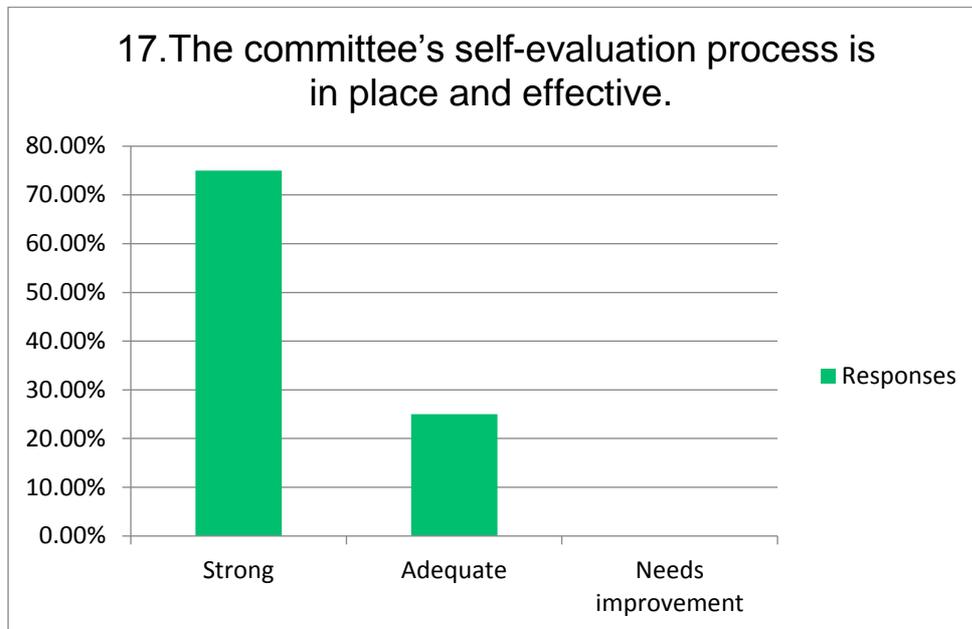
Comments received:

- Yes induction, though patient safety walk rounds suspended due to COVID

16.Is the committee satisfied that the Board has been advised that assurance reporting is in place to encompass all the organisations responsibilities?

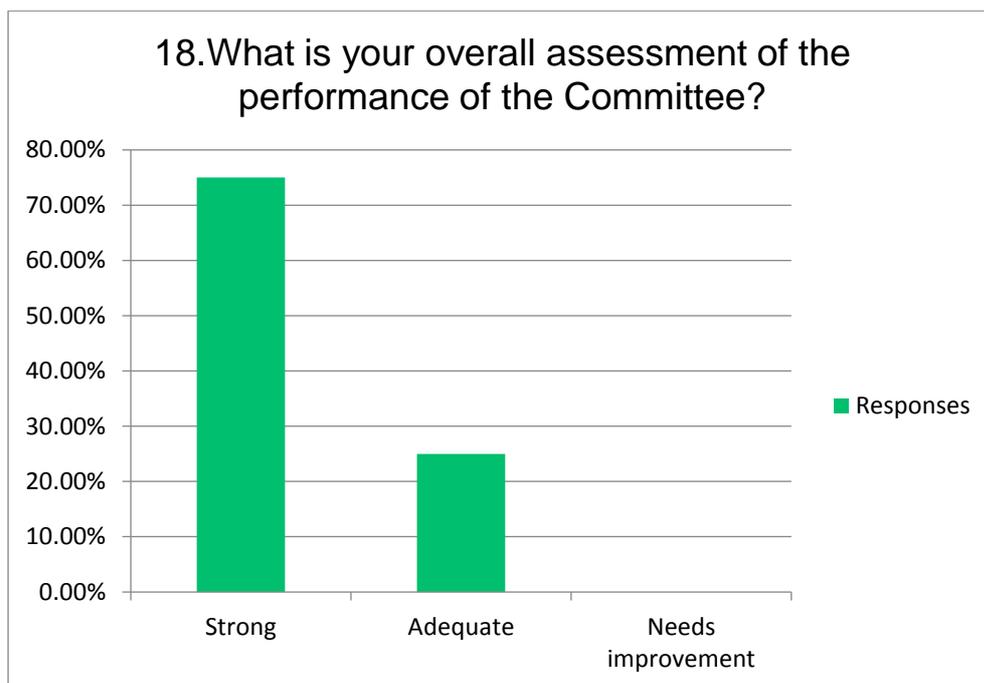


Saunders,Nathan
06/08/2021 14:36:47



Comments received:

- Frequently review and amend as needed/guided



Comment received:

- only issue is length of agenda

Additional comments received:
improved as time goes on

Saunders Nathaniel
06/08/2021 14:36:47

Board Effectiveness – Self Assessment 2020-2021 Action Plan

The table below identified areas from the Annual Committee Effectiveness Survey 2020-2021 undertaken in April 2021, that suggested a need for Further Improvement

Question asked 2020-2021	Response and Action Required	Lead	Timescale to complete
<p>Board 8. We Identify and Share Best Practice and benchmark</p>	<p>The Board are proactive in utilising business intelligence to support effective decision making and benchmarking is undertaken through the various NHS Wales professional peer groups, for example the NHS Wales Directors of Nursing Group, NHS Wales Board Secretaries Network etc.</p> <p>Action Consider strengthening and developing sharing best practice and benchmarking at a future Board Development session.</p>	<p>Executive Nurse Director, Executive Director for Strategic Planning Executive Medical Director, Chief Operating Officer, Executive Director of Workforce and OD.</p>	<p>Dec 2021</p>
<p>Charitable Funds Committee 4. Committee meetings packages are complete, received with enough lead time for members to give them due consideration and include the right information. Minutes are received as soon as possible after the meeting.</p> <p style="font-size: small; transform: rotate(-45deg); position: absolute; bottom: 10px; left: 10px;">Saunders, Nathan 06/08/2021 14:36:47</p>	<p>All Committee papers are issued in accordance with section 7.4.3 of the Standing Orders, specifically: <i>“7.4.3 Board members shall be sent an Agenda and a complete set of supporting papers at least 10 calendar days before a formal Board meeting.”</i></p> <p>Action - The Corporate Governance team will continue to adhere to internal performance standards for the review, approval and issuing of minutes, and will ensure that all minutes are issued swiftly.</p> <p>A review of the timeliness of papers being issued against the internal targets set will be undertaken to monitor effectiveness.</p>	<p>Director of Corporate Governance</p>	<p>Dec 2021</p>

	Agenda planning meetings will confirm that minutes have been approved by the Chair and circulated to Members as required.		
<u>Health & Safety Committee</u> 2. The Board is active in its consideration of the Committee's composition	<p>The Composition of the Health & Safety Committee is outlined in its Terms of Reference which are agreed by the Board.</p> <p>The DCG will liaise with the Chair and review the composition of all Committees and the scheme of delegation within the Standing Orders will be updated.</p>	Director of Corporate Governance	Sept 2021
<u>Health & Safety Committee</u> 4. Committee meetings packages are complete, received with enough lead time for members to give them due consideration and include the right information. Minutes are received as soon as possible after the meeting.	<p>All Committee papers are issued in accordance with section 7.4.3 of the Standing Orders, specifically: <i>"7.4.3 Board members shall be sent an Agenda and a complete set of supporting papers at least 10 calendar days before a formal Board meeting."</i></p> <p><i>Action</i> - The Corporate Governance team will continue to adhere to internal performance standards for the review, approval and issuing of minutes, and will ensure that all minutes are issued swiftly.</p> <p>A review of the timeliness of papers being issued against the internal targets set will be undertaken to monitor effectiveness.</p> <p>Agenda planning meetings will confirm that minutes have been approved by the Chair and circulated to Members as required.</p>	Director of Corporate Governance	Dec 2021
<u>Quality, Safety, Experience Committee</u> The Committee agenda setting process is thorough and led by the Committee Chair.	All Board/Committee meetings are supported through an agenda planning meeting which reviews the agenda, minutes, action log and length of the meeting. The Committee Chair attends the meeting and is involved in setting	Director of Corporate Governance	May 2021

	<p>the agenda with the Director of Corporate Governance.</p> <p>A meeting guidance document will be produced and issued to Officers and Independent Members and all agenda planning meetings will consider the length of the agenda, items for the agenda, time allowed for agenda items, approval of minutes and action logs, terms of reference, quoracy, Chairs report for Board etc</p>		
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

Saunders, Nathan
06/08/2021 14:36:47

Report Title:	Corporate Risk Register					
Meeting:	Quality Safety and Experience Committee			Meeting Date:	15 th June 2021	
Status:	For Discussion	✓	For Assurance	✓	For Approval	For Information
Lead Executive:	Director of Corporate Governance					
Report Author (Title):	Head of Risk and Regulation					

Background and current situation:

The Corporate Risk Register ('the Register') has been developed to enable the Board to have an overview of the key operational risks from the Health Board's Clinical Boards and Corporate Directorates. The Register includes those risks which are rated 15 and above and provides the Board and it's committees with an overview of the Health Board's extreme Operational Risks.

Each risk within the Register is linked to a Committee of the Board and the Board Assurance Framework. Those risks which are linked to the Quality, Safety and Experience Committee are attached at Appendix A for further scrutiny and to provide assurance to the committee that relevant risks are being appropriately recorded, managed and escalated.

Executive Director Opinion /Key Issues to bring to the attention of the Board/ Committee:

The Head of Risk and Regulation and his team continue to work with clinical and corporate colleagues to refine risk descriptors, controls and actions within Risk Registers and over the following months the quality and consistency of risk scoring should continue to improve.

Alongside this process the Risk and Regulation Team continue deliver a weekly Risk Management Training session (each Friday) and provide ongoing support and training to risk leads across the Health Board.

Assessment and Risk Implications (Safety, Financial, Legal, Reputational etc:)

At the Health Board's May Board meeting a total of 16 (from a total of 24 live) Extreme Risks reported to the Board related to patient safety and are linked to the Quality, Safety and Experience Committee for assurance purposes. Details of those risks are attached at Appendix 1 but can be summarized as follows:

Risk Score (1 to 25) - Clinical Board	15/25	16/25	20/25	25/25
CD&T	1	1		
Medicine			3	
PCIC				
Specialist Services	3	2	4	
Surgery		1		
Digital Health		1		
Total: 15	4	5	7	

Although there are a high number of risks rated 15 and above, over the course of time, as the impact of Covid-19 reduces and with appropriate scoring these risks should reduce. It should also be noted that the register, despite being over scored in some areas, does provide an indication of the patient safety risks the organisation is dealing with operationally.

ASSURANCE is provided by:

- Ongoing discussions with Clinical Boards and the Corporate Directorates regarding the scoring of risk.
- The programme of education and training that will be rolled out by the Head of Risk and Regulation to ensure that the Health Board's Risk Management policy is engrained and followed within Clinical Boards and Corporate Directorates.

RECOMMENDATION

The Committee is asked to:

NOTE the Corporate Risk Register risk entries linked to the Quality, Safety and Experience Committee and the work which is now progressing.

Shaping our Future Wellbeing Strategic Objectives

This report should relate to at least one of the UHB's objectives, so please tick the box of the relevant objective(s) for this report

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	X
2. Deliver outcomes that matter to people	X	7. Be a great place to work and learn	X
3. All take responsibility for improving our health and wellbeing	X	8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	X
4. Offer services that deliver the population health our citizens are entitled to expect	X	9. Reduce harm, waste and variation sustainably making best use of the resources available to us	X
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time	X	10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered

Please tick as relevant, click [here](#) for more information

Prevention	X	Long term		Integration		Collaboration		Involvement	
------------	---	-----------	--	-------------	--	---------------	--	-------------	--

Equality and Health Impact Assessment Completed:

Yes / No / Not Applicable

If "yes" please provide copy of the assessment. This will be linked to the report when published

Ymddiriedaeth ac uniondeb / Cyfrifoldeb personol

Patient Safety Risks from May 2021 Board meeting

Clinical Board/Corporate Directorate	Risk Reference	Date risk added	Risk	Initial Risk Rating			Controls	Current Risk rating			Actions	Target Risk rating			Date of next review	Assurance Committee	Link to BAF
				Consequence	Likelihood	Total		Consequence	Likelihood	Total		Consequence	Likelihood	Total			
Medicine	1	12/06/2020	Due to failures to maintain adequate social distancing in ward and emergency unit areas there is an increased risk of transmitting Covid-19 and the consequential risk of patient and/or staff harm.	5	5	25	Purple areas making attempts to adhere to social distancing in ward and emergency unit areas. It is recognised that social distancing is not always maintained on nightingale wards. Beds are blocked to create the correct social distancing space when capacity allows. UHB guidance is that capacity is not lost except in exceptional circumstances which are supported by the Clinical Board and IP&C and Executive team.	5	4	20	Review of all wards and Emergency Unit areas to ensure that bed/trolley spaces and patient areas adhere to the social distancing principles, as is reasonably possible, whilst not blocking physical spaces. Ensure that patients have received appropriate education in social distancing and maintaining their safety in hospital. Any areas that have been assessed by the Senior/Lead Nurse and IP&C that do not adhere to social distancing principles and still pose an increased risk to patients secondary to unchangeable environment and ergonomics should be escalated to the Clinical Board.	5	2	10	Jun-21	Quality, Safety and Experience Committee	Patient Safety
Medicine	2	01/12/2021	There is a risk of patient harm due to patients remaining on WAST ambulances for above the agreed 15 minute Welsh Government turn around time secondary to lack of capacity within the Directorate and UHB.	5	5	25	When patient arrives by WAST, patient is booked in and major assessment nurse (MAN) is alerted to immediately triage patient and handover taken. If there is any change in the patient's condition, the WAST crew will immediately inform the MAN. Concern by either party about the length of any delay or the volume of crews being held will be escalated by the Senior Controller/EU NIC to the Patient Access for usual UHB escalation procedures, or by WAST to their Silver Command. WAST have introduced a number of hospital avoidance initiatives with some evidence this has reduced ambulance transfers. Protection of Resus capacity when possible including Temporary additional capacity as Spire. Regular review of endoscopy template throughput in line with IP&C regulations. Change in pathway for some patients using alternative yet suboptimal alternative investigation eg, minimal prep CT	5	4	20	Review of all wards and Emergency Unit areas to ensure that bed/trolley spaces and patient areas adhere to the social distancing principles, as is reasonably possible, whilst not blocking physical spaces. Ensure that patients have received appropriate education in social distancing and maintaining their safety in hospital. Any areas that have been assessed by the Senior/Lead Nurse and IP&C that do not adhere to social distancing principles and still pose an increased risk to patients secondary to unchangeable environment and ergonomics should be escalated to the Clinical Board.	5	2	10	Jun-21	Quality, Safety and Experience Committee	Patient Safety
Medicine	3		There is a risk of delays in patient care and serious incidents for delayed cancer diagnosis due to an accumulation of therapeutic and surveillance backlog for Endoscopy secondary to COVID restrictions.	4	5	20	Temporary additional capacity as Spire. Regular review of endoscopy template throughput in line with IP&C regulations. Change in pathway for some patients using alternative yet suboptimal alternative investigation eg, minimal prep CT	4	5	20	Endoscopy unit expansion (as per IMTP). Introduce 6 day working. Establish appropriate endoscopy workforce levels. SBAR completed highlighting plans and risks going forward to be discussed with Clinical Board. August 20 Endoscopy recovery plan commenced with further benefits of FIT testing being discussed with the Clinical Board.	4	3	12	Jun-21	Quality, Safety and Experience Committee	Patient Safety
Specialist Services Clinical Board	4	26/09/2011	Critical Care - Nursing Workforce There is a risk that patients will not be admitted to the Critical Care Department in a timely and safe manner due to insufficient Critical Care Nursing Capacity resulting in patient safety risks including serious harm and death, staff burnout and a failure to adhere to national standards and guidelines. This risk is currently exacerbated by the consequences of the Covid19 pandemic due to staff absences due Covid19 infection, shielding & self-isolation requirements, and the significant associated impacts upon staff wellbeing.	5	5	20	Block booking of temporary staffing is ongoing; Recruitment strategies in place (ongoing recruitment events); Increased our educational team from 2.64 WTE to 5.04 WTE to support the junior workforce; Relying on the availability of an additional clinical area to admit patients; Working collaboratively with patient access to identify beds in a timely manner for Level 1 patients (not currently effective) Robust implementation of the CC escalation plan; Implement the smaller pod-focused initiative.	5	20	20	Develop a strategy to attract prospective employees to work in C&V CC; Develop further cross- Health Board working; Develop a staff feedback opportunity to generate ideas to support Point 1. Gain support from HR and Recruitment to have an open CC recruitment advert; Implement the Leadership Programme developed for senior staff Identify a more robust process for discharging patients within the 4 hour target; Robust implementation of the CC escalation plan; Develop a staff feedback opportunity to generate ideas to support Point 2. Initiate Workforce Task & Finish Group	5	2	10	Jun-21	Quality, Safety and Experience Committee	Patient Safety/Planned Care Capacity
Specialist Services Clinical Board	5	10/07/2020	Critical Care - Facility Issues There is a risk that patients admitted to the Critical Care Department will not receive care in an environment that is suitable for purpose due to a number of facility shortcomings resulting in patient safety risks including serious harm and death. The normal capacity is 35 beds with a single isolation cubicle. Analysis shows that the stated normal capacity is inadequate for the population served and needs to increase to 50 beds. The number of isolation cubicles is significantly below national guidelines and presents serious Infection Control & Prevention risks. The Covid19 crisis has led to a temporary increase in capacity to 44 beds however the isolation cubicle capacity remains at 1. There is no air handling available on the unit which results in there being no means to manage airborne infection risk or manage ambient temperatures. This exacerbates the IP&C risks and also compromises the care of patients where temperature is a critical concern. The well being of staff working in the environment is also compromised leading to issues of heat exhaustion and collapse secondary to dehydration. The inadequate size of the facility footprint leads to there being inadequate space for all non-clinical areas including office space, consumable storage, clean utility area, dirty utility areas, equipment storage, pharmaceutical storage, device storage and management hubs areas.	5	5	25	The clinical area is divided into zones to where patients are grouped according to IP&C risk to reduce the risk of cross-infection. Staff entering the clinical area are required to wear full PPE to reduce the risk of cross-infection.	5	4	20	There is an urgent need for a capital investment program and business case developed to address this need.	5	2	10	Jun-21	Strategy and Delivery Committee	Patient Safety/Capital Assets

Saunders Nathan
06/09/2021 14:36:47

Specialist Services Clinical Board	6	01/01/2010	Haematology & Immunology - There is an inadequate clinical environment for the care of Haematology Patients (including Bone Marrow Transplant). This creates a risk of cross infection for patients particularly vulnerable to infection. There is a potential impact on patient morbidity and mortality, quality of service and reputation. Despite the controls and assurances currently applied, it is extremely likely that the clinical environment will not meet the minimum required standard at the next JACIE accreditation assessment and the ensuing consequences of this cannot currently be prevented.	5	5	25	Risk specific policies, protocols, and guidelines. Cleaning schedules. Installation of air pressure gauges outside BMT cubicles to measure positive air pressures. Patients admitted to ward C4 North (amber) for triage prior to admission to B4 (green).	5	4	20	Escalated to Clinical Board, estates and WHSSC. There is an urgent need for a capital investment program and business case developed to address this need.	5	1	5	Jun-21	Strategy and Delivery Committee	Patient Safety/ Capital Assets
Specialist Services Clinical Board	7		Cardiothoracic - Clinical Area Relocations and Reduced Footprints Following multiple relocations of the level 2 CCU Unit, Pacing theatre, PCI Service and acute cardiology beds there is a risk of sub-optimal patient experience and/or patient harm. Causes: 1) No of line of sight of patients: increased risks of unwitnessed patient deterioration & cardiac arrest, unwitnessed falls and inadequate staffing levels for the acuity of patients. 2) Reduced size bed spaces: restricted use of clinical equipment, patient access and staff activity during emergency procedures. 3) A reduced departmental footprint and increased patient flow: insufficient space in general & utility areas leading to increased fire hazard, increased IP&C risks, social distancing issues, reduced bed capacity, insufficient consumables & equipment storage, patient care delays and reduced continuity, increased risk of patient complaints, increased pressure on staff resources, restricted flow of staff and patients, limited space to perform tasks, increased noise, communication issues, patient dignity issues (mixed gender unit) and reduced isolation facilities for palliative care, shielding, aerosol generating procedures. 4) Compromised service pathways, patient flow & reduced access to other departments: additional patient ward movements, increased escalation to critical care, reduced emergency support, Amber patients transit via critical care Blue zone, compromised access to the shielding area, compromised 'Treat & repatriate service' and reduced day case activity.	5	5	25	Close management and review of the allergy waiting list.	5	4	20	Fully utilise existing medical and nursing availability to maximise clinic capacity. Close monitoring of waiting lists.	5	2	10	Jun-21	Quality Safety and Experience Committee	Patient Safety
Specialist Services Clinical Board	8		Haematology, Immunology and Metabolic Medicine - Allergy Services Reduced allergy services in neighbouring Health Boards has contributed to a significantly increased number of referrals to C&VUHB. This has contributed to insufficient capacity for allergy patients on the out patient waiting list to be seen in a timely manner resulting in delayed diagnosis and the increased risk of anaphylaxis.	4	4	16	Regular review of the allergy waiting list. Close scrutiny by clinical team to ensure that all patients waiting need to be reviewed by this service.	4	5	16	Long term solution has not been identified. Review of clinical service model being explored in collaboration with the I&I team.	4	2	8	Jun-21	Strategy and Delivery Committee	Patient Safety
Specialist Services Clinical Board	9	07/08/2020	Major Trauma Centre - Theatre Capacity Due to a combination of COVID security measures and staffing challenges theatre capacity for major trauma has been reduced from original plan of 13 sessions to an interim plan of 0-4. As a consequence, access to major trauma theatre may be delayed by competing needs / priorities or other planned surgeries may have to be delayed or cancelled. This may result in an adverse impact on patient safety and quality of care.	4	4	16		4	4	16		4	2	8	Jun-21	Strategy and Delivery Committee	Patient Safety/ Capital Assets
Digital Health	10	20/07/2020	The Health Board's IG policies and procedures are not up to date/do not cover all relevant areas. Procedures are not aligned to relevant national policies which creates a lack of clarity in terms of how UHB expects its staff to work for relevant accountabilities to be discharged leading to the risk that the UHB will be in breach of its statutory and regulatory responsibilities.	4	4	16	Controlled document framework requirements delayed due to resource constraints - Overarching IG policy approved Feb 2020 which incorporates a number of policies i.e. Email policy, Internet policy, Information Security policy	4	4	16	Reorganisation of workload to provide for full review of policies. Sept 2020: workplan to review and update all outstanding policy and procedure documents in the CDF scheduled for completion by Dec 2020. Nov 2020: Work priorities being assessed to ensure review work can be completed against the timescale above.	4	2	8	Mar-21	Digital Health Intelligence Committee	Patient Safety

Surgery Clinical Board	11	SSDW/01/2013	Failure to provide timely access to surgery which significantly affects the patients quality of life and can in some cases exacerbate their condition. Increased risk to patients who's condition may deteriorate whilst waiting for surgery due to Covid	4	5	20	Development of Green Zones in both UHW and UHL to protect cancer and urgent patients who require surgery. Proactive Discharge Planning required to ensure bed availability in a timely manner and ensure. Quality assurance of patients waiting on list is undertaken and treatment expedited if GP requests urgent referral or if information received indicated urgent need of referral - this is overseen by a consultant. Weekly discussions to review longest waiters and the appropriate booking of them. Audit data on surgical patients has been collected since March 2020	4	4	16	Due to changes in requirements in theatre due to Covid pandemic our ability to provide theatre and PACU slots is greatly reduced. CB still supporting the T&T and MERIT teams. Delays in opening Green Zone for Orthopaedics and breast in UHL due to estate delays - now due to open 9th Nov	4	2	8	Jun-21	Quality, Safety and Patient Experience	Patient Safety/Planned Care Capacity
CD&T	12	14/07/2020	Backlog of diagnostics and services. Context: COVID 19 security, resilience and response Risk: Increased morbidity and mortality to patients due to delayed pathways. Missed and/or delayed cancer or critical illness diagnosis due to incorrect prioritisation. Cause: Reduction in capacity of the service (as a consequence of COVID 19) as follows: - A reprioritisation of activity - The imposition of social distancing on staff working in diagnostic and therapeutic areas - A need for additional decontamination with a commensurate demand on staff time - Additional constraints on staff availability (due to shielding, sickness absence) - A reduced number of patients attending hospital Impact: Resulting in adverse impact on patient safety and service quality, with an increase in concerns/complaints and an adverse impact on reputation.	4	5	20	Priority matrices Scheduling based on priority rather than time waited Virtual consultation Communication with service users Health Pathways redesign (e.g. foot pain, DXA)	4	4	16	Explore opportunities across professions Fully embed clinical prioritisation model of performance	4	3	12	Jun-21	Quality, Safety and Experience Committee	Patient Safety
CD&T	13	05/05/2021	Point of care Testing (POCT) Risk of error and incorrect testing results leading to patient harm due to a failure to adhere to the POCT guidance referred.	5	4	20	POCT manager in place Central register of POCT devices Standard operating procedures (SOPs) which must include the manufacturer's instructions for use, are developed. This include instances where staff should be particularly aware of situations when the device should not be used Record keeping is essential and must include patient results, test strip lot number and operator identity Maintaining devices according to the manufacturer's guidance is essential, to ensure that they continue to perform accurately	5	3	15	1.Clinical Lead and Clinical Scientist roles to be put in place 2.Re-establishment of POCT committee 3.Review implementation of POCT procedure within Clinical Boards 4.Review of current POCT stock and seek assurance on training, competence assessment, SOPs, maintenance, audit	5	2	10	Jun-21	Quality Safety and Experience Committee	Patient Safety
Specialist Services Clinical Board	14	60/01/2016	Critical Care - Bed Capacity Due to an inadequate bed capacity there is a risk that patients will not be admitted to the Critical Care Department in a timely and safe manner. Where demand exceeds capacity patients are cared for in inappropriate settings such as Recovery Area, Emergency Department and ward areas and patients may be discharged at risk to generate capacity. This risk of delayed admission to Critical Care Dept or care in inappropriate settings could lead to increased morbidity and mortality, increased re-admission rates, longer hospital length of stay and a failure to adhere to national standards and guidelines. A resumption of pre-pandemic service levels and a restoration of previous clinical area configurations will lead the risk level to increase to its previously elevated level.	5	5	25	Highlight patients to Patient Access for discharge to ward areas Additional footprint identified for more Critical Care capacity Funding has been granted by the Executive Team for 6 additional Level 3 equivalent beds in CC and these have been commissioned recently.	5	3	15	Continue to work with Patient Access and Health Board to have more effective discharge processes in place. Not all of the recommended staff are being supported at this time. Increase Patient Flow role to 7 days per week	5	2	10	Jun-21	Quality, Safety and Experience Committee	Patient Safety/Capital Assets
Specialist Services Clinical Board	15	17/02/2020	Haematology, Immunology & Metabolic Medicine - TYA Oncology Services TYA cancer patients may elect to have their treatment on the designated TYA cancer unit hosted in University Hospital of Wales. Chemotherapy plans are determined by the site specific MDT/ Consultant and facilitated by the TYA cancer Team on the unit. Chemotherapy is currently prescribed by the Consultant or TYA Staff Grade. Chemotherapy may be prescribed in 4 different ways. As a result, there are risks around: - Transcribing of chemotherapy - Lack of oversight of chemotherapy being prescribed by oncology clinician for their TYA patients - Variation in practices between UHW and VCC - Overreliance on individuals to make the TYA oncology cancer care delivery work, including patients and families to provide history.	5	4	20	Email correspondence from VCC Clinician confirming treatment plans. Expertise in pharmacy and nursing teams involved in TYA cancer care delivery.	5	3	15	Access to VCC chemocare on TCTU. Treatment plan proforma to be utilised by all TYA cancer patients. TYA team to access and use Canisc.	5	1	5	Jun-21	Quality Safety and Experience Committee	Patient Safety

Report Title:	Independent Blood Inquiry Update				
Meeting:	Quality, Safety & Experience Committee			Meeting Date:	15 th June 2021
Status:	For Discussion	x	For Assurance	For Approval	For Information x
Lead Executive:	Director of Corporate Governance				
Report Author (Title):	Corporate Governance Legal Advisor				

Background and current situation:

Following a six week suspension of hearings from 31st March 2021 until 18th May 2021 for Easter, hearings recommenced the week commencing 17th May with additional hearings scheduled until August 2021.

Due to Covid-19 restrictions, hearings continue to proceed remotely with witnesses giving evidence via video link or, on occasion, in person.

Executive Director Opinion /Key Issues to bring to the attention of the Board/Committee:

The hearings have been, and will continue to be, aired online and the Head of Risk and Regulation has put in place arrangements to ensure that hearings are attended virtually by the Health Board's Corporate Governance Legal Advisor, or himself in her absence, so that pertinent information and issues can be reported upon. Requests to physically attend the hearings cannot be made until further notice.

During January, Professor Peter Collins gave evidence pertaining to his role as director of the Cardiff Haemophilia Centre following the death of Professor Arthur Bloom. Professor Collins began his employment as Haemophilia Centre Director in 1996 and his knowledge on the practices of Professor Bloom were therefore limited to secondary anecdotal evidence and papers found in his office. A copy of Professor Collins' transcript is attached at appendix 1. Also in January, Counsel for the Inquiry shared a chronology of the treatment and death of a Cardiff Haemophilia patient, who was the first recorded haemophilia patient to contract HIV via NHS Factor VIII treatment. There was a small media reaction to this evidence which dissipated within 48 hours of publication.

From February through to March, evidence has been heard regarding medical ethics, the Haemophilia Society and charitable trusts including the MacFarlane Trust, Skipton Fund and Caxton Foundation. On 20th May 2021, Welsh Government Health Minister Vaughan Gething gave evidence on the establishment of the Welsh Infected Blood Support Scheme (WIBSS).

Saunders Nathan
06/08/2021 14:36:47

Also shared was confirmation that a letter had been sent by Paymaster General Penny Mordaunt to the Chancellor of the Exchequer Rishi Sunak in October 2020 to inform him of the inevitability of compensation being awarded to affected patients.

On 21st May 2021, Health Minister, Matt Hancock gave evidence to the Inquiry and confirmed that the Government would pay compensation if the Inquiry recommended it.

From 25th May 2021, campaigners and local chairpersons from the Haemophilia Society shared evidence pertaining to the information shared between the executive committee, medical advisory panel and the patient community. Future witnesses are scheduled to give evidence regarding Treloar's School, smaller haemophilia centers and Government witnesses.

Professor Collins, Dr Giddings and other former Health Board employees required to give evidence have been given the full support of the Health Board to ensure that they are able to fully co-operate with and assist the Inquiry. Administrative support has been provided internally however, to ensure that colleagues and former colleagues have been able to respond impartially, external independent legal advice has been sourced to assist with the preparation of witness statements and evidence.

Since December 2020 the following key issues have consistently been discussed:

- NHS/UK Self-sufficiency and the production of UK blood products;
- The date of knowledge of the risk of HIV/AIDS transmissions from blood products, particularly from imported commercial Factor VIII blood products;
- Treatment practices and guidelines, specifically the use of cryoprecipitate as opposed to commercial Factor VIII products and the differing approaches taken to children, adults and previously untreated patients;
- Issues of consent to treatment and testing; and
- Generally, the communication of risk and diagnosis with patients.
- Treatment of infected patients applying for financial relief, their financial plight and lack of funding of charitable trusts by the Dept of Health.
- The establishment, successes and criticisms of devolved counties' support schemes

The Corporate Governance Legal Advisor and the Head of Risk and Regulation have virtually attended each hearing since the 22nd September 2020 and are on hand to answer any queries that Committee Members may have.

Should Committee members wish to gain a greater understanding of the work of the Infected Blood Inquiry full details of the scope of the Inquiry and the work undertaken can be found at the following website: <https://www.infectedbloodinquiry.org.uk/>

An up to date hearing timetable can be found at the following link: <https://www.infectedbloodinquiry.org.uk/www.infectedbloodinquiry.org.uk/haemophilia-clinicians-public-hearings/haemophilia-clinicians-public-hearings-timetable>

Hearing Transcripts and other evidence shared can be found online at the following link: <https://www.infectedbloodinquiry.org.uk/evidence>

An online stream of the hearings is also shared on the Infected Blood Inquiry's Youtube Channel. Should Committee Members wish to view historic hearings or daily hearings live (with a three minute delay) they can do so via the following link:
<https://www.youtube.com/channel/UCmFkDoDeSsnYVZtNgo3150g>

Assessment and Risk Implications (Safety, Financial, Legal, Reputational etc.):

There is a risk that the evidence shared at upcoming hearings may lead to the publication of adverse press which would affect the reputation of the Health Board.

This risk will be mitigated by the Health Board's open and transparent approach to the Inquiry and through the implementation of a comprehensive communications plan.

Recommendation:

It is recommended that the Quality, Safety and Experience Committee note the contents of this report and links to inquiry resources.

Shaping our Future Wellbeing Strategic Objectives

This report should relate to at least one of the UHB's objectives, so please tick the box of the relevant objective(s) for this report

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	x	7. Be a great place to work and learn	
3. All take responsibility for improving our health and wellbeing	x	8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	
4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered

Please tick as relevant, click [here](#) for more information

Prevention		Long term		Integration		Collaboration	x	Involvement	
Equality and Health Impact Assessment Completed:	Not Applicable								

APPENDIX 1 – Evidence of Professor Peter Collins

Kind and caring
Caredig a gofalgar

Respectful
Dangos parch

Trust and integrity
Ymddiriedaeth ac uniondeb

Personal responsibility
Cyfrifoldeb personol

Friday, 15 January 2021

(10.00 am)

SIR BRIAN LANGSTAFF: Good morning, Professor Collins.

THE WITNESS: Good morning, Sir Brian.

SIR BRIAN LANGSTAFF: My apologies for speaking from and behind a mask, if you can't hear me very clearly. I hope you can. Obviously, you can see me.

Let me describe the scene to you that you're facing but, first of all, you're at home, I think.

THE WITNESS: That's correct, yes.

SIR BRIAN LANGSTAFF: Your wife is in the house?

THE WITNESS: Yes, she's here, yes.

SIR BRIAN LANGSTAFF: Right. You are talking to an Inquiry chamber which, although I know you had hoped to be here to see it in person, it's a big room, will seat about 200 people and, at the moment, we have a total of eight people in it, all very socially distanced, as you might imagine, all wearing masks except, at the moment, for Ms Scott who is going to ask you the questions. Mary, in a moment or two, will ask you to take the oath.

Beyond the Inquiry room, there will be something in the region of 100 to 200, there were just over 200 yesterday, watching either on a direct Zoom platform or on YouTube. So those are the people

1

could be transmitted through blood and blood products?

A. It would have been some time over the next year or so.

Q. Can you recall during your medical training what, if anything, you were taught about the seriousness of non-A, non-B as a disease?

A. I can't remember specifically what we were taught about non-A, non-B. We were taught that after transfusion there was the risk of hepatitis. I can't remember anything that was described about the risk of -- the severity of that or whether it would develop chronic hepatitis.

Q. Can you recall whether you ever had an understanding that it was anything other than a serious -- or it could be a serious disease and could be chronic?

A. Yes, I think I always understood it could be a chronic disease and could be serious, yes.

Q. You then undertook various house officer roles in surgery and medicine between August 1986 and February 1989; is that correct?

A. That's correct, yes.

Q. Was your first haematology post February 1989 as a Senior House Officer in Royal London Hospital?

A. That was the first formal haematology, although in my medical rotation at Oldchurch Hospital I covered some haematology there as well. But my first formal

3

you're speaking to. I imagine there will be probably a number of people from Wales, in particular, who will be interested to know what you have to tell us about that.

Mary, please would you ask Professor Collins to take the oath.

PETER WILLIAM COLLINS, affirmed

Questions by MS SCOTT

MS SCOTT: Good morning, Professor Collins.

A. Morning.

Q. I'm going to start off by asking you some questions about your CV. So we know from your witness statement that you qualified, you completed your medical training in 1986?

A. That's correct.

Q. Can you recall what you learnt during that medical training about the risk of viral infection via blood and blood products, particularly in relation to HIV and non-A, non-B?

A. I was aware from medical school training that hepatitis could be transmitted by blood products. I don't think I was aware at that time about HIV being transmitted. I was aware that -- I was aware of AIDS. That had been mentioned in my undergraduate training.

Q. Can you recall when you did become aware that HIV

2

training post in haematology was at the Royal London.

Q. Was that under Professor Colvin?

A. Well, it was -- Professor Newland was the -- managed the leukaemia side and the bone marrow transplantation and Dr Colvin the coagulation and thrombosis side.

Q. You then became an honorary lecturer in haematology in February 1990 at The Royal London; is that correct?

A. That is correct, yes.

Q. Was that a post that involved teaching?

A. No, it was really a research post, rather than a teaching post.

Q. So during that post, how much of your role involved the treatment of those with bleeding disorders?

A. I would cover bleeding disorders out-of-hours on-call and I would go on ward rounds where people with bleeding disorders were being treated as in-patients.

Q. You then had a post between September 1991 and June 1993 as the Leukaemia Research Fund Clinical Research Fellow at the Royal London. Did you spend any time during that post working with those with bleeding disorders or were your duties in relation to those of leukaemia?

A. I was employed at that time doing a thesis on thrombotic complications of bone marrow transplantation, so that was the focus of the work

4

1 then. However, I did continue throughout all of that
2 time to be involved in the care of people with
3 bleeding disorders, particularly out-of-hours.

4 **Q.** Were you involved during that time in any of the
5 testing of patients for HCV (hepatitis C)?

6 **A.** No, I wasn't involved.

7 **Q.** Then between July 1993 and July 1995 you were
8 a lecturer and honorary senior registrar in
9 haematology at the Royal London Hospital; is that
10 right?

11 **A.** I think I was at the Royal Free Hospital, or is that
12 next?

13 **Q.** No, it may be the Royal Free Hospital. I've got the
14 Royal London but it could be that it's the Royal Free.
15 Great Ormond Street I've got next.

16 **A.** Well, no from the Royal London I rotated for two years
17 to the Royal Free Hospital and then after two years
18 I rotated for one year at Great Ormond Street
19 Hospital.

20 **Q.** That must be the Royal Free Hospital then. Then
21 August 1991 for a year at Great Ormond Street
22 Hospital?

23 **SIR BRIAN LANGSTAFF:** 1995.

24 **MS SCOTT:** 1995, sorry.

25 **A.** Yes.

5

1 shared the on-call.

2 **Q.** Then in September 2001, you were appointed a Professor
3 of Haematology at the School of Medicine in Wales and
4 an honorary consultant haematologist at the Cardiff
5 Haemophilia Centre at the University Hospital Wales.

6 **A.** I was initially appointed as a senior lecturer and
7 then after that was promoted to reader and then
8 subsequently promoted to professor. So it was all the
9 academic track after that, yes.

10 **Q.** Is it right that from September 2001 approximately
11 50 per cent of your time was devoted to your academic
12 duties, teaching and so on, and 50 per cent of your
13 time to clinical work?

14 **A.** That was what my job plan was but I spent
15 substantially more than 50 per cent of my time doing
16 clinical work because of the volume of clinical work
17 and I always prioritised the clinical work over
18 research and teaching, if there was any conflict.

19 **Q.** Then in 2017 you stepped down as the Chair of the
20 Cardiff Centre and was succeeded by Dr Rayment; is
21 that right?

22 **A.** That's correct, yes.

23 **Q.** Then the other point I wanted to just to touch on on
24 your CV was your involvement with the UKHCDO. You
25 became a member of UKHCDO when you became a director

7

1 **Q.** Then in September 1996 you took up your consultant
2 haematologist post at University Hospital Wales?

3 **A.** That's correct, yes.

4 **MS SCOTT:** At the same time you became the Director of the
5 Cardiff Haemophilia Centre, which was then called the
6 Arthur Bloom Haemophilia Centre; is that correct?

7 **A.** Yes.

8 **Q.** So between 1996 and 2001 can you estimate how much of
9 your time was spent working within the haemophilia
10 centre and treating those with bleeding disorders?

11 **A.** It was probably about 80 to 90 per cent. My other
12 roles -- because I had to manage people with venous
13 thrombotic disorders, anti-coagulation and see people
14 generally around the hospital who were having abnormal
15 bleeding so, for example, after childbirth or after
16 cardiac surgery, I would be involved in treating
17 bleeding in those situations.

18 **Q.** Do I understand from your witness statement that
19 between 1996 and 2005 you were the only consultant on
20 call for those with bleeding disorders?

21 **A.** That's correct, yes.

22 **Q.** Then in 2005 that changed because you took on -- well,
23 Dr Rayment took up her post as a consultant at the
24 centre?

25 **A.** Yes. So she took up her post then and after that we

6

1 of the Cardiff centre in 1996; is that right?

2 **A.** Yes, that is correct.

3 **Q.** You have been on a number of working parties for the
4 UKHCDO, including the inhibitor working party,
5 von Willebrand disease working party, genetics working
6 party, paediatrics, rare disorders, and data
7 management, and you were the Vice-Chair between 2016
8 and November 2020; is that correct?

9 **A.** That is all correct, yes.

10 **Q.** I'm going to move on now to ask you some questions
11 about the facilities and services at the Cardiff
12 centre. So, first of all, when you took up your
13 directorship as director of the centre in
14 September 1996 can you describe the physical
15 facilities that the centre had at that time?

16 **A.** Yes. The facilities were relatively poor at that
17 time. We had a waiting room, we had one treatment
18 room and we had an office next door, and within that
19 treatment room we obviously had to manage all of the
20 people attending the centre. So it was a very -- very
21 cramped in terms of the physical space.

22 **Q.** Where were the records kept at that stage, during that
23 period?

24 **A.** The records were kept in the office, which was next
25 door to the treatment room, so that if people arrived

8

- 1 the records were readily available to be consulted.
- 2 **Q.** Then in 2000 a new haemophilia centre was built; is
- 3 that right?
- 4 **A.** Well, the first thing that happened was that, before
- 5 I arrived, it had been agreed that the haemophilia
- 6 centre would be -- the physical haemophilia centre
- 7 would be disbanded and people with bleeding disorders,
- 8 haemophilia and other bleeding disorders, would be
- 9 treated on a new haematology day unit. This caused
- 10 significant concern among the patient group and, as
- 11 I arrived, this was one of the first issues that I was
- 12 confronted with.
- 13 I think that to combine a comprehensive care
- 14 haemophilia centre and a haematology day unit is not
- 15 suitable, particularly as we were treating adults and
- 16 children, and so we had to go through, with the
- 17 patient group and myself, a process of advocating to
- 18 have a new haemophilia centre built that was separate
- 19 from the day unit and that's the position you're
- 20 describing then. So the first step that there was
- 21 a joint haematology day unit and haemophilia centre,
- 22 which I don't think was adequate for the work we were
- 23 trying to do.
- 24 **Q.** Your witness statement says that happened in 1998.
- 25 Does that sound right?

9

- 1 Oxford Haemophilia Centre, and obviously he had worked
- 2 at the Cardiff Haemophilia Centre for some time.
- 3 I was very reliant on his clinical expertise because
- 4 he was clearly a more experienced and knowledgeable
- 5 haemophilia doctor than I was when I took up that post
- 6 immediately from training. So I was very fortunate to
- 7 have someone of that competence and knowledge to be
- 8 present at the centre at that time.
- 9 **Q.** And there was a haemophilia nurse there,
- 10 Sister Jennifer Jones?
- 11 **A.** Yes, that's correct.
- 12 **Q.** You had a physiotherapist, Mrs Fiona Hall, and you had
- 13 a social worker, Mr Timothy Hunt, whose role,
- 14 I understand, was limited at that point to social work
- 15 for patients who'd been infected with HIV; is that
- 16 right?
- 17 **A.** That is all correct, yes.
- 18 **Q.** Is it also right that while you added additional staff
- 19 to the centre over the years, you have always had
- 20 nursing staff, physiotherapists and social workers at
- 21 the centre?
- 22 **A.** Yes, throughout the whole of the period, and we have
- 23 expanded the number of nurses and the number of
- 24 physiotherapists throughout that time and added, in
- 25 particular -- particularly important, paediatric

11

- 1 **A.** That's correct, yes.
- 2 **Q.** Then in 2000 the new haemophilia centre was built.
- 3 Can you describe --
- 4 **A.** Yes.
- 5 **Q.** Is that where the centre remains?
- 6 **A.** That's where the centre remains now, yes, yes.
- 7 **Q.** What are the facilities there, the physical facilities
- 8 there?
- 9 **A.** So, again, we have a waiting area, with an area for
- 10 adults and a second waiting area for children,
- 11 although it is the same physical space. We have
- 12 a consulting room and we have two treatment rooms.
- 13 One of those treatment rooms is shared with the
- 14 haematology day unit. We have an area of a reception
- 15 desk, behind which we keep all of the notes, and we
- 16 have office space as well, both physically within that
- 17 area of the haemophilia centre and then across the
- 18 corridor we have two other offices that we have access
- 19 to.
- 20 **Q.** When you took up your post in 1996, I understand from
- 21 your statement that Dr Dasani was in post and you were
- 22 the two doctors at the centre.
- 23 **A.** Yes, that's correct. Dr Dasani was an extremely
- 24 experienced and knowledgeable haemophilia doctor. He
- 25 had worked at Lord Mayor Treloar, he had worked at

10

- 1 specialist nurses have -- are now -- been working at
- 2 the centre for many years.
- 3 **Q.** We've touched on this already but you have now -- you
- 4 have got additional consultants at the centre. We
- 5 talked about Dr Rayment being appointed in 2004 but
- 6 coming to take up her post in 2005, Dr Alikhan
- 7 in 2008, Dr Heledd Roberts and Dr Obaji in 2019. So
- 8 there are five consultants now at the centre?
- 9 **A.** Since I wrote that statement there has been another
- 10 consultant appointment, Dr Gosrani, and he is
- 11 specialising in paediatrics. And that is deliberate
- 12 succession planning, so that when I retire he will
- 13 take over the management of children with bleeding
- 14 disorders. So we now have six consultants.
- 15 **Q.** And your statement says also that you have a data
- 16 manager.
- 17 **A.** Yes. So relatively early on we appointed a data
- 18 manager. I think that's very important because until
- 19 then that was falling onto the medical and nursing
- 20 staff to undertake data management duties such as
- 21 returns to the National Haemophilia Database, and so
- 22 we appointed a data manager relatively soon after
- 23 I was appointed, within a couple of years, I think.
- 24 **Q.** You also have a play specialist or play specialists.
- 25 Can you tell us a bit about them?

12

- 1 **A.** So we have a play specialist who works with the
2 children, and their role is to get children to be used
3 to having intravenous access, particularly with the
4 central lines and peripheral access, because obviously
5 some children are very nervous and afraid of having
6 treatment, and their role is to help with that
7 process, of gaining confidence of the child to have
8 treatment.
- 9 **Q.** Then in 2012 a psychology service was set up, the All
10 Wales Psychology Service for Inherited Bleeding
11 Disorders, which operates out of the centre; is that
12 right?
- 13 **A.** Yes. So that was set up in 2012 and continues today.
- 14 **Q.** So is that part of the haemophilia centre?
- 15 **A.** Yes. That's part of the haemophilia centre and it's
16 separate to the psychology service through the Welsh
17 infected blood scheme. They have a separate
18 psychology service which is not associated with the
19 haemophilia centre, so that people can choose either
20 to have psychology input from psychologists associated
21 with the centre or independent of the centre.
- 22 **Q.** The psychology service that's part of the centre
23 provides counselling and psychology services for those
24 with bleeding disorders infected with HIV and
25 hepatitis and their families; is that right?

13

- 1 for people who are attending the centre as patients,
2 it's for their families as well, and some of the
3 relatives of people who have lost family members have
4 accessed the service of psychology support as well.
- 5 **Q.** Now, the centre is the Comprehensive Care Centre for
6 mid-and South Wales; is that right?
- 7 **A.** Yes, that's correct.
- 8 **Q.** It runs two bleeding disorder clinics a month --
- 9 **A.** Two a week.
- 10 **Q.** -- sorry, a week --
- 11 **A.** Two a week.
- 12 **Q.** -- and has a 24-hour service through an out-of-hours
13 service.
- 14 **A.** Yes, that's right. There's an out-of-hours service
15 24/7 and people with bleeding disorders can access
16 that at any time.
- 17 **Q.** In addition, you have a system where people can be
18 visited at home.
- 19 **A.** Yes, that's correct and that's been very important
20 over the last nine or ten months, that in order to
21 reduce the number of people coming to the hospital,
22 a lot of our care has now been delivered in patients'
23 homes. So the physiotherapists go to patients' homes,
24 the psychologist and the nurses will go to patients'
25 homes for blood tests, so as to prevent people coming

15

- 1 **A.** Well, they provide psychology service for everybody
2 who attends the centre but with a specific remit to
3 work with people who have been affected by
4 transfusion-transmitted disease.
- 5 **Q.** That service has a consultant clinical psychologist
6 for one day a week, a principal counselling
7 psychologist for one day a week, and a highly
8 specialist clinical psychologist for three days
9 a week; is that correct?
- 10 **A.** That's correct and one of those posts is based in the
11 Swansea Haemophilia Centre so that we can have
12 appropriate access to care, more local to people's
13 homes. As part of that service, a psychologist was
14 also appointed in North Wales, associated with the
15 Bangor Haemophilia Centre but, in Cardiff, we're
16 not -- we're not involved in treatment in North Wales
17 but as part of that All Wales psychology service, that
18 happened at the same time.
- 19 **Q.** Do you know how much uptake there's been for that
20 service?
- 21 **A.** I think, to be fair, relatively slow. I think that
22 initially the uptake was slow but I think the uptake
23 is now very good and there are -- and I think that, as
24 people have got used to that service, more and more
25 people have come forward. Of course, it's not only

14

- 1 to the hospital.
- 2 **Q.** Some of the centre staff also carry out school visits.
3 What does that encompass?
- 4 **A.** Well, this is if a child is either starting school or
5 changing school. This is to make sure that the staff
6 at the school understand the bleeding disorder and
7 that the child is able to access and be involved in
8 all of the activities in the school, and it's mainly
9 to reassure the staff of the school that there
10 shouldn't be any significant impairment in what the
11 child is allowed to do.
- 12 **Q.** The centre also has a role, as I understand it from
13 your statement, in co-ordinating the care of all of
14 those diagnosed with bleeding disorders in south and
15 west Wales. Can you explain a little bit about what
16 that means.
- 17 **A.** So the haemophilia services in south, west and
18 mid-Wales are set up as a clinical network and this
19 has been led by Dr Rayment over the last three to four
20 years, so that there is not a haemophilia consultant
21 now in the Swansea Haemophilia Centre and the staff
22 from Cardiff go to Swansea to provide the care in
23 Swansea, so that someone from Cardiff will go there
24 once a week to see patients and to do out-patient
25 clinics. We're available all the time for the nurses

16

1 at the Swansea Haemophilia Centre and will react to
2 any issues that arise there.

3 The reason for that, that we had to set the
4 service up that way is that we were unable to appoint
5 a consultant to replace Dr Al-Ismail when he retired
6 and so we had to provide the service as outreach from
7 Cardiff. We also provide outreach to Nevill Hall
8 Hospital in Abergavenny and, before the travel
9 restrictions, I would go there once a month to do
10 a joint clinic with the consultant there. But we
11 still provide day-to-day clinical advice to the centre
12 in Abergavenny.

