Digital & Health Intelligence Committee

08 October 2020, 09:30 to 12:30
Woodland House Via Skype

Agenda

1. Standing Items

1.1. Welcome & Introductions

Eileen Brandreth

1.2. Apologies for Absence

Eileen Brandreth

1.3. Declarations of Interest

Eileen Brandreth

1.4. Minutes of the Committee Meeting held on 9th July 2020

Eileen Brandreth

- 1.4_Draft July Minutes_DHIC0720.pdf (5 pages)

1.5. Action Log following the Committee Meeting held on 9th July 2020

Eileen Brandreth

- 1.5_Action Log_DHIC0620.pdf (2 pages)

1.6. Chair's Action taken since the Committee Meeting held on 9th July 2020

Eileen Brandreth

2. Items for Approval / Ratification

2.1. Digital Strategy – Final Version

David Thomas

- 2.1 Digital Strategy Final Version Oct 2020.pdf (2 pages)
- 2.1 Digital Strategy Final Version Appendix 1 Oct 2020.pdf (1 pages)
- 2.1 Digital Strategy Final Version Appendix 2 Oct 2020.pdf (36 pages)

2.2. Digital Mobile Strategy – Final Version

David Thomas

- 2.2 Digital Mobile Strategy Oct 2020.pdf (5 pages)
- 2.2 Digital Mobile Strategy Oct 2020 Appendix 1.pdf (1 pages)
- 2.2 Digital Mobile Strategy Oct 2020 Appendix 2.pdf (3 pages)
- 2.2 Digital Mobile Strategy Appendix 3 Oct 2020.pdf (3 pages)

2.3. Self-assessment of Committee Effectiveness & Forward Action Plan

Nicola Foreman

- 2.3 Self Assessment of Committee Effectiveness.pdf (2 pages)
- 2.3 Appendix 1 Committee Effectiveness Results.pdf (9 pages)
- 2.3 Appendix 2 Committee Effectiveness Action Plan.pdf (2 pages)

2.4. GP Pilot Action Plan

David Thomas

2.4 GP Pilot Action Plan.pdf (2 pages)

3. Items for Review and Assurance

3.1. Digital Transformation Progress Report (Digital Dashboard)

David Thomas

3.1 Digital Transformation Progress Report Oct 2020.pdf (7 pages)

3.2. Digital Strategy - Plan on a Page

David Thomas

3.2 Digital Strategy Plan on a Page Oct 2020.pdf (2 pages)

3.2 Digital Strategy Plan on a Page Oct 2020.pdf (11 pages)

3.3. IG Data & Compliance (SIs, Data Protection, GDPR, FOI, SARs, Staffing & Mandatory Training)

James Webb

3.3 IG compliance - Oct 2020.pdf (5 pages)

3.4. Clinical Coding Performance Data

James Webb

3.4 Clinical Coding Performance Paper Oct 2020.pdf (4 pages)

3.5. Joint IMT & IG Corporate Risk Register

David Thomas / James Webb

3.5 Joint IMT Risk Register Oct 2020.pdf (2 pages)

3.5 Joint IMT Risk Register Oct 2020.docx.pdf (2 pages)

3.6. IMT Audit Assurance Tracker

David Thomas

3.6 IMT Audit Assurance - Action Plan Oct 2020 -.pdf (16 pages)

3.7. IG Audit Assurance Tracker

James Webb

3.7 Information Governance Audit Tracker.pdf (2 pages)

3.7 Appendix 1 Internal Audit Tracker - Sept 2020 Final.pdf (1 pages)

3.7 Appendix 2 WAO Sept 2020 (006) DT 2 (003).pdf (1 pages)

3.8. ICO Recommendations and Action Plan

James Webb

3.8 ICO Recommendations and Action Plan Oct 2020.pdf (2 pages)

3.8 Appendix 1.pdf (3 pages)

3.8 Appendix 2 ICO Action plan.pdf (3 pages)

4. Items for Noting and Information

4.1. IMTP Work Plan Exception Report

David Thomas

4.1 IMT WorkPlan Exception Report Oct2020.pdf (4 pages)

4.2. Schedule of Control Documents (Policies & Procedures)

David Thomas

4.2 Schedule of Control Documents Oct 2020.pdf (3 pages)

4.3. Minutes: i. Capital Management Group 17/08/20

David Thomas

4.3 i CMG Minutes of the meeting held August 2020.pdf (8 pages)