13 **Q.** So are all patients with bleeding disorders registered
14 at the Cardiff Centre or are they registered in
15 Swansea and Abergavenny as well?

16 **A.** So patients could be registered at Swansea, at
17 Abergavenny, or in Cardiff, or jointly, they could be
18 registered both at Swansea and in Cardiff. So
19 certainly patients are joint registered but some are
20 only registered in Swansea and some are only
21 registered in Abergavenny.

22 **Q.** You also provide advice on management of bleeding
23 disorders to all hospitals in the south and west of
24 Wales; is that right?

25 **A.** That's correct, so if a person has a problem they

17

1 in 1997 because that gives us quite a useful snapshot
2 of what was going on in 1997. Soumik, it's
3 HCDO0000280_061.

4 We can see from the first page that this is
5 a covering letter dated 4 June 1997, dictated 23/5/97
6 from Frank Hill, and it looks like copied to Dr Ludlam
7 and Dr Colvin. Were they undertaking the audit?

8 **A.** Dr Hill undertook the audit. I think he's probably
9 copying it to Dr Ludlam and Dr Colvin because they
10 would have been the chair of UKHCDO at the time.

11 **Q.** So the audit's fairly soon after you arrive at the
12 centre. If we go over to page 2 of the document --

13 **A.** The audit was delayed. The audit should have happened
14 the year before in 1996 but it was delayed until
15 I took up post.

16 **Q.** We can see at the first hole punch there "Haemophilia
17 patients registered". So out of those 328 patients
18 with inherited bleeding disorders registered in
19 Cardiff, of those is it right that these are the
20 haemophilia patients: severe haemophilia A 41, severe
21 haemophilia B 17, moderate haemophilia A 33, and
22 moderate haemophilia B 12; does that sound right?

23 **A.** It doesn't sound quite right to me. There are too
24 many people with moderate haemophilia. The proportion
25 of moderate haemophilia is much lower than for severe,

19

1 might go to the hospital in Haverfordwest, which isn't
2 a haemophilia centre, but that might be their closest
3 hospital and then the consultant haematologist is very
4 likely to ring us at the Cardiff centre and ask our
5 advice and we will advise on what should be done.
6 Either we can advise directly on what treatment should
7 be given or sometimes we advise that the patient
8 should be transferred to Cardiff if there is a more
9 serious problem.

10 **Q.** So you're describing there a patient going to their
11 local hospital because an event has occurred rather
12 than for their routine management?

13 **A.** Yes. It's not for routine management, no, not for
14 routine out-patient appointments. It's because they
15 have had an injury or, you know, they've been admitted
16 through casualty with abdominal pain or something like
17 that.

18 **Q.** In your statement, you've given us some figures as to
19 how many patients have been registered at the Cardiff
20 centre over the years, and you say that in 1996 there
21 were 328 patients with inherited bleeding disorders
22 registered with Cardiff, 239 of those were over 18 and
23 87 of those were under 18; is that correct?

24 **A.** Yes.

25 **Q.** Can I ask you to look at the audit that was undertaken

18

1 so those figures don't quite ring true to me, I'm
2 afraid.

3 **Q.** Then we can see there medical staff, as we touched on
4 earlier, you and Dr Dasani, nursing staff, you've got
5 two nursing staff at that stage, a social worker and
6 the physiotherapist, Ms Hall.

7 **A.** Correct, yes.

8 **Q.** Then if we go over to the next page please, Soumik, we
9 can see there that under "Other Services for
10 Children", you've got mention there of home therapy
11 and prophylaxis, so 15 to 18 of the 24 severe
12 haemophilia A boys are on prophylaxis. Then, just
13 over the page to page 3, while we're on this document,
14 we can see surgery. It sets out that there's genetic
15 counselling and then surgery, emergency surgery,
16 dental surgery and all the arrangements for
17 gynaecology, orthopaedic surgery and physiotherapy.
18 Does that look familiar and accurate?

19 **A.** Yes, that looks familiar and accurate.

20 **Q.** So I was asking you questions about numbers of
21 patients. You can take that down now, Soumik. We'll
22 come back to that document on another point a little
23 later on.

24 **SIR BRIAN LANGSTAFF:** I wonder if I can just ask
25 a question. You've told -- can we go back to page 1

20

1 of this document, and page 2. Thank you.

2 If we look at the haemophilia patients
3 registered there, the total comes to something just
4 over 100. What you were describing a moment or two
5 ago to Ms Scott from your statement was that in 1996
6 there were 328 people over the age of 18 with
7 an inherited bleeding disorder and 87 under the age of
8 18, which is 405. So there's a very big difference in
9 numbers. The inherited bleeding disorders, what comes
10 within the scope of that? How many people with
11 an inherited bleeding disorder will not be people who
12 you would define as suffering from either severe or
13 moderate or mild haemophilia A or B?

14 **A.** A considerable number of people would have
15 von Willebrand's disease. There would be people with
16 inherited disorders of fibrinogen, Factor XI, platelet
17 disorders. The figures that I have given in my
18 statement I derived from the National Haemophilia
19 Database and so I think that would explain why there
20 is a discrepancy from what we said here.

21 Of course, this isn't showing mild haemophilia
22 either. There would be a lot of people with mild
23 haemophilia who aren't included in those figures.

24 **SIR BRIAN LANGSTAFF:** The other question -- go back to
25 page 1 -- now Ms Scott may be coming to this, I don't

21

1 Now, of course, all of those aspects, they
2 required within the hospital structure to get -- to be
3 put in place and I think what he was there saying was
4 that he hoped that the audit that he had written would
5 be helpful for me to make propositions to the
6 management that we could make these improvements.

7 I think after Professor Bloom died, I took my
8 post up about four years later and there had been
9 three different people acting as consultant in that
10 time. So there hadn't been a stable consultant in
11 charge looking at a more long-term strategy, and
12 I think that that is reflected in this situation that
13 I found when I arrived.

14 **SIR BRIAN LANGSTAFF:** So the reference to update the
15 centre, in Dr Hill's view it had fallen behind the
16 curve, had it, during the previous four years, at any
17 rate, the years before you came?

18 **A.** I think there were some aspects that were very good
19 and there were some aspects that, yes, had fallen
20 behind the curve. I'd come directly from Great Ormond
21 Street where I had worked with Professor Hann and
22 there was a much more proactive view on prophylaxis in
23 children, particularly young children, to prevent the
24 progression or the development of joint damage, and
25 that was something I really needed to introduce in

23

1 know, but there Dr Hill says, in his second sentence:

2 "I hope it will help you in your efforts to
3 improve and update the Centre."

4 So had you discussed with Dr Hill plans to
5 improve and update the centre?

6 **A.** Yes. I mean, I read this audit through in the last
7 couple of days, and it sort of brought things back to
8 me as to the situation when I arrived in Cardiff.
9 There were, for example, no routine out-patient
10 clinics for anybody. Dr Dasani was seeing people in
11 the haemophilia centre on a sort of *ad hoc* basis. He
12 would contact people and they would come up and be
13 reviewed or they would present with a specific problem
14 and he would then review them overall. The number of
15 children on prophylaxis was clearly not appropriate.
16 We had to put in place prophylaxis for the other
17 children.

18 So I think that there was a lot that we needed
19 to sort out. There were no -- the joint clinics, for
20 example, that we were setting up with the HIV
21 physician and the joint clinics with the orthopaedic
22 consultant, these were all things that I discussed
23 with Dr Hill that we were putting in place and
24 planning to do and that's, I think, what he was
25 saying.

22

1 Cardiff because, certainly, we were behind the curve
2 at that time in introducing prophylaxis for young
3 children and, of course, that's very important for
4 their long term well-being, because the joint damage
5 in your 20s and 30s is caused by bleeds in your first
6 two or three years of life.

7 **SIR BRIAN LANGSTAFF:** Yes. Yes, thank you very much.

8 **MS SCOTT:** Sir, for your note, in fact, the figures in
9 Professor Collins' witness statement are 328 people in
10 total with inherited bleeding disorders, 239 over the
11 age of 18.

12 **SIR BRIAN LANGSTAFF:** Well, paragraph 26 reads "There are
13 328 with an inherited bleeding disorder registered in
14 Cardiff". I see, yes, you are right. I beg your
15 pardon. I misread it. My fault. It's still a rather
16 different figure than the just over 100, which was the
17 point.

18 **MS SCOTT:** Indeed, yes.

19 **A.** I agree it is a very different figure. I can't
20 explain it more fully.

21 **Q.** Then by 2019, your statement says that there are 802
22 patients with inherited bleeding disorders registered
23 with Cardiff, 640 over the age of 18 and 162 under the
24 age of 18. Those figures more or less remain accurate
25 or has there been an increase since then?

24

- 1 A. There is always a steady increase in the number of
2 people registered. Yes, steadily more people are
3 being registered with -- as diagnosis, such as mild
4 von Willebrand's disease or a number of people who
5 have clearly had evidence of bleeding but we can't
6 find anything wrong on their laboratory tests. We
7 look after quite a few people in that category.
- 8 Q. Of those 802 patients what would be your best estimate
9 to how many of those patients were people with
10 haemophilia?
- 11 A. Now?
- 12 Q. Yes.
- 13 A. Now. Probably about 150/160 something like that
14 I would have thought. One of the reasons I'm
15 struggling is, of course, we're now directly looking
16 after all the people with haemophilia in Swansea as
17 well, and that again might be a cause of the
18 discrepancy in those figures because whether someone's
19 registered with Swansea and Cardiff, as we discussed
20 earlier, it's not always clear-cut where you allocate
21 to which centre.
- 22 Q. So some of those 802 people may be registered in more
23 than one place?
- 24 A. That's right, yes, exactly.
- 25 Q. Your statement tells us that currently registered

25

- 1 hepatitis C that you were treating?
- 2 A. That's correct, yes.
- 3 **SIR BRIAN LANGSTAFF:** Just to clarify, Ms Scott, the
4 13 with HIV and the 66 with HCV, that's the entirety
5 of the cohort is it? So the 13 co-infected are the
6 13 who have HIV and 13 of the 66?
- 7 **MS SCOTT:** That's my understanding. Is that correct --
- 8 **SIR BRIAN LANGSTAFF:** So it's not an additional category?
- 9 **MS SCOTT:** Is that correct, Professor Collins?
- 10 A. Yes, that's not an additional category. The 66 with
11 hepatitis C include the 13 people who have HIV.
12 Again, just to make sure it's clear that some of those
13 people with HIV may also be registered in Swansea, and
14 so the numbers that Dr Al-Ismael gave you, you can't
15 add those two numbers together to give a South Wales
16 number because they will be being treated in both
17 centres.
- 18 Q. I'm going to ask you some questions about the
19 arrangements for the supply of product and treatment
20 to the Cardiff centre over the years, and also what
21 treatment's been provided to patients. But before
22 I do, I'm going to -- before I get on to your time
23 from 1996, you've exhibited to your statement some of
24 the treatment policies that were in place during
25 Professor Bloom's time at the Cardiff centre.

27

- 1 patients -- of the registered patients from the
2 centre, 13 of them have HIV, 13 of them are
3 co-infected with HIV and hepatitis C, 66 are infected
4 with hepatitis C, and four are being treated for
5 hepatitis B; is that right?
- 6 A. Yes, all those figures are correct, yes.
- 7 Q. Can you recall what the numbers of patients infected
8 with HIV and hepatitis C were in 1996 when you arrived
9 at the centre? How many patients you were treating
10 for HIV and HCV?
- 11 A. The figure that I was told and that I've always
12 assumed was 45 people had been infected with HIV --
13 some of them of course had died before I arrived in
14 Cardiff -- and also one partner had also been infected
15 with HIV, and the figure of the people infected with
16 hepatitis C was either 108 or 118. There are two
17 figures that are given there.
- 18 Of course, many, many more people would have
19 been infected with hepatitis C but they had died
20 before the hepatitis C test became available.
- 21 Q. So when you arrived in 1996 there were some number
22 between 13 and 45 patients infected with HIV that you
23 were treating in 1996?
- 24 A. Yes.
- 25 Q. And some number between 66 and 108 or 118 with

26

- 1 Do you have any firsthand knowledge yourself of
2 how those treatment protocols or treatment policies
3 were implemented in Cardiff?
- 4 A. Well, clearly I wasn't in Cardiff then so I don't have
5 firsthand knowledge but, to the best of my knowledge,
6 those treatment protocols were implemented in Cardiff.
- 7 Q. But given, professor, that you have no firsthand
8 knowledge yourself of what was happening in Cardiff,
9 I'm not intending to ask you any questions in relation
10 to the implementation or otherwise of those policies
11 and procedures -- protocols, sorry.
- 12 A. I understand.
- 13 Q. So what were the arrangements for -- how did the
14 centre purchase products, blood products, in 1996,
15 when you took over as director?
- 16 A. So, the blood products were all initially purchased by
17 the Welsh Blood Service and so they went to the --
18 which is the transfusion centre. So they were
19 purchased by the transfusion centre and held at the
20 transfusion centre, and then all the hospitals in
21 South Wales would have the blood products delivered to
22 their hospital, so Cardiff would have the blood
23 products from the Transfusion Service, and Swansea,
24 blood products from the Transfusion Service, so other
25 hospitals would do the same. So the purchasing was

28

1 directly from the Transfusion Service and then it was
 2 allocated to the hospitals, and then we would be
 3 cross-charged by the Transfusion Service for the cost
 4 of the product.

5 **Q.** So is that both for NHS product and for commercial
 6 product?

7 **A.** Correct. So the -- certainly when I arrived in 1996
 8 all of the product went to the transfusion centre and
 9 then came to the centre. Since then, things have
 10 changed because a lot of the product now is home
 11 delivered so it doesn't go to the transfusion centre,
 12 it's delivered directly to people's homes, and so
 13 that's a different mechanism. But at that time, in
 14 1996, the Cardiff Haemophilia Centre didn't buy any
 15 product directly, it all went through the transfusion
 16 centre.

17 **Q.** So when you -- in your statement, when you say you and
 18 Dr Dasani chose the blood products that were going to
 19 be used at the centre, was that out of the products
 20 that the Blood Transfusion Service was holding or
 21 could you say to the Blood Transfusion Service: could
 22 you purchase us X and Y?

23 **A.** Yes, we could go to the transfusion centre and say: we
 24 would like you to start holding a stock of this other
 25 treatment, and then we would use it. So we could

29

1 consider the relative risk of blood products from the
 2 point of view of infection.

3 **Q.** So is this fair, that at that stage you and Dr Dasani
 4 would have considered that all of the products were
 5 much of a muchness in terms of safety of viral
 6 transmission, and if there had been any issues with
 7 a particular product you would have expected that to
 8 have been brought to your attention by the Blood
 9 Transfusion Service?

10 **A.** I think -- well, this of course was at a time when
 11 recombinant blood products were just becoming
 12 available, so both myself and Dr Dasani were
 13 completely agreed that we would prefer to use
 14 recombinant blood products than plasma-derived blood
 15 products because of the potential of risk of
 16 infection.

17 I would have thought that if there were any
 18 issues relating to the risk of infection, I'm more
 19 likely to have been told by UKHCDO or by the companies
 20 themselves than by the transfusion centre.

21 **Q.** So when you started at the centre, you say in your
 22 statement that your patients were receiving blood
 23 products and people with haemophilia A were being
 24 treated with the BPL 8Y heat-treated plasma product
 25 and Replenate, people with haemophilia B with a high

31

1 certainly -- we were the people choosing what products
 2 to use, not the Transfusion Service.

3 **Q.** Can I ask you about a paragraph in your witness
 4 statement. It's WITN4029001 and it's at internal
 5 page 15. It's paragraph 75. You say:
 6 "Structures or decision-making bodies that
 7 considered the risk of infections associated with
 8 blood and blood products would have been led through
 9 the Blood Transfusion Service rather than through the
 10 haemophilia centre."
 11 What do you mean by that paragraph?

12 **A.** Well, I think that by that time the risk of infections
 13 from the products we were using in the haemophilia
 14 service were much, much lower.

15 **Q.** Because the products were -- why was that?

16 **A.** Because the products were by then all heat-treated and
 17 had been for over ten years, and by then had very good
 18 safety records in terms of HIV and hepatitis C. So
 19 that response -- the question was, in 74, whether
 20 there were any advisory or decision-making structures
 21 that covered the centre; the answer was no, there
 22 weren't any. And I've made the point that if there
 23 were any, it would be through the Blood Transfusion
 24 Service not through the haemophilia centre.

25 There were no specific structures there to

30

1 purity Factor IX product, Replinine, and patients with
 2 von Willebrand's were being treated either with
 3 BPL 8Y, DDAVP or Haemate P. Is that right?

4 **A.** It is. A very small number of people were also by
 5 then on recombinant Factor VIII. I think there were
 6 four people on recombinant Factor VIII, because they
 7 had been involved in a clinical trial of recombinant
 8 Factor VIII (the product was Kogenate) and at the end
 9 of the clinical trial they had remained on that
 10 recombinant Factor VIII. So a very small number were
 11 on recombinant at that time.

12 **Q.** We can see that in the audit document.
 13 So if we can go back to, Soumik, please,
 14 HCDO0000280_061, and go to page 5 of that document.
 15 Under "Availability of Blood Products", it
 16 says:
 17 "These are stored in the Haemophilia Unit.
 18 Children are currently treated with BPL 8Y apart from
 19 PUPs who have presented in the last 2 years ..."
 20 So presumably since 1995:
 21 "... and 4 previously untreated patients who
 22 were recruited into a trial of recombinant
 23 Factor VIII. Four adults are also in this study."
 24 So it looks like there's three cohorts of
 25 patients in that study. Does that accord with your

32

1 recollection?
 2 **A.** Yes. So the four people on recombinant Factor VIII,
 3 that's correct to say that they were people who had
 4 been recruited in the trial and carried on.

5 The previously untreated patients, I don't
 6 remember there having been any previously untreated
 7 patients in the previous two years before I arrived,
 8 but what we would have done is that had there been any
 9 we would have treated with recombinant Factor VIII.

10 **Q.** You also say in your statement that -- and that you
 11 just mentioned -- this was the point at which
 12 recombinant Factor VIII was becoming available and you
 13 were very keen for your patients to be put onto that.
 14 Can you talk us through how that occurred.

15 **A.** Yes. So almost the moment I arrived, within a couple
 16 of weeks, the patient group had come to me and said
 17 that they wanted to be pushing for recombinant
 18 Factor VIII. Of course, recombinant Factor VIII was
 19 substantially more expensive and so I had to put
 20 together cases based on the improved safety of
 21 recombinant Factor VIII to make the case for the
 22 increased funding.

23 It was quite complicated because we were
 24 treating people from all areas of south, mid-and west
 25 Wales, and so we were having to go to a number of

1 them to recombinant Factor VIII. We are in the
 2 process of doing this and hopefully will have all
 3 patients on recombinant Factor VIII in 3 to 4 months'
 4 time."

5 So in December 1997 it looks like you are
 6 hoping that that will be in place by April 1998; can
 7 you recall whether that was the time at which point
 8 all your patients had been switched over?

9 **A.** I can't remember exactly. I don't think that they had
 10 all been switched over by April 1998, based on
 11 information I'd seen from the National Haemophilia
 12 Database. I think it probably took another year for
 13 everyone to be changed over.

14 I think one of the things that this letter --
 15 just to make a point of this, I think this is
 16 an important role of a comprehensive care centre that
 17 I had been informed by UKHCDO about variant CJD and
 18 I had cascaded that information to all of the
 19 haematologists in south and mid-wales so that they
 20 were -- to make absolutely sure that they were aware
 21 of this information because, of course, the
 22 information had gone to haemophilia centres and not
 23 all hospitals.

24 **Q.** The next paragraph is also probably worth looking at
 25 here, talking about the situation with recombinant

1 different health authorities to get the funding. We
 2 put the case and, in 1997, there was an agreement that
 3 everyone in Wales, including North Wales, whose
 4 patients we weren't looking after, would have access
 5 to recombinant Factor VIII, and the additional funding
 6 required was put in place to fund that.

7 **Q.** If we can turn to a document that might help us with
 8 that, it's WITN4029013. This might help put some
 9 dates on when that actually took place. So this is
 10 a letter on 15 December 1997. It says "Dear
 11 Dr Blank", and if we turn over to the second page we
 12 can see it's signed by you and copied to a number of
 13 your colleagues. We can see there Dr Al-Ismael, for
 14 example.

15 So if we turn back to the first page of that
 16 document, and to the second paragraph, so just putting
 17 this in context, you are enclosing a letter that's
 18 been circulated by the UKHCDO regarding vCJD in the
 19 treatment of haemophilia. Then you go on in the
 20 second paragraph:

21 "From our point of view, we are very fortunate
 22 that we have agreement to treat all patients with
 23 recombinant blood products, and it would seem sensible
 24 to change all our patients to recombinant Factor VIII
 25 rather than to American-based plasma before changing

1 Factor IX being more difficult, because it is not yet
 2 available in the UK, likely to become available in the
 3 next six months. Therefore, there's a choice:

4 "... of continuing with the BPL product made
 5 from UK plasma, or changing to a Factor IX
 6 manufactured from American donors. Realistically,
 7 this would mean purchasing the Factor IX from Alpha.
 8 At the present time we are discussing this issue with
 9 individual patients and, if they show a strong
 10 preference for changing to USA plasma, we will change
 11 their product. However, if no strong preference is
 12 expressed, we will continue with the high purity BPL
 13 product until recombinant becomes available."

14 Why were you suggesting that patients should
 15 have a strong preference before changing them over to
 16 American plasma?

17 **A.** Well, I don't think that's -- looking at it,
 18 I wouldn't use the word "strong preference". If
 19 a patient had said they had a preference to change,
 20 then I would have changed. I don't think there was
 21 any resistance to that.

22 The reality was that, from my memory, that
 23 people were resistant to changing to US plasma because
 24 of the concerns they had in the past. It's important
 25 to remember at this time, 1997, is that the

1 information being given to us was that there was only
2 a hypothetical risk of variant CJD in UK plasma and,
3 indeed, there was, as we may come on to later, there
4 was advice that we shouldn't be telling the patients
5 at all about this issue, which UKHCDO disagreed with
6 and I disagreed with.

7 So there was -- the level of risk being told to
8 us was that, essentially, it was thought that there
9 wasn't a risk and, of course, everybody at this time
10 who was eating meat was being exposed to variant CJD
11 through that mechanism and so these were some of the
12 conversations I would have had to have had with the
13 patients about what their choice wanted to be, because
14 some people might well take the view that they were
15 being exposed through the food chain anyway.

16 My memory is that -- and I think I'm correct in
17 this -- no-one wanted to change to US plasma and, of
18 course, later on the next year BPL started to make all
19 of its products from US plasma and that did cause some
20 people some concern, that their product was now being
21 made from US plasma and, obviously, because they were
22 very well aware of the problems of the past.

23 **Q.** The Inquiry's heard evidence from some clinicians who
24 describe putting their patients or some of their
25 patients onto recombinant factor products and then

37

1 often haemophilia centres are then required to use
2 a certain proportion of different recombinant
3 Factor VIIIs, and so I was certainly involved in the
4 centre of ensuring that we complied with those tender
5 arrangements.

6 I think it is just worth pointing out that from
7 the point of view of the NHS, that tenders process has
8 saved a phenomenal amount of money for the NHS,
9 because the UK has acted as a single entity in these
10 tender arrangements. Before, each individual sort of
11 area would have to make a tender and so would get
12 nothing like as good a price.

13 **Q.** So just picking up on the point about centres having
14 to use a minimum proportion of particular named
15 Factor VIII products, if, for example, the tender is
16 for, I don't know, five Factor VIII products, do you
17 have to use all five of those or how does it work?

18 **A.** No, it would work -- let's say that there are, as you
19 say, a certain number of Factor VIII products. For
20 the top two in the tender we would have to use
21 a certain proportion of those. The top one we would
22 have to use the most, then after that, but for the
23 rest of it there's a proportion where we can use
24 anything we want, and so we would then have to discuss
25 with individuals about changing products. I would

39

1 there being a shortage and having to switch them back
2 to plasma products. Did you have difficulties with
3 that? Did that happen with any of your patients?

4 **A.** We didn't have to change anyone back to plasma-derived
5 products. We did have to reduce usage. We had to
6 reduce prophylaxis in some people and for a while
7 suspend prophylaxis in some people, and we had to
8 delay surgery. But we were able to maintain everybody
9 on recombinant. No-one was required to change back to
10 plasma-derived.

11 **Q.** Can I now move on to the current purchasing
12 procedures, if I can put it like that.

13 We understand from your statement that
14 since 2005 products used at the centre have been
15 purchased nationally via the national tender process.
16 What role do you or the centre have in that process,
17 if any?

18 **A.** Well, I play a role because I represent Wales on the
19 sort of UK-wide committee. There's a UK-wide
20 committee run by the commercial medicine unit and they
21 put a tender out on behalf of the whole UK and myself
22 and people from the Welsh Commissioners represent
23 Wales on that committee. So we give our opinions.

24 The tender goes out and as the result of the
25 tender, dependent on what -- the specific tender, very

38

1 always tell people that the reason the product was
2 changing was for price and that, you know, we would
3 discuss that it was for the benefit of the NHS
4 overall, although of course some of that saving has
5 been reinvested in haemophilia care in various ways,
6 particularly in access to increased amounts of
7 Factor VIII, so that the amount of Factor VIII we've
8 used over the years has gone up substantially and
9 that's funded in part by the savings in the contract.

10 But, of course, if some people for whatever
11 reason said they didn't want to change product, then
12 we wouldn't change their product. If they wanted to
13 stay on their product for any reason, they could stay
14 on it. There was no -- if someone had that view, they
15 were allowed to stay on their product. There was no
16 products that were specifically unavailable.

17 **Q.** I'm going to come back and ask you some questions
18 about your consent process in a moment as well, but
19 just sticking then with products that are available
20 that you provide to your patients at the centre.
21 People with haemophilia A, are they treated with third
22 generation recombinant Factor VIII products? Is that
23 how I understand your witness statement?

24 **A.** Yes. So at the moment they are treated with either
25 third generation recombinant Factor VIII products or

40

1 enhanced half-life recombinant Factor VIII products
 2 or, now, over the last sort of year or so,
 3 increasingly more people are treated with the -- with
 4 Emicizumab, which is a non-Factor VIII product. It's
 5 the bispecific antibody, and the advantage to that is
 6 it can be given subcutaneously rather than
 7 intravenously and can be given weekly or every two
 8 weeks. So more people with haemophilia are opting to
 9 go on to that product over time.

10 **Q.** People with haemophilia A and inhibitors treated with
 11 Factor VIIa and FEIBA; is that right?

12 **A.** Yes, and Emicizumab.

13 **Q.** And people with haemophilia B, are they treated with
 14 recombinant Factor IX products and some with plasma
 15 products?

16 **A.** So -- yes, so when recombinant Factor IX came in,
 17 everybody was offered recombinant Factor IX, and to my
 18 memory everyone decided they wanted to go onto
 19 recombinant Factor IX. However, some people who --
 20 their experience was that they did not think that the
 21 recombinant Factor IX worked as well to treat or
 22 prevent bleeds as the plasma-derived, and so a small
 23 number opted to change back to plasma-derived
 24 Factor IX.

25 **Q.** And some remain on that product?

41

1 use at the moment is called Voncento. We don't use
 2 Factor 8Y for von Willebrand's disease anymore. We
 3 did when I first arrived but we haven't for a long
 4 time.

5 We are just about to get access to recombinant
 6 von Willebrand factor and we are just waiting for the
 7 authorisation from the Welsh Commissioners to be able
 8 to start using that in some people with
 9 von Willebrand's disease.

10 **Q.** I'm just going to ask you some more questions on the
 11 consent process. You have already touched on this but
 12 can I ask you what conversations you would have with
 13 a patient when you are discussing with them the type
 14 of treatment that you're going to give them? I'm
 15 going to split this up between, if you like, type of
 16 treatment, so you are choosing between different kinds
 17 of treatment either plasma products, recombinant
 18 products or half-life products, and then go on to look
 19 at, within those types, different brands of treatment.

20 So when you are deciding what type of treatment
 21 a patient should have, what information would you give
 22 the patient about the risks and benefits of the type
 23 of treatment?

24 **A.** Well, this conversation predominantly happens in the
 25 context of young children with severe haemophilia and

43

1 **A.** A very small number -- one or two, I think.

2 Now we're using the enhanced half-life
 3 Factor IX product which can be given once a week or
 4 sometimes even once every two weeks, the enhanced
 5 half-life Factor IX products. So everyone with
 6 haemophilia B has been offered -- with severe
 7 haemophilia B, on prophylaxis, has been offered the
 8 opportunity to go onto enhanced half-life. Some
 9 people prefer to stay with the product they know and
 10 have stuck with the standard half-life Factor IX which
 11 is BeneFix.

12 **Q.** What is the first line of treatment for people with
 13 mild haemophilia?

14 **A.** Well, with mild haemophilia, the first line of
 15 treatment would be desmopressin, DDAVP, and everybody
 16 with mild haemophilia would have a DDAVP trial so that
 17 we can see how well they respond to that, because
 18 there are some bleeds that might well respond to DDAVP
 19 but very serious bleeds, if we're not getting good
 20 enough levels, they might not respond. So if there is
 21 an inadequate response we would use recombinant
 22 Factor VIII.

23 **Q.** For von Willebrand's patients it's plasma-derived
 24 product and DDAVP and/or Factor 8Y; is that right?

25 **A.** Well, yes. So it's plasma-derived. The product we

42

1 often this conversation takes place before the child
 2 is born because we offer antenatal diagnosis at about
 3 32/33 weeks of gestation. An amniocentesis can define
 4 whether the child has severe haemophilia or not. So
 5 before the child is born we will have discussions with
 6 the parents.

7 The key risk at the moment with recombinant
 8 Factor VIII is the development of a Factor VIII
 9 inhibitor. That's the most important side effect of
 10 treatment, and then the child will be resistant to
 11 Factor VIII treatment. We discuss, specifically on
 12 the basis of a paper called the SIPPET study, which
 13 was a randomised control study comparing the rate of
 14 inhibitor formation with plasma-derived Factor VIII in
 15 these previously untreated children versus recombinant
 16 and it showed that children treated with
 17 plasma-derived had less risk of inhibitor.

18 So we discuss that particular finding with the
 19 parents and then, you know, the discussion is do they
 20 want plasma-derived or do they want recombinant?
 21 Every single parent that I've ever spoken to with
 22 regard to this would prefer recombinant because they
 23 would prefer the recombinant product, even if there is
 24 a small increased risk of inhibitors.

25 We also discuss the enhanced half-life

44

1 products. Although, with Factor VIII they are
2 enhanced half-life, in young children it doesn't make
3 a huge difference, because in young children the
4 half-life of Factor VIII is quite short anyway, and it
5 gets longer, the half-life of Factor VIII, as the
6 child gets older into adulthood. So we do discuss
7 enhanced half-life Factor VIII and many, many parents
8 choose to go with half-life Factor VIII.

9 Just recently, we have started to discuss the
10 role of Emicizumab in the management of severe
11 haemophilia, and that some parents may wish to start
12 with Emicizumab rather than Factor VIII because one of
13 the big advantages of that is you don't have to put
14 a central line in and it can be given subcutaneously.
15 The downside is that we have much less experience with
16 Emicizumab in young children and so we would have
17 quite a long and in-depth discussion about the choice
18 of Emicizumab or Factor VIII replacement in a young
19 child.

20 **Q.** What information, if any, do you give to patients or
21 parents of patients during those sorts of
22 conversations about potential risk of pathogenic
23 transmission?

24 **A.** Well, I always discuss with the parents that in the
25 past Factor VIII has transmitted HIV and hepatitis and

45

1 of time so that -- you know, because obviously people
2 have a discussion, go away have more questions and
3 come back, and that's something we always make clear
4 that that is available. It's, of course, not just
5 myself and other consultants doing this, the nursing
6 staff will also often will visit the individual's home
7 and have a discussion about treatment choices because
8 it's not just a product that you're having, it
9 involves whether it's likely that the child will need
10 an intravenous catheter to deliver the treatment and
11 what it's like living with a child with haemophilia is
12 something that we go through in some detail.

13 **Q.** Would those sorts of discussions be recorded in notes,
14 in patients' notes?

15 **A.** Yes.

16 **Q.** How do you record those discussions in notes?

17 **A.** I record it in the medical notes to say what we've
18 discussed. I particularly record the discussion about
19 inhibitor formation and that I have reassured with
20 regard to infectious diseases, and then also the
21 letter to the GP is now routinely copied to the
22 patient, so that, again, they can -- and I think
23 that's really quite helpful because, quite often, once
24 I've done the letter to the GP or one of my colleagues
25 has, then the individual will come back having read

47

1 I always do that because if someone looks it up on the
2 internet that's one of the first things they will come
3 across. So I do that in the context of reassuring
4 them that the products we use are safe from that point
5 of view.

6 It's also, of course, very important to note
7 that many of the women who are giving birth to
8 children now with severe haemophilia have lost family
9 members because of HIV or they are living with family
10 members who have HIV. So, for example, their father
11 may have had HIV. So I have that discussion with
12 them, really it's to try and reassure that the current
13 recombinant products are not made in any way with
14 human or animal derived products and so can be
15 considered essentially safe, from the point of view of
16 transmission of those diseases.

17 **Q.** Would you provide any written materials to patients?
18 Is that part of your practice when making these sort
19 of treatment decisions?

20 **A.** We do provide some written material, yes, but we tend
21 mainly to spend time talking. These conversations
22 aren't one-off conversations. We will have
23 discussions. Sometimes these sorts of discussions
24 happen before the woman is pregnant. We will have
25 these discussions and they are over a prolonged period

46

1 the letter and say this is something that, you know,
2 I'm not sure about and I want more information. So
3 I think that that's quite important.

4 **Q.** So you will have those types of discussions for
5 children, even before they are born, presumably you
6 also have those types of discussions when new products
7 become available, new types of treatments become
8 available, you would have those with your existing
9 patients?

10 **A.** That's right. So over the last two or three years
11 we've had extensive discussions with people who, for
12 example, are on prophylaxis the standard half-life
13 Factor VIII, and we discussed the options of changing
14 to an enhanced life Factor VIII or more recently to
15 Emicizumab and quite a few people now are opting for
16 Emicizumab, and that is all in the context of the
17 discussion about what the individual person is wanting
18 to achieve with their prophylaxis, because often the
19 intensity of the prophylaxis depends on the intensity
20 of the physical activity the individual wants to
21 undertake.

22 **Q.** It sounds from what you have said that those
23 discussions with patients, adult patients or existing
24 patients, is not a one-off conversation for those.
25 When new products can come online, it sounds like it's

48

1 an ongoing dialogue that may take a few sessions; is
2 that right?

3 **A.** Yes, that is right. I mean, my experience with
4 Emicizumab is that a number of people I have discussed
5 Emicizumab with them and initially they have said,
6 "Oh, I will stick with Factor VIII", and as time has
7 gone on, a subsequent conversation is, "Well, I've now
8 decided I want to try the Emicizumab treatment", and
9 that's what happens. So, yes, people will obviously
10 change their minds as they get more of a feel for
11 a new product, and obviously people in South Wales
12 with haemophilia talk to each other.

13 **Q.** What's your practice in terms of the balance between
14 giving patients information about products and leaving
15 it entirely up to them to make a decision versus, you
16 know, you as the clinician making a recommendation to
17 the patient as to what you think would be best for
18 them. What's your practice? Where do you sit along
19 that continuum?

20 **A.** Well, the first thing I just want to say is that
21 I think that -- it's not the clinician, it's the
22 haemophilia centre, so the haemophilia centre in terms
23 of the nurses, the physiotherapists -- everyone is
24 involved in this. It's not clinician-led anymore
25 specifically, it's a team, a holistic team approach.

49

1 certain half-life products where the half-life is
2 prolonged because essentially the Factor VIII or the
3 Factor IX is recirculated through the -- kind of
4 recycled through the endothelial cell system. That's
5 one type. The other type is where a molecule called
6 polyethylene glycol is added to the Factor VIII and
7 that will extend the half-life. So there are
8 different mechanisms.

9 All of them come out with a half-life
10 essentially -- that they all prolong the half-life by
11 essentially the same. So the amount of Factor VIII
12 that the individual has is the same essentially for
13 all the products and so those are, you know,
14 discussions that are had.

15 Similarly, with Factor IX it's the same. There
16 is the option of the pegylated Factor IX or there are
17 two recycling mechanisms of Factor IX, one because the
18 Factor IX is bound to albumin and the other the
19 Factor IX is bound to what is called the Fc receptor.
20 So there are different mechanisms. With Factor IX,
21 importantly, the pharmacokinetics are different, so
22 the way that you use the product is different
23 dependent on the mechanism, and so that has to then be
24 taken into consideration as well.

25 **Q.** So you give information about the different ways that

51

1 Our view is that the individual with haemophilia has
2 the control of the situation and it's for them to
3 decide what type of product they want to use and, of
4 course, some people will try a product, find it suits
5 them well or find it doesn't suit them well and
6 they'll try something different.

7 So it's entirely down to the individual as to
8 which type of product they want to try.

9 **Q.** Then once you have made a decision about what kind of
10 treatment, then the patient then has another choice,
11 do they, as to which brand or which particular product
12 that they are going to use; is that right? Do you
13 offer them -- so they have decided they want to have
14 a half-life product, do you then say, "There's this
15 one, this one and this one"?

16 **A.** Well, we do, but it's in the context of cost as well,
17 because different products cost different things,
18 different amounts. So we discuss the different types
19 of extended half-life product.

20 **Q.** So typically the information you would give about each
21 extended half-life product, for example, balanced
22 against the other, what sort of type of information
23 would you be giving?

24 **A.** Well, we would give information about the mechanism by
25 which half-life products are prolonged. There's

50

1 the products work. You've said that you give
2 financial information as well so you give the patient
3 information about how much each product costs. Is
4 that right?

5 **A.** Well, we don't say specifically how much they cost but
6 we say that certain products are -- cost less than
7 others and that, all things being equal, that might be
8 something to consider in the choice.

9 **Q.** You've already told us that sometimes you're saying to
10 patients, "Look, in order to comply with our
11 obligations under the tendering process we need to
12 think about switching you to a new product", and you
13 would give them that information as part of that
14 discussion?

15 **A.** At the moment the current tender does not require you
16 to use a certain amount of any product. You can use
17 any product you want off the tender. In the past, we
18 did have to use a certain amount and we would explain
19 to the person, "Look, the reason we want to change you
20 is because of this national tender, it's going to save
21 the NHS money", and I've never had any person really
22 showing concern about that. Some people wanted to
23 stay on their same product because they preferred to
24 and then that was fine. We would agree to that.

25 **Q.** So the impact on the tender, in terms of choice of

52

1 product, was very much a request to the patient rather
2 than saying, "In order for us to comply with our
3 tendering obligations you must switch product"?

4 **A.** Yes. So it was never a compulsion. It was always
5 explained. But the people I talked to I think buy
6 into the concept of the NHS and the kind of the cold
7 resource that is the NHS, and in South Wales the NHS
8 is a very important part of the social fabric, because
9 of course it came from South Wales, and so people will
10 fully understand these concepts. So I've never --
11 some people, as I say, would prefer to stay on the
12 product they're on and then that would be absolutely
13 fine.

14 **Q.** So, again, when you're talking with patients about the
15 different choices they have got of half-life products,
16 for example, is the choice entirely up to them or is
17 that a choice or was that a little bit more
18 clinician-led, or centre-led, because of aspects like
19 price?

20 **A.** Everyone has access to enhanced half-life products and
21 we would not in the end dictate to people what they
22 wanted. We would explain the pros and cons of each
23 product.

24 I think that -- to put it into context, of
25 course, Emicizumab is substantially more expensive

53

1 **MS SCOTT:** I'm going to ask you some questions now about
2 testing for infections. I understand from your
3 statement that all the patients at Cardiff had been
4 tested both for HIV and HCV (hepatitis C) and told of
5 their infections by the time you arrived at the clinic
6 in 1996.

7 **A.** Yes, that's correct.

8 **Q.** Was there anything you heard from patients or from the
9 staff that had been at the centre under
10 Professor Bloom about the way that that was managed by
11 Professor Bloom?

12 **A.** I have heard the statements of the patients and I've
13 obviously heard the oral evidence of the patients and
14 much of the oral evidence I knew before I saw that,
15 because they explained that to me. The only person
16 who was working at the haemophilia centre at the time
17 that the information about HIV would have been related
18 to the patients was Jenny Jones. Dr Dasani wasn't
19 working there at that time. I think he started in
20 1989. The other person who would have been there
21 would be Dr Elizabeth Moffat, who was the research
22 registrar around that time.

23 It's difficult for me to really give any
24 further answer. The person who might well have
25 directly observed this is Sister Jenny Jones.

55

1 than Factor VIII to treat a person who doesn't have an
2 inhibitor and we give open access to people to
3 Emicizumab, so price is not the defining issue; if
4 someone wants to go on Emicizumab, that's
5 a significant cost increase in their care, but
6 people -- you know, if people want to, then we change.

7 **MS SCOTT:** Sir, I was going to go on to a different topic
8 now and I note the time so I wonder if now is a good
9 time for a break.

10 **SIR BRIAN LANGSTAFF:** Yes.

11 We take a break, as you may have realised,
12 during the morning, and it's normally about
13 half-an-hour so we will meet again at 5 to 12.

14 What I tell all witnesses is that they mustn't
15 discuss their evidence, being under oath, either the
16 evidence you have given or that which you think you
17 may be asked to give in due course. That includes
18 discussing with your wife. You can talk about
19 anything else you like but not that. So we will see
20 you back at 5 to 12.

21 **A.** Okay. Thank you.

22 (11.27 am)

(A short break)

24 (11.55 am)

25 **SIR BRIAN LANGSTAFF:** Yes.

54

1 **Q.** Do you recall any conversations with her about that
2 time and the events that unfolded at that time and how
3 they were managed?

4 **A.** I don't specifically remember her describing --
5 I mean, she did describe some specific cases to me but
6 we clearly can't discuss specific events. But in
7 terms of general terms, she didn't say to me anything
8 specifically about how people were informed of their
9 HIV infection. Of course, the person who informed
10 most people about their hepatitis C infection was
11 Dr Dasani because he was working at the haemophilia
12 centre at that time, and also Dr Simon Davies, who was
13 the locum consultant around 1991 -- sorry, 1992. He
14 took over as locum consultant when Arthur Bloom died.
15 So he would have been -- both him and Dr Dasani would
16 have been there when people were told of their
17 hepatitis C result.

18 **Q.** So most of your knowledge about how testing for
19 infections and delivering results to people, and so
20 on, was managed comes from the patients directly
21 either to you or through the information they'd given
22 and that you have become aware of to the Inquiry?

23 **A.** Yes, that's correct, yes.

24 **Q.** I also understand from your statement that partners of
25 those hepatitis C-infected patients had also been

56

(14) Pages 53 - 56

1 tested prior to your arrival at the centre in 1996 and
 2 they'd been tested by Dr Dasani and they were all
 3 negative; is that right?

4 **A.** That's right. Dr Dasani undertook a sort of
 5 comprehensive process of offering testing to partners
 6 and it is correct they were all negative for
 7 hepatitis C.

8 **Q.** So the testing that has taken place since your arrival
 9 in 1996 has been of partners of those infected with
 10 HIV; is that right?

11 **A.** Yes, we offer HIV tests for partners of people who
 12 were infected with HIV and that's been going on ever
 13 since I've been there and continues to today.

14 **Q.** You say in your statement that that was led by
 15 Dr Dasani. Have you been involved in that process
 16 yourself?

17 **A.** Yes. I've been involved in that process but
 18 Dr Dasani -- I think it is important to recognise that
 19 Dr Dasani was an expert in the management of HIV and
 20 he took the lead in these sorts of processes related
 21 to HIV. But, certainly, I will have been involved in
 22 offering tests to partners on a fairly regular basis.

23 **Q.** You also say that patients who were treated with
 24 pooled plasma products and who were HIV or HCV
 25 negative were also tested regularly for those viruses.

57

1 particularly about the implications of the test and
 2 with HIV what the -- why it's possible that the
 3 individual may be at risk of having contracted HIV.
 4 This often is for people who have moved in from abroad
 5 and who may have been treated with blood products in
 6 the past and so we don't have a record of the blood
 7 products.

8 The patient group in Cardiff really is quite
 9 stable. Relatively few people leave South Wales,
 10 relatively few people come so it's a very unusual
 11 event. But we will also discuss implications for
 12 insurance and mortgages and life insurance, so we have
 13 those sorts of discussions. But it must be 20 years
 14 since I've had this sort of discussion with anybody.

15 There was one case I remember, one individual,
 16 where we made a diagnosis of hepatitis C of a lady
 17 with von Willebrand's disease, who had not been to the
 18 centre for a long time and that was made after
 19 I started working in the centre. Again, we discussed
 20 with her the reason for wanting to do that, it's
 21 because we thought she might possibly have received
 22 a pool blood product in the past and it did
 23 unfortunately prove that that was the case.

24 **Q.** When you arrived at the centre, you had a policy to
 25 keep patients on the same batch of product where

59

1 **A.** Yes. So when I arrived there was already
 2 a surveillance programme in place where people were
 3 tested every six months if they were on plasma-derived
 4 products, and that continued until we introduced
 5 recombinant, after which we stopped doing that, once
 6 recombinant products had been introduced.

7 **Q.** So for those very few patients who remain on plasma
 8 products, do they still get testing?

9 **A.** No, no.

10 **Q.** You also say that you tested new patients coming in
 11 from other centres and from abroad for HIV and
 12 hepatitis C.

13 **A.** Yes. We inherited quite a few people who were
 14 infected with HIV or hepatitis. Often they were
 15 coming to Cardiff to attend the university and we
 16 would take over their care whilst they were at
 17 university. They all already knew of their HIV or
 18 hepatitis C status but we retested them when they
 19 arrived with their full knowledge and agreement.

20 **Q.** What is the process when you need to test somebody for
 21 HIV or hepatitis C? What's the conversation that you
 22 have with them in order to get their consent?

23 **A.** This hasn't happened for many, many, many years.
 24 I don't remember doing this for a very long time. But
 25 the discussion is around what the test is,

58

1 possible to reduce donor exposure. Presumably that
 2 has fallen by the wayside has it with the recombinant
 3 products?

4 **A.** To a degree. We still tend to try to stick to similar
 5 batch numbers, although there isn't really any
 6 compelling reason to do that. I think it's out of
 7 habit that we just continue to do that.

8 **Q.** You also describe in your statement how vaccinations
 9 were offered against hepatitis A and hepatitis B. Can
 10 you just explain why those vaccinations were offered
 11 in 1996 when the plasma products patients were
 12 receiving were virally inactivated?

13 **A.** I think it was mainly because there was a small risk
 14 from blood transfusions still, from red cells, and
 15 that people with bleeding disorders are more likely
 16 than other people to need a red blood cell transfusion
 17 and so that was the reason. Of course, when I arrived
 18 people were on plasma-derived products and although
 19 there had been safety for ten years, there was always
 20 this underlying concern that perhaps there would be
 21 a kind of a breakdown in the manufacturing process
 22 that led to another -- a problem, which was one of the
 23 main arguments from my point of view for recombinant.

24 **Q.** Do you still offer those vaccines to patients?

25 **A.** No, we don't routinely at the moment, no. Children

60

- 1 I think get routinely vaccinated for hepatitis B
2 anyway now but we don't routinely offer hepatitis A
3 vaccination now.
- 4 **Q.** Why is it that those with bleeding disorders are more
5 likely to need red blood cell transfusion?
- 6 **A.** Well, at that time, because a lot of people were not
7 on prophylaxis so if they started to, for example,
8 have a bleed from a stomach ulcer, they might bleed
9 a lot more than other people. Whilst people with
10 bleeding disorders are more prone to that, because the
11 vast majority of people with severe haemophilia are
12 now on prophylaxis to some degree that's mitigated
13 against.
- 14 **Q.** I'm going to ask you now about the current treatment,
15 the clinics that you hold for your patients and the
16 reviews that you undertake. How frequently would you
17 see somebody with severe haemophilia in a clinic?
- 18 **A.** Well, if someone's stable, it would be every
19 six months. Younger children it might well be every
20 three or four months, particularly when they are very
21 young and are initiating treatment. And we also have
22 a policy of open access. So essentially if someone
23 wants to discuss something or has an intermittent
24 bleed, they can come to the centre at any time and be
25 seen or, if it's not that urgent, they can ring in and

61

- 1 would be taken to get a blood count, for a patient
2 infected with HIV, a CD4 count, a liver function test,
3 viral loads for an HIV-infected patient, and later on
4 HIV virus resistance tests and, as you've described,
5 there was a period where regular testing for
6 hepatitis C and HIV were undertaken if the patient was
7 negative for those viruses.
- 8 **A.** Correct.
- 9 **Q.** For testing for hepatitis C genotype and PCR testing
10 when that became available. In a clinic where you see
11 a patient today, what tests are you doing on a regular
12 basis?
- 13 **A.** In a clinic today we are mainly doing tests to look
14 for anaemia and iron deficiency, which would be a full
15 blood count and a ferritin. We would be testing for
16 Factor VIII inhibitors on a regular basis and we would
17 do liver function and renal function tests.
- 18 People with HIV have their tests ordered or
19 requested by the blood-borne virus clinic and then
20 they come to the haemophilia centre with those forms
21 for the tests to actually be done. So we are no
22 longer involved in requesting the tests for monitoring
23 for HIV.
- 24 For hepatitis C, people will be monitored
25 routinely through the haemophilia centre, and what we

63

- 1 be slotted into the next clinic. So anyone can
2 essentially come when they want to if they have
3 a problem.
- 4 **Q.** What about a patient with moderate haemophilia?
- 5 **A.** So, again, every six months. We would offer people
6 with moderate haemophilia an appointment every six
7 months. People with mild haemophilia it might be once
8 a year, would be the average. But if a person has
9 hepatitis C or HIV they would be seen more often, at
10 least every six months if they had active hepatitis C.
- 11 **Q.** And a patient with von Willebrand's? How often would
12 they be seen?
- 13 **A.** Type 3 severe von Willebrand's, at least every
14 six months. There are some people with
15 type 3 von Willebrand's who have a really quite
16 significant bleeding pattern, they would be seen at
17 least every six months in a formal clinic, but people
18 with type 1 von Willebrand's, where it's a more mild
19 disease, maybe once a year or often once every
20 two years. Some people have -- they can go 10 or
21 15 years with no problems and then they might have an
22 issue, for example, related to when they need
23 a surgical procedure.
- 24 **Q.** You described in your statement that at every
25 appointment or that every appointment blood samples

62

- 1 now have is the joint clinic with Dr Srivastava, who
2 is the consultant hepatologist. He will advise us on
3 what blood tests to perform, and so we follow the
4 advice dependent on what he is suggesting.
- 5 **Q.** Can you describe for us the consent process that you
6 would undertake with a patient at a six-monthly
7 regular clinic appointment for those tests.
- 8 **A.** For a routine clinic appointment, we would just say to
9 the patient, we're going to do your routine tests,
10 we'd you know, test for anaemia, look for an inhibitor
11 which is what people are aware. We certainly don't
12 take more formalised consent than that.
- 13 **Q.** So if you were testing for a particular virus,
14 a parvovirus, or something of that nature, would you
15 have a more formal consent process?
- 16 **A.** We certainly would now, yes.
- 17 **Q.** What would be the nature of that conversation? Can
18 you describe that typical conversation you might have,
19 if you were testing for parvovirus, for example?
- 20 **A.** Well, that hasn't come up for a very, very long time,
21 although it did come up this week. I wasn't the
22 clinician involved in that discussion and it's
23 a discussion about an individual case, so we probably
24 best not. But we would have no reason to test for
25 parvovirus, so I don't think that would come up unless

64

1 the individual patient requested it at the moment.
 2 **Q.** So are there circumstances in which you have, in
 3 a regular clinic, have to go into a more in-depth
 4 discussion with patients in order to obtain consent
 5 for particular tests, particular blood tests or --
 6 **A.** Genetic tests we have a more in-depth process and we
 7 have a system of written, signed consent for taking
 8 genetic tests, those to look for the mutation that is
 9 causing haemophilia A or B, but now it's much more
 10 possible to test for all sorts of genetic disorders
 11 because of the huge progress that has been made in
 12 genetic testing over the years. So we are now
 13 offering genetic tests for families with
 14 von Willebrand's disease or with Factor XI deficiency
 15 or with platelet disorders and so we would go through
 16 a much more formal consent process and we have
 17 a written patient information sheet and a consent form
 18 and they would sign written consent for that process.
 19 **Q.** I understand from your statement that the centre no
 20 longer stores samples; is that correct?
 21 **A.** That's correct. Since we transferred to recombinant,
 22 there didn't seem any reason to continue to do that,
 23 so that was -- we stopped storing samples when people
 24 converted to recombinant.
 25 **Q.** What's happened to the stored samples?

65

1 **Q.** Can I take you to a document to see how this might
 2 have worked in practice. It's WITN4029008.
 3 We can see here this is an article "Long-term
 4 follow up of patients treated with intermediate
 5 Factor VIII concentrate BPL 8Y", and your name along
 6 with Dr Dasani and Dr Brown as authors. If we see the
 7 summary, second sentence:
 8 "Long-term surveillance [first sentence]
 9 studies of clotting factor concentrates are important
 10 to detect infrequent or delayed complications and to
 11 provide data against which newer products can be
 12 compared. We have assessed the long-term use of
 13 BPL 8Y Factor VIII ... concentrate ..."
 14 So that's the purpose of the study. We can see
 15 that you collected data from 33 patients treated over
 16 96 months. You tell us in your witness statement
 17 that, as this was a surveillance study, this is not
 18 something that you sought ethical approval for or
 19 consent from the patients; is that right?
 20 **A.** Yes, that's correct. We thought that this was put in
 21 the criteria of a service evaluation rather than
 22 a clinical study.
 23 **Q.** If we turn over the page, Soumik, there's "Patients
 24 and methods", we can see there the method that was
 25 used, 33 patients treated exclusively with BPL 8Y:

67

1 **A.** I can't answer that for definite. What I can say is
 2 that the stored samples are no longer present. No-one
 3 can tell me exactly when they were destroyed. It is
 4 possible that they were destroyed after there was
 5 a failure of one of the virology freezers but people
 6 can't tell me definitively. What they can tell me
 7 definitively is that they no longer hold any samples.
 8 **Q.** When you were storing samples, what were patients told
 9 about that when routine blood tests were taken, were
 10 they told that their samples were being stored back in
 11 1996/97?
 12 **A.** Yes, they were told that we were storing samples in
 13 case there was a problem with another infectious agent
 14 and that we might need to test those samples in the
 15 future. So that was the discussion that was had
 16 regarding those samples.
 17 **Q.** So was that discussion a process by which you were
 18 obtaining consent from the patient to test for future
 19 viruses or was it a discussion on the basis that you
 20 would then come back to get their consent to test for
 21 those viruses if that became appropriate?
 22 **A.** It was on the basis that if, for example, a test for
 23 variant CJD became available, we would go back to the
 24 individual and discuss whether they wanted that test
 25 to be done or not.

66

1 "The patients' notes were reviewed and data
 2 collected."
 3 Then at the top of the next column:
 4 "Virological testing had been carried out on
 5 a six-month basis."
 6 So that, presumably, is a reference to the
 7 testing that had been undertaken at the clinic
 8 reviews; is that right?
 9 **A.** That's correct, yes.
 10 **Q.** Then moving down to the end of that paragraph:
 11 "Stored sera were used for parvovirus ...
 12 antibody testing by ELISA ..."
 13 So it's really that that I wanted to ask you
 14 about. In this study, were you testing the stored
 15 sera for parvovirus?
 16 **A.** In some cases, those were tested on stored sera. In
 17 some cases, the individuals were invited up to the
 18 haemophilia centre to have samples taken for the
 19 parvovirus test.
 20 **Q.** So while -- and if this sera -- if the testing was
 21 done on stored sera, are we to understand then that
 22 the patients wouldn't have consented to that test?
 23 **A.** Yes, that's correct.
 24 **Q.** So some of the patients in this study would have
 25 consented to parvovirus testing but wouldn't have

68

1 understood that it was to be reported in this article;
2 is that right?

3 **A.** I don't know. I wasn't directly involved in that
4 conversation. That would have been Dr Dasani and
5 Dr Brown directly involved in that conversation. So
6 I don't know exactly what was said.

7 **Q.** Should the patients have consented to their stored
8 sera being tested for parvovirus?

9 **A.** I think in retrospect, looking at this now, I think
10 that they should have been asked to have their stored
11 sera tested for parvovirus, yes.

12 **Q.** Do you know whether the patients were told the results
13 of the tests for the parvovirus?

14 **A.** I don't know the answer to that, I'm afraid.

15 **Q.** Would that have fallen to Dr Dasani?

16 **A.** Possibly, or to Dr Brown. I think the other point
17 just to make about the results is that I think that --
18 because I've obviously read this paper again now.
19 This was written soon after I started in Cardiff and,
20 reading it again now, I'm not sure that we have
21 interpreted the results correctly with regard to those
22 parvovirus results. The reason I say that is that
23 these people, by definition, were receiving 8Y. 8Y
24 has immunoglobulin in it and it is possible that the
25 parvovirus antibody that we were picking up in that

69

1 that I don't think those samples should have been
2 tested.

3 **Q.** I'm anticipating from your previous answer that you
4 won't know the answer to this but were those patients
5 followed up as a result of what was thought to be
6 positive parvovirus tests?

7 **A.** Well, they were all being followed up regularly. Of
8 course that test is a test that if it is positive
9 shows past parvovirus infection, not current
10 parvovirus infection, and something like 50 to
11 60 per cent of the UK population will be
12 parvovirus IgG positive because they have had
13 parvovirus in the past.

14 So it's not a disease that leads to chronic
15 problems. You have parvovirus, you get over it. It's
16 sort of a classic childhood illness, a little bit like
17 measles, you have it, you get over it, and then that
18 is -- there's no further consequences of that.

19 So all of these individuals would have been
20 being followed up through the clinic and, you know,
21 any clinical symptoms would have been investigated
22 appropriately. But I don't think parvovirus would
23 have been an issue in that situation.

24 **Q.** Sticking then with treatment of patients at the
25 centre. Again, a similar question to the one I asked

71

1 test was, in fact, coming from the concentrate rather
2 than a demonstration that the individual had had
3 parvovirus in the past.

4 So I think it's difficult to interpret the
5 results of that, and that's something I've become
6 aware of when I've re-read this paper and looked at it
7 again with fresh eyes. I think, however, there is no
8 doubt that we should not have tested those stored sera
9 without talking directly to the individuals involved.

10 **Q.** Equally, should the patients have been told what the
11 outcome of those tests were?

12 **A.** I think they should have been told the outcome of
13 those tests but, as I say, it is possible we would
14 have given them the wrong information or potentially
15 misleading information. I think the conclusion that
16 I reach now is that we shouldn't have tested them at
17 all because we could not derive a clear understanding.
18 The reason this was of such significance at that time
19 was because there had been a case report from the
20 Royal Free Hospital of an individual who had
21 contracted parvovirus apparently from concentrate and
22 developed significant anaemia, and parvovirus was
23 being seen as an important sort of potential marker
24 for pushing the introduction of recombinant
25 Factor VIII around that time. However, I fully agree

70

1 you earlier about testing for infections. Is there
2 anything that you've heard from patients or from, in
3 particular, Dr Dasani or Sister Jones about the way
4 that patients' treatment was managed by
5 Professor Bloom during his directorship of the centre?

6 **A.** No. All I know about the treatment is from the two
7 protocols that I've submitted, from 1983 and 1985.
8 That's all I really know about the treatment. I know
9 from discussion with patients that there wasn't a full
10 discussion about the different types of treatment or
11 necessarily all the potential risks of treatment.
12 That's all I know. I don't know anything further.

13 Again, Jenny Jones would have been present at
14 those discussions, Elizabeth Moffat would have been
15 present at those discussions, and they may be able to
16 give a better answer than I can.

17 **Q.** Your knowledge of the protocols and procedures that
18 you have exhibited to your witness statements come
19 simply from those documents, do they, rather than from
20 anything you've gleaned about how they were
21 implemented from discussions with patients or
22 Dr Dasani or Sister Jones?

23 **A.** That's correct. I was unaware of those documents
24 until we received the request from the Inquiry for
25 documents. I went through everything I could find and

72

- 1 those were documents that -- I was unaware of their
2 existence until I looked through sort of the old kind
3 of files that I'd inherited from Professor Bloom's
4 office.
- 5 **Q.** So you didn't have conversations from -- someone
6 saying, "Well, you know, this is the treatment
7 protocol we used to apply, see this document"?
- 8 **A.** No, I didn't, no. But Jenny Jones would have followed
9 those protocols. She would have worked directly off
10 those protocols.
- 11 **Q.** Moving on then to how HIV is managed and has been
12 during your tenure at the centre.
- 13 You have already told us that Dr Dasani was an
14 HIV expert. The Inquiry's heard evidence from
15 Dr Winter, who described himself I think as an HIV
16 physician. Is that the same situation that Dr Dasani
17 was in?
- 18 **A.** Yes, Dr Dasani had -- because HIV was a very new
19 disease and he had been looking after people with HIV
20 since it was first recognised, he was probably as
21 knowledgeable about the management of HIV as anybody
22 at the time. He attended British HIV Association
23 meetings, he kept up-to-date with the literature, and
24 I think he was -- he could be considered as an HIV
25 physician in the same way that Dr Winter could be.

73

- 1 done that all the time I'd been in Cardiff. The
2 people with HIV who were being looked after in the
3 haemophilia centre expressed a very strong opinion
4 that they wanted to stay under the care of Dr Dasani,
5 and so they continued to be looked after by him, with
6 Dr Freedman doing joint clinics. So it was really
7 only after Dr Dasani retired that the expertise within
8 the haemophilia centre needed to be more formally
9 supported by the blood-borne virus clinic, and it was
10 after that time that we started to -- people started
11 to go to the blood-borne virus clinic specifically so
12 that they could see specialists, because of course we
13 weren't -- in the way that Dr Dasani was, we weren't
14 specialists in HIV management.
- 15 **Q.** So is this right, that currently all patients with
16 HIV, their HIV is managed by the blood-borne virus
17 clinic and the blood-borne virus clinic runs clinics
18 on the same day as the haemophilia centre so, while
19 there aren't joint clinics, the patients only need to
20 attend the hospital on one day?
- 21 **A.** That's correct. We tried very hard to make that the
22 case, so that the individual would go to the
23 blood-borne virus clinic first, they would be given
24 their blood tests, they'd come to the haemophilia
25 centre, we would review any issues related to

75

- 1 **Q.** You've also said that you were able to refer some of
2 your patients to the infectious diseases team led by
3 Professor -- and I'm not going to be able to pronounce
4 his name correctly -- Bory --
- 5 **A.** Borysiewicz.
- 6 **Q.** How frequently did you refer such patients?
- 7 **A.** Well, this was before I'd arrived. Dr Dasani told me
8 that he would sometimes seek Professor Borysiewicz's
9 opinion on patients. It was certainly not a formal
10 thing. That was all before I arrived. One of the
11 very first things I did after arriving in Cardiff was
12 to approach the consultant in infectious diseases,
13 called Dr Freedman, and he was, again, an expert
14 in HIV. And we then started working jointly with
15 Dr Freedman, both myself and Dr Dasani, to look after
16 people with HIV, and Dr Freedman started to come to
17 the haemophilia centre and do joint clinics with us so
18 that he could advise people directly. And so he and
19 Dr Dasani then -- all treatment-related decisions in
20 terms of what anti-HIV medication, the decision taken
21 jointly by Dr Freedman and Dr Dasani after that time.
- 22 **Q.** Then at some point the HIV care moved to the
23 blood-borne virus clinic. Was that a new service that
24 was set up?
- 25 **A.** No, Dr Freedman ran a blood-borne virus clinic and had

74

- 1 haemophilia and add any blood test, like inhibitors or
2 whatever, and then the haemophilia nurses would take
3 bloods. So that's the process.
- 4 **Q.** Presumably is there a mechanism by which you can
5 discuss patients with your colleagues from the
6 blood-borne virus clinic so there's joined up
7 multidisciplinary care?
- 8 **A.** Yes., at any time I can contact a member of the
9 blood-borne virus team and discuss an individual that
10 I might have some concern about. They are very
11 accessible and very easy to contact.
- 12 **Q.** Then moving on to arrangements for managing patients
13 with hepatitis, in your statement you say that prior
14 to your arrival patients had been managed by
15 Dr Dasani, with referrals being made to England for
16 second opinions and some liver transplants having been
17 undertaken in London and Cambridge; is that right?
- 18 **A.** That is correct, yes.
- 19 **Q.** Are we to understand from that that there was no
20 hepatology expertise within Wales at that stage?
- 21 **A.** There was certainly no hepatologist in Cardiff.
22 I don't know within Wales. It may be that there were
23 none in Wales. There was certainly no liver
24 specialist that could, for example, undertake liver
25 transplantation in Wales and there still aren't.

76

1 That's a service that is not available in Wales, liver
2 transplantation. But in Cardiff there was no -- when
3 I started in 1996 there was no hepatologist in
4 Cardiff. If you wanted to have an opinion locally you
5 would have to talk to a gastroenterologist who
6 certainly had more knowledge than we did about chronic
7 liver disease but they weren't a hepatology
8 specialist.

9 **Q.** You have already described to us that, when you
10 started, you started a regular out-patient clinic for
11 those with hepatitis. Were you running those clinics
12 with advice from Dr Freedman? Is that how it worked?

13 **A.** So Dr Freedman was a specialist in treatment to
14 eradicate hepatitis C because he was an infectious
15 disease doctor. Dr Freedman wasn't a specialist in
16 the management of chronic liver disease. So when it
17 came to the eradication of hepatitis C, Dr Dasani
18 [and] Dr Freedman would jointly come to decisions on
19 what treatment should be offered. If we were
20 concerned about an individual having progression of
21 liver disease, we would have to seek the opinion of
22 a gastroenterologist, or Dr Dasani would sometimes
23 contact one of his contacts elsewhere in the UK and
24 directly refer the individual.

25 So, for example, if there was concern about

77

1 wasn't just people with inherited bleeding disorders.
2 This was everyone in the Cardiff area. There was no
3 access to hepatology service for anybody, so it wasn't
4 a specific issue for bleeding disorders but, of
5 course, because so many people with bleeding disorders
6 have hepatitis, it was disproportionately affecting
7 their care.

8 **Q.** Then you describe in your statement how between 2003
9 and 2009 you were able to establish a joint clinic
10 with Professor Godkin who is a hepatologist --

11 **A.** Yes.

12 **Q.** -- and able to review patients with more progressive
13 liver disease that way and then make referrals to
14 Birmingham in some cases.

15 **A.** Yes, correct. So Professor Godkin came to the
16 haemophilia centre did joint clinic with either myself
17 or Dr Dasani, and we were -- and people with liver
18 disease would be seen in that clinic. He would see
19 them, examine them, advise them and, if necessary, he
20 would make the referral to the centre in Birmingham.

21 **Q.** You have also described how that wasn't part of
22 Professor Godkin's brief, as it were. He had to fit
23 that in on top of his existing commitments and so it
24 wasn't something that lasted beyond 2009?

25 **A.** That's correct. It wasn't in his job description and

79

1 an individual having progressed liver disease, he
2 might refer to London or to Cambridge to say, should
3 this individual be assessed for a liver transplant,
4 and the answer would come back yes or no and we would
5 refer like that.

6 About -- sorry.

7 **Q.** Sorry.

8 **A.** About one or two years after I started in Cardiff, one
9 of the gastroenterologists did a secondment to the
10 liver unit in Birmingham and, I think, spent about
11 a year there as, sort of, part of, sort of, more
12 specialist training. That was Dr Thomas and when he
13 came back to Cardiff, we started to use him as our
14 hepatology consult and, because of his links with
15 Birmingham, people were then starting to be referred
16 to Birmingham if they had problems with liver disease
17 that were progressing.

18 **Q.** So is this right: up until, I think, 2003 you were
19 managing your patients who were infected with
20 hepatitis C, you were managing their care with
21 assistance from, at various times Dr Freedman or
22 Dr Thomas, once he came back in, I think you said in
23 your statement, 1998?

24 **A.** Yes, that is all correct. We didn't have access to
25 formal hepatology and, just to make the point, this

78

1 he -- I obviously don't know the exact ins and outs of
2 it, but he has explained to me that he was told that
3 he couldn't continue to provide that service because
4 it wasn't part of his job plan. But I don't know the
5 exact -- how those exact discussions went ahead.

6 Even though he stopped coming to the joint
7 clinics, he still was available. So if, for example,
8 I was concerned about someone, or one of my colleagues
9 was concerned, we could still go and knock on his door
10 or contact him by email and say "This is the
11 situation", and then he would see the individual very
12 quickly in one of his clinics. He was still
13 available, it's just that he wasn't available to come
14 and do that joint clinic.

15 **Q.** So, again, the reviewing and monitoring was left to
16 you on a day-to-day basis with escalation to
17 Professor Godkin when you thought that was
18 appropriate?

19 **A.** Yes. So we had to undertake the surveillance for
20 liver disease, which I think was clearly something
21 that I don't think was optimal care because we're not
22 trained in what we were being asked to do, and when
23 Dr Godkin was coming to the joint clinic he was,
24 obviously, appropriately assessing people, we were,
25 I think, not providing optimal care during that period

80

1 because that wasn't a possibility.

2 **Q.** You've explained in your statement and exhibited

3 various documents that show that this gap in service

4 was identified, and a specific recommendation was

5 made, to ensure appropriate consultant and specialist

6 hepatology input into the treatment of patients

7 in 2011, and you were involved in that process --

8 **A.** Yes, so -- sorry.

9 **Q.** Yes?

10 **A.** So that was a ministerial review of inherited bleeding

11 disorders in Wales and the key -- a number of findings

12 came out of it but an absolute key finding was that

13 the haemophilia centre in Cardiff needed access to

14 a consultant hepatologist who could do the joint

15 clinics and who could manage the patients optimally.

16 By this stage Swansea Haemophilia Centre did have

17 a consultant hepatologist who was seeing patients

18 there and one or two of the people from Cardiff went

19 to Swansea to be seen by that hepatologist so that

20 they could access services that were appropriate to

21 their needs.

22 **Q.** You were also involved in the inherited bleeding

23 disorder action plan, which seems, as I read it, that

24 funding was confirmed in 2014/2015 for a consultant

25 hepatologist. Is that your understanding as well?

81

1 but I can't say that with real authority.

2 **Q.** You've said very candidly that that was not optimal

3 care. What impact do you think that has had on your

4 patients, the fact that, certainly from 2009, there

5 hasn't been hepatology input, other than as described

6 when escalated, for your patients with hepatitis C or

7 hepatitis?

8 **A.** I think that's a very difficult question because

9 I knew I was going to be asked that question. It

10 comes down to individual cases and the question of

11 whether individual cases could have been managed

12 better had they been -- more proactively been followed

13 up in hepatology is a very difficult question to

14 answer.

15 We certainly, I think, picked up a number of

16 severe liver-related complications quite quickly,

17 because we were doing regular ultrasounds of the liver

18 and regular blood tests to detect liver tumours.

19 Whether they would have been picked up more quickly

20 had they been in a formal hepatology clinic, it is

21 possible, but I don't know. That's a very difficult

22 question to answer.

23 **Q.** So currently patients with hepatitis are being managed

24 through joint clinics with you and Dr Srivastava and

25 there's also -- the blood-borne virus clinic also has

83

1 **A.** I wouldn't like to be sure to say what my

2 understanding was. I wasn't involved in the

3 discussions because there would have been discussions

4 between the Welsh Commissioners and the Cardiff and

5 Vale board about the funding arrangements, which

6 I wasn't involved in in that process at all. So

7 I don't know how those discussions panned out or what

8 was said.

9 **Q.** Do you know why it took from 2011 to 2016 for

10 a hepatologist to be engaged?

11 **A.** Again, the information that will give the clearest

12 answer would come from the hospital board, who would

13 have been -- it would have been their role to make

14 that appointment.

15 My understanding was that the post had been

16 advertised earlier but a suitable candidate hadn't

17 come forward and the suggestion that has been said to

18 me but, again, I can't say this with complete

19 authority, was that the job plan had included that

20 that individual would also have to undertake other

21 general medical duties, as well as being

22 a hepatologist and, therefore, it was thought unlikely

23 that you would get someone who really wanted to be in

24 hepatology to come and take that post on.

25 That's what I've been, sort of, led to believe

82

1 a roll. What role does that clinic take?

2 **A.** So Dr Srivastava in the joint clinic, the role there

3 is to monitor people with regard to progression of

4 liver disease and undertake surveillance. So, for

5 example, some people will be on a surveillance

6 programme of regular ultrasound, regular blood tests,

7 some people require regular endoscopy to look for

8 oesophageal varices. So that will be the role of the

9 clinic with Dr Srivastava.

10 In Wales, when the funding for the new

11 hepatitis C treatments came in, these are the

12 non-interferon-based treatments, that funding was

13 allocated so that people would be treated with the

14 blood-borne virus clinic to offer treatments to

15 eradicate the hepatitis C virus. So the hepatitis C

16 eradication therapy is done through the blood-borne

17 virus clinic and that has all now been completed. So

18 no-one is attending the blood-borne virus clinic for

19 hepatitis C eradication therapy because everyone who

20 has elected to have treatment has had the virus

21 eradicated, so there is, at the moment, no-one

22 attending that. That clinic was run by Dr Healy and

23 he was one of the -- again, an infectious disease

24 microbiology expert and he took the role on of

25 managing hepatitis C eradication throughout the whole

84

1 of the Cardiff area for all patients with hepatitis C.
 2 **Q.** Now I'm going to ask you some questions about medical
 3 records. Can I start by asking you this: the
 4 Inquiry's heard evidence from a number of patients
 5 treated at Cardiff before you arrived by
 6 Professor Bloom and they have told the Inquiry that
 7 there were a number of key records missing from their
 8 medical records, gaps in their medical records, and so
 9 on.

10 Is that something that you found yourself when
 11 you came to Cardiff and were treating patients? Was
 12 key information missing or key documents missing?

13 **A.** I think the only key documents that were missing which
 14 came up in the audit by Dr Hill was that the people's
 15 HIV results were filed -- they were all filed
 16 together, separate from the notes. As far as I'm
 17 aware, those are the only key documents that were not
 18 in the notes that one would have expected to be in the
 19 notes.

20 When I arrived in Cardiff, all of the notes of
 21 the people who had died of HIV were in a cupboard in
 22 the office that I inherited and we have kept those
 23 notes ever since.

24 I am not aware that those notes have -- we just
 25 kept them. We haven't -- I haven't been through them

85

1 **A.** It's the policy of the haemophilia centre to keep
 2 those. I think the policy in general in the NHS would
 3 be not to keep records of people who have died, you
 4 know, only for a period and I think that if someone
 5 doesn't attend the hospital for maybe ten years or so
 6 the policy might be not to retain the records. Of
 7 course, someone with a bleeding disorder might not
 8 attend for 20 years and then come with a problem, and
 9 so we needed to retain the notes.

10 **Q.** The hospital tolerates your policy, do they, of
 11 keeping notes for the life of the patient and after
 12 their death?

13 **A.** Yes, there is no issue with that in the current
 14 situation. As you are aware, there was a time when
 15 there was -- I can't remember how long ago it was but
 16 the Inquiry has the documents, where there had been
 17 this issue of trying to not store these documents for
 18 life, and I made the point that I thought we should.

19 And I didn't get any push-back on that apart from to
 20 say, "Well, you find the space then", which is what
 21 we've done.

22 **Q.** Can I ask you now some questions about links with
 23 pharmaceutical companies. You've told us in your
 24 statement that three companies gave donations that
 25 helped build the new centre in 2000. Who managed that

87

1 to look to see if there are key documents missing or
 2 elements that I think should have been there.
 3 I haven't been through the notes to make that
 4 assessment. So the only thing I'm aware of is this
 5 issue of filing HIV notes separately.

6 **Q.** So when you come to treat patients, do you, would you
 7 have to look through their notes to find key pieces of
 8 information? Is that something you would have
 9 noticed? Would you have noticed that key documents
 10 are missing from the patients that you are treating
 11 from 1996 onwards?

12 **A.** I think if there had been any systematic issue,
 13 I would have noticed, yes. I think -- I can't
 14 remember a case where I have been unable to find the
 15 information that I was expecting to find. It was all
 16 to me clear what was there. So, yes, I can't think of
 17 any issues.

18 **Q.** You also say in your statement that it's -- you told
 19 us it's your policy to keep records of those infected
 20 with HIV after they've died. You've also said it's
 21 your policy to keep records for the life of your
 22 patients.

23 Do you know whether that's become formal
 24 hospital policy or is that simply the policy of your
 25 centre?

86

1 process with the pharmaceutical companies? Was that
 2 something that you were involved with?

3 **A.** The money was paid into an endowment fund. So
 4 I wasn't directly involved in the transfer of the
 5 money. That went through the finance department. But
 6 I was involved in sort of discussing with various
 7 companies whether they would be prepared to make
 8 a donation.

9 The problem was that we had the agreement --
 10 because, as I've said earlier, all -- the haemophilia
 11 centre had been disbanded and the people being treated
 12 in the haematology day unit. Having made an argument
 13 that we needed a new centre, a stand-alone haemophilia
 14 centre -- and this was very strongly supported by the
 15 local patient group. We had a number of meetings with
 16 senior management, myself and the local patient group,
 17 to put this -- to advocate for this. The agreement
 18 then was that, "Okay, you can have a stand-alone
 19 haemophilia centre, but you are going to have to fund
 20 the cost of it" and that's why we were obliged to look
 21 for sources of funding. We had a number of different
 22 sources of funding that went to build the new centre.

23 **Q.** What sort of sums were the pharmaceutical companies
 24 contributing then to the building of the new centre?

25 **A.** It was around about 10,000 to 20,000 from my memory.

88

- 1 **Q.** For each company?
- 2 **A.** Yes, that's from my memory.
- 3 **Q.** Were they companies that you were -- companies whose
- 4 products you were using at the time?
- 5 **A.** Yes, they were recombinant Factor VIII product
- 6 companies. So we approached all of the companies with
- 7 the same request and they either agreed or didn't
- 8 agree.
- 9 **Q.** What do you do or what do you do at the centre, or you
- 10 personally, to guard against any risk that companies
- 11 contributing to the centre's work doesn't influence
- 12 the decisions that you make about prescribing
- 13 products?
- 14 **A.** I think we've always been very independent about what
- 15 products we would use. Of course, with the national
- 16 tenders, we followed the national tender. So that
- 17 doesn't -- that then becomes much less of an issue
- 18 because we are -- you know, we essentially have to
- 19 fulfil the requirements of the tender. And I think
- 20 that is a very big advantage of the tender because it
- 21 does remove the possibility or even perception that
- 22 there may be influence on prescribing.
- 23 So I don't think that that process of donations
- 24 to fund the building of the haemophilia centre had any
- 25 influence on our decision to prescribe any specific

89

- 1 across correspondence between him and pharmaceutical
- 2 companies in any of the documentation that was left at
- 3 the centre and that you've inherited?
- 4 **A.** I haven't. I'm aware of some of the documentation
- 5 that I've been shown by the Inquiry but I haven't come
- 6 across any documentation regarding an interaction
- 7 between Professor Bloom and pharmaceutical companies.
- 8 I didn't come across anything like that, no.
- 9 **Q.** Knowing what you do about the way that documents are
- 10 stored and the way that correspondence is generated,
- 11 certainly in '96, where do you think that
- 12 correspondence would have sat? Where do you think it
- 13 would have been kept?
- 14 **A.** Well, I don't know. I would have thought that if
- 15 there had been any correspondence it would be in
- 16 Professor Bloom's office, and I inherited his office
- 17 when I went there. Three people, as I said, have been
- 18 consultant for the centre in between Professor Bloom
- 19 dying and myself going there, so I didn't directly
- 20 inherit his office. So I don't -- as I say, I didn't
- 21 come across this sort of documentation.
- 22 Professor Bloom of course died suddenly, so his
- 23 office would have been left sort of in the state that
- 24 he was using it. There would have been no -- it
- 25 wasn't as if he retired and might have decided to get

91

- 1 brand of Factor VIII.
- 2 **Q.** You also described in your statement how
- 3 pharmaceutical companies continue to fund clinicians
- 4 attending educational meetings and activity patient
- 5 days?
- 6 **A.** Correct.
- 7 **Q.** Given what you said about the national contract, what
- 8 do you think the pharmaceutical companies are getting
- 9 out of that funding?
- 10 **A.** Well, the -- clearly from the point of view of the
- 11 pharmaceutical company they want to influence the
- 12 prescription of their product. Whether that is the
- 13 case or not, I don't know. I think that you will have
- 14 discussed this with many haemophilia doctors. I mean,
- 15 I might be supported to go to a meeting by a different
- 16 company each time. My colleagues might well be. So
- 17 there is a sort of a balance there. As I say, I think
- 18 that, from my perspective, I don't feel that I've been
- 19 influenced in prescribing policy because the policy,
- 20 as I describe, is sort of dictated by the national
- 21 contract. That's my sort of understanding of the
- 22 situation.
- 23 **Q.** Can I -- you have mentioned earlier on this morning
- 24 that when you took over the centre you inherited some
- 25 files of papers from Professor Bloom. Have you come

90

- 1 rid of documents. He died suddenly while still in
- 2 post. So I can't explain -- so, for example, I've not
- 3 come across any even UKHCDO minutes from
- 4 Arthur Bloom's time, so I just don't know where all
- 5 those documents went.
- 6 **MS SCOTT:** Sir, I notice it's 1 o'clock. I think I've got
- 7 probably about 15 minutes more to go, so what I was
- 8 going to suggest is that I continue for the next
- 9 15 minutes and then we take a break so that
- 10 Core Participants can ask any questions that they wish
- 11 to of me to put to --
- 12 **SIR BRIAN LANGSTAFF:** Might it be more convenient, do you
- 13 think, to come back at 2.00 and ask the 15 minutes
- 14 then, having picked up the questions they may have to
- 15 ask in the meantime?
- 16 **MS SCOTT:** I'm happy to proceed on that basis.
- 17 **SIR BRIAN LANGSTAFF:** Let's -- oh, all right, let's go on
- 18 for 15 minutes. Are you happy to go on for 15 minutes
- 19 and then take a break or would you rather take a break
- 20 now?
- 21 **A.** No, I'm happy to continue for another 15.
- 22 **MS SCOTT:** We've already looked at -- I'm moving on to
- 23 a new topic now, which is just a question on research.
- 24 We've already looked at one of your studies -- one of
- 25 our articles, rather.

92

1 What I would like to ask you is the difference
2 between, in your view, research studies and service
3 evaluations. So the article we looked at previously
4 was a service evaluation, and you have said in those
5 circumstances you wouldn't get ethical approval and
6 you wouldn't seek patient consent, but you would if it
7 was a research study.

8 I just wanted to explore with you where the
9 bright line is, in a sense, particularly given that
10 the example we looked at previously involved testing
11 of stored sera, for example.

12 So could you just explain to us where your
13 bright line is between a research study and a service
14 evaluation.

15 **A.** So my understanding is that if a person or a patient
16 group are being treated by standard practice of the
17 centre and that routinely collected information is
18 reported, then that is a service evaluation.

19 A research study is asking a specific question.
20 So you may say: we're going to change treatment and
21 see what happens. That would be a research study and
22 would require ethical approval and informed consent.

23 I note that in -- the Inquiry's ethics
24 specialty group has specifically mentioned the
25 difficulty of drawing the line between research and

93

1 Committee, we did get it passed by the ETSA(?) so we
2 did take written informed consent from the individuals
3 concerned.

4 So that's broadly where I'm seeing the line.

5 **Q.** Sorry. Carry on.

6 **A.** I could give another example in my work in post partum
7 haemorrhage, so I've done about 10 or 12 years now
8 work with colleagues in Cardiff trying to improve the
9 care of women who have bleeding after childbirth and
10 one of the main drivers for that is to try and reduce
11 the amount of blood transfusion people require after
12 childbirth.

13 Now, we've done a number of studies where we
14 have recruited women, we've been to ethics committees,
15 the women recruited into the study give written
16 informed consent, and they are research studies. But
17 once we've completed that research, we then applied
18 the knowledge gained from the research to change the
19 way post-partum haemorrhage was treated throughout
20 Wales, as part of a quality improvement programme and
21 that was a two-year quality improvement programme
22 based on the understanding that we gained from that
23 research.

24 Now, that involved, essentially, all the women
25 giving birth in Wales because all obstetric units in

95

1 service evaluation and I think it is a difficult
2 situation that -- that does need to be seriously
3 considered.

4 So let's say, for example, that we have a group
5 of people -- an example of this is that we wrote
6 a paper about unclassified bleeding disorders. We --
7 over the years we've looked after people with
8 unclassified bleeding disorders. These are people who
9 have bleeding during invasive procedures or at other
10 times but we can't find anything in the laboratory
11 that explains that bleeding so they are called
12 unclassified bleeding disorders. We've managed them
13 according to standard practice and so we have reported
14 that as a service evaluation. That's the way we have
15 reported it. So we didn't apply for ethical approval
16 and we didn't seek informed consent.

17 On the other hand, one of our team has done
18 a PhD looking for the underlying cause of unclassified
19 bleeding. And that we submitted to the Ethics
20 Committee, we invited people up, we explained the
21 study and we took written informed consent, and tests
22 were done that aren't routine laboratory tests, but
23 tests were done to see if we could find the underlying
24 cause for the unclassified bleeding disorder. That is
25 clearly research, and we did go to the Ethics

94

1 Wales took on this quality improvement programme. We
2 have collected information from that quality
3 improvement programme and demonstrated a very
4 substantial improvement in the quality of care,
5 a reduction in the number of women with severe
6 bleeding and very major reduction in the number of
7 women receiving a red cell transfusion.

8 However, that's a quality improvement
9 programme. In order to report that, that isn't going
10 to go to an Ethics Committee, we haven't taken written
11 informed consent from the 60,000 women involved, we
12 are reporting that as an evaluation of the service
13 across Wales.

14 So those are kind of a broadly where I see the
15 difference but I do agree that it is often difficult
16 to know where to draw the line between these things
17 and on the paper on 8Y that you showed me earlier
18 I think we drew the line in the wrong place. Looking
19 at that back now, I think we drew the line in the
20 wrong place.

21 **Q.** Is the fact that the information is going to be --
22 albeit the information about the patients is going to
23 be anonymised, the fact that it's going to be
24 published, it's going to be able to be accessed by
25 many people and analysed, and so on, is that relevant

96

1 to the question about whether or not one gets consent,
2 even if not relevant to whether or not one goes to
3 an ethical committee?

4 **A.** No, I don't think -- I think if you don't have to seek
5 ethical approval then I think it is reasonable to
6 publish the aggregate data from the haemophilia centre
7 and, as I said, we publish in the aggregate data for
8 all the births in Wales over a two-year period. If we
9 weren't able to do that, then all of that knowledge,
10 which would substantially improve the quality of care,
11 would be lost because it's impossible to go and seek
12 consent from 60,000 people.

13 So I think there has to be some
14 proportionality, I think that's the word that is used
15 by Ethics Committees and the Health Research
16 Authority, the NHS Health Research Authority does have
17 guidelines on where you try and draw the line. But it
18 sometimes isn't completely clear.

19 **SIR BRIAN LANGSTAFF:** Is perhaps part of the problem the
20 word "evaluation"? I can understand the difference
21 between reporting what is happening, on the one hand,
22 making research into why it is happening, which is
23 a separate issue, and making recommendations into what
24 should be done, which is a question of judgment or
25 policy or proposal. All three are quite distinct in

97

1 the patient, the NHS number, the date of birth,
2 information on their diagnosis, their factor levels or
3 the subtype of von Willebrand's disease, information
4 is held about HIV status, hepatitis C status. There's
5 a large section about variant CJD, about people who
6 were designated in the at-risk group for variant CJD
7 and whether or not they have received implicated batch
8 in that context. That's all held there.

9 There's a whole section which is called
10 Haemtrack, which is patient-reported information. So
11 an individual will -- on their phone they will have
12 an app, every time they give themselves Factor VIII or
13 the Factor IX they enter the information into their
14 app and that is uploading to the National Haemophilia
15 Database, and then the haemophilia centre can see
16 their own patients' data. So if a person in west
17 Wales enters that they have had a severe bleed in the
18 knee, we in Cardiff, we could be alerted to that, so
19 we might then phone up and say "Are you okay, can we
20 help", that sort of thing.

21 They are very useful in clinic because we can
22 then go back six months and we can see the pattern of
23 bleeds over the last six months, and if an individual
24 has forgotten bleeds, we might say "Back in June you
25 had this knee bleed, what was that about", and then

99

1 you can see them as being quite distinct but they
2 shade into each other. But the word "evaluation"
3 suggests that somebody at some stage is making
4 a judgment about something, rather than simply
5 reporting what is, organising the data to show what
6 is.

7 Is there any truth in that observation or not?

8 **A.** I don't know. It's not my word. It's the wording of
9 the NHS Health Research Authority. They have
10 a specific section called "service evaluation" and in
11 that it is, as I've tried to describe, that it's
12 observation of routine care and routine collected
13 information then being reported in an anonymised
14 aggregate way.

15 They use the term "service evaluation" for
16 that. It may be that a better term might be helpful
17 but that is the currently used term.

18 **MS SCOTT:** I wanted to ask you some questions about the
19 National Haemophilia Database Research Registry, which
20 you talk about in the UKHCDO section of your witness
21 statement, ie with your UKHCDO hat on.

22 Can you just tell us what sort of information
23 is held within that research registry?

24 **A.** Yes. So the information held there is named the name
25 of the patient -- it's not anonymised -- the name of

98

1 they are reminded. So that's very useful and that's
2 patient-reported information, and it can then show
3 whether if after an individual -- say, for example,
4 an individual's on Factor VIII prophylaxis and then
5 they convert to Emicizumab, does that mean that their
6 bleed rate goes down? Do they get improved outcomes?
7 So very useful clinically.

8 The other information that's connected is about
9 people's joint scores, and so this is one of the most
10 important markers of how well people are being looked
11 after because if their joints deteriorate over time,
12 it suggests something is not quite right. If the
13 joints are staying perfect over time it suggests that
14 good quality haemophilia care is ongoing.

15 So that information -- and it's all collated
16 within the National Haemophilia Database and, as you
17 know, from Professor Hay's discussion, this goes back
18 to, I think, 1969 and has evolved progressively over
19 the years with different types of information either
20 being collected or not collected.

21 **Q.** So when you talk in your statement about the research
22 registry, that is actually the database itself? It's
23 not a separate part of the database?

24 **A.** It technically is separate because the database is the
25 database, the National Haemophilia Database. That has

100

1 a number of functions. It has the function of direct
2 patient care, for example through this Haemtrack
3 mechanism and the issuing of patient bleeding disorder
4 cards; so that's important and it has a role for sort
5 of service planning. So the Department of Health
6 might want to know what the trend is of Factor VIII
7 usage over time and we can give that information.

8 Now, the research registry was set up so that
9 the individual's data that was held in the database
10 for those purposes could then, on top of that, be used
11 for research purposes and, until that time, then
12 people weren't -- people were informed that their
13 information was going to the database and could be
14 used for research purposes but they hadn't given
15 express consent. So the idea of starting the research
16 registry was so that we would then go to each
17 individual and give them the opportunity to say: the
18 information held on the National Haemophilia Database
19 I'm either happy or not happy for it to be used for
20 research purposes.

21 And that process we put that to an ethics
22 committee, because the database was then submitted to
23 an ethics committee to consider that. Patient
24 information sheets were produced and passed by the
25 ethics committee and the said process was passed by

101

1 drafted, I believe, in September, needs to bear in
2 mind that there's been an update about the consent
3 process which was given in evidence by Professor Hay
4 when he gave evidence to the Inquiry?

5 **A.** Absolutely, that the process has changed, and it's
6 because the advice -- and the advice changed. And it
7 does make it difficult to do the right thing when
8 advice is changing.

9 **Q.** So is the position now that third parties may be able
10 to access patient not un-anonymised, if I can put it
11 that way, so patient data, I mean the detailed patient
12 information that you have described, without the
13 patients being asked for their consent?

14 **A.** Yes. So -- well, no-one can access the data apart
15 from UKHCDO so only UKHCDO can access the data, and we
16 have a data management working party that controls
17 access to that data and that has on it patient
18 representatives, representatives of the Haemophilia
19 Nurses' Association, the physiotherapists' association
20 and representatives of the Commissioners, and they
21 have the overview of what can be done.

22 We also have a group called the data analysis
23 group which meets every month which -- if a proposal
24 for information comes to the National Haemophilia
25 Database, so, for example, if that's a proposal from

103

1 the ethics committee. And then we started on this
2 process of individually seeking consent in each
3 haemophilia centre in the UK to do that. That's the
4 process that had been going on for -- you know, two to
5 three years, that process had been going on.

6 Professor Hay then explained in his evidence
7 that that was then superseded by the NHS Health
8 Research Authority Confidentiality Advisory Group, who
9 then came back, after we had gone through all of
10 this -- and many of us were very keen on continuing
11 with this process because we thought it was a good
12 thing to do -- he was then informed that he should
13 stop doing that and that we would apply for
14 a section 251.

15 So we have throughout this process I think, and
16 I think Professor Hay described this quite well, is
17 that getting advice is one thing but getting
18 consistent advice is difficult. Even from the
19 authorities that are supposed to be advising us we get
20 different advice, and it changes with time. It does
21 make it very difficult for us to, with authority, know
22 where we should be going. But that's kind of the
23 brief outline of the National Haemophilia Database
24 research register.

25 **Q.** So anyone reading your witness statement, which was

102

1 NHS England, for example, we would discuss that at the
2 data analysis group -- and again, that includes
3 representatives of the patients, it includes
4 representatives of haemophilia nurses and
5 physiotherapists, and we decide whether that
6 information is reasonable to give.

7 So that is the situation. So the situation now
8 is that a proportion of people have given express
9 consent for their data to be used for research and in
10 Cardiff we've got quite a lot of people have written
11 and done their informed consent, you know, well in the
12 hundreds, but now there's a group that hasn't because
13 we've been told to stop the process. So it is, in my
14 view, a bit unsatisfactory the advice that we've
15 received from the Confidentiality Advisory Group on
16 how this is going.

17 **Q.** Forgive me if this is my fault, but is the research
18 that can be done simply by the UKHCDO, it's not by
19 pharmaceutical companies? They wouldn't have access
20 to that information if they made an application --

21 **A.** They would not have access. No-one has access, apart
22 from UKHCDO.

23 **Q.** So all the research would be within the UKHCDO?

24 **A.** It would be and the people who do the analyses, the
25 statisticians, they don't see -- they see anonymised

104

1 data, so they don't see anything like the patient's
2 name or date of birth or anything. They see
3 anonymised data and they would then do the analyses.
4 They, essentially -- it's aggregate data so, you know,
5 people receiving treatment X would have this number of
6 bleeds per year on average. That's the sort of
7 information that is available.

8 **Q.** Then just lastly before -- I've gone slightly over my
9 15 minutes' time estimate, but can I just ask you two
10 more questions.

11 The first one arises out of what you wrote at
12 paragraph 320 of your witness statement, and it's
13 this:

14 "The transmission of HIV and hepatitis to
15 patients with bleeding disorders has dominated my
16 consultant practice and the way I approach the
17 management of people with bleeding disorders."

18 I just wanted to ask you to expand on that if
19 you can, the ways in which the infection of patients
20 with bleeding disorders has dominated your practice.

21 **A.** Well, I think this is all through my career, both in
22 training and as a consultant. It has always been --
23 a major aspect of looking after people with bleeding
24 disorders is the management of the complications of
25 the infectious diseases that were transmitted.

105

1 very difficult for people to deal with because they
2 know the history, they are then are being told that
3 maybe this might be another problem. But, again, we
4 don't really know. That's very difficult for people
5 to have to listen to and understand.

6 The other way that this is really dominating,
7 continues to dominate, as I explained earlier, many of
8 the mothers who look after and have children with
9 haemophilia nowadays, they've lost members of the
10 family to HIV or hepatitis C, and it's always with
11 them and when you're seeing those families, you know
12 it's always with them, and you have to discuss things
13 in the context of understanding how they might feel
14 about having a child with haemophilia, knowing the
15 problem that it's caused their family member.

16 I think both for myself and for all the people
17 who work in Cardiff, it does dominate our thinking in
18 terms of how we try to approach things, because
19 clearly we can't put anything right but I think
20 acknowledging what has gone wrong is very important.

21 **Q.** Lastly from me before we break, the Inquiry
22 understands that the statue of Professor Bloom has
23 been removed from the centre and that the centre is no
24 longer named after him. Can you tell us how that
25 decision came to be made and why?

107

1 When I first arrived in Cardiff people were
2 still dying of AIDS because the highly effective
3 treatment was -- only really, sort of, came in early
4 in 1997, so people were still dying of AIDS and we had
5 to look after people in that very difficult situation.

6 Since 1997, in Cardiff, we haven't had anyone
7 die of AIDS. Obviously, people with AIDS have died
8 potentially of complications related to that but not
9 died specifically of AIDS, because the treatment has
10 improved, but still dominates your thinking when you
11 are seeing patients that, clearly -- the treatment
12 that has been given by the centre has caused major
13 problems for an individual is always very high in your
14 mind when you are talking to people and it's the same
15 with hepatitis C. You always know and you always
16 understand that.

17 I think then the variant CJD issue did come to,
18 in many ways, really dominate things in the early
19 2000s as we had to then go to people and say "Look,
20 you are going to be put into what's called at-risk
21 group for variant CJD for public health purposes", and
22 then explain what that meant, because that's not
23 a difficult -- that's not an easy conversation to have
24 and, again, that became a dominant feature of our
25 practice at that time, because the uncertainty was

106

1 **A.** We were contacted by Haemophilia Wales and there
2 was -- from what I understand, Haemophilia Wales did
3 not want the bust of Professor Bloom to be removed and
4 the centre renamed. They wanted to wait for the
5 outcome of the Inquiry and for the Inquiry to give
6 their views and, once that was known, Haemophilia
7 Wales wanted to then make a decision on whether to
8 change the name of the haemophilia centre and remove
9 the bust.

10 I discussed this with Haemophilia Wales on
11 multiple occasions and that was their consistent view.
12 They wanted to wait for all the evidence to be
13 presented before a decision was made.

14 However, they got to a position where they were
15 experiencing pressure to remove the bust and they
16 approached me and said that rather than the
17 haemophilia centre becoming the centre of the story,
18 they wanted us to remove the bust and wait for the
19 Inquiry to give its opinion. So that's my
20 understanding of what happened. Clearly, Haemophilia
21 Wales can give their understanding and their version
22 of that, but that's the way I felt it happened. The
23 day that Haemophilia Wales said that they wanted us to
24 take the bust down we took it down, and that wasn't
25 the unanimous decision of Haemophilia Wales, but it

108

1 was the, as I understand it, consensus decision.
 2 **SIR BRIAN LANGSTAFF:** Well, let's take a break then, shall
 3 we, until -- will 2.25 be all right for you,
 4 Professor Collins?
 5 **A.** Sorry, what was the time again?
 6 **SIR BRIAN LANGSTAFF:** 2.25 be all right for you?
 7 **A.** That will be very good, thank you.
 8 **SIR BRIAN LANGSTAFF:** So 2.25 then.
 9 **A.** Okay, thank you.

10 (1.27 pm)

11 (Luncheon Adjournment)

12 (2.25 pm)

13 **SIR BRIAN LANGSTAFF:** Yes.
 14 **MS SCOTT:** Professor Collins, I've now going to ask you
 15 a handful of questions from Core Participants.
 16 First of all, did you ever -- Professor Bloom
 17 died four years before you arrived in Cardiff. Did
 18 you ever meet him and speak to him?
 19 **A.** No, I never met or spoke to Professor Bloom.
 20 **Q.** You exhibited some of the treatment protocols that
 21 were in existence in Professor Bloom's time. You
 22 exhibited those to your witness statement. Do you
 23 know where those treatment protocols were found?
 24 **A.** Yes, they were in a file. There was an arch lever
 25 file that was in the haemophilia centre when I looked

109

1 know.
 2 Do you know whether Professor Bloom held any
 3 files relating either to the centre or to patients at
 4 his home?
 5 **A.** I don't know. I have heard I think it was a radio
 6 programme on BBC Wales to suggest that might have been
 7 the case but I have no knowledge as to whether that's
 8 true or not.
 9 **Q.** Just a couple of questions then about links with
 10 pharmaceutical companies. I asked you some questions
 11 about the funding provided by pharmaceutical companies
 12 in 2000, so five years before the national tender
 13 process came into place. What steps at that time --
 14 so before the national tender process was in
 15 existence, so around 2000 or before -- what steps were
 16 taken, if any, at the centre to ensure funding
 17 received by pharmaceutical companies of the centre did
 18 not influence product selection?
 19 **A.** So there were three pharmaceutical companies involved
 20 and there were three brands of recombinant
 21 Factor VIII. They all donated roughly the same amount
 22 of money, so it wasn't as if one was more influential
 23 than the others.
 24 My opinion at the time was that all three of
 25 those recombinant Factor VIII products were equally

111

1 through all the documents to see what would be of
 2 relevance to the Inquiry.
 3 **Q.** You mentioned that when you joined the haemophilia
 4 centre there was still some of Professor Bloom's
 5 documents in his room which then became your room.
 6 What documents had he left?
 7 **A.** Well, those were the documents that I've just
 8 described.
 9 **Q.** So there were the treatment protocols.
 10 **A.** Well, there were lots of documents there. There were
 11 various letters that I've submitted to the Inquiry
 12 about the use of different concentrates. There was --
 13 importantly, I think, there was a whole two arch lever
 14 files of reports to solicitors about individual people
 15 who had contracted HIV, which again I've declared to
 16 the Inquiry. They are about individuals, of course.
 17 Then there were lots of documents about the
 18 day-to-day management of things that I didn't think
 19 had any relevance to the Inquiry. So my
 20 understanding -- because I didn't submit -- I didn't
 21 make the submission to the Inquiry on behalf of
 22 Cardiff and Vale UHB, that was made by the people. My
 23 understanding was that they sent all of it but I don't
 24 know if that's definitely true.
 25 **Q.** We can make inquiries about that. The Inquiry will

110

1 safe and as efficacious. I think they all were good
 2 quality products and all could have been used.
 3 I can't remember exactly what products we were using
 4 at that time. I think we were probably using all
 5 three. That's the best I can do, I'm afraid, on that.
 6 **Q.** Does the fact that the national tender system that's
 7 currently in place, the fact that you have complete
 8 freedom to prescribe from any of the medications on
 9 the list, on the approved list of purchased products,
 10 mean that there is still scope, in your view, for
 11 there to be -- for donations from or support from
 12 pharmaceutical companies to influence prescribing
 13 policy? So, in other words, the fact that there is
 14 a tender system in place, is there not still scope for
 15 funding from pharmaceutical companies to influence
 16 prescribing policy at the centre?
 17 **A.** I think there is the potential risk that there would
 18 be influence, yes. I think that this is an issue that
 19 affects many areas of healthcare and many areas of
 20 public life. I do not think that the prescribing in
 21 Cardiff, or now that we are involved in treating
 22 people in Swansea, I do not think that it has ever
 23 influenced our decisions with regard to which products
 24 to use.
 25 **Q.** A couple of questions on the research database, the

112

1 UKHCDO research database. Given the process that you
2 described, of getting informed consent from patients
3 and the fact that you'd actually got quite far through
4 the process in Cardiff, when the UKHCDO was advised to
5 stop that process, is it right to say that it would
6 have been practical, at least from -- would it be
7 practical to obtain informed consent from patients to
8 the use of their data for research purposes?