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

Eileen Brandreth

6. Review of the Meeting

Eileen Brandreth

7. Date & Time of next Meeting:Thursday 11th February 2021 09:30am – 12:30pm

Eileen Brandreth

Unconfirmed Minutes of the Special Digital Health & Intelligence Committee
Thursday 9th July 2020 9:30am – 12:00pm
Via Skype

Chair:		
Eileen Brandreth	EB	Committee Chair / Independent Member - ICT
Members:		
Michael Imperato	MI	Committee Vice Chair / UHB Interim Vice Chair
In Attendance:		
Nicola Foreman	NF	Director of Corporate Governance
Charles Janczewski	CJ	Interim UHB Chair
Christopher Lewis	CL	Deputy Finance Director
Angela Parratt	AP	Director of Digital Transformation – IM&T
Len Richards	LR	Chief Executive Officer
David Thomas	DT	Director of Digital & Health Intelligence
Allan Wardhaugh	AW	Chief Clinical Information Officer
James Webb	JW	Information Governance Manager
Secretariat:		
Laura Tolley	LT	Corporate Governance Officer
Apologies:		
Gary Baxter	GB	Independent Member
Jonathon Gray	JG	Director of Transformation & Implementation
Stuart Walker	SW	Executive Medical Director

DHIC 20/07/001	**Welcome & Introductions** The Committee Chair (CC) welcomed everyone to the public meeting.	**Action**
DHIC 20/07/002	**Quorum** The CC confirmed the meeting was quorate.	
DHIC 20/07/003	**Apologies for Absence** Apologies for absence were noted.	
DHIC 20/07/004	**Declarations of Interest** There were no declarations of interest.	
DHIC 20/07/005	**Minutes of the Committee Meeting held on 4th February 2020** The Committee reviewed the minutes of the meeting held on 4th February 2020. **Resolved – that:**	

	(a) The Committee approved the minutes of the meeting held on 4th February 2020 as a true and accurate record.	
DHIC 20/07/006	**COVID-19 Response** The Director of Digital & Health Intelligence (DDHI) introduced Angela Parratt, newly appointed Director of Digital Transformation (DDT) to the Committee. The DDHI explained the following: • 56/62 practices had gone live and were actively using video consulting; • In secondary care, 32 services are live, 15 are in design and a further 37 had expressed interest; • Attend Anywhere had exceeded 1000 consultations virtually; • Staff resource on the internet, patient facing waiting room and patient communication was being implemented across the UHB; • Zoom was used on an adhoq basis, there were concerns using this, therefore it was only used in extra ordinary circumstances; • Cystic Fibrosis team had used zoom to deliver virtual leisure centre exercises with positive feedback received; • Consultant Connect went live on 1st June 2020, and a further roll out was underway to 8 specialities who had expressed interest in the service, this was due to be completed in the coming weeks; • Hospisfy Platform was used on an adhoq basis; • Microsoft Teams had been rolled out across the UHB, first phase was 250 staff, it would be rolled out to everyone going forward, Teams would require complete integration with outlook therefore it would take time, however once Office 365 was installed by the end of September 2020, the UHB would be able to convert fully to Microsoft Teams; • Office 365 Implementation Board would be chaired by Allan Wardaugh – Chief Clinical Information Officer (CCIO); • Clinical data was being captured remotely via a locally built COM II system; • IT department had built 1400 laptops, 900 maraki boxes and set up 800 blackberry work devices to enable over 2000 employees to work remotely; • WiFi was fully funded by the UHB, instead of the Health Charity; • The IT team supported Dragons Heart Hospital to be fully connected within 2 weeks, the team were able to replicate a smaller version of UHW at the site, therefore all staff had the same access regardless which location they were based; • In relation to lessons learned, the team had created a culture of 'can do' and 'can do at pace' and the challenge was to ensure this would be continually supported. The DDT advised all hospital sites were configured at the same time as everything above, and as a new arrival to the UHB she was very impressed by the commitment and dedication of the digital team.	**DT**

	The CC commended the team on the significant achievement and expressed concern that the team felt appreciated and their achievement was recognised enough. The CC also asked the DDHI to ensure that staff wellbeing was monitored over the coming months. The UHB Chair echoed the comments made by the CC and recognised the work that the digital team had undertaken and achieved over the past few months. The UHB Chair expressed thanks to the whole digital team for the first class support provided across the UHB. The Chief Executive Officer (CEO) commented that the UHB would not have responded to COVID-19 as well as it had without the digital department. The CEO added there was significant work to be carried out across the UHB in relation to digital, therefore clarity would be required on what could be achieved at the new pace of delivery. A key element was Microsoft Teams, this initially had a 3 year delivery programme however it had been delivered within 3 months. The CEO added there had been a positive culture change towards digital across the UHB. The CC confirmed a letter of thanks would be sent out on behalf of the Committee, countersigned by the UHB Chair to the digital team. **Resolved – that:** (a) the Committee noted the COVID-19 Response and that the CC would write to convey recognition and thanks to the digital team.	**EB**
DHIC 20/07/007	**Digital Strategy – Final Version** The DDHI and CCIO introduced the strategy and confirmed the following: • Strategy had been shared with HSMB and was well received; • Strategy would continue to change and developed as technology adapted; • The team had identified objectives with the knowledge these would change over time; • UHB recognised it had not delivered elements of Shaping our Future Wellbeing and Digital was a key enabler of this; • Infrastructure review had been undertaken on an All Wales level and outputs identified all Health Board need to invest in this area; • DDHI lead the infrastructure review during COVID-19 and work was commended by Welsh Government, this was a very important Cardiff & Vale representation; • Strategy was based on open architecture around an open platform; • Three channels identified – Patient, Clinician and Analyst Channel; • Digital Management Board had been set up where all key decisions, investment and direction of travel would be agreed; • Information Governance group developed to address and overcome any Information Governance issues; • Crucial element would be to have patient and staff involvement at design phase.	

	The CEO explained the strategy demonstrated how digital could drive Shaping our Future Wellbeing. The CCIO added that in conversations held with other Health Boards, all Health Boards had the same desire to do things in the National interest but in an individual way to suit the organisations, therefore the UHB were pushing and trying to work collaboratively with Welsh Government, however there may be some difficulty experiences as Welsh Government want systems on an All Wales Level. The CEO explained the UHB needed to endorse the approach taken by the digital team and remain faithful to the strategy that is outlined. The UHB needed to be prepared to take risks and support the digital team as they moved forward. The CC agreed with the CEO and asked how the UHB were engaged with local authorities and communities that the UHB needed to share data with? In response, the CCIO confirmed engagement was at the National Resource Project, the DDHI added that the Digital Programme Board would include Local Authority representation. The CC asked if a change was seen within NWIS. In response, the DDHI explained NWIS was moving to become a special health authority, therefore would have a Board of Directors to ensure they are accountable, this was a positive step forward where the UHB would have an opportunity to shape discussions. The CC queried in relation to Governance where the Digital Management Board would report to? In response, the DDHI confirmed the Digital Management Board Terms of Reference explained the Board would report into Management Executive, HSMB and the Digital & Health Intelligence Committee. The CC advised the Committee that she would like to ensure Board had more direct conversations relating digital and recognise the significant level of investment needed in this area. In response, the CEO informed the Committee there had been changes at Executive level and going forward both DDHI and CCIO would report to the CEO, in addition to being invited to Board meetings as participants to ensure digital had more input at Board level. The CC commented this was very positive progress and welcomed the changes. **Resolved – that:** (a) the Committee noted the Digital Strategy – Update on Progress. (b) the Committee recommended the Digital Strategy to the Board for approval.	
DHIC 20/07/008 Khan,Raj 10/07/2020 16:03:24	**Any Other Business** The CEO explained a year ago the UHB carried out work with the Board on the UHB risk appetite which outlined where the Board felt the UHB were as an organisation and what the direction of travel would look like. The CEO added he would like this to be re-circulated to serve as a reminder to ensure	

	the UHB moved up the scale from a cautious organisation to a seeking organisation. The Director of Corporate Governance (DCG) would circulate the risk appetite to Committee members. **Resolved – that:** (a) the Committee noted the Any Other Business raised.	**NF**
DHIC 20/07/009	**Items to bring to the attention of the Board / Committees** It was agreed the following item would be taken to the Board for approval on 30th July 2020: (a) Digital Strategy **Resolved – that:** (a) the Committee noted the items recommended to the Board for approval.	**LT**
DHIC 20/07/010	**Review of the Meeting** The CC conducted a review of the meeting. All present confirmed the meeting had run very smoothly and good, positive discussions had been held.	
DHIC 20/07/011	**Date & Time of Next Meeting** Thursday 8th October 9:30am – 12:30pm Woodland House / Via Skype	