9 **A.** It was definitely practical to obtain written informed
10 consent from the very large majority of patients. The
11 database holds quite a lot of information on people
12 who are no longer seen in any haemophilia centre, they
13 are essentially lost to follow up, and Cardiff has
14 some people in that category: very difficult to reach
15 those people.

16 I think that we could have taken written
17 informed consent from 90 to 95 per cent of people and
18 that was completely practical. I think there was
19 always going to be a small group that would be very
20 hard to reach and, as I said earlier, my personal
21 preference would have been to be allowed to have
22 carried on doing that, had the Confidentiality
23 Advisory Group not changed their advice to us.

24 **Q.** Why can't the data that's held in the research
25 registry part of the database, why can't that data be

113

1 hepatologist hadn't been appointed was revisited.

2 So certainly the Deputy Chief Medical Officer
3 has had quite a lot of interaction with regard to the
4 Inherited Bleeding Disorders Service with that review.

5 **Q.** And, lastly, when meetings were held between clinician
6 groups and the Department of Health, how was the Welsh
7 Government represented from 1996 onwards? Are you
8 able to answer that question?

9 **A.** I can't answer that question. I don't think I have
10 any knowledge. These are meetings between the
11 Department of Health in Wales and the Department of
12 Health in England? Is that the question?

13 **Q.** I think -- no, between clinician groups in Wales and
14 the Department of Health in Wales is what I imagine.

15 **A.** I mean, apart from the ministerial review, I don't
16 remember any really significant interactions. There
17 were some letters and information about things like
18 Skipton Fund and that sort of thing, but I didn't have
19 any discussions with any of the politicians with
20 regard to that. So I don't remember anything
21 directly, I'm afraid.

22 **MS SCOTT:** Sir, those were the questions from the Core
23 Participants.

24 ///

25 ///

115

1 held anonymously, so as to protect patients being
2 identified when that data's being used for research
3 purposes?

4 **A.** There aren't two registries. There's one registry and
5 the one registry is used for the direct patient care
6 for the research and for the public health planning.

7 When the data is used for research purposes, it
8 gets anonymised, or perhaps better pseudo-anonymised,
9 so that the analysis is based on pseudo-anonymised
10 data. But the database itself doesn't change, it's
11 always there. So the fields that identify people are
12 hidden when the analyses are done.

13 **Q.** Moving on to a new topic now, what role has the Welsh
14 CMO (Chief Medical Officer) played in the management
15 and oversight of the haemophilia centre since you've
16 been there?

17 **A.** I have -- well, with Chief Medical Officer I've not --
18 I can't remember any direct interaction, but with the
19 Deputy Chief Medical Officer, Dr Chris Jones, he of
20 course has had interaction with the haemophilia
21 centre, and he chaired the ministerial review in 2011,
22 and he chaired a follow-up review -- I think it was
23 around about 2015 -- particularly looking to see
24 whether the recommendations had been implemented, and
25 of course at that time the question of why the

114

Questions by SIR BRIAN LANGSTAFF

SIR BRIAN LANGSTAFF: Yes, thank you. Well, I have one or
two of my own.

Can I just pick up on that last question that
you were asked and link it to what you were saying
earlier about the role of the Transfusion Service in
Wales, which looked after the supply to you of
products. At the time you were talking about that,
the thought went through my mind: suppose a new virus
happened to be identified in blood. I appreciate that
now blood products tend to be recombinant by and large
but some still aren't. So it's a possible risk to
blood products, it's certainly a risk to the blood
supply more generally.

You said that you would expect to be told or
learn about possible hazards in blood, be told by the
Blood Transfusion Service or through UKHCDO; so the
question then arises how they know. They presumably
will know in the usual way, that some doctor or some
surveillance authority in some country in some part of
the world identifies that something has happened,
something has happened that deserves to be reported,
and so it's reported, and then someone writes about it
in a peer review journal and other people begin to
take notice, and fortunately, in the modern world,

116

1 with the internet and so on, news can agreed quite
 2 rapidly and probably, one hopes, faster than the
 3 virus.
 4 But would that not come to your notice in that
 5 way, it would come to your notice, you would expect,
 6 through UKHCDO or the Transfusion Service? The reason
 7 I link that with the relations with the Welsh
 8 Government relates to this: part of the landscape that
 9 I'm looking at in this Inquiry involves the DHSS.
 10 Largely, the evidence will relate to what happened in
 11 London but, of course, healthcare is now a devolved
 12 issue, more strictly than it ever was, and so the
 13 Welsh Government has the same role, perhaps, it might
 14 be thought, in respect of what happens in Welsh
 15 hospitals as the DHSS different in those days across
 16 most of the UK. Plainly, the medical division of the
 17 DHSS were kept informed and had their own views about
 18 what was happening and what the risks were, and so on.
 19 So how do you see it working if a new virus is
 20 identified somewhere which has a threat to blood
 21 products or blood supplies or, for that matter, not
 22 necessarily a virus, something like a prion?
 23 **A.** I think for the blood supply, for example, in red
 24 cells, platelets, FFP, cryoprecipitate that is
 25 produced by the Welsh Blood Service I would expect

117

1 and that looks at risks of blood products, both
 2 recombinant and plasma-derived. It may well be that
 3 information would come through that reporting system
 4 early and quickly. So I think it's difficult to know
 5 exactly where the information is most likely to come
 6 from in respect of if there is a completely new, out
 7 of the blue threat to the blood supply. I would have
 8 hoped to receive the information from multiple sources
 9 very rapidly.
 10 **SIR BRIAN LANGSTAFF:** Would one of those sources be the
 11 database?
 12 **A.** Possibly it will be the database, though the database
 13 is, of course, reporting retrospectively, and so if
 14 a new treatment was causing serious side effects, the
 15 data may not pick that up for you know three or four,
 16 five, six months after these events started happening.
 17 But there is an example within the database of -- one
 18 of the recombinant Factor VIII concentrates was
 19 thought to be associated with more inhibitors than
 20 other recombinant Factor VIII concentrates, and the
 21 database very quickly looked at the information held
 22 in the database and was able to confirm that that did
 23 look like it was the case, and that led to people in
 24 the UK using different concentrates. So that did
 25 happen quite quickly.

119

1 that they would be the first to become aware and alert
 2 and make sure that that was known. I would have
 3 thought that immediately they would be in discussion
 4 with the Welsh Assembly Government about a threat of
 5 that severity but I don't personally know what
 6 committees or what groups would do that because it's
 7 not part of my remit.

8 What I was saying about more likely to be
 9 hearing things from UKHCDO would be that, if there was
 10 a problem with a concentrate, I would expect that that
 11 would be known in the haemophilia world and would be
 12 picked up by one of my colleagues and I would be more
 13 likely to, you know, very rapidly hear about it from
 14 there. So let's say, for example, variant CJD,
 15 I heard about it through Professor Ludlam sending me
 16 a letter in 1977 (sic), even though, as I've explained
 17 that at that time the suggestion was that this wasn't
 18 anything to be concerned about and that we weren't
 19 supposed to be telling patients.

20 So I think that that is from the point of view
 21 of the concentrates, so I would have thought it might
 22 well be that UKHCDO or a member of that UKHCDO might
 23 hear first.

24 There's a reporting system within Europe called
 25 EUHASS, which is run by Professor Makris at Sheffield,

118

1 So the database does have the ability to look
 2 at this sort of thing but it is, as I say,
 3 retrospective.

4 **SIR BRIAN LANGSTAFF:** Obviously a lot may depend upon the
 5 precise data that goes into database in respect of
 6 what are at first anecdotal reports of reaction or
 7 illness. Does anyone keep a close weather eye on the
 8 database or does it come into play only when it's
 9 responding to the worries of others?

10 **A.** No, there is a reporting system. So every month the
 11 database sends an email to every haemophilia centre
 12 saying: do you have any adverse events to report? And
 13 names certain adverse events, like thrombotic events,
 14 infections, I can't remember the other -- neurological
 15 events because of -- you know, might we start picking
 16 up variant CJD issues? So it specifically asks every
 17 month: have you had any of these events? Our data
 18 manager in Cardiff emails all the consultants in
 19 Cardiff and says: have you seen any events? And if we
 20 have, they get reported.

21 The reports then are reviewed by the director
 22 of the database, who's Dr Hay at the moment,
 23 Professor Hay at the moment, but also there is
 24 a working party called the Co-Morbidities Working
 25 Party, and if there's any serious adverse event, like,

120

1 for example, a thrombosis or somebody has been given
2 a treatment and they have had a heart attack or
3 something, that committee will review the
4 circumstances of that event, and they will review it
5 with the clinician who's reporting the event, so there
6 will be some kind of the Zoom meeting and clinician
7 will report it, and that group will then come to the
8 conclusion whether they think that the event is likely
9 to be causally related to the product or not.

10 They will then report that on to the
11 manufacturer and to the authorities to say that this
12 adverse event has been reported. And of course if
13 there's a serious event as well, then the protocol is
14 that UKHCDO will email the whole membership to
15 say: a person has been treated with treatment X and
16 they developed a heart attack immediately after, you
17 should be aware that this has happened. And that
18 would be the process that has been put in place to do
19 that.

20 So the events don't sort of disappear into
21 a black hole, as it were. There is some attempt to
22 scrutinise the severity and the likelihood or
23 causality and then to communicate that if necessary.

24 **SIR BRIAN LANGSTAFF:** So what you are describing -- sorry.

25 **A.** Sorry, I was going to say that's a relatively recent

121

1 patient that that report has gone in.

2 **SIR BRIAN LANGSTAFF:** If you happen to be the individual
3 clinician, what would you think you would do?

4 **A.** I think that for a serious adverse event that we were
5 reporting, we would -- I think we probably would talk
6 to the patient now. I think, to be completely honest,
7 before this Inquiry started I probably may not have
8 done. I have been made to reflect on keeping people
9 better informed of what is being done with their
10 information and I think that's something that UKHCDO,
11 as a whole, has been reflecting on.

12 **SIR BRIAN LANGSTAFF:** The reason I ask is probably
13 obvious, is that there have been a number of comments
14 made to the Inquiry that the individuals who had been
15 told they have had HIV or hepatitis C or, for that
16 matter, hepatitis B weren't told, though it was
17 hypothesised that it was the case, where they got it
18 from and they weren't told that they had it from
19 infected blood. So I think you may well be right that
20 they are expressing an interest in knowing of the
21 source if it is known or hypothesised. That's,
22 I think, the outcome of your own ruminations from what
23 you've been saying.

24 **A.** Yes, I think that that is the case, yes. I think
25 there is also that we need to think that haemophilia

123

1 thing that we've set up over the last few years.

2 **SIR BRIAN LANGSTAFF:** From the way you are describing
3 that, that is something that has happened?

4 **A.** It has happened, yes. So events have happened and
5 clinicians have discussed with the group who is
6 overseeing the events and decisions have been come to
7 as to whether they think the event is related to the
8 product or not, and that information has then been
9 disseminated to the membership. That has happened,
10 yes.

11 **SIR BRIAN LANGSTAFF:** What information, do you know, has
12 been given to the patient about the fact that their
13 data or their event has been reported in this way?

14 **A.** I think that -- well, I don't know. I think that
15 would be down to the doctor looking after them in the
16 centre that has submitted the information. Clearly,
17 the patient will know that the event has happened,
18 because it's happened to them.

19 In addition to reporting to UKHCDO, you have
20 a duty to report through the yellow card system as
21 well, you know. So if product X causes someone to
22 have a heart attack, you've a duty to report through
23 that yellow card system completely separately.

24 So there are multiple ways forward. I think it
25 would be up to the individual clinician to inform the

122

1 doctors looking after people with bleeding disorders
2 now, many them are young consultants who may not be
3 aware what people have been told in the past and so
4 may not be aware that people haven't had all the
5 information that they may reasonably expect, and
6 I think that that is something, again, that we are
7 considering as a group, how that should be addressed.

8 **SIR BRIAN LANGSTAFF:** That leads me on to something I was
9 going to ask, actually a bit later in the questions
10 which I have for you, but you may recall that when the
11 Inquiry was in Cardiff, at the Royal College of Music,
12 you and I had the odd conversation and in one of them
13 you were saying how listening, reacting to the
14 evidence which had been given, that you hoped or
15 wanted some of your staff or your juniors to come and
16 hear what was being said.

17 Did that happen?

18 **A.** Yes. So a number of members of staff were at the
19 hearings in Cardiff, there for a number of reasons,
20 both to really to hear the testimony of the people
21 giving evidence, because some of these people that the
22 evidence was about had died long before the staff were
23 part of the haemophilia centre, and even before I was
24 at the haemophilia centre, and I thought it was very
25 important that people knew and understood what had

124

1 happened because I think it is so important in trying
2 to provide a service for this group of people.

3 But they were also there to try and lend, as it
4 were, moral support to the people giving evidence
5 because many of the people giving evidence the staff
6 knew very well and they knew it was a very difficult
7 situation for these people to tell their story, and we
8 thought it was important that members of staff were
9 there to help people. We discussed this in advance
10 with Haemophilia Wales to make sure that they thought
11 that that was the right thing to do and they said that
12 they did. Some members of staff who had long left the
13 haemophilia centre or who had retired came to the oral
14 evidence in Cardiff, specifically -- and I'm thinking
15 here of some of the social workers who had retired --
16 specifically to help give support to people who had
17 been giving their evidence.

18 **SIR BRIAN LANGSTAFF:** Insofar as younger staff may have
19 learnt something, what messages, what lessons do you
20 think they took away from listening to the evidence of
21 those who gave it, in what you say was courageous
22 evidence to give?

23 **A.** I think there are a lot of things that have come
24 through but one of the most important is that although
25 these events may have been in the 1970s and 1980s,

125

1 ripples are as small as they have to be?

2 **A.** Well, I mean, I think the fact that we are having this
3 Inquiry is a major part of that process. Ever since
4 I started in Cardiff, people have been coming to me
5 saying that they think that there needs to be a full,
6 open, transparent inquiry into what happened, so as to
7 understand the process. And I think most of the
8 people I talk to in Cardiff, it's that they want to
9 understand clearly and fully what happened and not
10 have this residual concern that things aren't being
11 uncovered and aren't being said.

12 So I think that will be absolutely crucial to
13 how the events are -- as you say, ripple down the
14 generations, as to whether it can -- the outcomes of
15 this Inquiry can resolve the questions that the
16 patient group are asking. I think that's absolutely
17 key to what happens. I think that -- I've always felt
18 that we needed this sort of inquiry. When I went to
19 Cardiff I hadn't considered that but, talking to the
20 patient group from very early on, they persuaded me
21 that it was the only way that things would move
22 forward, and I think that that is very important, that
23 we look -- that we have a clear understanding of what
24 happened and as far as possible why it happened.

25 **SIR BRIAN LANGSTAFF:** And perhaps do what it can to ensure

127

1 before some of the members of staff were even born,
2 they are still very important and resonant to the
3 people that -- that they were affected, both the
4 individuals and their families. And I think that we
5 mustn't think about this as all being events in the
6 past. These are events now. People are still living
7 with the events. So it's not a historic thing that
8 we're looking at, it's ongoing. And it will echo down
9 the generations, I'm sure of it, that -- as I've
10 explained, people who have children with haemophilia
11 now may have lost their father, and it will continue
12 to be very important for a very long time.

13 **SIR BRIAN LANGSTAFF:** In one sense I suppose you came to
14 Cardiff after what may be seen by some as a question
15 of history, although you see the ripples extending
16 down into the future, you'll have some similarities in
17 your position, looking back, as we do at the Inquiry,
18 looking back on what has happened without knowing from
19 firsthand what was happening. You have this
20 advantage, that you have taken over the reins and are
21 being involved in the treatment of those who suffered
22 and related to their families and carers and so on, on
23 an ongoing basis. So you have a lot of involvement in
24 that sense. What lessons would you learn for the
25 future that we might all use to ensure that the

126

1 that something like it never happens again.

2 **A.** Well, I think very important that we minimise the
3 chances of anything like this happening again.
4 I think it's -- you never know what's round the corner
5 and it is very important that everything that can
6 possibly be done to prevent further serious
7 complications of treatment that are being given to
8 people with bleeding disorders, that everything is
9 done to prevent that. I'm not just thinking about
10 infectious disease but complications of other
11 treatments. We have to have as much -- do as much as
12 we possibly can to prevent further problems.

13 **SIR BRIAN LANGSTAFF:** Changing the topic just a little,
14 though it's got a link to what we've just been
15 discussing, it always struck me listening to the
16 evidence that we've been having as to the past that
17 being a congenital disease -- or a condition, I'm
18 sorry, I shouldn't call it disease, condition --
19 haemophilia is always going to be recognisable most
20 often in very young children. And that may be with
21 parents who, because of the nature of the genetics
22 involved, may not themselves have any familial
23 experience of haemophilia. So they are on their own
24 and they are lost a little bit with a child that has
25 a condition they don't perhaps fully understand. And

128

1 the child needs to come to terms with it too.

2 So why wasn't a paediatrician or someone with

3 an RCPH -- what is it? The Royal College of

4 Paediatrics and Child Health qualification involved?

5 Well, you have in your Cardiff centre, from what you

6 were describing, thoroughly involved paediatrics. You

7 have a consultant who is primarily focused on

8 children. You're plainly equipped with play

9 specialists to assist the child, particular nurses who

10 have paediatric experience, which reassures me that at

11 least in one centre that has been the model.

12 How common is it across the whole country, by

13 which I mean the UK?

14 **A.** Most children in the UK are looked after in paediatric

15 haemophilia centres, so centres like Great Ormond

16 Street, for example, would only look after children.

17 Other centres where both adults and children are

18 looked after, for example in Oxford, they have

19 a paediatric haemophilia consultant who looks after

20 the children. So I think it's the case now that there

21 is certainly a recognition that children should be

22 looked after by people who specialise -- who are

23 paediatricians who specialise in looking after

24 children with bleeding disorders. I think that would

25 be the general standard of care.

129

1 help with training with venous access, and this sort

2 of thing. So I think that there is certainly

3 a significant focus on trying to make sure that

4 children are well looked after. In addition, in the

5 Cardiff centre we have a general paediatrician who

6 comes and does joint clinics with us. So she's not

7 a haemophilia doctor but she is a general

8 paediatrician. So she comes and does the joint clinic

9 with one of the haemophilia doctors, so that if the

10 children or the parents bring up

11 a non-haemophilia-related issue then we have the

12 expertise to address that.

13 **SIR BRIAN LANGSTAFF:** The only other thing that I wanted

14 to ask you was, when you have been discussing with

15 patients what treatment they might prefer, whether

16 they want to stay on what they have had, go on to

17 recombinant, if not what sort of recombinant, these

18 sorts of discussions, how long roughly do those

19 discussions take? You have said it was a process and

20 plainly that must be right and sensible but, roughly,

21 how long the initial conversations and how long

22 overall do you think you might end up discussing, in

23 the average case?

24 **A.** In the average case, if it's a question of changing

25 medication, I would say on average, it will be

131

1 Again, another example would be Bristol. It

2 has a combined adult and paediatric centre but the

3 paediatric centre essentially stands alone with

4 paediatric haematologists and haemophilia doctors and

5 nurses looking after their patients and there are

6 examples all round the country. Glasgow would be

7 another good example of the two centres, adults and

8 children.

9 I think it is the case that children are looked

10 after by paediatric specialists, certainly the

11 severely affected children.

12 **SIR BRIAN LANGSTAFF:** That's true, of course, in the

13 bigger centres. What about the centres and the

14 associate centres? Do they have any such involvement

15 or do they simply refer children on to the reference

16 centre or the care centre?

17 **A.** I think -- well, it's difficult for me to comment

18 outside of South Wales. In South Wales children are

19 looked after through the -- their treatment is

20 co-ordinated by Cardiff through the comprehensive care

21 centre but the treatment might be delivered through

22 a clinic in Swansea or Abergavenny, where one of us

23 goes out and sees the person more locally. Our nurses

24 will travel all the way out to west Wales, you know

25 100 miles or more to visit patients in their home to

130

1 ten minutes on a first consultation and then

2 ten minutes some time later once the person has

3 thought about it.

4 In addition, the nurses will have separate

5 conversations about the issues and, sometimes, these

6 issues will go on for many months as people consider

7 whether they want to change treatment or not. So

8 I would say it's roughly that sort of time.

9 But there are different -- so changing from one

10 standard half-life Factor VIII to another standard

11 half-life Factor VIII is not a huge jump, because

12 you'll be -- it's a very similar treatment but

13 changing from, for example, Factor VIII to Emicizumab,

14 that's a very big change that will almost certainly

15 require multiple conversations to understand the

16 implications of that change and whether people want to

17 go ahead and do that, because -- partly because it's

18 such a new treatment the consequences of receiving the

19 new treatment may not all be known and there may be

20 consequences of receiving that treatment that we are

21 not currently aware of.

22 So some people see the advantages of once

23 a week subcutaneous, but others see the kind of

24 reassurance of being on the treatment they've been on

25 for 20 years and why do they want to change.

132

(33) Pages 129 - 132

1 **SIR BRIAN LANGSTAFF:** That's all that I have to ask.
 2 Ms Scott?
 3 Further questions by MS SCOTT
 4 **MS SCOTT:** Sir, one question has arisen out of a response
 5 that Professor Collins gave to a question asked by you
 6 and it's this.
 7 Professor Collins, could you explain what the
 8 yellow card system is and how it works.
 9 **A.** Well, if an adverse event, a side effect, relating to
 10 a drug occurs, then the clinician will complete what
 11 used to be called a yellow card. It's now online.
 12 You go through a website and you put in the
 13 information related to that adverse event so that if
 14 a number of different clinicians are saying the same
 15 thing, then the regulators will note that very early
 16 and be able to take action if appropriate.
 17 **Q.** So the online system is run by whom?
 18 **A.** I'm not sure I can answer that, I'm afraid.
 19 **Q.** Okay.
 20 **A.** I don't want to give an inaccurate answer. But it's
 21 an official system. It's not -- you know, it is an
 22 official system but I don't say which agency, I'm
 23 afraid, is in charge of running it.
 24 **Q.** Thank you.
 25 Professor, is there anything that you would

133

1 about the local grouping in South Wales is that,
 2 despite the huge challenges and the grief that has
 3 often been associated with their individual stories,
 4 the local patient group has always worked very closely
 5 and very constructively with the haemophilia centre to
 6 improve care for people with bleeding disorders across
 7 the whole of Wales. Some of their notable
 8 achievements in enhancing care have been that they
 9 were instrumental in Wales becoming the first country
 10 in the world to establish recombinant for all, they
 11 campaigned for the new stand-alone haemophilia centre
 12 in Cardiff, they greatly enhanced physiotherapy across
 13 all of Wales and they established the psychology
 14 service dedicated to people with bleeding disorders.
 15 They also were instrumental in improving the
 16 hepatology service. These achievements would not have
 17 been possible without the tireless work of Haemophilia
 18 Wales, and I think it's of great credit to them that
 19 these have been achieved. However, the most important
 20 thing that I want to say is that the staff working at
 21 all the haemophilia centres in South Wales are acutely
 22 aware of the suffering that the treatment with
 23 infected blood has caused. Many people have died long
 24 before their time and they are all greatly missed.
 25 People and their families have had to live with the

135

1 like to say?
 2 **A.** So I would like to say a few words particularly about
 3 the extraordinary group of people that have attended
 4 the haemophilia centres in South Wales over the last
 5 24 years, and these are people that I've come to know
 6 very well.
 7 They were absolutely central to the campaign
 8 that led to this public Inquiry and they battled at
 9 times against what must have seemed enormous obstacles
 10 but they never lost focus in that and that was clear
 11 from the moment I first came to Cardiff.
 12 It is I think a great sadness that many of
 13 these people have not lived to see their work achieve
 14 the outcome that they wanted, particularly that they
 15 have not been able to hear the evidence and that they
 16 are not going to be able to hear the outcome of the
 17 Inquiry.
 18 Of particular note from the local patient group
 19 I would say that establishing The Birchgrove Group was
 20 an outstanding and defining achievement, and I think
 21 it's one that has had significant influence over very
 22 many years. I've learnt an enormous amount from
 23 talking with this group of people and I have to say
 24 I'm very proud to be able to be part of their lives.
 25 I think it's very important when we're thinking

134

1 appalling consequences of this tragedy and they
 2 continue to do so.
 3 I am sorry that these patients and their
 4 families, who I and my colleagues have had the
 5 privilege to care for, have had to experience the pain
 6 and suffering caused by these events.
 7 Thank you.
 8 **SIR BRIAN LANGSTAFF:** Thank you very much. I have to
 9 thank you for a number of things, not least I know
 10 that you would have wanted to be here in person to say
 11 what you have just said, as well as give your
 12 evidence, and I'm very grateful to you for being
 13 prepared to change your arrangements at short notice
 14 because of the way in which the timetabling had to be
 15 worked out in the light of the current virus and its
 16 restrictions. So thank you for being prepared to do
 17 that.
 18 But thank you also for giving us the view of
 19 somebody who was pretty much at the centre, given your
 20 involvement in the national committee as you have
 21 spoken about, UKHCDO and Cardiff, of what life as
 22 a haemophilia consultant and director has been like in
 23 the last 20-odd years, and in particular all the
 24 challenges that you have faced and the challenges that
 25 you have had to experience following on from the

136

1 tragedy, as you call it, which you've just described.
 2 I don't need to repeat it. It's clear.
 3 And for giving your evidence in such a clear,
 4 direct and helpful way. So thank you very much
 5 indeed.
 6 **A.** Thank you for the opportunity.
 7 **MS SCOTT:** Sir, we're not sitting next week.
 8 **SIR BRIAN LANGSTAFF:** No.
 9 **MS SCOTT:** Then the following week, on the Tuesday and
 10 Wednesday, the 26th and the 27th is going to be the
 11 medical ethics group panel.
 12 **SIR BRIAN LANGSTAFF:** Yes. So that will be a panel
 13 presentation of the sort that those of you who were
 14 here will have seen before, when we had our previous
 15 expert groups. So this, of course, will be online,
 16 which will be a new online experience for us but we
 17 shall manage it and we shall make progress then too.
 18 That's the whole of the next session will be the
 19 medical ethicists. That will be the Tuesday and the
 20 Wednesday and, if necessary, further in that week.
 21 I think just the Tuesday and the Wednesday will
 22 probably be sufficient.
 23 **MS SCOTT:** Yes, that's the plan at the moment.
 24 **SIR BRIAN LANGSTAFF:** So for those of you who are watching
 25 online, we sign off now until Tuesday week,

1 26 January. Thank you very much.
 2 (3.16 pm)
 3 (Adjourned until Tuesday, 26 January 2021 at 10.00 am)
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25

INDEX

1
 2 PETER WILLIAM COLLINS, affirmed 2
 3 Questions by MS SCOTT 2
 4 Questions by SIR BRIAN LANGSTAFF 116
 5 Further questions by MS SCOTT 133
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25

Saunders, Nathan
 06/08/2021 14:36:47

<p>MS SCOTT: [19] 2/9 5/24 6/4 24/8 24/18 27/7 27/9 54/7 55/1 92/6 92/16 92/22 98/18 109/14 115/22 133/4 137/7 137/9 137/23</p> <p>SIR BRIAN LANGSTAFF: [41] 1/3 1/5 1/11 1/13 5/23 20/24 21/24 23/14 24/7 24/12 27/3 27/8 54/10 54/25 92/12 92/17 97/19 109/2 109/6 109/8 109/13 116/2 119/10 120/4 121/24 122/2 122/11 123/2 123/12 124/8 125/18 126/13 127/25 128/13 130/12 131/13 133/1 136/8 137/8 137/12 137/24</p> <p>THE WITNESS: [3] 1/4 1/10 1/12</p> <p>'96 [1] 91/11</p> <p>0</p> <p>061 [2] 19/3 32/14</p> <p>1</p> <p>1 o'clock [1] 92/6 1.27 pm [1] 109/10 10 [2] 62/20 95/7 10,000 [1] 88/25 10.00 [2] 1/2 138/3 100 [3] 1/23 21/4 24/16 100 miles [1] 130/25 108 [2] 26/16 26/25 11.27 [1] 54/22 11.55 [1] 54/24 118 [2] 26/16 26/25 12 [3] 19/22 54/13 54/20 12 years [1] 95/7 13 [6] 26/2 26/2 26/22 27/5 27/6 27/11 13 who [1] 27/6 13 with [1] 27/4 15 [3] 20/11 30/5 92/21 15 December 1997 [1] 34/10 15 January 2021 [1] 14 15 minutes [5] 92/7 92/9 92/13 92/18 92/18 15 minutes' [1] 105/9</p>	<p>15 years [1] 62/21 150/160 [1] 25/13 160 [1] 25/13 162 [1] 24/23 17 [1] 19/21 18 [8] 18/22 18/23 20/11 21/6 21/8 24/11 24/23 24/24 1969 [1] 100/18 1970s [1] 125/25 1977 [1] 118/16 1980s [1] 125/25 1983 [1] 72/7 1985 [1] 72/7 1986 [2] 2/14 3/18 1989 [3] 3/19 3/21 55/20 1990 [1] 4/7 1991 [3] 4/17 5/21 56/13 1992 [1] 56/13 1993 [2] 4/18 5/7 1995 [4] 5/7 5/23 5/24 32/20 1996 [23] 6/1 6/8 6/19 8/1 8/14 10/20 18/20 19/14 21/5 26/8 26/21 26/23 27/23 28/14 29/7 29/14 55/6 57/1 57/9 60/11 77/3 86/11 115/7 1996/97 [1] 66/11 1997 [9] 19/1 19/2 19/5 34/2 34/10 35/5 36/25 106/4 106/6 1998 [4] 9/24 35/6 35/10 78/23</p> <p>2</p> <p>2.00 [1] 92/13 2.25 [3] 109/3 109/6 109/8 2.25 pm [1] 109/12 20 years [3] 59/13 87/8 132/25 20,000 [1] 88/25 20-odd [1] 136/23 200 [3] 1/16 1/23 1/24 2000 [5] 9/2 10/2 87/25 111/12 111/15 2000s [1] 106/19 2001 [3] 6/8 7/2 7/10 2003 [2] 78/18 79/8 2004 [1] 12/5 2005 [4] 6/19 6/22 12/6 38/14 2008 [1] 12/7 2009 [3] 79/9 79/24 83/4 2011 [3] 81/7 82/9 114/21 2012 [2] 13/9 13/13</p>	<p>2014/2015 [1] 81/24 2015 [2] 81/24 114/23 2016 [2] 8/7 82/9 2017 [1] 7/19 2019 [2] 12/7 24/21 2020 [1] 8/8 2021 [2] 1/1 138/3</p> <p>20s [1] 24/5 23/5/97 [1] 19/5 239 [2] 18/22 24/10 24 [1] 20/11 24 years [1] 134/5 24/7 [1] 15/15 251 [1] 102/14 26 [1] 24/12 26 January [1] 138/1 26 January 2021 [1] 138/3 26th [1] 137/10 27th [1] 137/10</p> <p>3</p> <p>3.16 pm [1] 138/2</p> <p>30s [1] 24/5 32/33 [1] 44/3 320 [1] 105/12 328 [5] 18/21 19/17 21/6 24/9 24/13 33 [4] 19/21 44/3 67/15 67/25</p> <p>4</p> <p>4 June 1997 [1] 19/5 405 [1] 21/8 41 [1] 19/20 45 [2] 26/12 26/22</p> <p>5</p> <p>50 [1] 71/10 50 per cent [3] 7/11 7/12 7/15</p> <p>6</p> <p>60 per cent [1] 71/11 60,000 [2] 96/11 97/12 640 [1] 24/23 66 [5] 26/3 26/25 27/4 27/6 27/10</p> <p>7</p> <p>74 [1] 30/19 75 [1] 30/5</p> <p>8</p> <p>80 [1] 6/11 802 [2] 24/21 25/8 802 people [1] 25/22 87 [2] 18/23 21/7 8Y [11] 31/24 32/3 32/18 42/24 43/2 67/5 67/13 67/25 69/23 69/23 96/17</p>	<p>9</p> <p>90 [1] 113/17 90 per cent [1] 6/11 95 per cent [1] 113/17 96 months [1] 67/16 97 [2] 19/5 66/11</p> <p>A</p> <p>abdominal [1] 18/16 Abergavenny [6] 17/8 17/12 17/15 17/17 17/21 130/22 ability [1] 120/1 able [17] 16/7 38/8 43/7 72/15 74/1 74/3 79/9 79/12 96/24 97/9 103/9 115/8 119/22 133/16 134/15 134/16 134/24 abnormal [1] 6/14 about [127] 1/16 2/3 2/12 2/17 2/22 3/4 3/7 3/9 6/11 8/11 12/5 12/25 16/15 20/20 23/8 25/13 27/18 30/3 35/17 35/25 37/5 37/13 39/13 39/25 40/18 43/5 43/22 44/2 45/17 45/22 47/7 47/18 48/2 48/17 49/14 50/9 50/20 50/24 51/25 52/3 52/12 52/22 53/14 54/12 54/18 55/1 55/10 55/17 56/1 56/8 56/10 56/18 59/1 61/14 62/4 64/23 66/9 68/14 69/17 72/1 72/3 72/6 72/8 72/10 72/20 73/21 76/10 77/6 77/20 77/25 78/6 78/8 78/10 80/8 82/5 85/2 87/22 88/25 89/12 89/14 90/7 91/9 92/7 94/6 95/7 96/22 97/1 98/4 98/18 98/20 99/4 99/5 99/5 99/25 100/8 100/21 103/2 107/14 110/12 110/14 110/16 110/17 110/25 111/9 111/11 114/23 115/17 116/6 116/8 116/16 116/23 117/17 118/4 118/8 118/13 118/15 118/18 122/12 124/22 126/5 128/9 130/13 132/3 132/5 134/2 135/1 136/21 abroad [2] 58/11 59/4 absolute [1] 81/12 absolutely [6] 35/20</p>	<p>53/12 103/5 127/12 127/16 134/7 academic [2] 7/9 7/11 access [24] 10/18 13/3 13/4 14/12 15/15 16/7 34/4 40/6 43/5 53/20 54/2 61/22 78/24 79/3 81/13 81/20 103/10 103/14 103/15 103/17 104/19 104/21 104/21 131/1 accessed [2] 15/4 96/24 accessible [1] 76/11 accord [1] 32/25 according [1] 94/13 accurate [3] 20/18 20/19 24/24 achieve [2] 48/18 134/13 achieved [1] 135/19 achievement [1] 134/20 achievements [2] 135/8 135/16 acknowledging [1] 107/20 across [12] 10/17 46/3 91/1 91/6 91/8 91/21 92/3 96/13 117/15 129/12 135/6 135/12 acted [1] 39/9 acting [1] 23/9 action [2] 81/23 133/16 active [1] 62/10 activities [1] 16/8 activity [2] 48/20 90/4 actually [5] 34/9 63/21 100/22 113/3 124/9 acutely [1] 135/21 ad [1] 22/11 add [2] 27/15 76/1 added [3] 11/18 11/24 51/6 addition [4] 15/17 122/19 131/4 132/4 additional [5] 11/18 12/4 27/8 27/10 34/5 address [1] 131/12 addressed [1] 124/7 adequate [1] 9/22 Adjourned [1] 138/3 Adjournment [1] 109/11 admitted [1] 18/15 adult [2] 48/23 130/2 adulthood [1] 45/6 adults [5] 9/15 10/10 32/23 129/17 130/7</p>	<p>advance [1] 125/9 advantage [3] 41/5 89/20 126/20 advantages [2] 45/13 132/22 adverse [7] 120/12 120/13 120/25 121/12 123/4 133/9 133/13 advertised [1] 82/16 advice [14] 17/11 17/22 18/5 37/4 64/4 77/12 102/17 102/18 102/20 103/6 103/6 103/8 104/14 113/23 advise [6] 18/5 18/6 18/7 64/2 74/18 79/19 advised [1] 113/4 advising [1] 102/19 advisory [4] 30/20 102/8 104/15 113/23 advocate [1] 88/17 advocating [1] 9/17 affected [3] 14/3 126/3 130/11 affecting [1] 79/6 affects [1] 112/19 affirmed [2] 2/7 139/2 afraid [7] 13/5 20/2 69/14 112/5 115/21 133/18 133/23 after [55] 3/7 5/17 6/15 6/15 6/25 7/7 7/9 12/22 19/11 23/7 25/7 25/16 34/4 39/22 58/5 59/18 66/4 69/19 73/19 74/11 74/15 74/21 75/2 75/5 75/7 75/10 78/8 86/20 87/11 94/7 95/9 95/11 100/3 100/11 102/9 105/23 106/5 107/8 107/24 116/7 119/16 121/16 122/15 124/1 126/14 129/14 129/16 129/18 129/19 129/22 129/23 130/5 130/10 130/19 131/4 again [27] 10/9 25/17 27/12 47/22 53/14 54/13 59/19 62/5 69/18 69/20 70/7 71/25 72/13 74/13 80/15 82/11 82/18 84/23 104/2 106/24 107/3 109/5 110/15 124/6 128/1 128/3 130/1 against [6] 50/22 60/9 61/13 67/11 89/10 134/9 age [5] 21/6 21/7 24/11 24/23 24/24</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>A</p> <p>agency [1] 133/22</p> <p>agent [1] 66/13</p> <p>aggregate [4] 97/6 97/7 98/14 105/4</p> <p>ago [2] 21/5 87/15</p> <p>agree [5] 24/19 52/24 70/25 89/8 96/15</p> <p>agreed [4] 9/5 31/13 89/7 117/1</p> <p>agreement [5] 34/2 34/22 58/19 88/9 88/17</p> <p>ahead [2] 80/5 132/17</p> <p>AIDS [6] 2/23 106/2 106/4 106/7 106/7 106/9</p> <p>AI [3] 17/5 27/14 34/13</p> <p>albeit [1] 96/22</p> <p>albumin [1] 51/18</p> <p>alert [1] 118/1</p> <p>alerted [1] 99/18</p> <p>Alikhan [1] 12/6</p> <p>all [107] 1/9 1/17 1/18 5/1 7/8 8/9 8/12 8/19 10/15 11/17 13/9 14/17 16/8 16/13 16/25 17/13 17/23 20/16 22/22 23/1 25/16 26/6 28/16 28/20 29/8 29/15 30/16 31/4 33/24 34/22 34/24 35/2 35/8 35/10 35/18 35/23 37/5 37/18 39/17 48/16 51/9 51/10 51/13 52/7 54/14 55/3 57/2 57/6 58/17 65/10 70/17 71/7 71/19 72/6 72/8 72/11 72/12 74/10 74/19 75/1 75/15 78/24 82/6 84/17 85/1 85/15 85/20 86/15 88/10 89/6 92/4 92/17 95/24 95/25 97/8 97/9 97/25 99/8 100/15 102/9 104/23 105/21 107/16 108/12 109/3 109/6 109/16 110/1 110/23 111/21 111/24 112/1 112/2 112/4 120/18 124/4 126/5 126/25 130/6 130/24 132/19 133/1 135/10 135/13 135/21 135/24 136/23</p> <p>allocate [1] 25/20</p> <p>allocated [2] 29/2 84/13</p> <p>allowed [3] 16/11</p>	<p>40/15 113/21</p> <p>almost [2] 33/15 132/14</p> <p>alone [4] 88/13 88/18 130/3 135/11</p> <p>along [2] 49/18 67/5</p> <p>Alpha [1] 36/7</p> <p>already [9] 12/3 43/11 52/9 58/1 58/17 73/13 77/9 92/22 92/24</p> <p>also [45] 11/18 12/15 12/24 14/14 16/2 16/12 17/7 17/22 26/14 26/14 27/13 27/20 32/4 32/23 33/10 35/24 44/25 46/6 47/6 47/20 48/6 56/12 56/24 56/25 57/23 57/25 58/10 59/11 60/8 61/21 74/1 79/21 81/22 82/20 83/25 83/25 86/18 86/20 90/2 103/22 120/23 123/25 125/3 135/15 136/18</p> <p>although [10] 1/14 3/23 10/11 40/4 45/1 60/5 60/18 64/21 125/24 126/15</p> <p>always [25] 3/15 7/17 11/19 25/1 25/20 26/11 40/1 45/24 46/1 47/3 53/4 60/19 89/14 105/22 106/13 106/15 106/15 107/10 107/12 113/19 114/11 127/17 128/15 128/19 135/4</p> <p>am [6] 1/2 54/22 54/24 85/24 136/3 138/3</p> <p>American [3] 34/25 36/6 36/16</p> <p>American-based [1] 34/25</p> <p>amniocentesis [1] 44/3</p> <p>among [1] 9/10</p> <p>amount [8] 39/8 40/7 51/11 52/16 52/18 95/11 111/21 134/22</p> <p>amounts [2] 40/6 50/18</p> <p>an agreement [1] 34/2</p> <p>an anonymised [1] 98/13</p> <p>an app [1] 99/12</p> <p>an application [1] 104/20</p> <p>an arch [1] 109/24</p> <p>an article [1] 67/3</p> <p>an easy [1] 106/23</p>	<p>an enhanced [1] 48/14</p> <p>an ethical [1] 97/3</p> <p>an Ethics [1] 96/10</p> <p>an evaluation [1] 96/12</p> <p>an event [1] 18/11</p> <p>an expert [1] 57/19</p> <p>an honorary [1] 4/6</p> <p>an important [1] 35/16</p> <p>an inadequate [1] 42/21</p> <p>an individual [7] 64/23 77/20 78/1 99/11 99/23 100/3 106/13</p> <p>an individual's [1] 100/4</p> <p>an infectious [2] 77/14 84/23</p> <p>an inherited [3] 21/7 21/11 24/13</p> <p>an inhibitor [1] 64/10</p> <p>an injury [1] 18/15</p> <p>an Inquiry [1] 1/14</p> <p>an interest [1] 123/20</p> <p>an intravenous [1] 47/10</p> <p>an issue [1] 112/18</p> <p>an office [1] 8/18</p> <p>an ongoing [1] 49/1</p> <p>an opinion [1] 77/4</p> <p>an understanding [1] 3/12</p> <p>anaemia [3] 63/14 64/10 70/22</p> <p>analysed [1] 96/25</p> <p>analyses [3] 104/24 105/3 114/12</p> <p>analysis [3] 103/22 104/2 114/9</p> <p>anecdotal [1] 120/6</p> <p>animal [1] 46/14</p> <p>anonymised [9] 96/23 98/13 98/25 103/10 104/25 105/3 114/8 114/8 114/9</p> <p>anonymously [1] 114/1</p> <p>another [12] 12/9 20/22 35/12 50/10 60/22 66/13 92/21 95/6 107/3 130/1 130/7 132/10</p> <p>answer [15] 30/21 55/24 66/1 69/14 71/3 71/4 72/16 78/4 82/12 83/14 83/22 115/8 115/9 133/18 133/20</p> <p>antenatal [1] 44/2</p> <p>anti [2] 6/13 74/20</p>	<p>anti-coagulation [1] 6/13</p> <p>anti-HIV [1] 74/20</p> <p>antibody [3] 41/5 68/12 69/25</p> <p>anticipating [1] 71/3</p> <p>any [65] 4/20 5/4 7/18 15/16 16/10 17/2 23/16 28/1 28/9 29/14 30/20 30/22 30/23 31/6 31/17 33/6 33/8 36/21 38/3 38/17 40/13 45/20 46/13 46/17 52/16 52/17 52/21 55/23 56/1 60/5 61/24 65/22 66/7 71/21 75/25 76/1 76/8 86/12 86/17 87/19 89/10 89/24 89/25 91/2 91/6 91/15 92/3 92/10 98/7 110/19 111/2 111/16 112/8 113/12 114/18 115/10 115/16 115/19 115/19 120/12 120/17 120/19 120/25 128/22 130/14</p> <p>anybody [4] 22/10 59/14 73/21 79/3</p> <p>anymore [2] 43/2 49/24</p> <p>anyone [5] 38/4 62/1 102/25 106/6 120/7</p> <p>anything [30] 3/4 3/9 3/13 25/6 29/24 54/19 55/8 56/7 72/2 72/12 72/20 91/8 94/10 105/1 105/2 107/19 115/20 118/18 128/3 133/25</p> <p>anyway [3] 37/15 45/4 61/2</p> <p>apart [5] 32/18 87/19 103/14 104/21 115/15</p> <p>apologies [1] 1/5</p> <p>app [2] 99/12 99/14</p> <p>appalling [1] 136/1</p> <p>apparently [1] 70/21</p> <p>application [1] 104/20</p> <p>applied [1] 95/17</p> <p>apply [3] 73/7 94/15 102/13</p> <p>appoint [1] 17/4</p> <p>appointed [8] 7/2 7/6 12/5 12/17 12/22 12/23 14/14 115/1</p> <p>appointment [7] 12/10 62/6 62/25 62/25 64/7 64/8 82/14</p> <p>appointments [1] 18/14</p> <p>appreciate [1] 116/10</p> <p>approach [4] 49/25</p>	<p>74/12 105/16 107/18</p> <p>approached [2] 89/6 108/16</p> <p>appropriate [7] 14/12 22/15 66/21 80/18 81/5 81/20 133/16</p> <p>appropriately [2] 71/22 80/24</p> <p>approval [5] 67/18 93/5 93/22 94/15 97/5</p> <p>approved [1] 112/9</p> <p>approximately [1] 7/10</p> <p>April [2] 35/6 35/10</p> <p>April 1998 [1] 35/10</p> <p>arch [2] 109/24 110/13</p> <p>are [160]</p> <p>area [8] 10/9 10/9 10/10 10/14 10/17 39/11 79/2 85/1</p> <p>areas [3] 33/24 112/19 112/19</p> <p>aren't [9] 21/23 46/22 75/19 76/25 94/22 114/4 116/12 127/10 127/11</p> <p>argument [1] 88/12</p> <p>arguments [1] 60/23</p> <p>arise [1] 17/2</p> <p>arisen [1] 133/4</p> <p>arises [2] 105/11 116/18</p> <p>around [8] 6/14 55/22 56/13 58/25 70/25 88/25 111/15 114/23</p> <p>arrangements [8] 20/16 27/19 28/13 39/5 39/10 76/12 82/5 136/13</p> <p>arrival [3] 57/1 57/8 76/14</p> <p>arrive [1] 19/11</p> <p>arrived [23] 8/25 9/5 9/11 22/8 23/13 26/8 26/13 26/21 29/7 33/7 33/15 43/3 55/5 58/1 58/19 59/24 60/17 74/7 74/10 85/5 85/20 106/1 109/17</p> <p>arriving [1] 74/11</p> <p>Arthur [3] 6/6 56/14 92/4</p> <p>Arthur Bloom [2] 6/6 56/14</p> <p>Arthur Bloom's [1] 92/4</p> <p>article [3] 67/3 69/1 93/3</p> <p>articles [1] 92/25</p> <p>as [133] 1/18 3/5 3/21 3/25 4/16 4/18 6/23</p>	<p>7/6 7/19 8/13 9/10 9/15 10/16 12/20 14/13 14/17 14/23 15/1 15/2 15/4 15/25 16/12 16/18 17/6 17/15 18/18 20/3 21/12 22/8 23/9 25/3 25/3 25/16 25/19 28/15 37/3 38/24 39/9 39/12 39/18 40/18 41/21 41/22 45/5 49/6 49/10 49/16 49/17 50/7 50/11 50/16 51/24 52/2 52/13 53/11 54/11 56/14 63/4 67/6 67/17 70/13 70/23 71/5 73/15 73/20 73/21 73/24 75/18 78/11 78/13 79/22 81/23 81/25 82/21 82/21 83/5 85/16 85/16 87/14 88/10 90/17 90/20 91/17 91/20 91/25 94/14 95/20 96/12 97/7 98/1 98/11 100/16 105/22 106/19 107/7 109/1 111/7 111/22 112/1 113/20 114/1 117/15 118/16 120/2 121/13 121/21 122/7 122/20 123/11 124/7 125/3 125/18 126/5 126/9 126/14 126/17 127/1 127/1 127/6 127/13 127/14 127/24 127/24 128/11 128/11 128/11 128/16 132/6 136/11 136/11 136/20 136/21 137/1</p> <p>ask [30] 1/20 1/21 2/5 8/10 18/4 18/25 20/24 27/18 28/9 30/3 40/17 43/10 43/12 55/1 61/14 68/13 85/2 87/22 92/10 92/13 92/15 93/1 98/18 105/9 105/18 109/14 123/12 124/9 131/14 133/1</p> <p>asked [9] 54/17 69/10 71/25 80/22 83/9 103/13 111/10 116/5 133/5</p> <p>asking [5] 2/11 20/20 85/3 93/19 127/16</p> <p>asks [1] 120/16</p> <p>aspect [1] 105/23</p> <p>aspects [4] 23/1 23/18 23/19 53/18</p> <p>Assembly [1] 118/4</p> <p>assessed [2] 67/12</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

(37) agency - assessed

<p>A</p> <p>assessed... [1] 78/3</p> <p>assessing [1] 80/24</p> <p>assessment [1] 86/4</p> <p>assist [1] 129/9</p> <p>assistance [1] 78/21</p> <p>associate [1] 130/14</p> <p>associated [6] 13/18 13/20 14/14 30/7 119/19 135/3</p> <p>association [3] 73/22 103/19 103/19</p> <p>assumed [1] 26/12</p> <p>attack [3] 121/2 121/16 122/22</p> <p>attempt [1] 121/21</p> <p>attend [4] 58/15 75/20 87/5 87/8</p> <p>attended [2] 73/22 134/3</p> <p>attending [5] 8/20 15/1 84/18 84/22 90/4</p> <p>attends [1] 14/2</p> <p>attention [1] 31/8</p> <p>audit [9] 18/25 19/7 19/8 19/13 19/13 22/6 23/4 32/12 85/14</p> <p>audit's [1] 19/11</p> <p>August [2] 3/18 5/21</p> <p>August 1986 [1] 3/18</p> <p>August 1991 [1] 5/21</p> <p>authorisation [1] 43/7</p> <p>authorities [3] 34/1 102/19 121/11</p> <p>authority [8] 82/19 83/1 97/16 97/16 98/9 102/8 102/21 116/20</p> <p>authors [1] 67/6</p> <p>Availability [1] 32/15</p> <p>available [19] 9/1 16/25 26/20 31/12 33/12 36/2 36/2 36/13 40/19 47/4 48/7 48/8 63/10 66/23 77/1 80/7 80/13 80/13 105/7</p> <p>average [5] 62/8 105/6 131/23 131/24 131/25</p> <p>aware [21] 2/20 2/22 2/23 2/23 2/25 35/20 37/22 56/22 64/11 70/6 85/17 85/24 86/4 87/14 91/4 118/1 121/17 124/3 124/4 132/21 135/22</p> <p>away [2] 47/2 125/20</p>	<p>40/17 41/23 47/3 47/25 54/20 66/10 66/20 66/23 78/4 78/13 78/22 87/19 92/13 96/19 99/22 99/24 100/17 102/9 126/17 126/18</p> <p>balance [2] 49/13 90/17</p> <p>balanced [1] 50/21</p> <p>Bangor [1] 14/15</p> <p>based [7] 14/10 33/20 34/25 35/10 84/12 95/22 114/9</p> <p>basis [11] 22/11 44/12 57/22 63/12 63/16 66/19 66/22 68/5 80/16 92/16 126/23</p> <p>batch [3] 59/25 60/5 99/7</p> <p>battled [1] 134/8</p> <p>BBC [1] 111/6</p> <p>be [224]</p> <p>be aware [1] 124/4</p> <p>bear [1] 103/1</p> <p>became [10] 4/6 6/4 7/25 7/25 26/20 63/10 66/21 66/23 106/24 110/5</p> <p>because [99] 6/12 6/22 7/16 11/3 12/18 13/4 18/11 18/14 19/1 19/9 24/1 24/4 25/18 27/16 29/10 30/15 30/16 31/15 32/6 33/23 35/21 36/1 36/23 37/13 37/21 38/18 39/9 42/17 44/2 44/22 45/3 45/12 46/1 46/9 47/1 47/7 47/23 48/18 50/17 51/2 51/17 52/20 52/23 53/8 53/18 55/15 56/11 59/21 60/13 61/6 61/10 65/11 69/18 70/17 70/19 71/12 73/18 75/12 77/14 78/14 79/5 80/3 80/21 81/1 82/3 83/8 83/17 84/19 88/10 89/18 89/20 90/19 95/25 97/11 99/21 100/11 100/24 101/22 102/11 103/6 104/12 106/2 106/9 106/22 106/25 107/1 107/18 110/20 118/6 120/15 122/18 124/21 125/1 125/5 128/21 132/11 132/17 132/17 136/14</p> <p>become [8] 2/25 36/2</p>	<p>48/7 48/7 56/22 70/5 86/23 118/1</p> <p>becomes [2] 36/13 89/17</p> <p>becoming [4] 31/11 33/12 108/17 135/9</p> <p>been [148]</p> <p>before [33] 9/4 17/8 19/14 23/17 26/13 26/20 27/21 27/22 33/7 34/25 36/15 39/10 44/1 44/5 46/24 48/5 55/14 74/7 74/10 85/5 105/8 107/21 108/13 109/17 111/12 111/14 111/15 123/7 124/22 124/23 126/1 135/24 137/14</p> <p>beg [1] 24/14</p> <p>begin [1] 116/24</p> <p>behalf [2] 38/21 110/21</p> <p>behind [5] 1/6 10/15 23/15 23/20 24/1</p> <p>being [49] 2/22 4/16 12/5 24/4 25/3 26/4 27/16 31/23 32/2 36/1 37/1 37/7 37/10 37/15 37/20 38/1 52/7 54/15 66/10 69/8 70/23 71/7 71/20 75/2 76/15 80/22 82/21 83/23 88/11 93/16 98/1 98/13 100/10 100/20 103/13 107/2 114/1 114/2 123/9 124/16 126/5 126/21 127/10 127/11 128/7 128/17 132/24 136/12 136/16</p> <p>believe [2] 82/25 103/1</p> <p>benefit [1] 40/3</p> <p>benefits [1] 43/22</p> <p>BeneFix [1] 42/11</p> <p>best [5] 25/8 28/5 49/17 64/24 112/5</p> <p>better [5] 72/16 83/12 98/16 114/8 123/9</p> <p>between [24] 3/18 4/17 5/7 6/8 6/19 8/7 26/22 26/25 43/15 43/16 49/13 79/8 82/4 91/1 91/7 91/18 93/2 93/13 93/25 96/16 97/21 115/5 115/10 115/13</p> <p>beyond [2] 1/22 79/24</p> <p>big [5] 1/15 21/8 45/13 89/20 132/14</p> <p>bigger [1] 130/13</p> <p>Birchgrove [1] 134/19</p> <p>Birmingham [5] 78/10</p>	<p>78/15 78/16 79/14 79/20</p> <p>birth [4] 46/7 95/25 99/1 105/2</p> <p>births [1] 97/8</p> <p>bispecific [1] 41/5</p> <p>bit [7] 12/25 16/15 53/17 71/16 104/14 124/9 128/24</p> <p>black [1] 121/21</p> <p>Blank [1] 34/11</p> <p>bled [6] 61/8 61/8 61/24 99/17 99/25 100/6</p> <p>bleeding [59] 4/13 4/14 4/16 4/21 5/3 6/10 6/15 6/17 6/20 9/7 9/8 12/13 13/10 13/24 15/8 15/15 16/6 16/14 17/13 17/22 18/21 19/18 21/7 21/9 21/11 24/10 24/13 24/22 25/5 60/15 61/4 61/10 62/16 79/1 79/4 79/5 81/10 81/22 87/7 94/6 94/8 94/9 94/11 94/12 94/19 94/24 95/9 96/6 101/3 105/15 105/17 105/20 105/23 115/4 124/1 128/8 129/24 135/6 135/14</p> <p>bleeds [7] 24/5 41/22 42/18 42/19 99/23 99/24 105/6</p> <p>blood [73] 2/17 2/18 2/21 3/1 3/1 13/17 15/25 28/14 28/16 28/17 28/21 28/22 28/24 29/18 29/20 29/21 30/8 30/8 30/9 30/23 31/1 31/8 31/11 31/14 31/14 31/22 32/15 34/23 59/5 59/6 59/22 60/14 60/16 61/5 62/25 63/1 63/15 63/19 64/3 65/5 66/9 74/23 74/25 75/9 75/11 75/16 75/17 75/23 75/24 76/1 76/6 76/9 83/18 83/25 84/6 84/14 84/16 84/18 95/11 116/10 116/11 116/13 116/13 116/16 116/17 117/20 117/21 117/23 117/25 119/1 119/7 123/19 135/23</p> <p>blood-borne [13] 63/19 74/23 75/9 75/11 75/16 75/17 75/23 76/6 76/9 83/25 84/14 84/16 84/18</p>	<p>bloods [1] 76/3</p> <p>Bloom [16] 6/6 23/7 55/10 55/11 56/14 72/5 85/6 90/25 91/7 91/18 91/22 107/22 108/3 109/16 109/19 111/2</p> <p>Bloom's [6] 27/25 73/3 91/16 92/4 109/21 110/4</p> <p>blue [1] 119/7</p> <p>board [2] 82/5 82/12</p> <p>bodies [1] 30/6</p> <p>bone [2] 4/4 4/24</p> <p>born [4] 44/2 44/5 48/5 126/1</p> <p>borne [14] 63/19 74/23 74/25 75/9 75/11 75/16 75/17 75/23 76/6 76/9 83/25 84/14 84/16 84/18</p> <p>Bory [1] 74/4</p> <p>Borsiewicz [1] 74/5</p> <p>Borsiewicz's [1] 74/8</p> <p>both [14] 10/16 17/18 27/16 29/5 31/12 55/4 56/15 74/15 105/21 107/16 119/1 124/20 126/3 129/17</p> <p>bound [2] 51/18 51/19</p> <p>boys [1] 20/12</p> <p>BPL [9] 31/24 32/3 32/18 36/4 36/12 37/18 67/5 67/13 67/25</p> <p>BPL 8Y [6] 31/24 32/3 32/18 67/5 67/13 67/25</p> <p>brand [2] 50/11 90/1 111/20</p> <p>break [8] 54/9 54/11 54/23 92/9 92/19 92/19 107/21 109/2</p> <p>breakdown [1] 60/21</p> <p>Brian [3] 1/4 116/1 139/4</p> <p>brief [2] 79/22 102/23</p> <p>bright [2] 93/9 93/13</p> <p>bring [1] 131/10</p> <p>Bristol [1] 130/1</p> <p>British [1] 73/22</p> <p>broadly [2] 95/4 96/14</p> <p>brought [2] 22/7 31/8</p> <p>Brown [3] 67/6 69/5 69/16</p> <p>build [2] 87/25 88/22</p> <p>building [2] 88/24 89/24</p> <p>built [3] 9/2 9/18 10/2</p> <p>bust [5] 108/3 108/9</p>	<p>108/15 108/18 108/24</p> <p>but [118] 1/9 3/25 5/14 7/14 12/3 12/5 14/2 14/15 14/17 14/22 17/10 17/19 18/2 19/14 22/1 25/5 26/19 27/21 28/5 28/7 29/13 33/8 38/8 39/22 40/10 40/18 42/19 43/3 43/11 46/20 50/16 52/5 53/5 54/5 54/19 56/5 56/6 57/17 57/21 58/18 58/24 59/11 59/13 61/2 62/8 62/17 64/24 65/9 66/5 68/25 70/13 71/4 71/22 73/8 77/2 77/7 79/4 80/2 80/4 81/12 82/16 82/18 83/1 83/21 87/15 88/5 88/19 91/5 93/6 94/10 94/22 95/16 96/15 97/17 98/1 98/2 98/17 101/14 102/17 102/22 104/12 104/17 105/9 106/8 106/10 107/3 107/19 108/22 108/25 110/23 111/7 114/10 114/18 115/18 116/12 117/4 117/11 118/5 119/17 120/2 120/23 124/10 125/3 125/24 127/19 128/10 130/2 130/21 131/7 131/20 132/9 132/12 132/23 133/20 133/22 134/10 136/18 137/16</p> <p>buy [2] 29/14 53/5</p> <p>by [91] 2/8 2/11 2/21 7/20 14/3 16/19 24/5 24/21 28/16 28/19 29/3 30/11 30/12 30/16 30/17 31/8 31/19 31/19 31/20 32/4 34/12 34/18 35/6 35/10 35/17 38/20 40/9 50/24 51/10 55/5 55/10 57/2 57/14 60/2 63/19 66/17 68/12 69/23 72/4 74/2 74/21 75/5 75/9 75/16 76/4 76/14 80/10 81/16 81/19 84/22 85/3 85/5 85/14 88/14 90/15 90/20 91/5 93/16 95/1 96/24 97/15 101/24 101/25 102/7 103/3 104/18 104/18 106/12 108/1 110/22 111/11 111/17 116/1 116/11 116/16 117/25 118/12 118/25 120/21 126/14</p>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>B</p> <p>by... [11] 129/12 129/22 130/10 130/20 133/3 133/5 133/17 136/6 139/3 139/4 139/5</p>	<p>87/15 92/2 94/10 107/19 112/3 113/24 113/25 114/18 115/9 120/14</p> <p>candidate [1] 82/16 candidly [1] 83/2 card [4] 122/20 122/23 133/8 133/11</p> <p>cardiac [1] 6/16 Cardiff [77] 6/5 7/4 7/20 8/1 8/11 11/2 14/15 16/22 16/23 17/7 17/14 17/17 17/18 18/4 18/8 18/19 18/22 19/19 22/8 24/1 24/14 24/23 25/19 26/14 27/20 27/25 28/3 28/4 28/6 28/8 28/22 29/14 55/3 58/15 59/8 69/19 74/11 75/1 76/21 77/2 77/4 78/8 78/13 79/2 81/13 81/18 82/4 85/1 85/5 85/11 85/20 95/8 99/18 104/10 106/1 106/6 107/17 109/17 110/22 112/21 113/4 113/13 120/18 120/19 124/11 124/19 125/14 126/14 127/4 127/8 127/19 129/5 130/20 131/5 134/11 135/12 136/21</p> <p>Cardiff and [1] 110/22 cards [1] 101/4 care [32] 5/2 9/13 14/12 15/5 15/22 16/13 16/22 35/16 40/5 54/5 58/16 74/22 75/4 76/7 78/20 79/7 80/21 80/25 83/3 95/9 96/4 97/10 98/12 100/14 101/2 114/5 129/25 130/16 130/20 135/6 135/8 136/5</p> <p>career [1] 105/21 carers [1] 126/22 carried [3] 33/4 68/4 113/22 carry [2] 16/2 95/5 cascaded [1] 35/18 case [18] 33/21 34/2 59/15 59/23 64/23 66/13 70/19 75/22 86/14 90/13 111/7 119/23 123/17 123/24 129/20 130/9 131/23 131/24 cases [7] 33/20 56/5 68/16 68/17 79/14 83/10 83/11 casualty [1] 18/16</p>	<p>category [4] 25/7 27/8 27/10 113/14 catheter [1] 47/10 causality [1] 121/23 causally [1] 121/9 cause [4] 25/17 37/19 94/18 94/24 caused [6] 9/9 24/5 106/12 107/15 135/23 136/6 causes [1] 122/21 causing [2] 65/9 119/14 CD4 [1] 63/2 cell [4] 51/4 60/16 61/5 96/7 cells [2] 60/14 117/24 cent [6] 6/11 7/11 7/12 7/15 7/11 113/17 central [3] 13/4 45/14 134/7 centre [160] centre's [1] 89/11 centre-led [1] 53/18 centres [14] 27/17 35/22 39/1 39/13 58/11 129/15 129/15 129/17 130/7 130/13 130/13 130/14 134/4 135/21 certain [8] 39/2 39/19 39/21 51/1 52/6 52/16 52/18 120/13 certainly [21] 17/19 24/1 29/7 30/1 39/3 57/21 64/11 64/16 74/9 76/21 76/23 77/6 83/4 83/15 91/11 115/2 116/13 129/21 130/10 131/2 132/14 chain [1] 37/15 chair [3] 7/19 8/7 19/10 chaired [2] 114/21 114/22 challenges [3] 135/2 136/24 136/24 chamber [1] 1/14 chances [1] 128/3 change [21] 34/24 36/10 36/19 37/17 38/4 38/9 40/11 40/12 41/23 49/10 52/19 54/6 93/20 95/18 108/8 114/10 132/7 132/14 132/16 132/25 136/13 changed [7] 6/22 29/10 35/13 36/20 103/5 103/6 113/23 changes [1] 102/20</p>	<p>changing [14] 16/5 34/25 36/5 36/10 36/15 36/23 39/25 40/2 48/13 103/8 128/13 131/24 132/9 132/13 charge [2] 23/11 133/23 charged [1] 29/3 Chief [4] 114/14 114/17 114/19 115/2 child [17] 13/7 16/4 16/7 16/11 44/1 44/4 44/5 44/10 45/6 45/19 47/9 47/11 107/14 128/24 129/1 129/4 129/9 childbirth [3] 6/15 95/9 95/12 childhood [1] 71/16 children [40] 9/16 10/10 12/13 13/2 13/2 13/5 20/10 22/15 22/17 23/23 23/23 24/3 32/18 43/25 44/15 44/16 45/2 45/3 45/16 46/8 48/5 60/25 61/19 107/8 126/10 128/20 129/8 129/14 129/16 129/17 129/20 129/21 129/24 130/8 130/9 130/11 130/15 130/18 131/4 131/10 choice [8] 36/3 37/13 45/17 50/10 52/8 52/25 53/16 53/17 choices [2] 47/7 53/15 choose [2] 13/19 45/8 choosing [2] 30/1 43/16 chose [1] 29/18 Chris [1] 114/19 chronic [6] 3/11 3/14 3/15 71/14 77/6 77/16 circulated [1] 34/18 circumstances [3] 65/2 93/5 121/4 CJD [10] 35/17 37/2 37/10 66/23 99/5 99/6 106/17 106/21 118/14 120/16 clarify [1] 27/3 classic [1] 71/16 clear [10] 25/20 27/12 47/3 70/17 86/16 97/18 127/23 134/10 137/2 137/3 clear-cut [1] 25/20 clearest [1] 82/11 clearly [14] 1/6 11/4 22/15 25/5 28/4 56/6</p>	<p>80/20 90/10 94/25 106/11 107/19 108/20 122/16 127/9 clinic [40] 17/10 55/5 61/17 62/1 62/17 63/10 63/13 63/19 64/1 64/7 64/8 65/3 68/7 71/20 74/23 74/25 75/9 75/11 75/17 75/17 75/23 76/6 77/10 79/9 79/16 79/18 80/14 80/23 83/20 83/25 84/1 84/2 84/9 84/14 84/17 84/18 84/22 99/21 130/22 131/8 clinical [14] 4/18 7/13 7/16 7/16 7/17 11/3 14/5 14/8 16/18 17/11 32/7 32/9 67/22 71/21 clinically [1] 100/7 clinician [12] 49/16 49/21 49/24 53/18 64/22 115/5 115/13 121/5 121/6 122/25 123/3 133/10 clinician-led [2] 49/24 53/18 clinicians [4] 37/23 90/3 122/5 133/14 clinics [16] 15/8 16/25 22/10 22/19 22/21 61/15 74/17 75/6 75/17 75/19 77/11 80/7 80/12 81/15 83/24 131/6 close [1] 120/7 closely [1] 135/4 closest [1] 18/2 clotting [1] 67/9 CMO [1] 114/14 co [5] 16/13 26/3 27/5 120/24 130/20 co-infected [2] 26/3 27/5 Co-Morbidities [1] 120/24 co-ordinated [1] 130/20 co-ordinating [1] 16/13 coagulation [2] 4/5 6/13 cohort [1] 27/5 cohorts [1] 32/24 cold [1] 53/6 collated [1] 100/15 colleagues [8] 34/13 47/24 76/5 80/8 90/16 95/8 118/12 136/4 collected [7] 67/15 68/2 93/17 96/2 98/12</p>	<p>100/20 100/20 College [2] 124/11 129/3 Collins [10] 1/3 2/5 2/7 2/9 27/9 109/4 109/14 133/5 133/7 139/2 Collins' [1] 24/9 column [1] 68/3 Colvin [4] 4/2 4/5 19/7 19/9 combine [1] 9/13 combined [1] 130/2 come [49] 14/25 20/22 22/12 23/20 33/16 37/3 40/17 46/2 47/3 47/25 48/25 51/9 59/10 61/24 62/2 63/20 64/20 64/21 64/25 66/20 72/18 74/16 75/24 77/18 78/4 80/13 82/12 82/17 82/24 86/6 87/8 90/25 91/5 91/8 91/21 92/3 92/13 106/17 117/4 117/5 119/3 119/5 120/8 121/7 122/6 124/15 125/23 129/1 134/5 comes [7] 21/3 21/9 56/20 83/10 103/24 131/6 131/8 coming [10] 12/6 15/21 15/25 21/25 58/10 58/15 70/1 80/6 80/23 127/4 comment [1] 130/17 comments [1] 123/13 commercial [2] 29/5 38/20 Commissioners [4] 38/22 43/7 82/4 103/20 commitments [1] 79/23 committee [13] 38/19 38/20 38/23 94/20 95/1 96/10 97/3 101/22 101/23 101/25 102/1 121/3 136/20 committees [3] 95/14 97/15 118/6 common [1] 129/12 communicate [1] 121/23 companies [22] 31/19 87/23 87/24 88/1 88/7 88/23 89/3 89/3 89/6 89/6 89/10 90/3 90/8 91/2 91/7 104/19 111/10 111/11 111/17 111/19 112/12 112/15</p>
--------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

(39) by... - companies

<p>C</p> <p>company [3] 89/1 90/11 90/16</p> <p>compared [1] 67/12</p> <p>comparing [1] 44/13</p> <p>compelling [1] 60/6</p> <p>competence [1] 11/7</p> <p>complete [3] 82/18 112/7 133/10</p> <p>completed [3] 2/13 84/17 95/17</p> <p>completely [6] 31/13 97/18 113/18 119/6 122/23 123/6</p> <p>complicated [1] 33/23</p> <p>complications [7] 4/24 67/10 83/16 105/24 106/8 128/7 128/10</p> <p>complied [1] 39/4</p> <p>comply [2] 52/10 53/2</p> <p>comprehensive [5] 9/13 15/5 35/16 57/5 130/20</p> <p>compulsion [1] 53/4</p> <p>concentrate [5] 67/5 67/13 70/1 70/21 118/10</p> <p>concentrates [6] 67/9 110/12 118/21 119/18 119/20 119/24</p> <p>concept [1] 53/6</p> <p>concepts [1] 53/10</p> <p>concern [7] 9/10 37/20 52/22 60/20 76/10 77/25 127/10</p> <p>concerned [5] 77/20 80/8 80/9 95/3 118/18</p> <p>concerns [1] 36/24</p> <p>conclusion [2] 70/15 121/8</p> <p>condition [3] 128/17 128/18 128/25</p> <p>confidence [1] 13/7</p> <p>Confidentiality [3] 102/8 104/15 113/22</p> <p>confirm [1] 119/22</p> <p>confirmed [1] 81/24</p> <p>conflict [1] 7/18</p> <p>confronted [1] 9/12</p> <p>congenital [1] 128/17</p> <p>connected [1] 100/8</p> <p>cons [1] 53/22</p> <p>consensus [1] 109/1</p> <p>consent [33] 40/18 43/11 58/22 64/5 64/12 64/15 65/4 65/7 65/16 65/17 65/18 66/18 66/20 67/19 93/6 93/22 94/16 94/21 95/2 95/16</p>	<p>96/11 97/1 97/12 101/15 102/2 103/2 103/13 104/9 104/11 113/2 113/7 113/10 113/17</p> <p>consented [3] 68/22 68/25 69/7</p> <p>consequences [4] 71/18 132/18 132/20 136/1</p> <p>consider [4] 31/1 52/8 101/23 132/6</p> <p>considerable [1] 21/14</p> <p>consideration [1] 51/24</p> <p>considered [6] 30/7 31/4 46/15 73/24 94/3 127/19</p> <p>considering [1] 124/7</p> <p>consistent [2] 102/18 108/11</p> <p>constructively [1] 135/5</p> <p>consult [1] 78/14</p> <p>consultant [27] 6/1 6/19 6/23 7/4 12/10 14/5 16/20 17/5 17/10 18/3 22/22 23/9 23/10 56/13 56/14 64/2 74/12 81/5 81/14 81/17 81/24 91/18 105/16 105/22 129/7 129/19 136/22</p> <p>consultants [6] 12/4 12/8 12/14 47/5 120/18 124/2</p> <p>consultation [1] 132/1</p> <p>consulted [1] 9/1</p> <p>consulting [1] 10/12</p> <p>contact [5] 22/12 76/8 76/11 77/23 80/10</p> <p>contacted [1] 108/1</p> <p>contacts [1] 77/23</p> <p>context [8] 34/17 43/25 46/3 48/16 50/16 53/24 99/8 107/13</p> <p>continue [10] 5/1 36/12 60/7 65/22 80/3 90/3 92/8 92/21 126/11 136/2</p> <p>continued [2] 58/4 75/5</p> <p>continues [3] 13/13 57/13 107/7</p> <p>continuing [2] 36/4 102/10</p> <p>continuum [1] 49/19</p> <p>contract [3] 40/9 90/7 90/21</p>	<p>contracted [3] 59/3 70/21 110/15</p> <p>contributing [2] 88/24 89/11</p> <p>control [2] 44/13 50/2</p> <p>controls [1] 103/16</p> <p>convenient [1] 92/12</p> <p>conversation [11] 43/24 44/1 48/24 49/7 58/21 64/17 64/18 69/4 69/5 106/23 124/12</p> <p>conversations [10] 37/12 43/12 45/22 46/21 46/22 56/1 73/5 131/21 132/5 132/15</p> <p>convert [1] 100/5</p> <p>converted [1] 65/24</p> <p>copied [3] 19/6 34/12 47/21</p> <p>copying [1] 19/9</p> <p>Core [3] 92/10 109/15 115/22</p> <p>Core Participants [1] 92/10</p> <p>corner [1] 128/4</p> <p>correct [47] 1/10 2/15 3/19 3/20 4/7 4/8 6/3 6/6 6/21 7/22 8/2 8/8 8/9 10/1 10/23 11/11 11/17 14/9 14/10 15/7 15/19 17/25 18/23 20/7 26/6 27/2 27/7 27/9 29/7 33/3 37/16 55/7 56/23 57/6 63/8 65/20 65/21 67/20 68/9 68/23 72/23 75/21 76/18 78/24 79/15 79/25 90/6</p> <p>correctly [2] 69/21 74/4</p> <p>correspondence [4] 91/1 91/10 91/12 91/15</p> <p>corridor [1] 10/18</p> <p>cost [7] 29/3 50/16 50/17 52/5 52/6 54/5 88/20</p> <p>costs [1] 52/3</p> <p>could [36] 2/21 3/1 3/14 3/14 3/15 3/16 5/14 17/16 17/17 23/6 29/21 29/21 29/23 29/25 40/13 70/17 72/25 73/24 73/25 74/18 75/12 76/24 80/9 81/14 81/15 81/20 83/11 93/12 94/23 95/6 99/18 101/10 101/13 112/2 113/16 133/7</p> <p>couldn't [1] 80/3</p>	<p>counselling [3] 13/23 14/6 20/15</p> <p>count [3] 63/1 63/2 63/15</p> <p>country [4] 116/20 129/12 130/6 135/9</p> <p>couple [5] 12/23 22/7 33/15 111/9 112/25</p> <p>courageous [1] 125/21</p> <p>course [36] 14/25 21/21 23/1 24/3 25/15 26/13 26/18 31/10 33/18 35/21 37/9 37/18 40/4 40/10 46/6 47/4 50/4 53/9 53/25 54/17 56/9 60/17 71/8 75/12 79/5 87/7 89/15 91/22 110/16 114/20 114/25 117/11 119/13 121/12 130/12 137/15</p> <p>cover [1] 4/14</p> <p>covered [2] 3/24 30/21</p> <p>covering [1] 19/5</p> <p>cramped [1] 8/21</p> <p>credit [1] 135/18</p> <p>criteria [1] 67/21</p> <p>cross [1] 29/3</p> <p>cross-charged [1] 29/3</p> <p>crucial [1] 127/12</p> <p>cryoprecipitate [1] 117/24</p> <p>cupboard [1] 85/21</p> <p>current [7] 38/11 46/12 52/15 61/14 71/9 87/13 136/15</p> <p>currently [7] 25/25 32/18 75/15 83/23 98/17 112/7 132/21</p> <p>curve [3] 23/16 23/20 24/1</p> <p>cut [1] 25/20</p> <p>CV [2] 2/12 7/24</p>	<p>67/11 67/15 68/1 97/6 97/7 98/5 99/16 101/9 103/11 103/14 103/15 103/16 103/17 103/22 104/2 104/9 105/1 105/3 105/4 113/8 113/24 113/25 114/7 114/10 119/15 120/5 120/17 122/13</p> <p>data's [1] 114/2</p> <p>database [33] 12/21 21/19 35/12 98/19 99/15 100/16 100/22 100/23 100/24 100/25 100/25 101/9 101/13 101/18 101/22 102/23 103/25 112/25 113/1 113/11 113/25 114/10 119/11 119/12 119/12 119/17 119/21 119/22 120/1 120/5 120/8 120/11 120/22</p> <p>date [3] 73/23 99/1 105/2</p> <p>dated [1] 19/5</p> <p>dates [1] 34/9</p> <p>Davies [1] 56/12</p> <p>day [17] 9/9 9/14 9/19 9/21 10/14 14/6 14/7 17/11 17/11 75/18 75/20 80/16 80/16 88/12 108/23 110/18 110/18</p> <p>day-to-day [2] 17/11 110/18</p> <p>days [4] 14/8 22/7 90/5 117/15</p> <p>DDAVP [5] 32/3 42/15 42/16 42/18 42/24</p> <p>deal [1] 107/1</p> <p>Dear [1] 34/10</p> <p>death [1] 87/12</p> <p>December [2] 34/10 35/5</p> <p>December 1997 [1] 35/5</p> <p>decide [2] 50/3 104/5</p> <p>decided [4] 41/18 49/8 50/13 91/25</p> <p>deciding [1] 43/20</p> <p>decision [11] 30/6 30/20 49/15 50/9 74/20 89/25 107/25 108/7 108/13 108/25 109/1</p> <p>decision-making [2] 30/6 30/20</p> <p>decisions [6] 46/19 74/19 77/18 89/12 112/23 122/6</p> <p>declared [1] 110/15</p> <p>dedicated [1] 135/14</p>	<p>deficiency [2] 63/14 65/14</p> <p>define [2] 21/12 44/3</p> <p>defining [2] 54/3 134/20</p> <p>definite [1] 66/1</p> <p>definitely [2] 110/24 113/9</p> <p>definition [1] 69/23</p> <p>definitively [2] 66/6 66/7</p> <p>degree [2] 60/4 61/12</p> <p>delay [1] 38/8</p> <p>delayed [3] 19/13 19/14 67/10</p> <p>deliberate [1] 12/11</p> <p>deliver [1] 47/10</p> <p>delivered [5] 15/22 28/21 29/11 29/12 130/21</p> <p>delivering [1] 56/19</p> <p>demonstrated [1] 96/3</p> <p>demonstration [1] 70/2</p> <p>dental [1] 20/16</p> <p>department [6] 88/5 101/5 115/6 115/11 115/11 115/14</p> <p>depend [1] 120/4</p> <p>dependent [3] 38/25 51/23 64/4</p> <p>depths [1] 48/19</p> <p>depth [3] 45/17 65/3 65/6</p> <p>Deputy [2] 114/19 115/2</p> <p>derive [1] 70/17</p> <p>derived [15] 21/18 31/14 38/4 38/10 41/22 41/23 42/23 42/25 44/14 44/17 44/20 46/14 58/3 60/18 119/2</p> <p>describe [11] 1/8 8/14 10/3 37/24 56/5 60/8 64/5 64/18 79/8 90/20 98/11</p> <p>described [13] 3/9 62/24 63/4 73/15 77/9 79/21 83/5 90/2 102/16 103/12 110/8 113/2 137/1</p> <p>describing [7] 9/20 18/10 21/4 56/4 121/24 122/2 129/6</p> <p>description [1] 79/25</p> <p>deserves [1] 116/22</p> <p>designated [1] 99/6</p> <p>desk [1] 10/15</p> <p>desmopressin [1] 42/15</p>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

(40) company - desmopressin

<p>D</p> <p>despite [1] 135/2</p> <p>destroyed [2] 66/3 66/4</p> <p>detail [1] 47/12</p> <p>detailed [1] 103/11</p> <p>detect [2] 67/10 83/18</p> <p>deteriorate [1] 100/11</p> <p>develop [1] 3/10</p> <p>developed [2] 70/22 121/16</p> <p>development [2] 23/24 44/8</p> <p>devolved [1] 117/11</p> <p>devoted [1] 7/11</p> <p>DHSS [3] 117/9 117/15 117/17</p> <p>diagnosed [1] 16/14</p> <p>diagnosis [4] 25/3 44/2 59/16 99/2</p> <p>dialogue [1] 49/1</p> <p>dictate [1] 53/21</p> <p>dictated [2] 19/5 90/20</p> <p>did [32] 2/25 4/19 5/1 28/13 37/19 38/2 38/3 38/5 41/20 43/3 52/18 56/5 59/22 64/21 74/6 74/11 77/6 78/9 79/16 81/16 94/25 95/1 95/2 106/17 108/2 109/16 109/17 111/17 119/22 119/24 124/17 125/12</p> <p>didn't [19] 29/14 38/4 40/11 56/7 65/22 73/5 73/8 78/24 87/19 89/7 91/8 91/19 91/20 94/15 94/16 110/18 110/20 110/20 115/18</p> <p>die [1] 106/7</p> <p>died [14] 23/7 26/13 26/19 56/14 85/21 86/20 87/3 91/22 92/1 106/7 106/9 109/17 124/22 135/23</p> <p>difference [5] 21/8 45/3 93/1 96/15 97/20</p> <p>different [30] 23/9 24/16 24/19 29/13 34/1 39/2 43/16 43/19 50/6 50/17 50/17 50/18 50/18 51/8 51/20 51/21 51/22 51/25 53/15 54/7 72/10 88/21 90/15 100/19 102/20 110/12 117/15 119/24 132/9 133/14</p> <p>different -- so [1] 132/9</p> <p>difficult [19] 36/1</p>	<p>55/23 70/4 83/8 83/13 83/21 94/1 96/15 102/18 102/21 103/7 106/5 106/23 107/1 107/4 113/14 119/4 125/6 130/17</p> <p>difficulties [1] 38/2</p> <p>difficulty [1] 93/25</p> <p>direct [5] 1/24 101/1 114/5 114/18 137/4</p> <p>directly [17] 18/6 23/20 25/15 29/1 29/12 29/15 55/25 56/20 69/3 69/5 70/9 73/9 74/18 77/24 88/4 91/19 115/21</p> <p>director [6] 6/4 7/25 8/13 28/15 120/21 136/22</p> <p>directorship [2] 8/13 72/5</p> <p>disagreed [2] 37/5 37/6</p> <p>disappear [1] 121/20</p> <p>disbanded [2] 9/7 88/11</p> <p>discrepancy [2] 21/20 25/18</p> <p>discuss [18] 39/24 40/3 44/11 44/18 44/25 45/6 45/9 45/24 50/18 54/15 56/6 59/11 61/23 66/24 76/5 76/9 104/1 107/12</p> <p>discussed [11] 22/4 22/22 25/19 47/18 48/13 49/4 59/19 90/14 108/10 122/5 125/9</p> <p>discussing [7] 36/8 43/13 54/18 88/6 128/15 131/14 131/22</p> <p>discussion [20] 44/19 45/17 46/11 47/2 47/7 47/18 48/17 52/14 58/25 59/14 64/22 64/23 65/4 66/15 66/17 66/19 72/9 72/10 100/17 118/3</p> <p>discussions [22] 44/5 46/23 46/23 46/25 47/13 47/16 48/4 48/6 48/11 48/23 51/14 59/13 72/14 72/15 72/21 80/5 82/3 82/3 82/7 115/19 131/18 131/19</p> <p>disease [29] 3/5 3/14 3/16 8/5 14/4 21/15 25/4 43/2 43/9 59/17 62/19 65/14 71/14</p>	<p>73/19 77/7 77/15 77/16 77/21 78/1 78/16 79/13 79/18 80/20 84/4 84/23 99/3 128/10 128/17 128/18</p> <p>diseases [5] 46/16 47/20 74/2 74/12 105/25</p> <p>disorder [9] 15/8 16/6 21/7 21/11 24/13 81/23 87/7 94/24 101/3</p> <p>disorders [47] 4/13 4/14 4/16 4/21 5/3 6/10 6/13 6/20 8/6 9/7 9/8 12/14 13/11 13/24 15/15 16/14 17/13 17/23 18/21 19/18 21/9 21/16 21/17 24/10 24/22 60/15 61/4 61/10 65/10 65/15 79/1 79/4 79/5 81/11 94/6 94/8 94/12 105/15 105/17 105/20 105/24 115/4 124/1 128/8 129/24 135/6 135/14</p> <p>disproportionately [1] 79/6</p> <p>disseminated [1] 122/9</p> <p>distanced [1] 1/18</p> <p>distinct [2] 97/25 98/1</p> <p>division [1] 117/16</p> <p>do [87] 6/18 9/23 14/19 16/11 16/24 17/9 22/24 27/22 28/1 28/25 30/11 38/16 39/16 44/19 44/20 45/6 45/20 46/1 46/3 46/20 47/16 49/18 50/11 50/12 50/14 50/16 56/1 58/8 59/20 60/6 60/7 60/24 63/17 64/9 65/22 69/12 72/19 74/17 80/14 80/22 81/14 82/9 83/3 86/6 86/23 87/10 89/9 89/9 89/9 89/9 90/8 91/9 91/11 91/12 92/12 96/15 97/9 100/6 102/3 102/12 103/7 104/24 105/3 109/22 111/2 112/5 112/20 112/22 117/19 118/6 120/12 121/18 122/11 123/3 125/11 125/19 126/17 127/25 128/11 130/14 130/15 131/18 131/22 132/17 132/25 136/2 136/16</p> <p>doctor [6] 10/24 11/5</p>	<p>77/15 116/19 122/15 131/7</p> <p>doctors [5] 10/22 90/14 124/1 130/4 131/9</p> <p>document [10] 19/12 20/13 20/22 21/1 32/12 32/14 34/7 34/16 67/1 73/7</p> <p>documentation [4] 91/2 91/4 91/6 91/21</p> <p>documents [21] 72/19 72/23 72/25 73/1 81/3 85/12 85/13 85/17 86/1 86/9 87/16 87/17 91/9 92/1 92/5 110/1 110/5 110/6 110/7 110/10 110/17</p> <p>does [21] 9/25 16/3 19/22 20/18 32/25 39/17 52/15 84/1 89/21 94/2 97/16 100/5 102/20 103/7 107/17 112/6 120/1 120/7 120/8 131/6 131/8</p> <p>doesn't [9] 19/23 29/11 45/2 50/5 54/1 87/5 89/11 89/17 114/10</p> <p>doing [12] 4/23 7/15 35/2 47/5 58/5 58/24 63/11 63/13 75/6 83/17 102/13 113/22</p> <p>dominant [1] 106/24</p> <p>dominate [3] 106/18 107/7 107/17</p> <p>dominated [2] 105/15 105/20</p> <p>dominates [1] 106/10</p> <p>dominating [1] 107/6</p> <p>don't [56] 2/22 9/22 20/1 21/25 28/4 33/5 35/9 36/17 36/20 39/16 43/1 45/13 52/5 56/4 58/24 59/6 60/25 61/2 64/11 64/25 69/3 69/6 69/14 71/1 71/22 72/12 76/22 80/1 80/4 80/21 82/7 83/21 89/23 90/13 90/18 91/14 91/20 92/4 97/4 97/4 98/8 104/25 105/1 107/4 110/23 111/5 115/9 115/15 115/20 118/5 121/20 122/14 128/25 133/20 133/22 137/2</p> <p>donated [1] 111/21</p> <p>donation [1] 88/8</p> <p>donations [3] 87/24 89/23 112/11</p>	<p>done [23] 18/5 33/8 47/24 63/21 66/25 68/21 75/1 84/16 87/21 94/17 94/22 94/23 95/7 95/13 97/24 103/21 104/11 104/18 114/12 123/8 123/9 128/6 128/9</p> <p>donor [1] 60/1</p> <p>donors [1] 36/6</p> <p>door [3] 8/18 8/25 80/9</p> <p>doubt [1] 70/8</p> <p>down [12] 7/19 20/21 50/7 68/10 83/10 100/6 108/24 108/24 122/15 126/8 126/16 127/13</p> <p>downside [1] 45/15</p> <p>Dr [85] 4/5 6/23 7/20 10/21 10/23 12/5 12/6 12/7 12/7 12/10 16/19 17/5 19/6 19/7 19/8 19/9 19/9 20/4 22/1 22/4 22/10 22/23 23/15 27/14 29/18 31/3 31/12 34/11 34/13 55/18 55/21 56/11 56/12 56/15 57/2 57/4 57/15 57/18 57/19 64/1 67/6 67/6 69/4 69/5 69/15 69/16 72/3 72/22 73/13 73/15 73/16 73/18 73/25 74/7 74/13 74/15 74/15 74/16 74/19 74/21 74/21 74/25 75/4 75/6 75/7 75/13 76/15 77/12 77/13 77/15 77/17 77/18 77/22 78/12 78/21 78/22 79/17 80/23 83/24 84/2 84/9 84/22 85/14 114/19 120/22</p> <p>Dr Al-Ismael [3] 17/5 27/14 34/13</p> <p>Dr Alikhan [1] 12/6</p> <p>Dr Blank [1] 34/11</p> <p>Dr Brown [3] 67/6 69/5 69/16</p> <p>Dr Chris [1] 114/19</p> <p>Dr Colvin [3] 4/5 19/7 19/9</p> <p>Dr Dasani [34] 10/21 10/23 20/4 22/10 29/18 31/3 31/12 55/18 56/11 56/15 57/2 57/4 57/15 57/18 57/19 67/6 69/4 69/15 72/3 72/22 73/13 73/16 73/18 74/7</p>	<p>74/15 74/19 74/21 75/4 75/7 75/13 76/15 77/17 77/22 79/17</p> <p>Dr Elizabeth Moffat [1] 55/21</p> <p>Dr Freedman [11] 74/13 74/15 74/16 74/21 74/25 75/6 77/12 77/13 77/15 77/18 78/21</p> <p>Dr Godkin [1] 80/23</p> <p>Dr Gosrani [1] 12/10</p> <p>Dr Hay [1] 120/22</p> <p>Dr Healy [1] 84/22</p> <p>Dr Heledd Roberts [1] 12/7</p> <p>Dr Hill [5] 19/8 22/1 22/4 22/23 85/14</p> <p>Dr Hill's [1] 23/15</p> <p>Dr Ludlam [2] 19/6 19/9</p> <p>Dr Obaji [1] 12/7</p> <p>Dr Rayment [4] 6/23 7/20 12/5 16/19</p> <p>Dr Simon [1] 56/12</p> <p>Dr Srivastava [4] 64/1 83/24 84/2 84/9</p> <p>Dr Thomas [2] 78/12 78/22</p> <p>Dr Winter [2] 73/15 73/25</p> <p>drafted [1] 103/1</p> <p>draw [2] 96/16 97/17</p> <p>drawing [1] 93/25</p> <p>drew [2] 96/18 96/19</p> <p>drivers [1] 95/10</p> <p>drug [1] 133/10</p> <p>due [1] 54/17</p> <p>during [14] 2/16 3/3 4/12 4/20 5/4 8/22 23/16 27/24 45/21 54/12 72/5 73/12 80/25 94/9</p> <p>duties [4] 4/21 7/12 12/20 82/21</p> <p>duty [2] 122/20 122/22</p> <p>dying [3] 91/19 106/2 106/4</p> <hr/> <p>E</p> <p>each [10] 39/10 49/12 50/20 52/3 53/22 89/1 90/16 98/2 101/16 102/2</p> <p>earlier [10] 20/4 25/20 72/1 82/16 88/10 90/23 96/17 107/7 113/20 116/6</p> <p>early [6] 12/17 106/3 106/18 119/4 127/20 133/15</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