Action Log
Following the Digital Health & Intelligence Committee
Held on 9th July 2020

Minute Ref	Subject	Agreed Action	Lead	Date	Status
Complete Progress					
DHIC 20/07/006	COVID-19 Response	Committee & UHB Chair to write to Digital Team to convey thanks for all their hard work.	Eileen Brandreth	**08/10/2020**	**Complete**
DHIC 20/07/008	Risk Appetite	Director of Corporate Governance to circulate the risk appetite to Committee members.	Nicola Foreman	**08/10/2020**	**Complete**
Actions in Progress					
ITGSC 18/028 IGSC 17/031	GP Pilot	Three month pilot report to be submitted to the next meeting	David Thomas	**08/10/2020**	On agenda for October Item 2.4
DHIC 20/02/008	Digital Strategy	Final version of Digital Strategy to be brought to committee	David Thomas	**08/10/2020**	On agenda for October Item 2.1
DHIC 20/02/008	Digital Strategy – Informatics for Plan on a Page	DT to discuss with Exec Dir of Planning re Informatics to create a 'plan on a page' for the Digital Strategy	David Thomas	**08/10/2020**	On agenda for October Item 3.2
DHIC 20/02/009	Data Repository Governance	A verbal update regarding the IG Promise be brought to the June meeting	James Webb	**08/10/2020**	A verbal update be provided at the October meeting
DHIC 20/02/010	Digital Transformation Progress Report	Dashboard style report to be provided at the next meeting	David Thomas	**08/10/2020**	On agenda for October Item 3.1

Minute Ref	Subject	Agreed Action	Lead	Date	Status
DHIC 20/02/016	Digital Mobile Strategy	Final Strategy be brought to the June meeting	David Thomas	**08/10/2020**	On agenda for October Item 2.2
DHIC 20/02/17	Information Governance Policy	Information Governance Manager to undertake a local EHIA on the policy for those areas that deviate from the All Wales policies.	James Webb	**08/10/2020**	Postponed to February meeting
Actions referred to the Board / Committees of the Board					
DHIC 20/02/018	Committee Annual Report 2019-20	The Committee recommended approval of the Committee Annual Report to the Board	Nicola Foreman	26th March 2020	**Complete:** Committee Annual Report approved by Board 26/03/2020
DHIC 20/02/019	Committee Work Plan 2020-21	The Committee recommended approval of the Committee Work Plan to the Board	Nicola Foreman	26th March 2020	**Complete:** Committee Work Plan approved by Board 26/03/2020
DHIC 20/02/020	Committee Terms of Reference 2020-21	The Committee recommended approval of the Committee Terms of Reference to the Board	Nicola Foreman	26th March 2020	**Complete:** Committee Terms of Reference approved by Board 26/03/2020

Report Title:	**Digital Strategy – Final Version**								
Meeting:	**Digital & Health Intelligence Committee**						**Meeting Date:**	**8th October 2020**	
Status:	**For Discussion**		**For Assurance**		**For Approval**	**x**	**For Information**		
Lead Executive:	**Director of Digital & Health Intelligence**								
Report Author (Title):	**Director of Digital & Health Intelligence**								

Background and current situation:

The creation and development of Cardiff and Vale's Digital Strategy 2020-2025 sets out the direction of travel and is a key enabler of the UHB's service transformation plans over the next 5 years. The Digital Strategy was presented to the Committee on 9th July 2020 where it was ratified and recommended for UHB Board approval.

The Digital Strategy was subsequently approved by the UHB Board at its meeting on 30th July 2020.

The final version of the Digital Strategy has been updated to reflect the governance arrangements being put in place as the focus moves from development to delivery. An additional section has been inserted (referenced at Appendix 1) which sets out the governance system adopted to oversee and manage the work programmes, ensuring that these remain clinically-led.

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

Delivery of the Digital Strategy will require a detailed roadmap addressing the key themes and wider organizational implications, committing the UHB to a direction of travel informed by clinical services and the UHB's own future plans. Delivery of the plans will require investment decisions to be made based on business cases that will describe the benefits to be derived from their implementation.

The Digital Strategy will inevitably evolve and change as local and national initiatives become clearer and are implemented.

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

The Strategy's success will be dependent on adequate investment plans as well as an appetite to deliver transformed services, which will require cutural changes to the ways of working.

Recommendation:

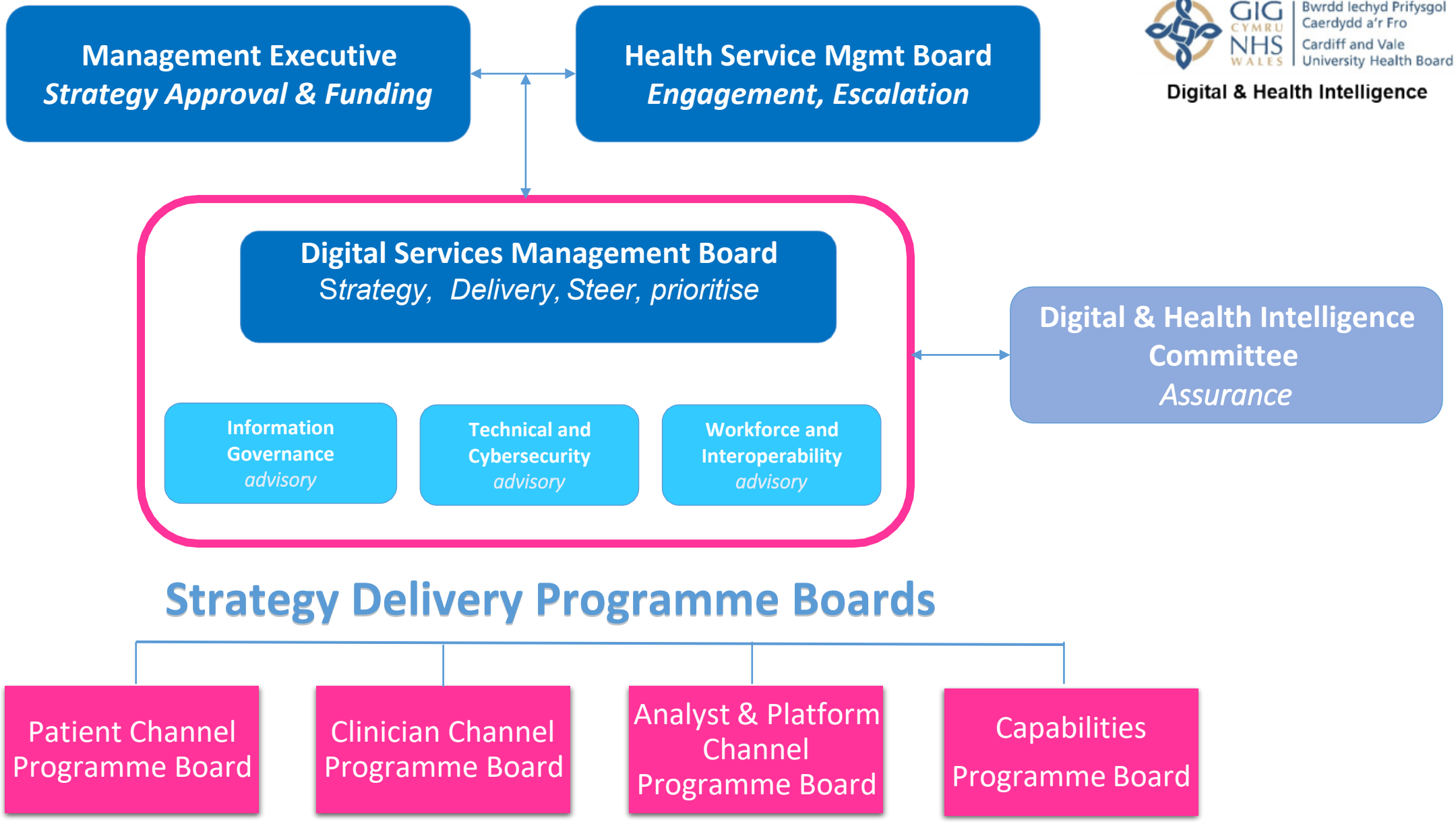
The Committee is asked to:

AGREE the final version of the Digital Strategy for the UHB for 2020-2025.