(41) despite - early

E	53/16 entirety [1] 27/4 entity [1] 39/9 equal [1] 52/7 equally [2] 70/10 111/25 equipped [1] 129/8 eradicate [2] 77/14 84/15 eradicated [1] 84/21 eradication [4] 77/17 84/16 84/19 84/25 escalated [1] 83/6 escalation [1] 80/16 essentially [13] 37/8 46/15 51/2 51/10 51/11 51/12 61/22 62/2 89/18 95/24 105/4 113/13 130/3 establish [2] 79/9 135/10 established [1] 135/13 establishing [1] 134/19 estimate [3] 6/8 25/8 105/9 ethical [6] 67/18 93/5 93/22 94/15 97/3 97/5 ethicists [1] 137/19 ethics [11] 93/23 94/19 94/25 95/14 96/10 97/15 101/21 101/23 101/25 102/1 137/11 ETSA [1] 95/1 EUHASS [1] 118/25 Europe [1] 118/24 evaluation [11] 67/21 93/4 93/14 93/18 94/1 94/14 96/12 97/20 98/2 98/10 98/15 evaluations [1] 93/3 even [11] 42/4 44/23 48/5 80/6 89/21 92/3 97/2 102/18 118/16 124/23 126/1 event [14] 18/11 59/11 120/25 121/4 121/5 121/8 121/12 121/13 122/7 122/13 122/17 123/4 133/9 133/13 events [18] 56/2 56/6 119/16 120/12 120/13 120/13 120/15 120/17 120/19 121/20 122/4 122/6 125/25 126/5 126/6 126/7 127/13 136/6 ever [9] 3/12 44/21 57/12 85/23 109/16	109/18 112/22 117/12 127/3 every [19] 41/7 42/4 44/21 58/3 61/18 61/19 62/5 62/6 62/10 62/13 62/17 62/19 62/24 62/25 99/12 103/23 120/10 120/11 120/16 everybody [5] 14/1 37/9 38/8 41/17 42/15 everyone [8] 34/3 35/13 41/18 42/5 49/23 53/20 79/2 84/19 everything [3] 72/25 128/5 128/8 evidence [26] 25/5 37/23 54/15 54/16 55/13 55/14 73/14 85/4 102/6 103/3 103/4 108/12 117/10 124/14 124/21 124/22 125/4 125/5 125/14 125/17 125/20 125/22 128/16 134/15 136/12 137/3 evolved [1] 100/18 exact [3] 80/1 80/5 80/5 exactly [6] 25/24 35/9 66/3 69/6 112/3 119/5 examine [1] 79/19 example [36] 6/15 22/9 22/20 34/14 39/15 46/10 48/12 50/21 53/16 61/7 62/22 64/19 66/22 76/24 77/25 80/7 84/5 92/2 93/10 93/11 94/4 94/5 95/6 100/3 101/2 103/25 104/1 117/23 118/14 119/17 121/1 129/16 129/18 130/1 130/7 132/13 examples [1] 130/6 except [1] 1/19 exclusively [1] 67/25 exhibited [5] 27/23 72/18 81/2 109/20 109/22 existence [3] 73/2 109/21 111/15 existing [3] 48/8 48/23 79/23 expand [1] 105/18 expanded [1] 11/23 expect [5] 116/15 117/5 117/25 118/10 124/5 expected [2] 31/7 85/18	expecting [1] 86/15 expensive [2] 33/19 53/25 experience [8] 41/20 45/15 49/3 128/23 129/10 136/5 136/25 137/16 experienced [2] 10/24 11/4 experiencing [1] 108/15 expert [5] 57/19 73/14 74/13 84/24 137/15 expertise [4] 11/3 75/7 76/20 131/12 explain [10] 16/15 21/19 24/20 52/18 53/22 60/10 92/2 93/12 106/22 133/7 explained [9] 53/5 55/15 80/2 81/2 94/20 102/6 107/7 118/16 126/10 explains [1] 94/11 explore [1] 93/8 exposed [2] 37/10 37/15 exposure [1] 60/1 express [2] 101/15 104/8 expressed [2] 36/12 75/3 expressing [1] 123/20 extend [1] 51/7 extended [2] 50/19 50/21 extending [1] 126/15 extensive [1] 48/11 extraordinary [1] 134/3 extremely [1] 10/23 eye [1] 120/7 eyes [1] 70/7	40/25 41/1 41/4 41/11 41/14 41/16 41/17 41/19 41/21 41/24 42/3 42/5 42/10 42/22 42/24 43/2 43/6 44/8 44/8 44/11 44/14 45/1 45/4 45/5 45/7 45/8 45/12 45/18 45/25 48/13 48/14 49/6 51/2 51/3 51/6 51/11 51/15 51/16 51/17 51/18 51/19 51/20 54/1 63/16 65/14 67/5 67/9 67/13 70/25 89/5 90/1 99/2 99/12 99/13 100/4 101/6 111/21 111/25 119/18 119/20 132/10 132/11 132/13 Factor 8Y [2] 42/24 43/2 Factor IX [20] 32/1 36/1 36/7 41/14 41/16 41/17 41/19 41/21 41/24 42/3 42/5 42/10 51/3 51/15 51/16 51/17 51/18 51/19 51/20 99/13 Factor VIIa [1] 41/11 Factor VIII [57] 32/5 32/6 32/8 32/10 32/23 33/2 33/9 33/12 33/18 33/18 33/21 34/5 34/24 35/1 35/3 39/15 39/16 39/19 40/7 40/7 40/22 40/25 41/1 42/22 44/8 44/11 44/14 45/1 45/5 45/7 45/8 45/12 45/18 45/25 48/13 48/14 49/6 51/2 51/6 51/11 54/1 63/16 67/5 67/13 70/25 89/5 90/1 99/12 100/4 101/6 111/21 111/25 119/18 119/20 132/10 132/11 132/13 Factor VIII [57] 32/5 Factor XI [2] 21/16 65/14 failure [1] 66/5 fair [2] 14/21 31/3 fairly [2] 19/11 57/22 fallen [4] 23/15 23/19 60/2 69/15 falling [1] 12/19 familial [1] 128/22 familiar [2] 20/18 20/19 families [8] 13/25 15/2 65/13 107/11 126/4 126/22 135/25 136/4 family [5] 15/3 46/8	46/9 107/10 107/15 far [3] 85/16 113/3 127/24 faster [1] 117/2 father [2] 46/10 126/11 fault [2] 24/15 104/17 Fc [1] 51/19 Fc receptor [1] 51/19 feature [1] 106/24 February [3] 3/19 3/21 4/7 February 1989 [2] 3/19 3/21 February 1990 [1] 4/7 feel [3] 49/10 90/18 107/13 FEIBA [1] 41/11 Fellow [1] 4/19 felt [2] 108/22 127/17 ferritin [1] 63/15 few [9] 25/7 48/15 49/1 58/7 58/13 59/9 59/10 122/1 134/2 FFP [1] 117/24 fibrinogen [1] 21/16 fields [1] 114/11 figure [4] 24/16 24/19 26/11 26/15 figures [9] 18/18 20/1 21/17 21/23 24/8 24/24 25/18 26/6 26/17 file [2] 109/24 109/25 file [2] 85/15 85/15 files [4] 73/3 90/25 110/14 111/3 filing [1] 86/5 finance [1] 88/5 financial [1] 52/2 find [10] 25/6 50/4 50/5 72/25 86/7 86/14 86/15 87/20 94/10 94/23 finding [2] 44/18 81/12 findings [1] 81/11 fine [2] 52/24 53/13 Fiona [1] 11/12 first [30] 1/9 3/21 3/23 3/25 8/12 9/4 9/11 9/20 19/4 19/16 24/5 34/15 42/12 42/14 43/3 46/2 49/20 67/8 73/20 74/11 75/23 105/11 106/1 109/16 118/1 118/23 120/6 132/1 134/11 135/9 firsthand [4] 28/1 28/5 28/7 126/19 fit [1] 79/22 five [5] 12/8 39/16
----------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>F</p> <p>five... [3] 39/17 111/12 119/16</p> <p>focus [3] 4/25 131/3 134/10</p> <p>focused [1] 129/7</p> <p>follow [4] 64/3 67/4 113/13 114/22</p> <p>followed [6] 71/5 71/7 71/20 73/8 83/12 89/16</p> <p>following [2] 136/25 137/9</p> <p>food [1] 37/15</p> <p>Forgive [1] 104/17</p> <p>forgotten [1] 99/24</p> <p>form [1] 65/17</p> <p>formal [9] 3/23 3/25 62/17 64/15 65/16 74/9 78/25 83/20 86/23</p> <p>formalised [1] 64/12</p> <p>formally [1] 75/8</p> <p>formation [2] 44/14 47/19</p> <p>forms [1] 63/20</p> <p>fortunate [2] 11/6 34/21</p> <p>fortunately [1] 116/25</p> <p>forward [4] 14/25 82/17 122/24 127/22</p> <p>found [3] 23/13 85/10 109/23</p> <p>four [10] 16/19 23/8 23/16 26/4 32/6 32/23 33/2 61/20 109/17 119/15</p> <p>Frank [1] 19/6</p> <p>Frank Hill [1] 19/6</p> <p>Free [6] 5/11 5/13 5/14 5/17 5/20 70/20</p> <p>Freedman [11] 74/13 74/15 74/16 74/21 74/25 75/6 77/12 77/13 77/15 77/18 78/21</p> <p>freedom [1] 112/8</p> <p>freezers [1] 66/5</p> <p>frequently [2] 61/16 74/6</p> <p>fresh [1] 70/7</p> <p>Friday [1] 1/1</p> <p>from [148]</p> <p>fulfil [1] 89/19</p> <p>full [4] 58/19 63/14 72/9 127/5</p> <p>fully [5] 24/20 53/10 70/25 127/9 128/25</p> <p>function [4] 63/2 63/17 63/17 101/1</p> <p>functions [1] 101/1</p>	<p>fund [7] 4/18 34/6 88/3 88/19 89/24 90/3 115/18</p> <p>funded [1] 40/9</p> <p>funding [13] 33/22 34/1 34/5 81/24 82/5 84/10 84/12 88/21 88/22 90/9 111/11 111/16 112/15</p> <p>further [8] 55/24 71/18 72/12 128/6 128/12 133/3 137/20 139/5</p> <p>future [4] 66/15 66/18 126/16 126/25</p> <p>G</p> <p>gained [2] 95/18 95/22</p> <p>gaining [1] 13/7</p> <p>gap [1] 81/3</p> <p>gaps [1] 85/8</p> <p>gastroenterologist [2] 77/5 77/22</p> <p>gastroenterologists [1] 78/9</p> <p>gave [5] 27/14 87/24 103/4 125/21 133/5 34/21</p> <p>general [6] 56/7 82/21 87/2 129/25 131/5 131/7</p> <p>generally [2] 6/14 116/14</p> <p>generated [1] 91/10</p> <p>generation [2] 40/22 40/25</p> <p>generations [2] 126/9 127/14</p> <p>genetic [6] 20/14 65/6 65/8 65/10 65/12 65/13</p> <p>genetics [2] 8/5 128/21</p> <p>genotype [1] 63/9</p> <p>gestation [1] 44/3</p> <p>get [22] 13/2 23/2 27/22 34/1 39/11 43/5 49/10 58/8 58/22 61/1 63/1 66/20 71/15 71/17 82/23 87/19 91/25 93/5 95/1 100/6 102/19 120/20</p> <p>gets [4] 45/5 45/6 97/1 114/8</p> <p>getting [5] 42/19 90/8 102/17 102/17 113/2</p> <p>give [29] 27/15 38/23 43/14 43/21 45/20 50/20 50/24 51/25 52/1 52/2 52/13 54/2 54/17 55/23 72/16 82/11 95/6 95/15</p>	<p>99/12 101/7 101/17 104/6 108/5 108/19 108/21 125/16 125/22 133/20 136/11</p> <p>given [26] 18/7 18/18 21/17 26/17 28/7 37/1 41/6 41/7 42/3 45/14 54/16 56/21 70/14 75/23 90/7 93/9 101/14 103/3 104/8 106/12 113/1 121/1 122/12 124/14 128/7 136/19</p> <p>gives [1] 19/1</p> <p>giving [10] 46/7 49/14 50/23 95/25 124/21 125/4 125/5 125/17 136/18 137/3</p> <p>Glasgow [1] 130/6</p> <p>gleaned [1] 72/20</p> <p>glycol [1] 51/6</p> <p>go [48] 4/15 9/16 15/23 15/24 16/22 16/23 17/9 18/1 19/12 20/8 20/25 21/24 29/11 29/23 32/13 32/14 33/25 34/19 41/9 41/18 42/8 43/18 45/8 47/2 47/12 54/4 54/7 62/20 65/3 65/15 66/23 75/11 75/22 80/9 90/15 92/7 92/17 92/18 94/25 96/10 97/11 99/22 101/16 106/19 131/16 132/6 132/17 133/12</p> <p>Godkin [4] 79/10 79/15 80/17 80/23</p> <p>Godkin's [1] 79/22</p> <p>goes [6] 38/24 97/2 100/6 100/17 120/5 130/23</p> <p>going [44] 1/19 2/11 8/10 18/10 19/2 27/18 27/22 29/18 40/17 43/10 43/14 43/15 50/12 52/20 54/7 55/1 57/12 61/14 64/9 74/3 83/9 85/2 88/19 91/19 92/8 93/20 96/9 96/21 96/22 96/23 96/24 101/13 102/4 102/5 102/22 104/16 106/20 109/14 113/19 121/25 124/9 128/19 134/16 137/10</p> <p>gone [7] 35/22 40/8 49/7 102/9 105/8 107/20 123/1</p> <p>good [14] 1/3 1/4 2/9 14/23 23/18 30/17 39/12 42/19 54/8</p>	<p>100/14 102/11 109/7 112/1 130/7</p> <p>Gosrani [1] 12/10</p> <p>got [13] 5/13 5/15 12/4 14/24 20/4 20/10 53/15 92/6 104/10 108/14 113/3 123/17 128/14</p> <p>Government [4] 115/7 117/8 117/13 118/4</p> <p>GP [2] 47/21 47/24</p> <p>grateful [1] 136/12</p> <p>great [7] 5/15 5/18 5/21 23/20 129/15 134/12 135/18</p> <p>greatly [2] 135/12 135/24</p> <p>grief [1] 135/2</p> <p>group [31] 9/10 9/17 33/16 59/8 88/15 88/16 93/16 93/24 94/4 99/6 102/8 103/22 103/23 104/2 104/12 104/15 106/21 113/19 113/23 121/7 122/5 124/7 125/2 127/16 127/20 134/3 134/18 134/19 134/23 135/4 137/11</p> <p>grouping [1] 135/1</p> <p>groups [4] 115/6 115/13 118/6 137/15</p> <p>guard [1] 89/10</p> <p>guidelines [1] 97/17</p> <p>gynaecology [1] 20/17</p> <p>H</p> <p>habit [1] 60/7</p> <p>had [139] 1/14 2/24 3/12 4/17 6/12 8/15 8/17 8/17 8/18 8/19 9/5 9/16 10/25 10/25 11/1 11/12 11/12 11/19 17/3 17/6 18/15 22/4 22/16 23/4 23/8 23/15 23/16 23/19 23/21 25/5 26/12 26/13 26/14 26/19 30/17 30/17 31/6 32/7 32/9 33/3 33/8 33/16 33/19 35/8 35/9 35/17 35/18 35/22 36/19 36/19 36/24 37/12 37/12 38/5 38/7 40/14 44/17 46/11 48/11 51/14 52/21 55/3 55/9 56/25 58/6 59/14 59/17 59/24 60/19 62/10 66/15 68/4 68/7 70/2 70/2 70/19 70/20 71/12 73/18 73/19</p>	<p>74/25 76/14 77/6 78/16 79/22 80/19 82/15 82/19 83/3 83/12 83/20 84/20 85/21 86/12 87/16 88/9 88/11 88/15 88/21 89/24 91/15 99/17 99/25 102/4 102/5 102/9 106/4 106/6 106/19 110/6 110/15 110/19 113/22 114/20 114/24 115/3 117/17 120/17 121/2 123/14 123/15 123/18 124/4 124/12 124/14 124/22 124/25 125/12 125/13 125/15 125/16 131/16 134/21 135/25 136/4 136/5 136/14 136/25 137/14</p> <p>hadn't [5] 23/10 82/16 101/14 115/1 127/19</p> <p>Haemate [1] 32/3</p> <p>Haemate P [1] 32/3</p> <p>haematologist [3] 6/2 7/4 18/3</p> <p>haematologists [2] 35/19 130/4</p> <p>haematology [12] 3/21 3/23 3/25 4/1 4/6 5/9 7/3 9/9 9/14 9/21 10/14 88/12</p> <p>haemophilia [154]</p> <p>haemophilia A [7] 19/20 19/21 20/12 31/23 40/21 41/10 65/9</p> <p>haemophilia B [6] 19/21 19/22 31/25 41/13 42/6 42/7</p> <p>haemorrhage [2] 95/7 95/19</p> <p>Haemtrack [2] 99/10 101/2</p> <p>half [27] 41/1 42/2 42/5 42/8 42/10 43/18 44/25 45/2 45/4 45/5 45/7 45/8 48/12 50/14 50/19 50/21 50/25 51/1 51/1 51/7 51/9 51/10 53/15 53/20 54/13 132/10 132/11</p> <p>half-an-hour [1] 54/13</p> <p>half-life [24] 41/1 42/2 42/5 42/8 42/10 43/18 44/25 45/2 45/4 45/5 45/7 45/8 48/12 50/19 50/21 50/25 51/1 51/1 51/7 51/10 53/15 53/20 132/10 132/11</p> <p>Hall [3] 11/12 17/7 20/6</p>	<p>hand [2] 94/17 97/21</p> <p>handful [1] 109/15</p> <p>Hann [1] 23/21</p> <p>happen [5] 38/3 46/24 119/25 123/2 124/17</p> <p>happened [25] 9/4 9/24 14/18 19/13 58/23 65/25 108/20 108/22 116/10 116/21 116/22 117/10 121/17 122/3 122/4 122/4 122/9 122/17 122/18 125/1 126/18 127/6 127/9 127/24 127/24</p> <p>happening [7] 28/8 97/21 97/22 117/18 119/16 126/19 128/3</p> <p>happens [6] 43/24 49/9 93/21 117/14 127/17 128/1</p> <p>happy [5] 92/16 92/18 92/21 101/19 101/19</p> <p>hard [2] 75/21 113/20</p> <p>has [95] 12/9 14/5 15/12 15/22 16/12 16/19 17/25 18/11 24/25 39/7 39/9 40/4 40/8 42/6 42/7 44/4 45/25 47/25 49/6 50/1 50/10 51/12 51/23 53/20 57/8 57/9 60/2 60/2 61/23 62/8 65/11 69/24 73/11 80/2 82/17 83/3 83/25 84/17 84/20 84/20 87/16 93/24 94/17 97/13 99/24 100/18 100/25 101/1 101/4 103/5 103/17 104/21 105/15 105/20 105/22 106/9 106/12 106/12 107/20 107/22 112/22 113/13 114/13 114/20 115/3 116/21 116/22 117/13 117/20 121/1 121/12 121/15 121/17 121/18 122/3 122/4 122/8 122/9 122/11 122/13 122/16 122/17 123/1 123/11 126/18 128/24 129/11 130/2 132/2 133/4 134/21 135/2 135/4 135/23 136/22</p> <p>hasn't [4] 58/23 64/20 83/5 104/12</p> <p>hat [1] 98/21</p> <p>have [322]</p> <p>haven't [9] 43/3 85/25 85/25 86/3 91/4 91/5 96/10 106/6 124/4</p> <p>Haverfordwest [1]</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

(43) five... - Haverfordwest

H	101/18 111/2 113/24 114/1 115/5 119/21	highly [2] 14/7 106/2	hoping [1] 35/6	I beg [1] 24/14	93/8 105/18
Haverfordwest... [1] 18/1	Heledd [1] 12/7	Hill [6] 19/6 19/8 22/1 22/4 22/23 85/14	hospital [26] 3/22 3/24 5/9 5/11 5/13 5/17 5/19 5/20 5/22 6/2 6/14 7/5 15/21 16/1 17/8 18/1 18/3 18/11 23/2 28/22 70/20 75/20 82/12 86/24 87/5 87/10	I can [8] 20/24 38/12 66/1 76/8 97/20 103/10 112/5 133/18	I knew [2] 55/14 83/9
having [18] 6/14 13/3 13/5 33/6 33/25 38/1 39/13 47/8 47/25 59/3 76/16 77/20 78/1 88/12 92/14 107/14 127/2 128/16	help [8] 13/6 22/2 34/7 34/8 99/20 125/9 125/16 131/1	Hill's [1] 23/15	hour [2] 15/12 54/13	I can't [15] 3/6 3/8 24/19 35/9 66/1 82/18 83/1 86/13 86/16 87/15 92/2 112/3 114/18 115/9 120/14	I know [5] 1/14 72/6 72/8 72/12 136/9
Hay [5] 102/6 102/16 103/3 120/22 120/23	helped [1] 87/25	him [8] 56/15 75/5 78/13 80/10 91/1 107/24 109/18 109/18	hours [4] 4/14 5/3 15/12 15/14	I covered [1] 3/24	I link [1] 117/7
Hay's [1] 100/17	helpful [4] 23/5 47/23 98/16 137/4	himself [1] 73/15	house [3] 1/11 3/17 3/22	I derived [1] 21/18	I looked [2] 73/2 109/25
hazards [1] 116/16	hepatitis [56] 2/21 3/8 3/11 5/5 13/25 26/3 26/4 26/5 26/8 26/16 26/19 26/20 27/1 27/11 30/18 45/25 55/4 56/10 56/17 56/25 57/7 58/12 58/14 58/18 58/21 59/16 60/9 60/9 61/1 61/2 62/9 62/10 63/6 63/9 63/24 76/13 77/11 77/14 77/17 78/20 79/6 83/6 83/7 83/23 84/11 84/15 84/15 84/19 84/25 85/1 99/4 105/14 106/15 107/10 123/15 123/16	his [17] 11/3 22/1 72/5 74/4 77/23 78/14 79/23 79/25 80/4 80/9 80/12 91/16 91/20 91/22 102/6 110/5 111/4	how [49] 4/12 6/8 14/19 18/19 21/10 25/9 26/9 28/2 28/13 33/14 39/17 40/23 42/17 47/16 52/3 52/5 56/2 56/8 56/18 60/8 61/16 62/11 67/1 72/20 73/11 74/6 77/12 79/8 79/21 80/5 82/7 87/15 90/2 100/10 104/16 107/13 107/18 107/24 115/6 116/18 117/19 124/7 124/13 127/13 129/12 131/18 131/21 131/21 133/8	I describe [1] 90/20	I made [1] 87/18
HCDO0000280 [2] 19/3 32/14	hepatitis A [2] 60/9 61/2	history [2] 107/2 126/15	however [8] 5/1 36/11 41/19 70/7 70/25 96/8 108/14 135/19	I did [2] 5/1 74/11	I mean [7] 22/6 49/3 56/5 90/14 115/15 127/2 129/13
HCV [5] 5/5 26/10 27/4 55/4 57/24	hepatitis B [4] 26/5 60/9 61/1 123/16	HIV [69] 2/18 2/22 2/25 11/15 13/24 22/20 26/2 26/3 26/8 26/10 26/12 26/15 26/22 27/4 27/6 27/11 27/13 30/18 45/25 46/9 46/10 46/11 55/4 55/17 56/9 57/10 57/11 57/12 57/19 57/21 57/24 58/11 58/14 58/17 58/21 59/2 59/3 62/9 63/2 63/3 63/4 63/6 63/18 63/23 73/11 73/14 73/15 73/18 73/19 73/21 73/22 73/24 74/14 74/16 74/20 74/22 75/2 75/14 75/16 75/16 85/15 85/21 86/5 86/20 99/4 105/14 107/10 110/15 123/15	hold [2] 61/15 66/7	I didn't [8] 73/8 87/19 91/8 91/19 110/18 110/20 110/20 115/18	I might [2] 76/10 90/15
he [59] 10/24 10/25 11/1 11/4 12/10 12/12 17/5 22/11 22/14 22/24 23/3 23/4 23/4 55/19 56/11 56/13 56/15 57/20 64/2 64/4 73/19 73/20 73/22 73/23 73/24 73/24 74/8 74/13 74/18 74/18 77/14 78/1 78/12 78/22 79/18 79/19 79/22 80/1 80/2 80/2 80/3 80/6 80/7 80/11 80/12 80/13 80/23 84/23 84/24 91/24 91/25 92/1 102/12 102/12 103/4 110/6 114/19 114/21 114/22	hepatitis C [37] 5/5 26/3 26/4 26/8 26/16 26/19 26/20 27/1 27/11 30/18 55/4 56/10 56/17 57/7 58/12 58/18 58/21 59/16 62/9 62/10 63/6 63/9 63/24 77/14 77/17 78/20 83/6 84/11 84/15 84/15 84/19 84/25 85/1 99/4 106/15 107/10 123/15	HIV expert [1] 73/14	hugely [4] 45/3 65/11 132/11 135/2	I discussed [2] 22/22 108/10	I misread [1] 24/15
he's [1] 19/8	hepatitis C-infected [1] 56/25	HIV-infected [1] 63/3	human [1] 46/14	I do [5] 27/22 46/3 96/15 112/20 112/22	I never [1] 109/19
health [13] 34/1 97/15 97/16 98/9 101/5 102/7 106/21 114/6 115/6 115/11 115/12 115/14 129/4	hepatologist [11] 64/2 76/21 77/3 79/10 81/14 81/17 81/19 81/25 82/10 82/22 115/1	hoc [1] 22/11	hundreds [1] 104/12	I don't [40] 2/22 9/22 21/25 28/4 33/5 35/9 36/17 36/20 39/16 56/4 58/24 64/25 69/3 69/6 69/14 71/1 71/22 72/12 76/22 80/4 80/21 82/7 83/21 89/23 90/13 90/18 91/14 91/20 97/4 98/8 110/23 111/5 115/9 115/15 115/20 118/5 122/14 133/20 133/22 137/2	I note [2] 54/8 93/23
healthcare [2] 112/19 117/11	holds [1] 113/11	hold [2] 61/15 66/7	Hunt [1] 11/13	I noticed [1] 21/18	I notice [1] 92/6
Healy [1] 84/22	hole [2] 19/16 121/21	holding [2] 29/20 29/24	hypothesised [2] 123/17 123/21	I described [1] 90/20	I obviously [1] 80/1
hear [7] 1/6 118/13 118/23 124/16 124/20 134/15 134/16	holistic [1] 49/25	holds [1] 113/11	hypothetical [1] 37/2	I disagreed [1] 37/6	I particularly [1] 47/18
heard [9] 37/23 55/8 55/12 55/13 72/2 73/14 85/4 111/5 118/15	home [7] 1/9 15/18 20/10 29/10 47/6 111/4 130/25	home [5] 14/13 15/23 15/23 15/25 29/12	I	I disagreed [2] 22/22 108/10	I play [1] 38/18
hearing [1] 118/9	homes [5] 14/13 15/23 15/23 15/25 29/12	honest [1] 123/6	I agree [1] 24/19	I do [5] 27/22 46/3 96/15 112/20 112/22	I probably [1] 123/7
hearings [1] 124/19	honorary [3] 4/6 5/8 7/4	honourary [3] 4/6 5/8 7/4	I also [1] 56/24	I do [5] 27/22 46/3 96/15 112/20 112/22	I reach [1] 70/16
heart [3] 121/2 121/16 122/22	here [8] 1/12 1/15 21/20 35/25 67/3 125/15 136/10 137/14	hope [2] 1/7 22/2	I always [4] 3/15 7/17 45/24 46/1	I don't [40] 2/22 9/22 21/25 28/4 33/5 35/9 36/17 36/20 39/16 56/4 58/24 64/25 69/3 69/6 69/14 71/1 71/22 72/12 76/22 80/4 80/21 82/7 83/21 89/23 90/13 90/18 91/14 91/20 97/4 98/8 110/23 111/5 115/9 115/15 115/20 118/5 122/14 133/20 133/22 137/2	I read [2] 22/6 81/23
heat [2] 30/16 31/24	hidden [1] 114/12	hoped [4] 1/15 23/4 119/8 124/14	I am [2] 85/24 136/3	I do [5] 27/22 46/3 96/15 112/20 112/22	I really [2] 23/25 72/8
heat-treated [2] 30/16 31/24	high [3] 31/25 36/12 106/13	hope [2] 1/7 22/2	I and [1] 136/4	I do [5] 27/22 46/3 96/15 112/20 112/22	I record [1] 47/17
held [12] 23/28/19 98/23 98/24 99/4 99/8 101/9		hoped [4] 1/15 23/4 119/8 124/14	I appreciate [1] 116/10	I do [5] 27/22 46/3 96/15 112/20 112/22	I remember [1] 59/15

<p>I</p> <p>I think... [42] 100/18 102/15 102/16 105/21 107/16 107/19 110/13 111/5 112/1 112/4 112/18 113/18 114/22 118/20 119/4 122/14 122/14 122/24 123/5 123/6 123/10 123/19 123/22 123/24 124/6 125/1 126/4 127/2 127/7 127/12 127/16 127/17 127/22 128/2 128/4 129/20 129/24 131/2 134/12 134/20 135/18 137/21</p> <p>I thought [2] 87/18 124/24</p> <p>I took [3] 11/5 19/15 23/7</p> <p>I understand [8] 6/18 10/20 11/14 28/12 40/23 55/2 65/19 108/2</p> <p>I want [3] 48/2 49/8 135/20</p> <p>I wanted [4] 7/23 68/13 98/18 131/13</p> <p>I was [26] 2/20 2/22 2/23 2/23 4/23 5/11 7/6 9/11 11/3 11/5 11/6 12/23 20/20 26/11 39/3 54/7 72/23 80/8 83/9 86/15 88/6 92/7 118/8 121/25 124/8 124/23</p> <p>I wasn't [7] 5/6 28/4 64/21 69/3 82/2 82/6 88/4</p> <p>I went [3] 72/25 91/17 127/18</p> <p>I will [2] 49/6 57/21</p> <p>I wonder [2] 20/24 54/8</p> <p>I would [21] 4/14 4/15 6/16 17/9 25/14 31/17 36/20 37/12 39/25 86/13 91/14 93/1 117/25 118/2 118/12 118/21 119/7 131/25 132/8 134/2 134/19</p> <p>I wouldn't [2] 36/18 82/1</p> <p>I wrote [1] 12/9</p> <p>I'd [5] 23/20 35/11 73/3 74/7 75/1</p> <p>I'm [40] 2/11 8/10 20/1 25/14 27/18 27/22 28/9 31/18 37/16 40/17 43/10 43/14 48/2 55/1 61/14 69/14</p>	<p>69/20 71/3 74/3 85/2 85/16 86/4 91/4 92/16 92/21 92/22 95/4 101/19 112/5 115/21 117/9 125/14 126/9 128/9 128/17 133/18 133/18 133/22 134/24 136/12</p> <p>I've [36] 5/13 5/15 26/11 30/22 44/21 47/24 49/7 52/21 53/10 55/12 57/13 57/17 59/14 69/18 70/5 70/6 72/7 82/25 88/10 90/18 91/5 92/2 92/6 95/7 98/11 105/8 109/14 110/7 110/11 110/15 114/17 118/16 126/9 127/17 134/5 134/22</p> <p>I've never [1] 52/21</p> <p>I've submitted [1] 72/7</p> <p>idea [1] 101/15</p> <p>identified [4] 81/4 114/2 116/10 117/20</p> <p>identifies [1] 116/21</p> <p>identify [1] 114/11</p> <p>ie [1] 98/21</p> <p>if [103] 1/6 3/3 7/18 8/25 16/4 17/25 18/8 19/12 20/8 20/24 21/2 30/22 31/6 31/17 32/13 34/7 34/11 34/15 36/9 36/11 36/18 38/12 38/17 39/15 40/10 40/12 40/14 42/19 42/20 43/15 44/23 45/20 46/1 54/3 54/6 54/8 58/3 61/7 61/18 61/22 61/25 62/2 62/8 62/10 63/6 64/13 64/19 66/21 66/22 67/6 67/23 68/20 68/20 71/8 77/4 77/19 77/25 78/16 79/19 80/7 86/1 86/12 87/4 91/14 91/25 93/6 93/15 94/23 97/2 97/4 97/8 99/16 99/23 100/3 100/11 100/12 103/10 103/23 103/25 104/17 104/20 105/18 110/24 111/16 111/22 117/19 118/9 119/6 119/13 120/19 120/25 121/12 121/23 122/21 123/2 123/21 131/9 131/17 131/24 133/9 133/13 133/16 137/20</p> <p>IgG [1] 71/12</p>	<p>illness [2] 71/16 120/7</p> <p>imagine [3] 1/18 2/1 115/14</p> <p>immediately [3] 11/6 118/3 121/16</p> <p>immunoglobulin [1] 69/24</p> <p>impact [2] 52/25 83/3</p> <p>impairment [1] 16/10</p> <p>implementation [1] 28/10</p> <p>implemented [4] 28/3 28/6 72/21 114/24</p> <p>implicated [1] 99/7</p> <p>implications [3] 59/1 59/11 132/16</p> <p>important [27] 11/25 12/18 15/19 24/3 35/16 36/24 44/9 46/6 48/3 53/8 57/18 67/9 70/23 100/10 101/4 107/20 124/25 125/1 125/8 125/24 126/2 126/12 127/22 128/2 128/5 134/25 135/19</p> <p>importantly [2] 51/21 110/13</p> <p>impossible [1] 97/11</p> <p>improve [5] 22/3 22/5 95/8 97/10 135/6</p> <p>improved [3] 33/20 100/6 106/10</p> <p>improvement [6] 95/20 95/21 96/1 96/3 96/4 96/8</p> <p>improvements [1] 23/6</p> <p>improving [1] 135/15</p> <p>inaccurate [1] 133/20</p> <p>inactivated [1] 60/12</p> <p>inadequate [1] 42/21</p> <p>include [1] 27/11</p> <p>included [2] 21/23 82/19</p> <p>includes [3] 54/17 104/2 104/3</p> <p>including [2] 8/4 34/3</p> <p>increase [3] 24/25 25/1 54/5</p> <p>increased [3] 33/22 40/6 44/24</p> <p>increasingly [1] 41/3</p> <p>indeed [3] 24/18 37/3 137/5</p> <p>independent [2] 13/21 89/14</p> <p>individual [34] 36/9 39/10 47/25 48/17 48/20 50/1 50/7 51/12 59/3 59/15 64/23 65/1 66/24 70/2 70/20</p>	<p>75/22 76/9 77/20 77/24 78/1 78/3 80/11 82/20 83/10 83/11 99/11 99/23 100/3 101/17 106/13 110/14 122/25 123/2 135/3</p> <p>individual's [3] 47/6 100/4 101/9</p> <p>individually [1] 102/2</p> <p>individuals [8] 39/25 68/17 70/9 71/19 95/2 110/16 123/14 126/4</p> <p>infected [22] 11/15 13/17 13/24 26/3 26/3 26/7 26/12 26/14 26/15 26/19 26/22 27/5 56/25 57/9 57/12 58/14 63/2 63/3 78/19 86/19 123/19 135/23</p> <p>infection [9] 2/17 31/2 31/16 31/18 56/9 56/10 71/9 71/10 105/19</p> <p>infections [7] 30/7 30/12 55/2 55/5 56/19 72/1 120/14</p> <p>infectious [8] 47/20 66/13 74/2 74/12 77/14 84/23 105/25 128/10</p> <p>influence [9] 89/11 89/22 89/25 90/11 111/18 112/12 112/15 112/18 134/21</p> <p>influenza [2] 90/19 112/23</p> <p>influential [1] 111/22</p> <p>inform [1] 122/25</p> <p>information [61] 35/11 35/18 35/21 35/22 37/1 43/21 45/20 48/2 49/14 50/20 50/22 50/24 51/25 52/2 52/3 52/13 55/17 56/21 65/17 70/14 70/15 82/11 85/12 86/8 86/15 93/17 96/2 96/21 96/22 98/13 98/22 98/24 99/2 99/3 99/10 99/13 100/2 100/8 100/15 100/19 101/7 101/13 101/18 101/24 103/12 103/24 104/6 104/20 105/7 113/11 115/17 119/3 119/5 119/8 119/21 122/8 122/11 122/16 123/10 124/5 133/13</p> <p>informed [18] 35/17 56/8 56/9 93/22 94/16 94/21 95/2 95/16</p>	<p>96/11 101/12 102/12 104/11 113/2 113/7 113/9 113/17 117/17 123/9</p> <p>infrequent [1] 67/10</p> <p>inherit [1] 91/20</p> <p>inherited [20] 13/10 18/21 19/18 21/7 21/9 21/11 21/16 24/10 24/13 24/22 58/13 73/3 79/1 81/10 81/22 85/22 90/24 91/3 91/16 115/4</p> <p>inhibitor [7] 8/4 44/9 44/14 44/17 47/19 54/2 64/10</p> <p>inhibitors [5] 41/10 44/24 63/16 76/1 119/19</p> <p>initial [1] 131/21</p> <p>initially [4] 7/6 14/22 28/16 49/5</p> <p>initiating [1] 61/21</p> <p>injury [1] 18/15</p> <p>input [3] 13/20 81/6 83/5</p> <p>inquiries [1] 110/25</p> <p>inquiry [29] 1/14 1/22 56/22 72/24 85/6 87/16 91/5 103/4 107/21 108/5 108/5 108/19 110/2 110/11 110/16 110/19 110/21 110/25 117/9 123/7 123/14 124/11 126/17 127/3 127/6 127/15 127/18 134/8 134/17</p> <p>Inquiry's [4] 37/23 73/14 85/4 93/23</p> <p>ins [1] 80/1</p> <p>Insofar [1] 125/18</p> <p>instrumental [2] 135/9 135/15</p> <p>insurance [2] 59/12 59/12</p> <p>intending [1] 28/9</p> <p>intensity [2] 48/19 48/19</p> <p>interaction [4] 91/6 114/18 114/20 115/3</p> <p>interactions [1] 115/16</p> <p>interest [1] 123/20</p> <p>interested [1] 2/3</p> <p>interferon [1] 84/12</p> <p>intermediate [1] 67/4</p> <p>intermittent [1] 61/23</p> <p>internal [1] 30/4</p> <p>internet [2] 46/2 117/1</p> <p>interpret [1] 70/4</p> <p>interpreted [1] 69/21</p> <p>into [21] 32/22 45/6</p>	<p>51/24 53/6 53/24 62/1 65/3 81/6 88/3 95/15 97/22 97/23 98/2 99/13 106/20 111/13 120/5 120/8 121/20 126/16 127/6</p> <p>intravenous [2] 13/3 47/10</p> <p>intravenously [1] 41/7</p> <p>introduce [1] 23/25</p> <p>introduced [2] 58/4 58/6</p> <p>introducing [1] 24/2</p> <p>introduction [1] 70/24</p> <p>invasive [1] 94/9</p> <p>investigated [1] 71/21</p> <p>invited [2] 68/17 94/20</p> <p>involved [35] 4/9 4/12 5/2 5/4 5/6 6/16 14/16 16/7 32/7 39/3 49/24 57/15 57/17 57/21 63/22 64/22 69/3 69/5 70/9 81/7 81/22 82/2 82/6 88/2 88/4 88/6 93/10 95/24 96/11 111/19 112/21 126/21 128/22 129/4 129/6</p> <p>involvement [4] 7/24 126/23 130/14 136/20</p> <p>involves [2] 47/9 117/9</p> <p>iron [1] 63/14</p> <p>Ismail [3] 17/5 27/14 34/13</p> <p>isn't [5] 18/1 21/21 60/5 96/9 97/18</p> <p>issue [16] 36/8 37/5 54/3 62/22 71/23 79/4 86/5 86/12 87/13 87/17 89/17 97/23 106/17 112/18 117/12 131/11</p> <p>issues [9] 9/11 17/2 31/6 31/18 75/25 86/17 120/16 132/5 132/6</p> <p>issuing [1] 101/3</p> <p>it's [104] 1/15 5/14 13/15 14/25 15/2 16/8 18/13 18/14 19/2 24/15 25/20 27/8 27/12 29/12 30/4 30/4 30/5 34/8 34/12 36/24 41/4 42/23 42/25 46/6 46/12 47/4 47/8 47/9 47/11 48/25 49/21 49/21 49/24 49/25 50/2 50/7 50/16 51/15 52/20 54/12 55/23 59/2 59/10 59/20 60/6</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

(45) I think... - it's

<p>I</p> <p>it's... [59] 61/25 62/18 64/22 65/9 67/2 68/13 70/4 71/14 71/15 80/13 86/18 86/19 86/20 87/1 92/6 96/23 96/24 97/11 98/8 98/8 98/11 98/25 100/15 100/22 103/5 104/18 105/4 105/12 106/14 107/10 107/12 107/15 114/10 116/12 116/13 116/23 118/6 119/4 120/8 122/18 126/7 126/8 127/8 128/4 128/14 129/20 130/17 131/24 132/8 132/12 132/17 133/6 133/11 133/20 133/21 134/21 134/25 135/18 137/2</p> <p>its [3] 37/19 108/19 136/15</p> <p>itself [2] 100/22 114/10</p> <p>IX [21] 32/1 36/1 36/5 36/7 41/14 41/16 41/17 41/19 41/21 41/24 42/3 42/5 42/10 51/3 51/15 51/16 51/17 51/18 51/19 51/20 99/13</p> <p>J</p> <p>January [3] 1/1 138/1 138/3</p> <p>Jennifer [1] 11/10</p> <p>Jenny [4] 55/18 55/25 72/13 73/8</p> <p>Jenny Jones [1] 73/8</p> <p>job [4] 7/14 79/25 80/4 82/19</p> <p>joined [2] 76/6 110/3</p> <p>joint [22] 9/21 17/10 17/19 22/19 22/21 23/24 24/4 64/1 74/17 75/6 75/19 79/9 79/16 80/6 80/14 80/23 81/14 83/24 84/2 100/9 131/6 131/8</p> <p>jointly [4] 17/17 74/14 74/21 77/18</p> <p>joints [2] 100/11 100/13</p> <p>Jones [8] 11/10 55/18 55/25 72/3 72/13 72/22 73/8 114/19</p> <p>journal [1] 116/24</p> <p>judgment [2] 97/24 98/4</p> <p>July [2] 5/7 5/7</p> <p>July 1993 [1] 5/7</p>	<p>July 1995 [1] 5/7</p> <p>jump [1] 132/11</p> <p>June [3] 4/18 19/5 99/24</p> <p>June 1993 [1] 4/18</p> <p>juniors [1] 124/15</p> <p>just [47] 1/23 7/23 20/12 20/24 21/3 24/16 27/3 27/12 31/11 33/11 34/16 35/15 39/6 39/13 40/19 43/5 43/6 43/10 45/9 47/4 47/8 49/20 60/7 60/10 64/8 69/17 78/25 79/1 80/13 85/24 92/4 92/23 93/8 93/12 98/22 105/8 105/9 105/18 110/7 111/9 116/4 128/9 128/13 128/14 136/11 137/1 137/21</p> <p>K</p> <p>keen [2] 33/13 102/10</p> <p>keep [7] 10/15 59/25 86/19 86/21 87/1 87/3 120/7</p> <p>keeping [2] 87/11 123/8</p> <p>kept [7] 8/22 8/24 73/23 85/22 85/25 91/13 117/17</p> <p>key [12] 44/7 81/11 81/12 85/7 85/12 85/12 85/13 85/17 86/1 86/7 86/9 127/17</p> <p>kind [9] 50/9 51/3 53/6 60/21 73/2 96/14 102/22 121/6 132/23</p> <p>kinds [1] 43/16</p> <p>knee [2] 99/18 99/25</p> <p>knew [6] 55/14 58/17 83/9 124/25 125/6 125/6</p> <p>knock [1] 80/9</p> <p>know [73] 1/14 2/3 2/12 14/19 18/15 22/1 39/16 40/2 42/9 44/19 47/1 48/1 49/16 51/13 54/6 64/10 69/3 69/6 69/12 69/14 71/4 71/20 72/6 72/8 72/8 72/12 72/12 73/6 76/22 80/1 80/4 82/7 82/9 83/21 86/23 87/4 89/18 90/13 91/14 92/4 96/16 98/8 100/17 101/6 102/4 102/21 104/11 105/4 106/15 107/2 107/4 107/11 109/23 110/24 111/1 111/2 111/5</p>	<p>116/18 116/19 118/5 118/13 119/4 119/15 120/15 122/11 122/14 122/17 122/21 128/4 130/24 133/21 134/5 136/9</p> <p>knowing [4] 91/9 107/14 123/20 126/18</p> <p>knowledge [13] 11/7 28/1 28/5 28/5 28/8 56/18 58/19 72/17 77/6 95/18 97/9 111/7 115/10</p> <p>knowledgeable [3] 10/24 11/4 73/21</p> <p>known [5] 108/6 118/2 118/11 123/21 132/19</p> <p>Kogenate [1] 32/8</p> <p>L</p> <p>laboratory [3] 25/6 94/10 94/22</p> <p>lady [1] 59/16</p> <p>landscape [1] 117/8</p> <p>LANGSTAFF [2] 116/1 139/4</p> <p>large [3] 99/5 113/10 116/11</p> <p>Largely [1] 117/10</p> <p>last [11] 15/20 16/19 22/6 32/19 41/2 48/10 99/23 116/4 122/1 134/4 136/23</p> <p>lasted [1] 79/24</p> <p>lastly [3] 105/8 107/21 115/5</p> <p>later [7] 20/23 23/8 37/3 37/18 63/3 124/9 132/2</p> <p>lead [1] 57/20</p> <p>leads [2] 71/14 124/8</p> <p>learn [2] 116/16 126/24</p> <p>learnt [3] 2/16 125/19 134/22</p> <p>least [6] 62/10 62/13 62/17 113/6 129/11 136/9</p> <p>leave [1] 59/9</p> <p>leaving [1] 49/14</p> <p>lecturer [3] 4/6 5/8 7/6</p> <p>led [11] 16/19 30/8 49/24 53/18 53/18 57/14 60/22 74/2 82/25 119/23 134/8</p> <p>left [5] 80/15 91/2 91/23 110/6 125/12</p> <p>lend [1] 125/3</p> <p>less [5] 24/24 44/17 45/15 52/6 89/17</p> <p>lessons [2] 125/19</p>	<p>126/24</p> <p>Let [1] 1/8</p> <p>let's [6] 39/18 92/17 92/17 94/4 109/2 118/14</p> <p>letter [8] 19/5 34/10 34/17 35/14 47/21 47/24 48/1 118/16 115/17</p> <p>letters [2] 110/11 115/17</p> <p>leukaemia [3] 4/4 4/18 4/22</p> <p>level [1] 37/7</p> <p>levels [2] 42/20 99/2</p> <p>lever [2] 109/24 110/13</p> <p>life [34] 24/6 41/1 42/2 42/5 42/8 42/10 43/18 44/25 45/2 45/4 45/5 45/7 45/8 48/12 48/14 50/14 50/19 50/21 50/25 51/1 51/1 51/7 51/9 51/10 53/15 53/20 59/12 86/21 87/11 87/18 112/20 132/10 132/11 136/21</p> <p>light [1] 136/15</p> <p>like [32] 18/16 19/6 25/13 29/24 32/24 35/5 38/12 39/12 43/15 47/11 48/25 53/18 54/19 71/10 71/16 76/1 78/5 82/1 91/8 93/1 105/1 115/17 117/22 119/23 120/13 120/25 128/1 128/3 129/15 134/1 134/2 136/22</p> <p>likelihood [1] 121/22</p> <p>likely [10] 18/4 31/19 36/2 47/9 60/15 61/5 118/8 118/13 119/5 121/8</p> <p>limited [1] 11/14</p> <p>line [11] 42/12 42/14 45/14 93/9 93/13 93/25 95/4 96/16 96/18 96/19 97/17</p> <p>lines [1] 13/4</p> <p>link [3] 116/5 117/7 128/14</p> <p>links [3] 78/14 87/22 111/9</p> <p>list [2] 112/9 112/9</p> <p>listen [1] 107/5</p> <p>listening [3] 124/13 125/20 128/15</p> <p>literature [1] 73/23</p> <p>little [6] 16/15 20/22 53/17 71/16 128/13 128/24</p> <p>live [1] 135/25</p>	<p>lived [1] 134/13</p> <p>liver [20] 63/2 63/17 76/16 76/23 76/24 77/1 77/7 77/16 77/21 78/1 78/3 78/10 78/16 79/13 79/17 80/20 83/16 83/17 83/18 84/4</p> <p>liver-related [1] 83/16</p> <p>lives [1] 134/24</p> <p>living [3] 46/9 47/11 126/6</p> <p>loads [1] 63/3</p> <p>local [7] 14/12 18/11 88/15 88/16 134/18 135/1 135/4</p> <p>locally [2] 77/4 130/23</p> <p>locum [2] 56/13 56/14</p> <p>London [10] 3/22 4/1 4/7 4/19 5/9 5/14 5/16 76/17 78/2 117/11</p> <p>long [18] 23/11 24/4 43/3 45/17 58/24 59/18 64/20 67/3 67/8 67/12 87/15 124/22 125/12 126/12 131/18 131/21 131/21 135/23</p> <p>long-term [4] 23/11 67/3 67/8 67/12</p> <p>longer [7] 45/5 63/22 65/20 66/2 66/7 107/24 113/12</p> <p>look [22] 18/25 20/18 21/2 25/7 43/18 52/10 52/19 63/13 64/10 65/8 74/15 84/7 86/1 86/7 88/20 106/5 106/19 107/8 119/23 120/1 127/23 129/16</p> <p>looked [19] 70/6 73/2 75/2 75/5 92/22 92/24 93/3 93/10 94/7 100/10 109/25 116/7 119/21 129/14 129/18 129/22 130/9 130/19 131/4</p> <p>looking [19] 23/11 25/15 34/4 35/24 36/17 69/9 73/19 94/18 96/18 105/23 114/23 117/9 122/15 124/1 126/8 126/17 126/18 129/23 130/5</p> <p>looks [7] 19/6 20/19 32/24 35/5 46/1 119/1 129/19</p> <p>Lord [1] 10/25</p> <p>lost [8] 15/3 46/8 97/11 107/9 113/13 126/11 128/24 134/10</p> <p>lot [12] 15/22 21/22</p>	<p>22/18 29/10 61/6 61/9 104/10 113/11 115/3 120/4 125/23 126/23</p> <p>lots [2] 110/10 110/17</p> <p>lower [2] 19/25 30/14</p> <p>Ludlam [3] 19/6 19/9 118/15</p> <p>Luncheon [1] 109/11</p> <p>M</p> <p>made [18] 30/22 36/4 37/21 46/13 50/9 59/16 59/18 65/11 76/15 81/5 87/18 88/12 104/20 107/25 108/13 110/22 123/8 123/14</p> <p>main [2] 60/23 95/10</p> <p>mainly [4] 16/8 46/21 60/13 63/13</p> <p>maintain [1] 38/8</p> <p>major [4] 96/6 105/23 106/12 127/3</p> <p>majority [2] 61/11 113/10</p> <p>make [30] 16/5 23/5 23/6 27/12 33/21 35/15 35/20 37/18 39/11 45/2 47/3 49/15 69/17 75/21 78/25 79/13 79/20 82/13 86/3 88/7 89/12 102/21 103/7 108/7 110/21 110/25 118/2 125/10 131/3 137/17</p> <p>making [7] 30/6 30/20 46/18 49/16 97/22 97/23 98/3</p> <p>Makris [1] 118/25</p> <p>manage [4] 6/12 8/19 81/15 137/17</p> <p>managed [12] 4/3 55/10 56/3 56/20 72/4 73/11 75/16 76/14 83/11 83/23 87/25 94/12</p> <p>management [18] 8/7 12/13 12/20 17/22 18/12 18/13 23/6 45/10 57/19 73/21 75/14 77/16 88/16 103/16 105/17 105/24 110/18 114/14</p> <p>manager [4] 12/16 12/18 12/22 120/18</p> <p>managing [4] 76/12 78/19 78/20 84/25</p> <p>manufactured [1] 36/6</p> <p>manufacturer [1] 121/11</p> <p>manufacturing [1]</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

(46) it's... - manufacturing

<p>M</p> <p>manufacturing... [1] 60/21</p> <p>many [28] 12/2 18/19 19/24 21/10 25/9 26/9 26/18 26/18 45/7 45/7 46/7 58/23 58/23 58/23 79/5 90/14 96/25 102/10 106/18 107/7 112/19 112/19 124/2 125/5 132/6 134/12 134/22 135/23</p> <p>marker [1] 70/23</p> <p>markers [1] 100/10</p> <p>marrow [2] 4/4 4/24</p> <p>Mary [2] 1/20 2/5</p> <p>mask [1] 1/6</p> <p>masks [1] 1/18</p> <p>material [1] 46/20</p> <p>materials [1] 46/17</p> <p>matter [2] 117/21 123/16</p> <p>may [36] 5/13 21/25 25/22 27/13 37/3 45/11 46/11 49/1 54/11 54/17 59/3 59/5 72/15 76/22 89/22 92/14 93/20 98/16 103/9 119/2 119/15 120/4 123/7 123/19 124/2 124/4 124/5 124/10 125/18 125/25 126/11 126/14 128/20 128/22 132/19 132/19</p> <p>maybe [3] 62/19 87/5 107/3</p> <p>Mayor [1] 10/25</p> <p>me [31] 1/6 1/7 1/8 19/23 20/1 22/8 23/5 33/16 55/15 55/23 56/5 56/7 66/3 66/6 66/6 74/7 80/2 82/18 86/16 92/11 96/17 104/17 107/21 108/16 118/15 124/8 127/4 127/20 128/15 129/10 130/17</p> <p>mean [12] 22/6 30/11 36/7 49/3 56/5 90/14 100/5 103/11 112/10 115/15 127/2 129/13</p> <p>means [1] 16/16</p> <p>meant [1] 106/22</p> <p>meantime [1] 92/15</p> <p>measles [1] 71/17</p> <p>meat [1] 37/10</p> <p>mechanism [6] 29/13 37/11 50/24 51/23 76/4 101/3</p> <p>mechanisms [3] 51/8 51/17 51/20</p>	<p>medical [19] 2/13 2/16 2/20 3/3 3/24 12/19 20/3 47/17 82/21 85/2 85/8 85/8 114/14 114/17 114/19 115/2 117/16 137/11 137/19</p> <p>medication [2] 74/20 131/25</p> <p>medications [1] 112/8</p> <p>medicine [3] 3/18 7/3 38/20</p> <p>meet [2] 54/13 109/18</p> <p>meeting [2] 90/15 121/6</p> <p>meetings [5] 73/23 88/15 90/4 115/5 115/10</p> <p>meets [1] 103/23</p> <p>member [4] 7/25 76/8 107/15 118/22</p> <p>members [8] 15/3 46/9 46/10 107/9 124/18 125/8 125/12 126/1</p> <p>membership [2] 121/14 122/9</p> <p>memory [5] 36/22 37/16 41/18 88/25 89/2</p> <p>mention [1] 20/10</p> <p>mentioned [5] 2/24 33/11 90/23 93/24 110/3</p> <p>messages [1] 125/19</p> <p>met [1] 109/19</p> <p>method [1] 67/24</p> <p>methods [1] 67/24</p> <p>microbiology [1] 84/24</p> <p>mid [4] 15/6 16/18 33/24 35/19</p> <p>mid-and [2] 15/6 33/24</p> <p>mid-wales [2] 16/18 35/19</p> <p>might [42] 1/18 18/1 18/2 25/17 34/7 34/8 37/14 42/18 42/20 52/7 55/24 59/21 61/8 61/19 62/7 62/21 64/18 66/14 67/1 76/10 78/2 87/6 87/7 90/15 90/16 91/25 92/12 98/16 99/19 99/24 101/6 107/3 107/13 111/6 117/13 118/21 118/22 120/15 126/25 130/21 131/15 131/22</p> <p>mild [9] 21/13 21/21 21/22 25/3 42/13</p>	<p>42/14 42/16 62/7 62/18</p> <p>miles [1] 130/25</p> <p>mind [3] 103/2 106/14 116/9</p> <p>minds [1] 49/10</p> <p>minimise [1] 128/2</p> <p>minimum [1] 39/14</p> <p>ministerial [3] 81/10 114/21 115/15</p> <p>minutes [8] 92/3 92/7 92/9 92/13 92/18 92/18 132/1 132/2</p> <p>minutes' [1] 105/9</p> <p>misleading [1] 70/15</p> <p>misread [1] 24/15</p> <p>missed [1] 135/24</p> <p>missing [6] 85/7 85/12 85/12 85/13 86/1 86/10</p> <p>mitigated [1] 61/12</p> <p>model [1] 129/11</p> <p>moderate [7] 19/21 19/22 19/24 19/25 21/13 62/4 62/6</p> <p>modern [1] 116/25</p> <p>Moffat [2] 55/21 72/14</p> <p>molecule [1] 51/5</p> <p>moment [17] 1/16 1/19 1/20 21/4 33/15 40/18 40/24 43/1 44/7 52/15 60/25 65/1 84/21 120/22 120/23 134/11 137/23</p> <p>money [5] 39/8 52/21 88/3 88/5 111/22</p> <p>monitor [1] 84/3</p> <p>monitored [1] 63/24</p> <p>monitoring [2] 63/22 80/15</p> <p>month [5] 15/8 17/9 68/5 103/23 120/10</p> <p>month: [1] 120/17</p> <p>month: have [1] 120/17</p> <p>monthly [1] 64/6</p> <p>months [15] 15/20 36/3 58/3 61/19 61/20 62/5 62/7 62/10 62/14 62/17 67/16 99/22 99/23 119/16 132/6</p> <p>months' [1] 35/3</p> <p>moral [1] 125/4</p> <p>Morbidities [1] 120/24</p> <p>more [54] 7/15 11/4 14/12 14/24 14/24 18/8 23/11 23/22 24/20 24/24 25/2 25/22 26/18 31/18 33/19 36/1 41/3 41/8 43/10 47/2 48/2 48/14 49/10 53/17 53/25</p>	<p>60/15 61/4 61/9 61/10 62/9 62/18 64/12 64/15 65/3 65/6 65/9 65/16 75/8 77/6 78/11 79/12 83/12 83/19 92/7 92/12 105/10 111/22 116/14 117/12 118/8 118/12 119/19 130/23 130/25</p> <p>morning [6] 1/3 1/4 2/9 2/10 54/12 90/23</p> <p>mortgages [1] 59/12</p> <p>most [12] 39/22 44/9 56/10 56/18 100/9 117/16 119/5 125/24 127/7 128/19 129/14 135/19</p> <p>mothers [1] 107/8</p> <p>move [3] 8/10 38/11 127/21</p> <p>moved [2] 59/4 74/22</p> <p>moving [5] 68/10 73/11 76/12 92/22 114/13</p> <p>Mr [1] 11/13</p> <p>Mr Timothy [1] 11/13</p> <p>Mrs [1] 11/12</p> <p>Mrs Fiona Hall [1] 11/12</p> <p>Ms [10] 1/19 2/8 20/6 21/5 21/25 27/3 133/2 133/3 139/3 139/5</p> <p>Ms Hall [1] 20/6</p> <p>Ms Scott [7] 1/19 2/8 21/5 21/25 27/3 133/2 139/3</p> <p>much [23] 4/12 6/8 14/19 19/25 23/22 24/7 30/14 30/14 31/5 45/15 52/3 52/5 53/1 55/14 65/9 65/16 89/17 128/11 128/11 136/8 136/19 137/4 138/1</p> <p>muchness [1] 31/5</p> <p>multidisciplinary [1] 76/7</p> <p>multiple [4] 108/11 119/8 122/24 132/15</p> <p>Music [1] 124/11</p> <p>must [5] 5/20 53/3 59/13 131/20 134/9</p> <p>mustn't [2] 54/14 126/5</p> <p>mutation [1] 65/8</p> <p>my [44] 1/5 2/24 3/23 3/25 6/11 7/14 7/15 21/17 23/7 24/15 27/7 28/5 36/22 37/16 41/17 47/24 49/3 60/23 80/8 82/1 82/15 88/25 89/2 90/16</p>	<p>90/18 90/21 93/15 95/6 98/8 104/13 104/17 105/8 105/15 105/21 108/19 110/19 110/22 111/24 113/20 116/3 116/9 118/7 118/12 136/4</p> <p>myself [9] 9/17 31/12 38/21 47/5 74/15 79/16 88/16 91/19 107/16</p>	<p>N</p> <p>name [6] 67/5 74/4 98/24 98/25 105/2 108/8</p> <p>named [3] 39/14 98/24 107/24</p> <p>names [1] 120/13</p> <p>national [20] 12/21 21/18 35/11 38/15 52/20 89/15 89/16 90/7 90/20 98/19 99/14 100/16 100/25 101/18 102/23 103/24 111/12 111/14 112/6 136/20</p> <p>nationally [1] 38/15</p> <p>nature [3] 64/14 64/17 128/21</p> <p>necessarily [2] 72/11 117/22</p> <p>necessary [3] 79/19 121/23 137/20</p> <p>need [11] 47/9 52/11 58/20 60/16 61/5 62/22 66/14 75/19 94/2 123/25 137/2</p> <p>needed [7] 22/18 23/25 75/8 81/13 87/9 88/13 127/18</p> <p>needs [4] 81/21 103/1 127/5 129/1</p> <p>negative [4] 57/3 57/6 57/25 63/7</p> <p>nervous [1] 13/5</p> <p>network [1] 16/18</p> <p>neurological [1] 120/14</p> <p>never [7] 52/21 53/4 53/10 109/19 128/1 128/4 134/10</p> <p>Nevill [1] 17/7</p> <p>new [27] 9/2 9/9 9/18 10/2 48/6 48/7 48/25 49/11 52/12 58/10 73/18 74/23 84/10 87/25 88/13 88/22 88/24 92/23 114/13 116/9 117/19 119/6 119/14 132/18 132/19 135/11 137/16</p>	<p>newer [1] 67/11</p> <p>Newland [1] 4/3</p> <p>news [1] 117/1</p> <p>next [14] 3/2 5/12 5/15 8/18 8/24 20/8 35/24 36/3 37/18 62/1 68/3 92/8 137/7 137/18</p> <p>NHS [14] 29/5 39/7 39/8 40/3 52/21 53/6 53/7 53/7 87/2 97/16 98/9 99/1 102/7 104/1</p> <p>NHS England [1] 104/1</p> <p>nine [1] 15/20</p> <p>no [56] 4/10 5/6 5/13 5/16 18/13 22/9 22/19 28/7 30/21 30/25 36/11 37/17 38/9 39/18 40/14 40/15 58/9 58/9 60/25 60/25 62/21 63/21 64/24 65/19 66/2 66/2 66/7 70/7 71/18 72/6 73/8 73/8 74/25 76/19 76/21 76/23 77/2 77/3 78/4 79/2 84/18 84/21 87/13 91/8 91/24 92/21 97/4 103/14 104/21 107/23 109/19 111/7 113/12 115/13 120/10 137/8</p> <p>no-one [7] 37/17 38/9 66/2 84/18 84/21 103/14 104/21</p> <p>non [9] 2/19 2/19 3/5 3/5 3/7 3/7 41/4 84/12 131/11</p> <p>non-A [3] 2/19 3/5 3/7</p> <p>non-B [3] 2/19 3/5 3/7</p> <p>non-interferon-based [1] 84/12</p> <p>none [1] 76/23</p> <p>normally [1] 54/12</p> <p>North [3] 14/14 14/16 34/3</p> <p>not [110] 9/14 13/18 14/16 14/16 14/25 16/20 18/13 18/13 21/11 22/15 25/20 27/8 27/10 28/9 30/2 30/24 35/22 36/1 41/20 42/19 42/20 44/4 46/13 47/4 47/8 48/2 48/24 49/21 49/24 52/15 53/21 54/3 54/19 59/17 61/6 61/25 64/24 66/25 67/17 69/20 70/8 70/17 71/9 71/14 74/3 74/9 77/1 80/21 80/25 83/2 85/17 85/24 87/3</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

(47) manufacturing... - not

<p>N</p> <p>not... [57] 87/6 87/7 87/17 90/13 92/2 97/1 97/2 97/2 98/7 98/8 98/25 99/7 100/12 100/20 100/23 101/19 103/10 104/18 104/21 106/8 106/22 106/23 108/3 111/8 111/18 112/14 112/20 112/22 113/23 114/17 117/4 117/21 118/7 119/15 121/9 122/8 123/7 124/2 124/4 126/7 127/9 128/9 128/22 131/6 131/17 132/7 132/11 132/19 132/21 133/18 133/21 134/13 134/15 134/16 135/16 136/9 137/7</p> <p>notable [1] 135/7</p> <p>note [6] 24/8 46/6 54/8 93/23 133/15 134/18</p> <p>notes [17] 10/15 47/13 47/14 47/16 47/17 68/1 85/16 85/18 85/19 85/20 85/23 85/24 86/3 86/5 86/7 87/9 87/11</p> <p>nothing [1] 39/12</p> <p>notice [5] 92/6 116/25 117/4 117/5 136/13</p> <p>noticed [3] 86/9 86/9 86/13</p> <p>November [1] 8/8</p> <p>November 2020 [1] 8/8</p> <p>now [65] 8/10 10/6 12/1 12/3 12/8 12/14 14/23 15/5 15/22 16/21 20/21 21/25 23/1 25/11 25/13 25/15 29/10 37/20 38/11 41/2 42/2 46/8 47/21 48/15 49/7 54/8 54/8 55/1 61/2 61/3 61/12 61/14 64/1 64/16 65/9 65/12 69/9 69/18 69/20 70/16 84/17 85/2 87/22 92/20 92/23 95/7 95/13 95/24 96/19 101/8 103/9 104/7 104/12 109/14 112/21 114/13 116/11 117/11 123/6 124/2 126/6 126/11 129/20 133/11 137/25</p> <p>nowadays [1] 107/9</p> <p>number [37] 2/2 8/3</p>	<p>11/23 11/23 15/21 21/14 22/14 25/1 25/4 26/21 26/25 27/16 32/4 32/10 33/25 34/12 39/19 41/23 42/1 49/4 81/11 83/15 85/4 85/7 88/15 88/21 95/13 96/5 96/6 99/1 101/1 105/5 123/13 124/18 124/19 133/14 136/9</p> <p>numbers [6] 20/20 21/9 26/7 27/14 27/15 60/5</p> <p>nurse [1] 11/9</p> <p>nurses [11] 11/23 12/1 15/24 16/25 49/23 76/2 104/4 129/9 130/5 130/23 132/4</p> <p>Nurses' [1] 103/19</p> <p>nursing [5] 11/20 12/19 20/4 20/5 47/5</p> <p>O</p> <p>o'clock [1] 92/6</p> <p>oath [3] 1/21 2/6 54/15</p> <p>Obaji [1] 12/7</p> <p>obligations [2] 52/11 53/3</p> <p>obliged [1] 88/20</p> <p>observation [2] 98/7 98/12</p> <p>observed [1] 55/25</p> <p>obstacles [1] 134/9</p> <p>obstetric [1] 95/25</p> <p>obtain [3] 65/4 113/7 113/9</p> <p>obtaining [1] 66/18</p> <p>obvious [1] 123/13</p> <p>obviously [14] 1/7 8/19 11/1 13/4 37/21 47/1 49/9 49/11 55/13 69/18 80/1 80/24 106/7 120/4</p> <p>occasions [1] 108/11</p> <p>occurred [2] 18/11 33/14</p> <p>occurs [1] 133/10</p> <p>odd [2] 124/12 136/23</p> <p>oesophageal [1] 84/8</p> <p>off [6] 2/11 46/22 48/24 52/17 73/9 137/25</p> <p>offer [7] 44/2 50/13 57/11 60/24 61/2 62/5 84/14</p> <p>offered [6] 41/17 42/6 42/7 60/9 60/10 77/19</p> <p>offering [3] 57/5 57/22 65/13</p>	<p>office [9] 8/18 8/24 10/16 73/4 85/22 91/16 91/16 91/20 91/23</p> <p>officer [6] 3/17 3/22 114/14 114/17 114/19 115/2</p> <p>offices [1] 10/18</p> <p>official [2] 133/21 133/22</p> <p>often [13] 39/1 44/1 47/6 47/23 48/18 58/14 59/4 62/9 62/11 62/19 96/15 128/20 135/3</p> <p>oh [2] 49/6 92/17</p> <p>okay [5] 54/21 88/18 99/19 109/9 133/19</p> <p>old [1] 73/2</p> <p>Oldchurch [1] 3/24</p> <p>older [1] 45/6</p> <p>once [15] 16/24 17/9 42/3 42/4 47/23 50/9 58/5 62/7 62/19 62/19 78/22 95/17 108/6 132/2 132/22</p> <p>one [72] 5/18 8/17 9/11 10/13 14/6 14/7 14/10 25/14 25/23 26/14 35/14 37/17 38/9 39/21 42/1 45/12 46/2 46/22 47/24 48/24 50/15 50/15 50/15 51/5 51/17 59/15 59/15 60/22 66/2 66/5 71/25 74/10 75/20 77/23 78/8 78/8 80/8 80/12 81/18 84/18 84/21 84/23 85/18 92/24 92/24 94/17 95/10 97/1 97/2 97/21 100/9 102/17 103/14 104/21 105/11 111/22 114/4 114/5 116/2 117/2 118/12 119/10 119/17 124/12 125/24 126/13 129/11 130/22 131/9 132/9 133/4 134/21</p> <p>one-off [1] 46/22</p> <p>ongoing [4] 49/1 100/14 126/8 126/23</p> <p>online [6] 48/25 133/11 133/17 137/15 137/16 137/25</p> <p>only [18] 6/19 14/25 17/20 17/20 37/1 55/15 75/7 75/19 85/13 85/17 86/4 87/4 103/15 106/3 120/8 127/21 129/16 131/13</p> <p>onto [5] 12/19 33/13</p>	<p>37/25 41/18 42/8</p> <p>onwards [2] 86/11 115/7</p> <p>open [3] 54/2 61/22 127/6</p> <p>operates [1] 13/11</p> <p>opinion [6] 74/9 75/3 77/4 77/21 108/19 111/24</p> <p>opinions [2] 38/23 76/16</p> <p>opportunity [3] 42/8 101/17 137/6</p> <p>opted [1] 41/23</p> <p>optimal [3] 80/21 80/25 83/2</p> <p>optimally [1] 81/15</p> <p>opting [2] 41/8 48/15</p> <p>option [1] 51/16</p> <p>options [1] 48/13</p> <p>or [175]</p> <p>oral [3] 55/13 55/14 125/13</p> <p>order [6] 15/20 52/10 53/2 58/22 65/4 96/9</p> <p>ordered [1] 63/18</p> <p>ordained [1] 130/20</p> <p>ordinating [1] 16/13</p> <p>organising [1] 98/5</p> <p>Ormond [5] 5/15 5/18 5/21 23/20 129/15</p> <p>orthopaedic [2] 20/17 22/21</p> <p>other [34] 3/13 6/11 7/23 9/8 10/18 20/9 21/24 22/16 28/24 29/24 47/5 49/12 50/22 51/5 51/18 55/20 58/11 60/16 61/9 69/16 82/20 83/5 94/9 94/17 98/2 100/8 107/6 112/13 116/24 119/20 120/14 128/10 129/17 131/13</p> <p>others [4] 52/7 111/23 120/9 132/23</p> <p>otherwise [1] 28/10</p> <p>our [18] 15/22 18/4 34/21 34/24 38/23 50/1 52/10 53/2 78/13 89/25 92/25 94/17 106/24 107/17 112/23 120/17 130/23 137/14</p> <p>out [29] 4/14 5/3 13/11 15/12 15/14 16/2 16/24 18/14 19/17 20/14 22/9 22/19 29/19 38/21 38/24 39/6 51/9 60/6 68/4 77/10 81/12 82/7 90/9 105/11 119/6 130/23 130/24 133/4</p>	<p>136/15</p> <p>out-patient [4] 16/24 18/14 22/9 77/10</p> <p>outcome [6] 70/11 70/12 108/5 123/22 134/14 134/16</p> <p>outcomes [2] 100/6 127/14</p> <p>outline [1] 102/23</p> <p>outreach [2] 17/6 17/7</p> <p>outs [1] 80/1</p> <p>outside [1] 130/18</p> <p>outstanding [1] 134/20</p> <p>over [50] 1/24 3/2 7/17 11/19 12/13 15/20 16/19 18/20 18/22 19/12 20/8 20/13 21/4 21/6 24/10 24/16 24/23 27/20 28/15 30/17 34/11 35/8 35/10 35/13 36/15 40/8 41/2 41/9 46/25 48/10 56/14 58/16 65/12 67/15 67/23 71/15 71/17 90/24 94/7 97/8 99/23 100/11 100/13 100/18 101/7 105/8 122/1 126/20 134/4 134/21</p> <p>overall [3] 22/14 40/4 131/22</p> <p>overseeing [1] 122/6</p> <p>oversight [1] 114/15</p> <p>overview [1] 103/21</p> <p>own [5] 99/16 116/3 117/17 123/22 128/23</p> <p>Oxford [2] 11/1 129/18</p>	<p>paid [1] 88/3</p> <p>pain [2] 18/16 136/5</p> <p>panel [2] 137/11 137/12</p> <p>panned [1] 82/7</p> <p>paper [5] 44/12 69/18 70/6 94/6 96/17</p> <p>papers [1] 90/25</p> <p>paragraph [9] 24/12 30/3 30/5 30/11 34/16 34/20 35/24 68/10 105/12</p> <p>paragraph 26 [1] 24/12</p> <p>paragraph 320 [1] 105/12</p> <p>paragraph 75 [1] 30/5</p> <p>pardon [1] 24/15</p> <p>parent [1] 44/21</p> <p>parents [8] 44/6 44/19 45/7 45/11 45/21 45/24 128/21 131/10 13/22 13/14 13/15 13/22 14/13 14/17 40/9 46/18 52/13 53/8 78/11 79/21 80/4 95/20 97/19 100/23 113/25 116/20 117/8 118/7 124/23 127/3 134/24</p> <p>Participants [3] 92/10 109/15 115/23</p> <p>particular [13] 2/2 11/25 31/7 39/14 44/18 50/11 64/13 65/5 65/5 72/3 129/9 134/18 136/23</p> <p>particularly [14] 2/18 5/3 9/15 11/25 13/3 23/23 40/6 47/18 59/1 61/20 93/9 114/23 134/2 134/14</p> <p>parties [2] 8/3 103/9</p> <p>partly [1] 132/17</p> <p>partner [1] 26/14</p> <p>partners [5] 56/24 57/5 57/9 57/11 57/22</p> <p>partum [2] 95/6 95/19</p> <p>party [6] 8/4 8/5 8/6 103/16 120/24 120/25</p> <p>parvovirus [22] 64/14 64/19 64/25 68/11 68/15 68/19 68/25 69/8 69/11 69/13 69/22 69/25 70/3 70/21 70/22 71/6 71/9 71/10 71/12 71/13 71/15 71/22</p> <p>parvovirus IgG [1] 71/12</p> <p>passed [3] 95/1 101/24 101/25</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>P</p> <p>past [12] 36/24 37/22 45/25 52/17 59/6 59/22 70/3 71/9 71/13 124/3 126/6 128/16</p> <p>pathogenic [1] 45/22</p> <p>patient [56] 9/10 9/17 16/24 18/7 18/10 18/14 22/9 33/16 36/19 43/13 43/21 43/22 47/22 49/17 50/10 52/2 53/1 59/8 62/4 62/11 63/1 63/3 63/6 63/11 64/6 64/9 65/1 65/17 66/18 77/10 87/11 88/15 88/16 90/4 93/6 93/15 98/25 99/1 99/10 100/2 101/2 101/3 101/23 103/10 103/11 103/11 103/17 114/5 122/12 122/17 123/1 123/6 127/16 127/20 134/18 135/4</p> <p>patient's [1] 105/1</p> <p>patient-reported [2] 99/10 100/2</p> <p>patients [124] 4/16 5/5 11/15 15/1 16/24 17/13 17/16 17/19 18/19 18/21 19/17 19/17 19/20 20/21 21/2 24/22 25/8 25/9 26/1 26/1 26/7 26/9 26/22 27/21 31/22 32/1 32/21 32/25 33/5 33/7 33/13 34/4 34/22 34/24 35/3 35/8 36/9 36/14 37/4 37/13 37/24 37/25 38/3 40/20 42/23 45/20 45/21 46/17 48/9 48/23 48/23 48/24 49/14 52/10 53/14 55/3 55/8 55/12 55/13 55/18 56/20 56/25 57/23 58/7 58/10 59/25 60/11 60/24 61/15 65/4 66/8 67/4 67/15 67/19 67/23 67/25 68/22 68/24 69/7 69/12 70/10 71/4 71/24 72/2 72/9 72/21 74/2 74/6 74/9 75/15 75/19 76/5 76/12 76/14 78/19 79/12 81/6 81/15 81/17 83/4 83/6 83/23 85/1 85/4 85/11 86/6 86/10 86/22 96/22 103/13 104/3 105/15 105/19</p>	<p>106/11 111/3 113/2 113/7 113/10 114/1 118/19 130/5 130/25 131/15 136/3</p> <p>patients' [7] 15/22 15/23 15/24 47/14 68/1 72/4 99/16</p> <p>pattern [2] 62/16 99/22</p> <p>PCR [1] 63/9</p> <p>peer [1] 116/24</p> <p>pegylated [1] 51/16</p> <p>people [198]</p> <p>people's [4] 14/12 29/12 85/14 100/9</p> <p>per [7] 6/11 7/11 7/12 7/15 7/11 105/6 113/17</p> <p>perception [1] 89/21</p> <p>perfect [1] 100/13</p> <p>perform [1] 64/3</p> <p>perhaps [6] 60/20 97/19 114/8 117/13 127/25 128/25</p> <p>period [7] 8/23 11/22 46/25 63/5 80/25 87/4 97/8</p> <p>peripheral [1] 13/4</p> <p>person [17] 1/15 17/25 48/17 52/19 52/21 54/1 55/15 55/20 55/24 56/9 62/8 93/15 99/16 121/15 130/23 132/2 136/10</p> <p>personal [1] 113/20</p> <p>personally [2] 89/10 118/5</p> <p>perspective [1] 90/18</p> <p>persuaded [1] 127/20</p> <p>PETER [2] 2/7 139/2</p> <p>pharmaceutical [15] 87/23 88/1 88/23 90/3 90/8 90/11 91/1 91/7 104/19 111/10 111/11 111/17 111/19 112/12 112/15</p> <p>pharmacokinetics [1] 51/21</p> <p>PhD [1] 94/18</p> <p>phenomenal [1] 39/8</p> <p>phone [2] 99/11 99/19</p> <p>physical [6] 8/14 8/21 9/6 10/7 10/11 48/20</p> <p>physically [1] 10/16</p> <p>physician [3] 22/21 73/16 73/25</p> <p>physiotherapist [2] 11/12 20/6</p> <p>physiotherapists [5] 11/20 11/24 15/23 49/23 104/5</p> <p>physiotherapists' [1]</p>	<p>103/19</p> <p>physiotherapy [2] 20/17 135/12</p> <p>pick [2] 116/4 119/15</p> <p>picked [4] 83/15 83/19 92/14 118/12</p> <p>picking [3] 39/13 69/25 120/15</p> <p>pieces [1] 86/7</p> <p>place [17] 22/16 22/23 23/3 25/23 27/24 34/6 34/9 35/6 44/1 57/8 58/2 96/18 96/20 111/13 112/7 112/14 121/18</p> <p>plainly [3] 117/16 129/8 131/20</p> <p>plan [5] 7/14 80/4 81/23 82/19 137/23</p> <p>planning [4] 12/12 22/24 101/5 114/6</p> <p>plans [1] 22/4</p> <p>plasma [29] 31/14 31/24 34/25 36/5 36/10 36/16 36/23 37/2 37/17 37/19 37/21 38/2 38/4 38/10 41/14 41/22 41/23 42/23 42/25 43/17 44/14 44/17 44/20 57/24 58/3 58/7 60/11 60/18 119/2</p> <p>plasma-derived [13] 31/14 38/4 38/10 41/22 41/23 42/23 42/25 44/14 44/17 44/20 58/3 60/18 119/2</p> <p>platelet [2] 21/16 65/15</p> <p>platelets [1] 117/24</p> <p>platform [1] 1/25</p> <p>play [6] 12/24 12/24 13/1 38/18 120/8 129/8</p> <p>played [1] 114/14</p> <p>please [3] 2/5 20/8 32/13</p> <p>pm [3] 109/10 109/12 138/2</p> <p>point [21] 7/23 11/14 20/22 24/17 30/22 31/2 33/11 34/21 35/7 35/15 39/7 39/13 46/4 46/15 60/23 69/16 74/22 78/25 87/18 90/10 118/20</p> <p>pointing [1] 39/6</p> <p>policies [3] 27/24 28/2 28/10</p> <p>policy [15] 59/24 61/22 86/19 86/21</p>	<p>86/24 86/24 87/1 87/2 87/6 87/10 90/19 90/19 97/25 112/13 112/16</p> <p>politicians [1] 115/19</p> <p>polyethylene [1] 51/6</p> <p>pool [1] 59/22</p> <p>pooled [1] 57/24</p> <p>poor [1] 8/16</p> <p>population [1] 71/11</p> <p>position [4] 9/19 103/9 108/14 126/17</p> <p>positive [3] 71/6 71/8 71/12</p> <p>possibility [2] 81/1 89/21</p> <p>possible [11] 59/2 60/1 65/10 66/4 69/24 70/13 83/21 116/12 116/16 127/24 135/17</p> <p>possibly [5] 59/21 69/16 119/12 128/6 128/12</p> <p>post [22] 3/21 4/1 4/9 4/10 4/11 4/12 4/17 4/20 6/2 6/23 6/25 10/20 10/21 11/5 12/6 19/15 23/8 82/15 82/24 92/2 95/6 95/19</p> <p>post-partum [1] 95/19</p> <p>posts [1] 14/10</p> <p>potential [5] 31/15 45/22 70/23 72/11 112/17</p> <p>potentially [2] 70/14 106/8</p> <p>practical [4] 113/6 113/7 113/9 113/18</p> <p>practice [9] 46/18 49/13 49/18 67/2 93/16 94/13 105/16 105/20 106/25</p> <p>precise [1] 120/5</p> <p>predominantly [1] 43/24</p> <p>prefer [6] 31/13 42/9 44/22 44/23 53/11 131/15</p> <p>preference [6] 36/10 36/11 36/15 36/18 36/19 113/21</p> <p>preferred [1] 52/23</p> <p>pregnant [1] 46/24</p> <p>prepared [3] 88/7 136/13 136/16</p> <p>prescribe [2] 89/25 112/8</p> <p>prescribing [6] 89/12 89/22 90/19 112/12 112/16 112/20</p> <p>prescription [1] 90/12</p> <p>present [6] 11/8 22/13</p>	<p>36/8 66/2 72/13 72/15</p> <p>presentation [1] 137/13</p> <p>presented [2] 32/19 108/13</p> <p>pressure [1] 108/15</p> <p>presumably [6] 32/20 48/5 60/1 68/6 76/4 116/18</p> <p>pretty [1] 136/19</p> <p>prevent [6] 15/25 23/23 41/22 128/6 128/9 128/12</p> <p>previous [4] 23/16 33/7 71/3 137/14</p> <p>previously [6] 32/21 33/5 33/6 44/15 93/3 93/10</p> <p>price [4] 39/12 40/2 53/19 54/3</p> <p>primarily [1] 129/7</p> <p>principal [1] 14/6</p> <p>prion [1] 117/22</p> <p>prior [2] 57/1 76/13</p> <p>prioritised [1] 7/17</p> <p>privilege [1] 136/5</p> <p>proactive [1] 23/22</p> <p>proactively [1] 83/12</p> <p>probably [15] 2/1 6/11 19/8 25/13 35/12 35/24 64/23 73/20 92/7 112/4 117/2 123/5 123/7 123/12 137/22</p> <p>problem [12] 17/25 18/9 22/13 60/22 62/3 66/13 87/8 88/9 97/19 107/3 107/15 118/10</p> <p>problems [6] 37/22 62/21 71/15 78/16 106/13 128/12</p> <p>procedure [1] 62/23</p> <p>procedures [4] 28/11 38/12 72/17 94/9</p> <p>proceed [1] 92/16</p> <p>process [44] 9/17 13/7 35/2 38/15 38/16 39/7 40/18 43/11 52/11 57/5 57/15 57/17 58/20 60/21 64/5 64/15 65/6 65/16 65/18 66/17 76/3 81/7 82/6 88/1 89/23 101/21 101/25 102/2 102/4 102/5 102/11 102/15 103/3 103/5 104/13 111/13 111/14 113/1 113/4 113/5 121/18 127/3 127/7 131/19</p> <p>processes [1] 57/20</p> <p>produced [2] 101/24</p>	<p>117/25</p> <p>product [55] 27/19 29/4 29/5 29/6 29/8 29/10 29/15 31/7 31/24 32/1 32/8 36/4 36/11 36/13 37/20 40/1 40/11 40/12 40/13 40/15 41/4 41/9 41/25 42/3 42/9 42/24 42/25 44/23 47/8 49/11 50/3 50/4 50/8 50/11 50/14 50/19 50/21 51/22 52/3 52/12 52/16 52/17 52/23 53/1 53/3 53/12 53/23 59/22 59/25 89/5 90/12 111/18 121/9 122/8 122/21</p> <p>products [82] 2/18 2/21 3/1 28/14 28/14 28/16 28/21 28/23 28/24 29/18 29/19 30/1 30/8 30/13 30/15 30/16 31/1 31/4 31/11 31/14 31/15 31/23 32/15 34/23 37/19 37/25 38/2 38/5 38/14 39/15 39/16 39/19 39/25 40/16 40/19 40/22 40/25 41/1 41/14 41/15 42/5 43/17 43/18 43/18 45/1 46/4 46/13 46/14 48/6 48/25 49/14 50/17 50/25 51/1 51/13 52/1 52/6 53/15 53/20 57/24 58/4 58/6 58/8 59/5 59/7 60/3 60/11 60/18 67/11 89/4 89/13 89/15 111/25 112/2 112/3 112/9 112/23 116/8 116/11 116/13 117/21 119/1</p> <p>professor [48] 1/3 2/5 2/9 4/2 4/3 7/2 7/8 23/7 23/21 24/9 27/9 27/25 28/7 55/10 55/11 72/5 73/3 74/3 74/8 79/10 79/15 79/22 80/17 85/6 90/25 91/7 91/16 91/18 91/22 100/17 102/6 102/16 103/3 107/22 108/3 109/4 109/14 109/16 109/19 109/21 110/4 111/2 118/15 118/25 120/23 133/5 133/7 133/25</p> <p>Professor Bloom [14] 23/7 55/10 55/11 72/5 85/6 90/25 91/7 91/18</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>P</p> <p>Professor Bloom... [6] 91/22 107/22 108/3 109/16 109/19 111/2</p> <p>Professor Bloom's [5] 27/25 73/3 91/16 109/21 110/4</p> <p>Professor Borysiewicz's [1] 74/8</p> <p>Professor Collins [8] 1/3 2/5 2/9 27/9 109/4 109/14 133/5 133/7</p> <p>Professor Collins' [1] 24/9</p> <p>Professor Colvin [1] 4/2</p> <p>Professor Godkin [3] 79/10 79/15 80/17</p> <p>Professor Godkin's [1] 79/22</p> <p>Professor Hann [1] 23/21</p> <p>Professor Hay [4] 102/6 102/16 103/3 120/23</p> <p>Professor Hay's [1] 100/17</p> <p>Professor Ludlam [1] 118/15</p> <p>Professor Makris [1] 118/25</p> <p>Professor Newland [1] 4/3</p> <p>programme [8] 58/2 84/6 95/20 95/21 96/1 96/3 96/9 111/6</p> <p>progress [2] 65/11 137/17</p> <p>progressed [1] 78/1</p> <p>progressing [1] 78/17</p> <p>progression [3] 23/24 77/20 84/3</p> <p>progressive [1] 79/12</p> <p>progressively [1] 100/18</p> <p>prolong [1] 51/10</p> <p>prolonged [3] 46/25 50/25 51/2</p> <p>promoted [2] 7/7 7/8</p> <p>prone [1] 61/10</p> <p>pronounce [1] 74/3</p> <p>prophylaxis [15] 20/11 20/12 22/15 22/16 23/22 24/2 38/6 38/7 42/7 48/12 48/18 48/19 61/7 61/12 100/4</p> <p>proportion [6] 19/24 39/2 39/14 39/21 39/23 104/8</p>	<p>proportionality [1] 97/14</p> <p>proposal [3] 97/25 103/23 103/25</p> <p>propositions [1] 23/5</p> <p>pros [1] 53/22</p> <p>protect [1] 114/1</p> <p>protocol [2] 73/7 121/13</p> <p>protocols [10] 28/2 28/6 28/11 72/7 72/17 73/9 73/10 109/20 109/23 110/9</p> <p>proud [1] 134/24</p> <p>prove [1] 59/23</p> <p>provide [12] 14/1 16/22 17/6 17/7 17/11 17/22 40/20 46/17 46/20 67/11 80/3 125/2</p> <p>provided [2] 27/21 111/11</p> <p>provides [1] 13/23</p> <p>providing [1] 80/25</p> <p>pseudo [2] 114/8 114/9</p> <p>pseudo-anonymised [2] 114/8 114/9</p> <p>psychologist [5] 14/5 14/7 14/8 14/13 15/24</p> <p>psychologists [1] 13/20</p> <p>psychology [11] 13/9 13/10 13/16 13/18 13/20 13/22 13/23 14/1 14/17 15/4 135/13</p> <p>public [4] 106/21 112/20 114/6 134/8</p> <p>publish [2] 97/6 97/7</p> <p>published [1] 96/24</p> <p>punch [1] 19/16</p> <p>PUPs [1] 32/19</p> <p>purchase [2] 28/14 29/22</p> <p>purchased [4] 28/16 28/19 38/15 112/9</p> <p>purchasing [3] 28/25 36/7 38/11</p> <p>purity [2] 32/1 36/12</p> <p>purpose [1] 67/14</p> <p>purposes [8] 101/10 101/11 101/14 101/20 106/21 113/8 114/3 114/7</p> <p>push [1] 87/19</p> <p>push-back [1] 87/19</p> <p>pushing [2] 33/17 70/24</p> <p>put [20] 22/16 23/3 33/13 33/19 34/2 34/6 34/8 38/12 38/21</p>	<p>45/13 53/24 67/20 88/17 92/11 101/21 103/10 106/20 107/19 121/18 133/12</p> <p>putting [3] 22/23 34/16 37/24</p> <p>Q</p> <p>qualification [1] 129/4</p> <p>qualified [1] 2/13</p> <p>quality [9] 95/20 95/21 96/1 96/2 96/4 96/8 97/10 100/14 112/2</p> <p>question [23] 20/25 21/24 30/19 71/25 83/8 83/9 83/10 83/13 83/22 92/23 93/19 97/1 97/24 114/25 115/8 115/9 115/12 116/4 116/18 126/14 131/24 133/4 133/5</p> <p>questions [29] 1/20 2/8 2/11 8/10 20/20 27/18 28/9 40/17 43/10 47/2 55/1 85/2 87/22 92/10 92/14 98/18 105/10 109/15 111/9 111/10 112/25 115/22 115/24 124/9 127/15 133/3 139/3 139/4 139/5</p> <p>quickly [6] 80/12 83/16 83/19 119/4 119/21 119/25</p> <p>quite [25] 19/1 19/23 20/1 25/7 33/23 45/4 45/17 47/23 47/23 48/3 48/15 58/13 59/8 62/15 83/16 97/25 98/1 100/12 102/16 104/10 113/3 113/11 115/3 117/1 119/25</p> <p>R</p> <p>radio [1] 111/5</p> <p>ran [1] 74/25</p> <p>randomised [1] 44/13</p> <p>rapidly [3] 117/2 118/13 119/9</p> <p>rare [1] 8/6</p> <p>rate [3] 23/17 44/13 100/6</p> <p>rather [15] 4/10 18/11 24/15 30/9 34/25 41/6 45/12 53/1 67/21 70/1 72/19 92/19 92/25 98/4 108/16</p> <p>Rayment [4] 6/23 7/20 12/5 16/19</p> <p>RCPH [1] 129/3</p> <p>re [1] 70/6</p>	<p>re-read [1] 70/6</p> <p>reach [3] 70/16 113/14 113/20</p> <p>react [1] 17/1</p> <p>reacting [1] 124/13</p> <p>reaction [1] 120/6</p> <p>read [5] 22/6 47/25 69/18 70/6 81/23</p> <p>reader [1] 7/7</p> <p>readily [1] 9/1</p> <p>reading [2] 69/20 102/25</p> <p>reads [1] 24/12</p> <p>real [1] 83/1</p> <p>realised [1] 54/11</p> <p>Realistically [1] 36/6</p> <p>reality [1] 36/22</p> <p>really [19] 4/10 23/25 46/12 47/23 52/21 55/23 59/8 60/5 62/15 68/13 72/8 75/6 82/23 106/3 106/18 107/4 107/6 115/16 124/20</p> <p>reason [14] 17/3 40/1 40/11 40/13 52/19 59/20 60/6 60/17 64/24 65/22 69/22 70/18 117/6 123/12</p> <p>reasonable [2] 97/5 104/6</p> <p>reasonably [1] 124/5</p> <p>reasons [2] 25/14 124/19</p> <p>reassurance [1] 132/24</p> <p>reassure [2] 16/9 46/12</p> <p>reassured [1] 47/19</p> <p>reassures [1] 129/10</p> <p>reassuring [1] 46/3</p> <p>recall [8] 2/16 2/25 3/3 3/12 26/7 35/7 56/1 124/10</p> <p>receive [1] 119/8</p> <p>received [5] 59/21 72/24 99/7 104/15 111/17</p> <p>receiving [7] 31/22 60/12 69/23 96/7 105/5 132/18 132/20</p> <p>recent [1] 121/25</p> <p>recently [2] 45/9 48/14</p> <p>reception [1] 10/14</p> <p>receptor [1] 51/19</p> <p>recirculated [1] 51/3</p> <p>recognisable [1] 128/19</p> <p>recognise [1] 57/18</p> <p>recognised [1] 73/20</p> <p>recognition [1] 129/21</p>	<p>recollection [1] 33/1</p> <p>recombinant [58] 31/11 31/14 32/5 32/6 32/7 32/10 32/11 32/22 33/2 33/9 33/12 33/17 33/18 33/21 34/5 34/23 34/24 35/1 35/3 35/25 36/13 37/25 38/9 39/2 40/22 40/25 41/1 41/14 41/16 41/17 41/19 41/21 42/21 43/5 43/17 44/7 44/15 44/20 44/22 44/23 46/13 58/5 58/6 60/2 60/23 65/21 65/24 70/24 89/5 111/20 111/25 116/11 119/2 119/18 119/20 131/17 131/17 135/10</p> <p>recommendation [2] 49/16 81/4</p> <p>recommendations [2] 97/23 114/24</p> <p>record [4] 47/16 47/17 47/18 59/6</p> <p>recorded [1] 47/13</p> <p>records [12] 8/22 8/24 9/1 30/18 85/3 85/7 85/8 85/8 86/19 86/21 87/3 87/6</p> <p>recruited [4] 32/22 33/4 95/14 95/15</p> <p>recycled [1] 51/4</p> <p>recycling [1] 51/17</p> <p>red [5] 60/14 60/16 61/5 96/7 117/23</p> <p>reduce [5] 15/21 38/5 38/6 60/1 95/10</p> <p>reduction [2] 96/5 96/6</p> <p>refer [6] 74/1 74/6 77/24 78/2 78/5 130/15</p> <p>reference [3] 23/14 68/6 130/15</p> <p>referral [1] 79/20</p> <p>referrals [2] 76/15 79/13</p> <p>referred [1] 78/15</p> <p>reflect [1] 123/8</p> <p>reflected [1] 23/12</p> <p>reflecting [1] 123/11</p> <p>regard [7] 44/22 47/20 69/21 84/3 112/23 115/3 115/20</p> <p>regarding [3] 34/18 66/16 91/6</p> <p>region [1] 1/23</p> <p>register [1] 102/24</p> <p>registered [21] 17/13 17/14 17/16 17/18</p>	<p>17/19 17/20 17/21 18/19 18/22 19/17 19/18 21/3 24/13 24/22 25/2 25/3 25/19 25/22 25/25 26/1 27/13</p> <p>registrar [2] 5/8 55/22</p> <p>registries [1] 114/4</p> <p>registry [8] 98/19 98/23 100/22 101/8 101/16 113/25 114/4 114/5</p> <p>regular [12] 57/22 63/5 63/11 63/16 64/7 65/3 77/10 83/17 83/18 84/6 84/6 84/7</p> <p>regularly [2] 57/25 71/7</p> <p>regulators [1] 133/15</p> <p>reins [1] 126/20</p> <p>reinvested [1] 40/5</p> <p>relate [1] 117/10</p> <p>related [12] 55/17 57/20 62/22 74/19 75/25 83/16 106/8 121/9 122/7 126/22 131/11 133/13</p> <p>relates [1] 117/8</p> <p>relating [3] 31/18 111/3 133/9</p> <p>relation [3] 2/18 4/21 28/9</p> <p>relations [1] 117/7</p> <p>relative [1] 31/1</p> <p>relatively [7] 8/16 12/17 12/22 14/21 59/9 59/10 121/25</p> <p>relatives [1] 15/3</p> <p>relevance [2] 110/2 110/19</p> <p>relevant [2] 96/25 97/2</p> <p>reliant [1] 11/3</p> <p>remain [3] 24/24 41/25 58/7</p> <p>remained [1] 32/9</p> <p>remains [2] 10/5 10/6</p> <p>remember [15] 3/6 3/9 33/6 35/9 36/25 56/4 58/24 59/15 86/14 87/15 112/3 114/18 115/16 115/20 120/14</p> <p>reminded [1] 100/1</p> <p>remit [2] 14/2 118/7</p> <p>remove [4] 89/21 108/8 108/15 108/18</p> <p>removed [2] 107/23 108/3</p> <p>renal [1] 63/17</p> <p>renamed [1] 108/4</p> <p>repeat [1] 137/2</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

(50) Professor Bloom... - repeat

<p>R</p> <p>replace [1] 17/5 replacement [1] 45/18 Replenate [1] 31/25 Replinine [1] 32/1 report [8] 70/19 96/9 120/12 121/7 121/10 122/20 122/22 123/1 reported [12] 69/1 93/18 94/13 94/15 98/13 99/10 100/2 116/22 116/23 120/20 121/12 122/13 reporting [10] 96/12 97/21 98/5 118/24 119/3 119/13 120/10 121/5 122/19 123/5 reports [3] 110/14 120/6 120/21 represent [2] 38/18 38/22 representatives [5] 103/18 103/18 103/20 104/3 104/4 represented [1] 115/7 request [3] 53/1 72/24 89/7 requested [2] 63/19 65/1 requesting [1] 63/22 require [5] 52/15 84/7 93/22 95/11 132/15 required [4] 23/2 34/6 38/9 39/1 requirements [1] 89/19 research [41] 4/10 4/18 4/19 7/18 55/21 92/23 93/2 93/7 93/13 93/19 93/21 93/25 94/25 95/16 95/17 95/18 95/23 97/15 97/16 97/22 98/9 98/19 98/23 100/21 101/8 101/11 101/14 101/15 101/20 102/8 102/24 104/9 104/17 104/23 112/25 113/1 113/8 113/24 114/2 114/6 114/7 residual [1] 127/10 resistance [2] 36/21 63/4 resistant [2] 36/23 44/10 resolve [1] 127/15 resonant [1] 126/2 resource [1] 53/7 respect [3] 117/14 119/6 120/5 respond [3] 42/17</p>	<p>42/18 42/20 responding [1] 120/9 response [3] 30/19 42/21 133/4 rest [1] 39/23 restrictions [2] 17/9 136/16 result [3] 38/24 56/17 71/5 results [7] 56/19 69/12 69/17 69/21 69/22 70/5 85/15 retain [2] 87/6 87/9 retested [1] 58/18 retire [1] 12/12 retired [5] 17/5 75/7 91/25 125/13 125/15 retrospect [1] 69/9 retrospective [1] 120/3 retrospectively [1] 119/13 returns [1] 12/21 review [11] 22/14 75/25 79/12 81/10 114/21 114/22 115/4 115/15 116/24 121/3 121/4 reviewed [3] 22/13 68/1 120/21 reviewing [1] 80/15 reviews [2] 61/16 68/8 revisited [1] 115/1 rid [1] 92/1 right [47] 1/13 5/10 7/10 7/21 8/1 9/3 9/25 11/16 11/18 13/12 13/25 15/6 15/14 17/24 19/19 19/22 19/23 24/14 25/24 26/5 32/3 41/11 42/24 48/10 49/2 49/3 50/12 52/4 57/3 57/4 57/10 67/19 68/8 69/2 75/15 76/17 78/18 92/17 100/12 103/7 107/19 109/3 109/6 113/5 123/19 125/11 131/20 ring [3] 18/4 20/1 61/25 ripple [1] 127/13 ripples [2] 126/15 127/1 risk [23] 2/17 3/8 3/9 30/7 30/12 31/1 31/15 31/18 37/2 37/7 37/9 44/7 44/17 44/24 45/22 59/3 60/13 89/10 99/6 106/20 112/17 116/12 116/13 risks [4] 43/22 72/11</p>	<p>117/18 119/1 Roberts [1] 12/7 role [18] 4/12 11/13 13/2 13/6 16/12 35/16 38/16 38/18 45/10 82/13 84/1 84/2 84/8 84/24 101/4 114/13 116/6 117/13 roles [2] 3/17 6/12 roll [1] 84/1 room [9] 1/15 1/22 8/17 8/18 8/19 8/25 10/12 110/5 110/5 rooms [2] 10/12 10/13 rotated [2] 5/16 5/18 rotation [1] 3/24 roughly [4] 111/21 131/18 131/20 132/8 round [2] 128/4 130/6 rounds [1] 4/15 routine [10] 18/12 18/13 18/14 22/9 64/8 64/9 66/9 94/22 98/12 98/12 routinely [6] 47/21 60/25 61/1 61/2 63/25 93/17 Royal [15] 3/22 4/1 4/7 4/19 5/9 5/11 5/13 5/14 5/14 5/16 5/17 5/20 70/20 124/11 129/3 Royal Free [6] 5/11 5/13 5/14 5/17 5/20 70/20 ruminations [1] 123/22 run [4] 38/20 84/22 118/25 133/17 running [2] 77/11 133/23 runs [2] 15/8 75/17</p>	<p>59/25 73/16 73/25 75/18 89/7 106/14 111/21 117/13 133/14 samples [13] 62/25 65/20 65/23 65/25 66/2 66/7 66/8 66/10 66/12 66/14 66/16 68/18 71/1 sat [1] 91/12 save [1] 52/20 saved [1] 39/8 saving [1] 40/4 savings [1] 40/9 saw [1] 55/14 say [56] 18/20 29/17 29/21 30/5 31/21 33/3 33/10 39/18 39/19 47/17 48/1 49/20 50/14 52/5 52/6 53/11 56/7 57/14 57/23 58/10 64/8 66/1 69/22 70/13 76/13 78/2 80/10 82/1 82/18 83/1 86/18 87/20 90/17 91/20 94/4 99/19 99/24 100/3 101/17 106/19 113/5 118/14 120/2 121/11 121/25 125/21 127/13 131/25 132/8 133/22 134/1 134/2 134/19 134/23 135/20 136/10 say: [3] 29/23 93/20 121/15 say: we [1] 29/23 say: we're [1] 93/20 saying [11] 22/25 23/3 52/9 53/2 73/6 116/5 118/8 123/23 124/13 127/5 133/14 saying: [1] 120/12 saying: do [1] 120/12 says [6] 9/24 12/15 22/1 24/21 32/16 34/10 says: [1] 120/19 says: have [1] 120/19 scene [1] 1/8 scheme [1] 13/17 school [8] 2/20 7/3 16/2 16/4 16/5 16/6 16/8 16/9 scope [3] 21/10 112/10 112/14 scores [1] 100/9 Scott [9] 1/19 2/8 21/5 21/25 27/3 133/2 133/3 139/3 139/5 scrutinise [1] 121/22 seat [1] 1/16 second [7] 10/10 22/1 34/11 34/16 34/20</p>	<p>67/7 76/16 secondment [1] 78/9 section [5] 98/10 98/20 99/5 99/9 102/14 see [44] 1/7 1/15 6/13 16/24 19/4 19/16 20/3 20/9 20/14 24/14 32/12 34/12 34/13 42/17 54/19 61/17 63/10 67/1 67/3 67/6 67/14 67/24 73/7 75/12 79/18 80/11 86/1 93/21 94/23 96/14 98/1 99/15 99/22 104/25 104/25 105/1 105/2 110/1 114/23 117/19 126/15 132/22 132/23 134/13 seeing [5] 22/10 81/17 95/4 106/11 107/11 seek [6] 74/8 77/21 93/6 94/16 97/4 97/11 seeking [1] 102/2 seem [2] 34/23 65/22 seemed [1] 134/9 seems [1] 81/23 seen [12] 35/11 61/25 62/9 62/12 62/16 70/23 79/18 81/19 113/12 120/19 126/14 137/14 sees [1] 130/23 selection [1] 111/18 sending [1] 118/15 sends [1] 120/11 senior [4] 3/22 5/8 7/6 88/16 sense [3] 93/9 126/13 126/24 sensible [2] 34/23 131/20 sent [1] 110/23 sentence [3] 22/1 67/7 67/8 separate [8] 9/18 13/16 13/17 85/16 97/23 100/23 100/24 132/4 separately [2] 86/5 122/23 September [6] 4/17 6/1 7/2 7/10 8/14 103/1 September 1991 [1] 4/17 September 1996 [2] 6/1 8/14 September 2001 [2] 7/2 7/10 sera [9] 68/11 68/15</p>	<p>68/16 68/20 68/21 69/8 69/11 70/8 93/11 serious [10] 3/13 3/14 3/16 18/9 42/19 119/14 120/25 121/13 123/4 128/6 seriously [1] 94/2 seriousness [1] 3/4 service [52] 13/9 13/10 13/16 13/18 13/22 14/1 14/5 14/13 14/17 14/20 14/24 15/4 15/12 15/13 15/14 17/4 17/6 28/17 28/23 28/24 29/1 29/3 29/20 30/2 30/9 30/14 30/24 31/9 67/21 74/23 77/1 79/3 80/3 81/3 93/2 93/4 93/13 93/18 94/1 94/14 96/12 98/10 98/15 101/5 115/4 116/6 116/17 117/6 117/25 125/2 135/14 135/16 Service: [1] 29/21 Service: could [1] 29/21 services [5] 8/11 13/23 16/17 20/9 81/20 session [1] 137/18 sessions [1] 49/1 set [7] 13/9 13/13 16/18 17/3 74/24 101/8 122/1 sets [1] 20/14 setting [1] 22/20 severe [16] 19/20 19/20 19/25 20/11 21/12 42/6 43/25 44/4 45/10 46/8 61/11 61/17 62/13 83/16 96/5 99/17 severely [1] 130/11 severity [3] 3/10 118/5 121/22 shade [1] 98/2 shall [3] 109/2 137/17 137/17 shared [2] 7/1 10/13 she [7] 6/25 56/5 56/7 59/21 73/9 131/7 131/8 she's [2] 1/12 131/6 sheet [1] 65/17 sheets [1] 101/24 Sheffield [1] 118/25 short [3] 45/4 54/23 136/13 shortage [1] 38/1 should [22] 18/5 18/6 18/8 19/13 36/14</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

(51) replace - should

<p>S</p> <p>should... [17] 43/21 69/7 69/10 70/8 70/10 70/12 71/1 77/19 78/2 86/2 87/18 97/24 102/12 102/22 121/17 124/7 129/21</p> <p>shouldn't [4] 16/10 37/4 70/16 128/18</p> <p>show [4] 36/9 81/3 98/5 100/2</p> <p>showed [2] 44/16 96/17</p> <p>showing [2] 21/21 52/22</p> <p>shown [1] 91/5</p> <p>shows [1] 71/9</p> <p>sic [1] 118/16</p> <p>side [5] 4/4 4/5 44/9 119/14 133/9</p> <p>sign [2] 65/18 137/25</p> <p>signed [2] 34/12 65/7</p> <p>significance [1] 70/18</p> <p>significant [8] 9/10 16/10 54/5 62/16 70/22 115/16 131/3 134/21</p> <p>similar [3] 60/4 71/25 132/12</p> <p>similarities [1] 126/16</p> <p>Similarly [1] 51/15</p> <p>Simon [1] 56/12</p> <p>simply [5] 72/19 86/24 98/4 104/18 130/15</p> <p>since [14] 12/9 24/25 29/9 32/20 38/14 57/8 57/13 59/14 65/21 73/20 85/23 106/6 114/15 127/3</p> <p>since 2005 [1] 38/14</p> <p>single [2] 39/9 44/21</p> <p>SIPPET [1] 44/12</p> <p>Sir [9] 1/4 24/8 54/7 92/6 115/22 116/1 133/4 137/7 139/4</p> <p>Sir Brian [1] 1/4</p> <p>Sister [4] 11/10 55/25 72/3 72/22</p> <p>Sister Jennifer Jones [1] 11/10</p> <p>Sister Jones [2] 72/3 72/22</p> <p>sit [1] 49/18</p> <p>sitting [1] 137/7</p> <p>situation [14] 22/8 23/12 35/25 50/2 71/23 73/16 80/11 87/14 90/22 94/2 104/7 104/7 106/5 125/7</p>	<p>situations [1] 6/17</p> <p>six [14] 12/14 36/3 58/3 61/19 62/5 62/6 62/10 62/14 62/17 64/6 68/5 99/22 99/23 119/16</p> <p>six months [4] 61/19 62/10 62/14 119/16</p> <p>Skipton [1] 115/18</p> <p>Skipton Fund [1] 115/18</p> <p>slightly [1] 105/8</p> <p>slotted [1] 62/1</p> <p>slow [2] 14/21 14/22</p> <p>small [8] 32/4 32/10 41/22 42/1 44/24 60/13 113/19 127/1</p> <p>snapshot [1] 19/1</p> <p>so [336]</p> <p>social [6] 11/13 11/14 11/20 20/5 53/8 125/15</p> <p>socially [1] 1/17</p> <p>solicitors [1] 110/14</p> <p>some [89] 2/11 3/2 3/24 8/10 11/2 13/5 15/2 16/2 17/19 17/20 18/18 23/18 23/19 25/22 26/13 26/21 26/25 27/12 27/18 27/23 34/8 37/11 37/14 37/19 37/20 37/23 37/24 38/6 38/7 40/4 40/10 40/17 41/14 41/19 41/25 42/8 42/18 43/8 43/10 45/11 46/20 47/12 50/4 52/22 53/11 55/1 56/5 61/12 62/14 62/20 68/16 68/17 68/24 74/1 74/22 76/10 76/16 79/14 84/5 84/7 85/2 87/22 90/24 91/4 97/13 98/3 98/18 109/20 110/4 111/10 113/14 115/17 116/12 116/19 116/19 116/20 116/20 121/6 121/21 124/15 124/21 125/12 125/15 126/1 126/14 126/16 132/2 132/22 135/7</p> <p>somebody [5] 58/20 61/17 98/3 121/1 136/19</p> <p>someone [14] 11/7 16/23 40/14 46/1 54/4 61/22 73/5 80/8 82/23 87/4 87/7 116/23 122/21 129/2</p> <p>someone's [2] 25/18 61/18</p>	<p>something [32] 1/23 18/16 21/3 23/25 25/13 47/3 47/12 48/1 50/6 52/8 61/23 64/14 67/18 70/5 71/10 79/24 80/20 85/10 86/8 88/2 98/4 100/12 116/21 116/22 117/22 121/3 122/3 123/10 124/6 124/8 125/19 128/1</p> <p>sometimes [8] 18/7 42/4 46/23 52/9 74/8 77/22 97/18 132/5</p> <p>somewhere [1] 117/20</p> <p>soon [3] 12/22 19/11 69/19</p> <p>sorry [13] 5/24 15/10 28/11 56/13 78/6 78/7 81/8 95/5 109/5 121/24 121/25 128/18 136/3</p> <p>sort [36] 22/7 22/11 22/19 38/19 39/10 41/2 46/18 50/22 57/4 59/14 70/23 71/16 73/2 78/11 78/11 82/25 88/6 88/23 90/17 90/20 90/21 91/21 91/23 98/22 99/20 101/4 105/6 106/3 115/18 120/2 121/20 127/18 131/1 131/17 132/8 137/13</p> <p>sorts [7] 45/21 46/23 47/13 57/20 59/13 65/10 131/18</p> <p>sought [1] 67/18</p> <p>Soumik [5] 19/2 20/8 20/21 32/13 67/23</p> <p>sound [3] 9/25 19/22 19/23</p> <p>sounds [2] 48/22 48/25</p> <p>source [1] 123/21</p> <p>sources [4] 88/21 88/22 119/8 119/10</p> <p>south [17] 15/6 16/14 16/17 17/23 27/15 28/21 33/24 35/19 49/11 53/7 53/9 59/9 130/18 130/18 134/4 135/1 135/21</p> <p>South Wales [11] 15/6 28/21 49/11 53/7 53/9 59/9 130/18 130/18 134/4 135/1 135/21</p> <p>space [4] 8/21 10/11 10/16 87/20</p> <p>speak [1] 109/18</p>	<p>speaking [2] 1/5 2/1</p> <p>specialise [2] 129/22 129/23</p> <p>specialising [1] 12/11</p> <p>specialist [10] 12/1 12/24 13/1 14/8 76/24 77/8 77/13 77/15 78/12 81/5</p> <p>specialists [5] 12/24 75/12 75/14 129/9 130/10</p> <p>specialty [1] 93/24</p> <p>specific [11] 14/2 22/13 30/25 38/25 56/5 56/6 79/4 81/4 89/25 93/19 98/10</p> <p>specifically [13] 3/6 40/16 44/11 49/25 52/5 56/4 56/8 75/11 93/24 106/9 120/16 125/14 125/16</p> <p>spend [2] 4/19 46/21</p> <p>spent [3] 6/9 7/14 78/10</p> <p>split [1] 43/15</p> <p>spoke [1] 109/19</p> <p>spoken [2] 44/21 136/21</p> <p>Srivastava [4] 64/1 83/24 84/2 84/9</p> <p>stable [3] 23/10 59/9 61/18</p> <p>staff [21] 11/18 11/20 12/20 16/2 16/5 16/9 16/21 20/3 20/4 20/5 47/6 55/9 124/15 124/18 124/22 125/5 125/8 125/12 125/18 126/1 135/20</p> <p>stage [6] 8/22 20/5 31/3 76/20 81/16 98/3</p> <p>stand [3] 88/13 88/18 135/11</p> <p>stand-alone [1] 135/11</p> <p>standard [7] 42/10 48/12 93/16 94/13 129/25 132/10 132/10</p> <p>stands [1] 130/3</p> <p>start [6] 2/11 29/24 43/8 45/11 85/3 120/15</p> <p>started [20] 31/21 37/18 45/9 55/19 59/19 61/7 69/19 74/14 74/16 75/10 75/10 77/3 77/10 77/10 78/8 78/13 102/1 119/16 123/7 127/4</p> <p>starting [3] 16/4 78/15 101/15</p>	<p>state [1] 91/23</p> <p>statement [39] 2/12 6/18 9/24 10/21 12/9 12/15 16/13 18/18 21/5 21/18 24/9 24/21 25/25 27/23 29/17 30/4 31/22 33/10 38/13 40/23 55/3 56/24 57/14 60/8 62/24 65/19 67/16 76/13 78/23 79/8 81/2 86/18 87/24 90/2 98/21 100/21 102/25 105/12 109/22</p> <p>statements [2] 55/12 72/18</p> <p>statisticians [1] 104/25</p> <p>statue [1] 107/22</p> <p>status [3] 58/18 99/4 99/4</p> <p>stay [8] 40/13 40/13 40/15 42/9 52/23 53/11 75/4 131/16</p> <p>staying [1] 100/13</p> <p>steadily [1] 25/2</p> <p>steady [1] 25/1</p> <p>step [1] 9/20</p> <p>stepped [1] 7/19</p> <p>steps [2] 111/13 111/15</p> <p>stick [2] 49/6 60/4</p> <p>sticking [2] 40/19 71/24</p> <p>still [20] 17/11 24/15 58/8 60/4 60/14 60/24 76/25 80/7 80/9 80/12 92/1 106/2 106/4 106/10 110/4 112/10 112/14 116/12 126/2 126/6</p> <p>stock [1] 29/24</p> <p>stomach [1] 61/8</p> <p>stop [3] 102/13 104/13 113/5</p> <p>stopped [3] 58/5 65/23 80/6</p> <p>store [1] 87/17</p> <p>stored [13] 32/17 65/25 66/2 66/10 68/11 68/14 68/16 68/21 69/7 69/10 70/8 91/10 93/11</p> <p>stores [1] 65/20</p> <p>stories [1] 135/3</p> <p>storing [3] 65/23 66/8 66/12</p> <p>story [2] 108/17 125/7</p> <p>strategy [1] 23/11</p> <p>Street [5] 5/15 5/18 5/21 23/21 129/16</p> <p>strictly [1] 117/12</p>	<p>strong [5] 36/9 36/11 36/15 36/18 75/3</p> <p>strongly [1] 88/14</p> <p>struck [1] 128/15</p> <p>structure [1] 23/2</p> <p>structures [3] 30/6 30/20 30/25</p> <p>struggling [1] 25/15</p> <p>stuck [1] 42/10</p> <p>studies [5] 67/9 92/24 93/2 95/13 95/16</p> <p>study [15] 32/23 32/25 44/12 44/13 67/14 67/17 67/22 68/14 68/24 93/7 93/13 93/19 93/21 94/21 95/15</p> <p>subcutaneous [1] 132/23</p> <p>subcutaneously [2] 41/6 45/14</p> <p>submission [1] 110/21</p> <p>submit [1] 110/20</p> <p>submitted [5] 72/7 94/19 101/22 110/11 122/16</p> <p>subsequent [1] 49/7</p> <p>subsequently [1] 7/8</p> <p>substantial [1] 96/4</p> <p>substantially [5] 7/15 33/19 40/8 53/25 97/10</p> <p>subtype [1] 99/3</p> <p>succeeded [1] 7/20</p> <p>succession [1] 12/12</p> <p>such [7] 12/20 25/3 70/18 74/6 130/14 132/18 137/3</p> <p>suddenly [2] 91/22 92/1</p> <p>suffered [1] 126/21</p> <p>suffering [3] 21/12 135/22 136/6</p> <p>sufficient [1] 137/22</p> <p>suggest [2] 92/8 111/6</p> <p>suggesting [2] 36/14 64/4</p> <p>suggestion [2] 82/17 118/17</p> <p>suggests [3] 98/3 100/12 100/13</p> <p>suit [1] 50/5</p> <p>suitable [2] 9/15 82/16</p> <p>suits [1] 50/4</p> <p>summary [1] 67/7</p> <p>sums [1] 88/23</p> <p>superseded [1] 102/7</p> <p>supplies [1] 117/21</p> <p>supply [5] 27/19</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

(52) should... - supply

S	talked [2] 12/5 53/5	57/11 57/22 63/4	46/10 48/18 49/10	89/17 92/9 92/14	136/9
supply... [4] 116/7 116/14 117/23 119/7	talking [9] 1/13 35/25 46/21 53/14 70/9 106/14 116/8 127/19 134/23	63/11 63/13 63/17 63/18 63/21 63/22 64/3 64/7 64/9 65/5 65/5 65/6 65/8 65/13 66/9 69/13 70/11 70/13 71/6 75/24 83/18 84/6 94/21 94/22 94/23	52/23 54/5 54/15 55/5 56/8 56/10 56/16 58/16 58/17 58/19 58/22 63/18 66/10 66/20 69/7 69/10 73/1 75/16 75/24 78/20 79/7 81/21 82/13 85/7 85/8 86/7 87/12 90/12 99/2 99/2 99/11 99/13 99/16 100/5 100/11 101/12 103/13 104/9 104/11 107/15 108/6 108/11 108/21 108/21 113/8 113/23 117/17 122/12 122/13 123/9 125/7 125/17 126/4 126/11 126/22 128/23 130/5 130/19 130/25 134/13 134/24 135/3 135/7 135/24 135/25 136/3	92/19 93/18 95/17 97/5 97/9 98/13 99/15 99/19 99/22 99/25 100/2 100/4 101/10 101/11 101/16 101/22 102/1 102/6 102/7 102/9 102/12 105/3 105/8 106/17 106/19 106/22 107/2 108/7 109/2 109/8 110/5 110/17 111/9 116/18 116/23 120/21 121/7 121/10 121/13 121/23 122/8 131/11 132/1 133/10 133/15 137/9 137/17	think [158] thinking [5] 106/10 107/17 125/14 128/9 134/25 third [3] 40/21 40/25 103/9 this [130] 9/9 9/11 12/3 16/4 16/5 16/18 19/4 20/13 21/1 21/21 21/25 22/6 23/12 29/24 31/3 31/10 32/23 33/11 34/8 34/9 34/17 35/2 35/14 35/15 35/15 35/21 36/7 36/8 36/25 37/5 37/9 37/17 43/11 43/15 43/24 44/1 44/22 47/5 48/1 49/24 50/14 50/15 50/15 52/20 55/25 58/23 58/24 59/4 59/14 60/20 64/21 67/1 67/3 67/17 67/17 67/20 68/14 68/20 68/24 69/1 69/9 69/18 69/19 70/6 70/18 71/4 73/6 73/7 74/7 75/15 78/3 78/18 78/25 79/2 80/10 81/3 81/16 82/18 85/3 86/4 87/17 88/14 88/17 88/17 90/14 90/23 91/21 94/5 96/1 99/25 100/9 100/17 101/2 102/1 102/10 102/11 102/15 102/16 104/16 104/17 105/5 105/13 105/21 107/3 107/6 108/10 112/18 117/8 117/9 118/17 120/2 121/11 121/17 122/13 123/7 125/2 125/9 126/5 126/19 127/2 127/10 127/15 127/18 128/3 131/1 133/6 134/8 134/23 136/1 137/15 Thomas [2] 78/12 78/22 thoroughly [1] 129/6 those [99] 1/25 4/13 4/20 4/22 6/10 6/17 6/20 10/13 13/23 14/10 16/14 18/22 18/23 19/17 19/19 20/1 21/23 23/1 24/24 25/8 25/9 25/18 25/22 26/6 27/12 27/15 28/2 28/6 28/10 39/4 39/17 39/21 43/19 45/21 46/16 47/13 47/16 48/4 48/6 48/8 48/22
supported [3] 75/9 88/14 90/15	taught [3] 3/4 3/6 3/7	66/9 69/13 70/11 70/13 71/6 75/24 83/18 84/6 94/21 94/22 94/23	66/20 69/7 69/10 73/1 75/16 75/24 78/20 79/7 81/21 82/13 85/7 85/8 86/7 87/12 90/12 99/2 99/2 99/11 99/13 99/16 100/5 100/11 101/12 103/13 104/9 104/11 107/15 108/6 108/11 108/21 108/21 113/8 113/23 117/17 122/12 122/13 123/9 125/7 125/17 126/4 126/11 126/22 128/23 130/5 130/19 130/25 134/13 134/24 135/3 135/7 135/24 135/25 136/3	101/11 101/16 101/22 102/1 102/6 102/7 102/9 102/12 105/3 105/8 106/17 106/19 106/22 107/2 108/7 109/2 109/8 110/5 110/17 111/9 116/18 116/23 120/21 121/7 121/10 121/13 121/23 122/8 131/11 132/1 133/10 133/15 137/9 137/17	third [3] 40/21 40/25 103/9 this [130] 9/9 9/11 12/3 16/4 16/5 16/18 19/4 20/13 21/1 21/21 21/25 22/6 23/12 29/24 31/3 31/10 32/23 33/11 34/8 34/9 34/17 35/2 35/14 35/15 35/15 35/21 36/7 36/8 36/25 37/5 37/9 37/17 43/11 43/15 43/24 44/1 44/22 47/5 48/1 49/24 50/14 50/15 50/15 52/20 55/25 58/23 58/24 59/4 59/14 60/20 64/21 67/1 67/3 67/17 67/17 67/20 68/14 68/20 68/24 69/1 69/9 69/18 69/19 70/6 70/18 71/4 73/6 73/7 74/7 75/15 78/3 78/18 78/25 79/2 80/10 81/3 81/16 82/18 85/3 86/4 87/17 88/14 88/17 88/17 90/14 90/23 91/21 94/5 96/1 99/25 100/9 100/17 101/2 102/1 102/10 102/11 102/15 102/16 104/16 104/17 105/5 105/13 105/21 107/3 107/6 108/10 112/18 117/8 117/9 118/17 120/2 121/11 121/17 122/13 123/7 125/2 125/9 126/5 126/19 127/2 127/10 127/15 127/18 128/3 131/1 133/6 134/8 134/23 136/1 137/15 Thomas [2] 78/12 78/22 thoroughly [1] 129/6 those [99] 1/25 4/13 4/20 4/22 6/10 6/17 6/20 10/13 13/23 14/10 16/14 18/22 18/23 19/17 19/19 20/1 21/23 23/1 24/24 25/8 25/9 25/18 25/22 26/6 27/12 27/15 28/2 28/6 28/10 39/4 39/17 39/21 43/19 45/21 46/16 47/13 47/16 48/4 48/6 48/8 48/22
supported [3] 75/9 88/14 90/15	suppose [2] 116/9 126/13	team [5] 49/25 49/25 74/2 76/9 94/17	79/7 81/21 82/13 85/7 85/8 86/7 87/12 90/12 99/2 99/2 99/11 99/13 99/16 100/5 100/11 101/12 103/13 104/9 104/11 107/15 108/6 108/11 108/21 108/21 113/8 113/23 117/17 122/12 122/13 123/9 125/7 125/17 126/4 126/11 126/22 128/23 130/5 130/19 130/25 134/13 134/24 135/3 135/7 135/24 135/25 136/3	101/11 101/16 101/22 102/1 102/6 102/7 102/9 102/12 105/3 105/8 106/17 106/19 106/22 107/2 108/7 109/2 109/8 110/5 110/17 111/9 116/18 116/23 120/21 121/7 121/10 121/13 121/23 122/8 131/11 132/1 133/10 133/15 137/9 137/17	therapeutic [3] 20/10 84/16 84/19 there [184] there's [22] 14/19 15/14 20/14 21/8 32/24 36/3 38/19 39/23 50/14 50/25 67/23 71/18 76/6 83/25 99/4 99/9 103/2 104/12 114/4 118/24 120/25 121/13 therefore [2] 36/3 82/22 these [34] 19/19 22/22 23/6 32/17 37/11 39/9 44/15 46/18 46/21 46/23 46/25 53/10 57/20 69/23 71/19 84/11 87/17 94/8 96/16 115/10 119/16 120/17 124/21 125/7 125/25 126/6 131/17 132/5 134/5 134/13 135/16 135/19 136/3 136/6 thesis [1] 4/23 they [218] they'd [3] 56/21 57/2 75/24 they'll [1] 50/6 they're [1] 53/12 they've [4] 18/15 86/20 107/9 132/24 thing [17] 9/4 49/20 74/10 86/4 99/20 102/12 102/17 103/7 115/18 120/2 122/1 125/11 126/7 131/2 131/13 133/15 135/20 things [19] 22/7 22/22 29/9 35/14 46/2 50/17 52/7 74/11 96/16 106/18 107/12 107/18 110/18 115/17 118/9 125/23 127/10 127/21
supposed [2] 102/19 118/19	sure [11] 16/5 27/12 35/20 48/2 69/20 82/1 118/2 125/10 126/9 131/3 133/18	technically [1] 100/24	101/12 103/13 104/9 104/11 107/15 108/6 108/11 108/21 108/21 113/8 113/23 117/17 122/12 122/13 123/9 125/7 125/17 126/4 126/11 126/22 128/23 130/5 130/19 130/25 134/13 134/24 135/3 135/7 135/24 135/25 136/3	101/11 101/16 101/22 102/1 102/6 102/7 102/9 102/12 105/3 105/8 106/17 106/19 106/22 107/2 108/7 109/2 109/8 110/5 110/17 111/9 116/18 116/23 120/21 121/7 121/10 121/13 121/23 122/8 131/11 132/1 133/10 133/15 137/9 137/17	therapeutic [3] 20/10 84/16 84/19 there [184] there's [22] 14/19 15/14 20/14 21/8 32/24 36/3 38/19 39/23 50/14 50/25 67/23 71/18 76/6 83/25 99/4 99/9 103/2 104/12 114/4 118/24 120/25 121/13 therefore [2] 36/3 82/22 these [34] 19/19 22/22 23/6 32/17 37/11 39/9 44/15 46/18 46/21 46/23 46/25 53/10 57/20 69/23 71/19 84/11 87/17 94/8 96/16 115/10 119/16 120/17 124/21 125/7 125/25 126/6 131/17 132/5 134/5 134/13 135/16 135/19 136/3 136/6 thesis [1] 4/23 they [218] they'd [3] 56/21 57/2 75/24 they'll [1] 50/6 they're [1] 53/12 they've [4] 18/15 86/20 107/9 132/24 thing [17] 9/4 49/20 74/10 86/4 99/20 102/12 102/17 103/7 115/18 120/2 122/1 125/11 126/7 131/2 131/13 133/15 135/20 things [19] 22/7 22/22 29/9 35/14 46/2 50/17 52/7 74/11 96/16 106/18 107/12 107/18 110/18 115/17 118/9 125/23 127/10 127/21
sure [11] 16/5 27/12 35/20 48/2 69/20 82/1 118/2 125/10 126/9 131/3 133/18	surveillance [7] 58/2 67/8 67/17 80/19 84/4 84/5 116/20	tell [11] 2/3 12/25 40/1 54/14 66/3 66/6 66/6 67/16 98/22 107/24 125/7	101/12 103/13 104/9 104/11 107/15 108/6 108/11 108/21 108/21 113/8 113/23 117/17 122/12 122/13 123/9 125/7 125/17 126/4 126/11 126/22 128/23 130/5 130/19 130/25 134/13 134/24 135/3 135/7 135/24 135/25 136/3	101/11 101/16 101/22 102/1 102/6 102/7 102/9 102/12 105/3 105/8 106/17 106/19 106/22 107/2 108/7 109/2 109/8 110/5 110/17 111/9 116/18 116/23 120/21 121/7 121/10 121/13 121/23 122/8 131/11 132/1 133/10 133/15 137/9 137/17	therapeutic [3] 20/10 84/16 84/19 there [184] there's [22] 14/19 15/14 20/14 21/8 32/24 36/3 38/19 39/23 50/14 50/25 67/23 71/18 76/6 83/25 99/4 99/9 103/2 104/12 114/4 118/24 120/25 121/13 therefore [2] 36/3 82/22 these [34] 19/19 22/22 23/6 32/17 37/11 39/9 44/15 46/18 46/21 46/23 46/25 53/10 57/20 69/23 71/19 84/11 87/17 94/8 96/16 115/10 119/16 120/17 124/21 125/7 125/25 126/6 131/17 132/5 134/5 134/13 135/16 135/19 136/3 136/6 thesis [1] 4/23 they [218] they'd [3] 56/21 57/2 75/24 they'll [1] 50/6 they're [1] 53/12 they've [4] 18/15 86/20 107/9 132/24 thing [17] 9/4 49/20 74/10 86/4 99/20 102/12 102/17 103/7 115/18 120/2 122/1 125/11 126/7 131/2 131/13 133/15 135/20 things [19] 22/7 22/22 29/9 35/14 46/2 50/17 52/7 74/11 96/16 106/18 107/12 107/18 110/18 115/17 118/9 125/23 127/10 127/21
sure [11] 16/5 27/12 35/20 48/2 69/20 82/1 118/2 125/10 126/9 131/3 133/18	surgery [8] 3/18 6/16 20/14 20/15 20/15 20/16 20/17 38/8	telling [2] 37/4 118/19	101/12 103/13 104/9 104/11 107/15 108/6 108/11 108/21 108/21 113/8 113/23 117/17 122/12 122/13 123/9 125/7 125/17 126/4 126/11 126/22 128/23 130/5 130/19 130/25 134/13 134/24 135/3 135/7 135/24 135/25 136/3	101/11 101/16 101/22 102/1 102/6 102/7 102/9 102/12 105/3 105/8 106/17 106/19 106/22 107/2 108/7 109/2 109/8 110/5 110/17 111/9 116/18 116/23 120/21 121/7 121/10 121/13 121/23 122/8 131/11 132/1 133/10 133/15 137/9 137/17	therapeutic [3] 20/10 84/16 84/19 there [184] there's [22] 14/19 15/14 20/14 21/8 32/24 36/3 38/19 39/23 50/14 50/25 67/23 71/18 76/6 83/25 99/4 99/9 103/2 104/12 114/4 118/24 120/25 121/13 therefore [2] 36/3 82/22 these [34] 19/19 22/22 23/6 32/17 37/11 39/9 44/15 46/18 46/21 46/23 46/25 53/10 57/20 69/23 71/19 84/11 87/17 94/8 96/16 115/10 119/16 120/17 124/21 125/7 125/25 126/6 131/17 132/5 134/5 134/13 135/16 135/19 136/3 136/6 thesis [1] 4/23 they [218] they'd [3] 56/21 57/2 75/24 they'll [1] 50/6 they're [1] 53/12 they've [4] 18/15 86/20 107/9 132/24 thing [17] 9/4 49/20 74/10 86/4 99/20 102/12 102/17 103/7 115/18 120/2 122/1 125/11 126/7 131/2 131/13 133/15 135/20 things [19] 22/7 22/22 29/9 35/14 46/2 50/17 52/7 74/11 96/16 106/18 107/12 107/18 110/18 115/17 118/9 125/23 127/10 127/21
sure [11] 16/5 27/12 35/20 48/2 69/20 82/1 118/2 125/10 126/9 131/3 133/18	surveillance [7] 58/2 67/8 67/17 80/19 84/4 84/5 116/20	tells [1] 25/25	101/12 103/13 104/9 104/11 107/15 108/6 108/11 108/21 108/21 113/8 113/23 117/17 122/12 122/13 123/9 125/7 125/17 126/4 126/11 126/22 128/23 130/5 130/19 130/25 134/13 134/24 135/3 135/7 135/24 135/25 136/3	101/11 101/16 101/22 102/1 102/6 102/7 102/9 102/12 105/3 105/8 106/17 106/19 106/22 107/2 108/7 109/2 109/8 110/5 110/17 111/9 116/18 116/23 120/21 121/7 121/10 121/13 121/23 122/8 131/11 132/1 133/10 133/15 137/9 137/17	therapeutic [3] 20/10 84/16 84/19 there [184] there's [22] 14/19 15/14 20/14 21/8 32/24 36/3 38/19 39/23 50/14 50/25 67/23 71/18 76/6 83/25 99/4 99/9 103/2 104/12 114/4 118/24 120/25 121/13 therefore [2] 36/3 82/22 these [34] 19/19 22/22 23/6 32/17 37/11 39/9 44/15 46/18 46/21 46/23 46/25 53/10 57/20 69/23 71/19 84/11 87/17 94/8 96/16 115/10 119/16 120/17 124/21 125/7 125/25 126/6 131/17 132/5 134/5 134/13 135/16 135/19 136/3 136/6 thesis [1] 4/23 they [218] they'd [3] 56/21 57/2 75/24 they'll [1] 50/6 they're [1] 53/12 they've [4] 18/15 86/20 107/9 132/24 thing [17] 9/4 49/20 74/10 86/4 99/20 102/12 102/17 103/7 115/18 120/2 122/1 125/11 126/7 131/2 131/13 133/15 135/20 things [19] 22/7 22/22 29/9 35/14 46/2 50/17 52/7 74/11 96/16 106/18 107/12 107/18 110/18 115/17 118/9 125/23 127/10 127/21
sure [11] 16/5 27/12 35/20 48/2 69/20 82/1 118/2 125/10 126/9 131/3 133/18	surgical [1] 62/23	ten [6] 15/20 30/17 60/19 87/5 132/1 132/2	101/12 103/13 104/9 104/11 107/15 108/6 108/11 108/21 108/21 113/8 113/23 117/17 122/12 122/13 123/9 125/7 125/17 126/4 126/11 126/22 128/23 130/5 130/19 130/25 134/13 134/24 135/3 135/7 135/24 135/25 136/3	101/11 101/16 101/22 102/1 102/6 102/7 102/9 102/12 105/3 105/8 106/17 106/19 106/22 107/2 108/7 109/2 109/8 110/5 110/17 111/9 116/18 116/23 120/21 121/7 121/10 121/13 121/23 122/8 131/11 132/1 133/10 133/15 137/9 137/17	therapeutic [3] 20/10 84/16 84/19 there [184] there's [22] 14/19 15/14 20/14 21/8 32/24 36/3 38/19 39/23 50/14 50/25 67/23 71/18 76/6 83/25 99/4 99/9 103/2 104/12 114/4 118/24

T	4/20 4/23 5/2 5/4 6/4 6/9 7/11 7/13 7/15 8/15 8/17 11/2 11/8 11/24 14/18 15/16 16/25 19/10 23/10 24/2 27/22 27/25 29/13 30/12 31/10 32/11 35/4 35/7 36/8 36/25 37/9 41/9 43/4 46/21 47/1 49/6 54/8 54/9 55/5 55/16 55/19 55/22 56/2 56/2 56/12 58/24 59/18 61/6 61/24 64/20 70/18 70/25 73/22 74/21 75/1 75/10 76/8 87/14 89/4 90/16 92/4 99/12 100/11 100/13 101/7 101/11 102/20 105/9 106/25 109/5 109/21 111/13 111/24 112/4 114/25 116/8 118/17 126/12 132/2 132/8 135/24	track [1] 7/9 tragedy [2] 136/1 137/1 trained [1] 80/22 training [10] 2/14 2/17 2/20 2/24 3/3 4/1 11/6 78/12 105/22 131/1 transfer [1] 88/4 transferred [2] 18/8 65/21 transfusion [27] 3/8 14/4 28/18 28/19 28/20 28/23 28/24 29/1 29/3 29/8 29/11 29/15 29/20 29/21 29/23 30/2 30/9 30/23 31/9 31/20 60/16 61/5 95/11 96/7 116/6 116/17 117/6 transfusion-transmitted [1] 14/4 transfusions [1] 60/14 transmission [4] 31/6 45/23 46/16 105/14 transmitted [6] 2/21 2/23 3/1 14/4 45/25 105/25 transparent [1] 127/6 transplant [1] 78/3 transplantation [4] 4/4 4/25 76/25 77/2 transplants [1] 76/16 travel [2] 17/8 130/24 treat [4] 34/22 41/21 54/1 86/6 treated [27] 4/16 9/9 26/4 27/16 30/16 31/24 31/24 32/2 32/18 33/9 40/21 40/24 41/3 41/10 41/13 44/16 57/23 59/5 67/4 67/15 67/25 84/13 85/5 88/11 93/16 95/19 121/15 treating [10] 6/10 6/16 9/15 26/9 26/23 27/1 33/24 85/11 86/10 112/21 treatment [69] 4/13 8/17 8/19 8/25 10/12 10/13 13/6 13/8 14/16 18/6 27/19 27/24 28/2 28/2 28/6 29/25 34/19 42/12 42/15 43/14 43/16 43/17 43/19 43/20 43/23 44/10 44/11 46/19 47/7 47/10 49/8 50/10 61/14 61/21 71/24 72/4 72/6 72/8 72/10 72/11 73/6 74/19	77/13 77/19 81/6 84/20 93/20 105/5 106/3 106/9 106/11 109/20 109/23 110/9 119/14 121/2 121/15 126/21 128/7 130/19 130/21 131/15 132/7 132/12 132/18 132/19 132/20 132/24 135/22 treatment's [1] 27/21 treatment-related [1] 74/19 treatments [5] 48/7 84/11 84/12 84/14 128/11 Treloar [1] 10/25 trend [1] 101/6 trial [5] 32/7 32/9 32/22 33/4 42/16 tried [2] 75/21 98/11 true [4] 20/1 110/24 111/8 130/12 truth [1] 98/7 try [10] 46/12 49/8 50/4 50/6 50/8 60/4 95/10 97/17 107/18 125/3 trying [5] 9/23 87/17 95/8 125/1 131/3 Tuesday [5] 137/9 137/19 137/21 137/25 138/3 tumours [1] 83/18 turn [4] 34/7 34/11 34/15 67/23 two [33] 1/20 5/16 5/17 10/12 10/18 10/22 15/8 15/9 15/11 20/5 21/4 24/6 26/16 27/15 33/7 39/20 41/7 42/1 42/4 48/10 51/17 62/20 72/6 78/8 81/18 95/21 97/8 102/4 105/9 110/13 114/4 116/3 130/7 two years [1] 62/20 type [12] 43/13 43/15 43/20 43/22 50/3 50/8 50/22 51/5 51/5 62/13 62/15 62/18 type 3 von Willebrand's [1] 62/15 types [7] 43/19 48/4 48/6 48/7 50/18 72/10 100/19 typical [1] 64/18 typically [1] 50/20	38/19 38/19 38/21 39/9 71/11 77/23 102/3 117/16 119/24 129/13 129/14 UK-wide [2] 38/19 38/19 UKHCDO [27] 7/24 7/25 8/4 19/10 31/19 34/18 35/17 37/5 92/3 98/20 98/21 103/15 103/15 104/18 104/22 104/23 113/1 113/4 116/17 117/6 118/9 118/22 118/22 121/14 122/19 123/10 136/21 ulcer [1] 61/8 ultrasound [1] 84/6 ultrasounds [1] 83/17 un [1] 103/10 un-anonymised [1] 103/10 unable [2] 17/4 86/14 unanimous [1] 108/25 unavailable [1] 40/16 unaware [2] 72/23 73/1 uncertainty [1] 106/25 unclassified [5] 94/6 94/8 94/12 94/18 94/24 uncovered [1] 127/11 under [10] 4/2 18/23 20/9 21/7 24/23 32/15 52/11 54/15 55/9 75/4 undergraduate [1] 2/24 underlying [3] 60/20 94/18 94/23 understand [23] 6/18 10/20 11/14 16/6 16/12 28/12 38/13 40/23 53/10 55/2 56/24 65/19 68/21 76/19 97/20 106/16 107/5 108/2 109/1 127/7 127/9 128/25 132/15 understanding [15] 3/12 27/7 70/17 81/25 82/2 82/15 90/21 93/15 95/22 107/13 108/20 108/21 110/20 110/23 127/23 understands [1] 107/22 understood [3] 3/15 69/1 124/25 undertake [8] 12/20 48/21 61/16 64/6 76/24 80/19 82/20 84/4	undertaken [4] 18/25 63/6 68/7 76/17 undertaking [1] 19/7 undertook [3] 3/17 19/8 57/4 unfolded [1] 56/2 unfortunately [1] 59/23 unit [9] 9/9 9/14 9/19 9/21 10/14 32/17 38/20 78/10 88/12 units [1] 95/25 university [4] 6/2 7/5 58/15 58/17 unless [1] 64/25 unlikely [1] 82/22 unsatisfactory [1] 104/14 until [11] 12/18 19/14 36/13 58/4 72/24 73/2 78/18 101/11 109/3 137/25 138/3 untreated [4] 32/21 33/5 33/6 44/15 unusual [1] 59/10 up [52] 6/1 6/23 6/25 8/12 10/20 11/5 12/6 13/9 13/13 16/18 17/4 19/15 22/12 22/20 23/8 39/13 40/8 43/15 46/1 49/15 53/16 64/20 64/21 64/25 67/4 68/17 69/25 71/5 71/7 71/20 73/23 74/24 76/6 78/18 83/13 83/15 83/19 85/14 92/14 94/20 99/19 101/8 113/13 114/22 116/4 118/12 119/15 120/16 122/1 122/25 131/10 131/22 up-to-date [1] 73/23 update [4] 22/3 22/5 23/14 103/2 uploading [1] 99/14 upon [1] 120/4 uptake [3] 14/19 14/22 14/22 urgent [1] 61/25 us [38] 2/3 12/25 18/4 18/18 19/1 25/25 29/22 33/14 34/7 36/23 37/1 37/8 37/17 37/19 37/21 52/9 53/2 64/2 64/5 67/16 73/13 74/17 77/9 86/19 87/23 93/12 98/22 102/10 102/19 102/21 107/24 108/18 108/23 113/23 130/22 131/6 136/18 137/16 USA [1] 36/10
----------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>U</p> <p>usage [2] 38/5 101/7</p> <p>use [28] 29/25 30/2 31/13 36/18 39/1 39/14 39/17 39/20 39/22 39/23 42/21 43/1 43/1 46/4 50/3 50/12 51/22 52/16 52/16 52/18 67/12 78/13 89/15 98/15 110/12 112/24 113/8 126/25</p> <p>used [19] 13/2 14/24 29/19 38/14 40/8 67/25 68/11 73/7 97/14 98/17 101/10 101/14 101/19 104/9 112/2 114/2 114/5 114/7 133/11</p> <p>useful [4] 19/1 99/21 100/1 100/7</p> <p>using [8] 30/13 42/2 43/8 89/4 91/24 112/3 112/4 119/24</p> <p>usual [1] 116/19</p>	<p>83/21 88/14 89/14 89/20 96/3 96/6 99/21 100/1 100/7 102/10 102/21 106/5 106/13 107/1 107/4 107/20 109/7 113/10 113/14 113/19 118/13 119/9 119/21 124/24 125/6 125/6 126/2 126/12 126/12 127/20 127/22 128/2 128/5 128/20 132/12 132/14 133/15 134/6 134/21 134/24 134/25 135/4 135/5 136/8 136/12 137/4 138/1</p> <p>via [2] 2/17 38/15</p> <p>Vice [1] 8/7</p> <p>Vice-Chair [1] 8/7</p> <p>view [18] 23/15 23/22 31/2 34/21 37/14 39/7 40/14 46/5 46/15 50/1 60/23 90/10 93/2 104/14 108/11 112/10 118/20 136/18</p> <p>views [2] 108/6 117/17</p> <p>Vlla [1] 41/11</p> <p>VIII [60] 32/5 32/6 32/8 32/10 32/23 33/2 33/9 33/12 33/18 33/18 33/21 34/5 34/24 35/1 35/3 39/15 39/16 39/19 40/7 40/7 40/22 40/25 41/1 41/4 42/22 44/8 44/8 44/11 44/14 45/1 45/4 45/5 45/7 45/8 45/12 45/18 45/25 48/13 48/14 49/6 51/2 51/6 51/11 54/1 63/16 67/5 67/13 70/25 89/5 90/1 99/12 100/4 101/6 111/21 111/25 119/18 119/20 132/10 132/11 132/13</p> <p>Vills [1] 39/3</p> <p>viral [3] 2/17 31/5 63/3</p> <p>virally [1] 60/12</p> <p>Virological [1] 68/4</p> <p>virology [1] 66/5</p> <p>virus [23] 63/4 63/19 64/13 74/23 74/25 75/9 75/11 75/16 75/17 75/23 76/6 76/9 83/25 84/14 84/15 84/17 84/18 84/20 116/9 117/3 117/19 117/22 136/15</p> <p>viruses [4] 57/25 63/7 66/19 66/21</p> <p>visit [2] 47/6 130/25</p>	<p>visited [1] 15/18</p> <p>visits [1] 16/2</p> <p>volume [1] 7/16</p> <p>von [15] 8/5 21/15 25/4 32/2 42/23 43/2 43/6 43/9 59/17 62/11 62/13 62/15 62/18 65/14 99/3</p> <p>von Willebrand [2] 8/5 43/6</p> <p>von Willebrand's [12] 21/15 25/4 32/2 42/23 43/2 43/9 59/17 62/11 62/13 62/18 65/14 99/3</p> <p>Voncento [1] 43/1</p> <p>W</p> <p>wait [3] 108/4 108/12 108/18</p> <p>waiting [4] 8/17 10/9 10/10 43/6</p> <p>wailes [60] 2/2 6/2 7/3 7/5 13/10 14/14 14/16 14/17 15/6 16/15 16/18 17/24 27/15 28/21 33/25 34/3 34/3 35/19 38/18 38/23 49/11 53/7 53/9 59/9 76/20 76/22 76/23 76/25 77/1 81/11 84/10 95/20 95/25 96/1 96/13 97/8 99/17 108/1 108/2 108/7 108/10 108/21 108/23 108/25 111/6 115/11 115/13 115/14 116/7 125/10 130/18 130/18 130/24 134/4 135/1 135/7 135/9 135/13 135/18 135/21</p> <p>want [24] 39/24 40/11 44/20 44/20 48/2 49/8 49/20 50/3 50/8 50/13 52/17 52/19 54/6 62/2 90/11 101/6 108/3 127/8 131/16 132/7 132/16 132/25 133/20 135/20</p> <p>wanted [25] 7/23 33/17 37/13 37/17 40/12 41/18 52/22 53/22 66/24 68/13 75/4 77/4 82/23 93/8 98/18 105/18 108/4 108/7 108/12 108/18 108/23 124/15 131/13 134/14 136/10</p> <p>wanting [2] 48/17 59/20</p> <p>wants [3] 48/20 54/4 61/23</p>	<p>ward [1] 4/15</p> <p>was [307]</p> <p>wasn't [24] 5/6 28/4 37/9 55/18 64/21 69/3 72/9 77/15 79/1 79/3 79/21 79/24 79/25 80/4 80/13 81/1 82/2 82/6 88/4 91/25 108/24 111/22 118/17 129/2</p> <p>watching [2] 1/24 137/24</p> <p>way [25] 17/4 46/13 51/22 55/10 72/3 73/25 75/13 79/13 91/9 91/10 94/14 95/19 98/14 103/11 105/16 107/6 108/22 116/19 117/5 122/2 122/13 127/21 130/24 136/14 137/4</p> <p>ways [5] 40/5 51/25 105/19 106/18 122/24</p> <p>wayside [1] 60/2</p> <p>we [324]</p> <p>we'd [1] 64/10</p> <p>We'll [1] 20/21</p> <p>we're [13] 14/15 14/16 16/25 20/13 25/15 42/2 42/19 64/9 80/21 93/20 126/8 134/25 137/7</p> <p>we've [19] 12/3 40/7 47/17 48/11 87/21 89/14 92/22 92/24 94/7 94/12 95/13 95/14 95/17 104/10 104/13 104/14 122/1 128/14 128/16</p> <p>wearing [1] 1/18</p> <p>weather [1] 120/7</p> <p>website [1] 133/12</p> <p>Wednesday [3] 137/10 137/20 137/21</p> <p>week [14] 14/6 14/7 14/9 15/9 15/10 15/11 16/24 42/3 64/21 132/23 137/7 137/9 137/20 137/25</p> <p>weekly [1] 41/7</p> <p>weeks [4] 33/16 41/8 42/4 44/3</p> <p>well [78] 3/25 4/3 5/16 6/22 9/4 10/16 14/1 15/2 15/4 16/4 17/15 24/4 24/12 25/17 28/4 30/12 31/10 36/17 37/14 37/22 38/18 40/18 41/21 42/14 42/17 42/18 42/25 43/24 45/24 49/7 49/20 50/5 50/5 50/16</p>	<p>50/16 50/24 51/24 52/2 52/5 55/24 61/6 61/18 61/19 64/20 71/7 73/6 74/7 81/25 82/21 87/20 90/10 90/16 91/14 100/10 102/16 103/14 104/11 105/21 109/2 110/7 110/10 114/17 116/2 118/22 119/2 121/13 122/14 122/21 123/19 125/6 127/2 128/2 129/5 130/17 131/4 133/9 134/6 136/11</p> <p>well-being [1] 24/4</p> <p>Welsh [12] 13/16 28/17 38/22 43/7 82/4 114/13 115/6 117/7 117/13 117/14 117/25 118/4</p> <p>Welsh Assembly [1] 118/4</p> <p>went [12] 28/17 29/8 29/15 72/25 80/5 81/18 88/5 88/22 91/17 92/5 116/9 127/18</p> <p>were [209]</p> <p>weren't [10] 30/22 34/4 75/13 75/13 77/7 97/9 101/12 118/18 123/16 123/18</p> <p>west [6] 16/15 16/17 17/23 33/24 99/16 130/24</p> <p>what [143]</p> <p>what's [6] 49/13 49/18 58/21 65/25 106/20 128/4</p> <p>whatever [2] 40/10 76/2</p> <p>when [77] 2/25 7/25 8/12 10/20 11/5 12/12 17/5 22/8 23/13 26/8 26/21 28/15 29/7 29/17 29/17 31/10 31/21 34/9 41/16 43/3 43/13 43/20 46/18 48/6 48/25 53/14 56/14 56/16 58/1 58/18 58/20 59/24 60/11 60/17 61/20 62/2 62/22 63/10 65/23 66/3 66/8 66/9 70/6 77/2 77/9 77/16 78/12 80/17 80/22 83/6 84/10 85/10 85/20 86/6 87/14 90/24 91/17 100/21 103/4 103/7 106/1 106/10 106/14 107/11 109/25 110/3 113/4</p>	<p>114/2 114/7 114/12 115/5 120/8 124/10 127/18 131/14 134/25 137/14</p> <p>where [36] 4/15 8/22 10/5 10/6 15/17 23/21 25/20 39/23 49/18 51/1 51/5 58/2 59/16 59/25 62/18 63/5 63/10 86/14 87/16 91/11 91/12 92/4 93/8 93/12 95/4 95/13 96/14 96/16 97/17 102/22 108/14 109/23 119/5 123/17 129/17 130/22</p> <p>whether [29] 3/10 3/12 25/18 30/19 35/7 44/4 47/9 66/24 69/12 83/11 83/19 86/23 88/7 90/12 97/1 97/2 99/7 100/3 104/5 108/7 111/2 111/7 114/24 121/8 122/7 127/14 131/15 132/7 132/16</p> <p>which [63] 1/14 6/5 8/24 9/22 10/15 13/11 13/18 18/1 21/8 24/16 25/21 28/18 33/11 35/7 37/5 41/4 42/3 42/10 44/12 50/8 50/11 50/11 50/25 54/16 58/5 60/22 63/14 64/11 65/2 66/17 67/11 76/4 80/20 81/23 82/5 85/13 87/20 92/23 97/10 97/22 97/24 98/19 99/9 99/10 102/25 103/3 103/23 103/23 105/19 110/5 110/15 112/23 116/7 117/20 118/25 124/10 124/14 129/10 129/13 133/22 136/14 137/1 137/16</p> <p>while [6] 11/18 20/13 38/6 68/20 75/18 92/1</p> <p>whilst [2] 58/16 61/9</p> <p>who [85] 1/19 2/2 6/14 13/1 14/2 14/3 15/1 15/3 21/11 21/23 25/4 27/6 27/11 32/19 32/21 33/3 37/10 37/23 41/19 46/7 46/10 48/11 54/1 55/16 55/20 55/21 55/24 56/9 56/12 57/11 57/23 57/24 58/7 58/13 59/4 59/5 59/17 62/15 64/1</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>W</p> <p>who... [46] 70/20 73/15 75/2 77/5 78/19 79/10 81/14 81/15 81/17 82/12 82/23 84/19 85/21 87/3 87/25 94/8 95/9 99/5 102/8 104/24 107/8 107/17 110/15 113/12 122/5 123/14 124/2 125/12 125/13 125/15 125/16 125/21 126/10 126/21 128/21 129/7 129/9 129/19 129/22 129/22 129/23 131/5 136/4 136/19 137/13 137/24</p> <p>who'd [1] 11/15</p> <p>who's [2] 120/22 121/5</p> <p>whole [10] 11/22 38/21 84/25 99/9 110/13 121/14 123/11 129/12 135/7 137/18</p> <p>whom [1] 133/17</p> <p>whose [3] 11/13 34/3 89/3</p> <p>why [16] 21/19 30/15 36/14 59/2 60/10 61/4 82/9 88/20 97/22 107/25 113/24 113/25 114/25 127/24 129/2 132/25</p> <p>wide [2] 38/19 38/19</p> <p>wife [2] 1/11 54/18</p> <p>will [76] 1/16 1/20 1/22 2/1 2/2 12/12 15/24 16/23 17/1 18/5 21/11 22/2 27/16 35/2 35/6 36/10 36/12 44/5 44/10 46/2 46/22 46/24 47/6 47/6 47/9 47/25 48/4 49/6 49/9 50/4 51/7 53/9 54/13 54/19 57/21 59/11 63/24 64/2 71/11 82/11 84/5 84/8 90/13 99/11 99/11 109/3 109/7 110/25 116/19 117/10 119/12 121/3 121/4 121/6 121/7 121/7 121/10 121/14 122/17 126/8 126/11 127/12 130/24 131/25 132/4 132/6 132/14 133/10 133/15 137/12 137/14 137/15 137/16 137/18 137/19 137/21</p> <p>will advise [1] 64/2</p> <p>Willebrand [2] 8/5 43/6</p>	<p>Willebrand's [13] 21/15 25/4 32/2 42/23 43/2 43/9 59/17 62/11 62/13 62/15 62/18 65/14 99/3</p> <p>WILLIAM [2] 2/7 139/2</p> <p>Winter [2] 73/15 73/25</p> <p>wish [2] 45/11 92/10</p> <p>with [299]</p> <p>with HIV [1] 26/12</p> <p>within [16] 6/9 8/18 10/16 12/23 21/10 23/2 33/15 43/19 75/7 76/20 76/22 98/23 100/16 104/23 118/24 119/17</p> <p>without [4] 70/9 103/12 126/18 135/17</p> <p>WITN4029001 [1] 30/4</p> <p>WITN4029008 [1] 67/2</p> <p>WITN4029013 [1] 34/8</p> <p>witness [12] 2/12 6/18 9/24 24/9 30/3 40/23 67/16 72/18 98/20 102/25 105/12 109/22</p> <p>witnesses [1] 54/14</p> <p>woman [1] 46/24</p> <p>women [8] 46/7 95/9 95/14 95/15 95/24 96/5 96/7 96/11</p> <p>won't [1] 71/4</p> <p>wonder [2] 20/24 54/8</p> <p>word [5] 36/18 97/14 97/20 98/2 98/8</p> <p>wording [1] 98/8</p> <p>words [2] 112/13 134/2</p> <p>work [17] 4/25 7/13 7/16 7/16 7/17 9/22 11/14 14/3 39/17 39/18 52/1 89/11 95/6 95/8 107/17 134/13 135/17</p> <p>worked [10] 10/25 10/25 11/1 23/21 41/21 67/2 73/9 77/12 135/4 136/15</p> <p>worker [2] 11/13 20/5</p> <p>workers [2] 11/20 125/15</p> <p>working [17] 4/20 6/9 8/3 8/4 8/5 8/5 12/1 55/16 55/19 56/11 59/19 74/14 103/16 117/19 120/24 120/24 135/20</p> <p>works [2] 13/1 133/8</p> <p>world [4] 116/21 116/25 118/11 135/10</p> <p>worries [1] 120/9</p> <p>worth [2] 35/24 39/6</p>	<p>would [209]</p> <p>wouldn't [8] 36/18 40/12 68/22 68/25 82/1 93/5 93/6 104/19</p> <p>writes [1] 116/23</p> <p>written [14] 23/4 46/17 46/20 65/7 65/17 65/18 69/19 94/21 95/2 95/15 96/10 104/10 113/9 113/16</p> <p>wrong [5] 25/6 70/14 96/18 96/20 107/20</p> <p>wrote [3] 12/9 94/5 105/11</p> <p>X</p> <p>XI [2] 21/16 65/14</p> <p>Y</p> <p>year [13] 3/2 5/18 5/21 19/14 35/12 37/18 41/2 62/8 62/19 78/11 95/21 97/8 105/6</p> <p>years [37] 5/16 5/17 11/19 12/2 12/23 16/20 18/20 23/8 23/16 23/17 24/6 27/20 30/17 32/19 33/7 40/8 48/10 58/23 59/13 60/19 62/20 62/21 65/12 78/8 87/5 87/8 94/7 95/7 100/19 102/5 109/17 111/12 122/1 132/25 134/5 134/22 136/23</p> <p>yellow [4] 122/20 122/23 133/8 133/11</p> <p>yes [104] 1/10 1/12 1/12 3/15 3/16 3/20 4/8 5/25 6/3 6/7 6/21 6/25 7/9 7/22 8/2 8/9 8/16 10/1 10/4 10/6 10/6 10/23 11/11 11/17 11/22 12/17 13/13 13/15 15/7 15/14 15/19 18/13 18/24 20/7 20/19 22/6 23/19 24/7 24/7 24/14 24/18 25/2 25/12 25/24 26/6 26/6 26/24 27/2 27/10 29/23 33/2 33/15 40/24 41/12 41/16 42/25 46/20 47/15 49/3 49/9 53/4 54/10 54/25 55/7 56/23 56/23 57/11 57/17 58/1 58/13 64/16 66/12 67/20 68/9 68/23 69/11 73/18 76/8 76/18 78/4</p>	<p>78/24 79/11 79/15 80/19 81/8 81/9 86/13 86/16 87/13 89/2 89/5 98/24 103/14 109/13 109/24 112/18 116/2 122/4 122/10 123/24 123/24 124/18 137/12 137/23</p> <p>yesterday [1] 1/24</p> <p>yet [1] 36/1</p> <p>you [414]</p> <p>you'd [1] 113/3</p> <p>you'll [2] 126/16 132/12</p> <p>you're [11] 1/8 1/9 2/1 9/19 18/10 43/14 47/8 52/9 53/14 107/11 129/8</p> <p>you've [20] 18/18 20/4 20/10 20/25 27/23 52/1 52/9 63/4 72/2 72/20 74/1 81/2 83/2 86/20 87/23 91/3 114/15 122/22 123/23 137/1</p> <p>young [10] 23/23 24/2 43/25 45/2 45/3 45/16 45/18 61/21 124/2 128/20</p> <p>younger [2] 61/19 125/18</p> <p>your [115] 1/11 2/12 2/12 2/13 3/3 3/21 4/12 4/21 6/1 6/9 6/18 7/11 7/11 7/12 7/24 7/24 8/12 9/24 10/20 10/21 12/15 16/13 18/18 21/5 22/2 24/5 24/5 24/8 24/14 24/21 25/8 25/25 27/22 27/23 29/17 30/3 31/8 31/21 31/22 32/25 33/10 33/13 34/13 35/8 38/3 38/13 40/18 40/20 40/23 46/18 48/8 49/13 49/18 54/18 55/2 56/18 56/24 57/1 57/8 57/14 60/8 61/15 62/24 64/9 65/19 67/5 67/16 71/3 72/17 72/18 73/12 74/2 76/5 76/13 76/14 78/19 78/23 79/8 81/2 81/25 83/3 83/6 86/18 86/19 86/21 86/21 86/24 87/10 87/23 90/2 92/24 93/2 93/12 98/20 98/21 100/21 102/25 105/12 105/20 106/10 106/13 109/22 110/5 112/10 117/4 117/5 123/22 124/15</p>	<p>124/15 126/17 129/5 136/11 136/13 136/19 137/3</p> <p>yourself [4] 28/1 28/8 57/16 85/10</p> <p>YouTube [1] 1/25</p> <p>Z</p> <p>Zoom [2] 1/24 121/6</p>	
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--