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	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	X	Long term		Integration		Collaboration		Involvement	

Equality and Health Impact Assessment Completed:	Not Applicable



GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board
Digital & Health Intelligence

Khan,Raj
10/07/2020 16:03:24

Delivering Digital

Building a learning health and care system
A Five Year Strategy

Cardiff & Vale University Health Board

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board

Digital Strategy for Cardiff & Vale UHB

- Section One — Overview
- Section Two — Achieving the Vision
  - 2.1 — Achieving the Vision: Stuff
  - 2.2 — Achieving the Vision: Staff
  - 2.3 — Achieving the Vision: Adaptive Change
- Section Three — Delivery

Overview

Our vision,

Our Principles

Introduction

This digital strategy is being produced to provide a clear roadmap for how digital technology will enable the transformation of clinical services described by the Cardiff & Vale University Health Board overarching strategy, ‘Shaping Our Future Well-being’.

The ambition of the NHS in Wales has been set out in the Welsh government document a healthier Wales published in 2018, declaring the ambition for an integrated health and social care system which enables seamless care and the ability to promote health and well-being as close to home as possible. The document very clearly sets out the need for a modern digital infrastructure to enable this transformational change.

The strategy has been written after engagement with staff across the organisation, taking particular note of the attendees of the clinical information management and technology group, the clinical boards, the executive board and information available to us from patient feedback.
The strategy sets out a significant step change in the approach that Cardiff and Vale University health board will take towards a digital future for healthcare services.

Digital services should not be regarded as an end in themselves. The Parliamentary Review into Health and Social Care in Wales, informed by extensive public and service engagement, called for a transformation in the way we deliver services, and this has been accepted by the Welsh Government in the ‘A Healthier Wales’ strategy document. Both recognize that Digital services are a key enabler to transforming the way health and Care services are delivered in Wales, and in enabling patients to have greater involvement in managing their health and well-being.

CTRL-ALT-DEL

Digital as an enabler, not a blocker

Khan Raj
10/07/2020 16:03:24

Time to reset – Local driver

A staff engagement event (Amplify) in the summer of 2019 to review progress of Shaping Our Future Well-being at its halfway point of five years. A clear message at this event is that many people appreciated the great potential of digital technology to transform our services, but those same people felt that inability to deliver the technology itself and become a significant block to progress.
A similar picture had emerged nationally, and in 2018 the Welsh audit office followed by the public accounts committee delivered to hard-hitting and critical reports into the failure of the health system in Wales to deliver at scale or that piece many of the elements set out in the national digital strategy, informed health and care.

Time to reset – National driver

In 2019 following those national reports, the Welsh government accepted the recommendations of an informatics architecture review, and also announced significant changes to the governance arrangements for the NHS Wales Informatics Service, and the relationship between and the Health Boards and Trusts responsible for delivering services. Importantly, Welsh Government has made available significant increase in funding levels specifically directed towards transformational change, with digital technology as its enabler.

The strategy described here is in line with the architecture review and maintains and updates the direction of travel set out in informed health care.

Our vision: A Learning Health and Care System

High Level Aims

- Digital First for patients and carers
- Digital First for staff.
- Seamless information sharing across professional and organisational boundaries.

Principles

- Co-production through user-centred design
- Digital as the enabler, not digital as a goal in itself
- Iterative, agile design
- Innovation aligned to startegy
- Democratise data, democratise knowledge

We are all used to using digital services in many areas of our life – banking, shopping, booking a table at a restaurant, leaving feedback about holiday accommodation etc. Health seems to be lagging compared to all other areas. This is a global phenomenon, and not unique to Wales. Health care is acknowledged by information technology experts to be especially complex, with information having to be shared over a large number of organisational boundaries, and tracking many different types of user-experiences through time. And yet it is possible to deliver and track those services digitally. The Baltic country of Estonia adopted a 'digital first' philosophy for its public services, including health, several years ago, and is held up as an international example of what can be achieved.

Closer to home, the UK Government Digital Services has revolutionised the way in which we can now use digital solutions to perform many functions which required extensive paperwork and trips to the post office or other government buildings – renewing a driving license or passport, completing a tax return or applying for state benefits for example.

We set out to adopt a similar 'digital first' philosophy for Cardiff and Vale University Health Board, enabling users and staff to use digital technology to access services.

A Learning Health and Care System

By collecting timely, accurate data, we will understand how our system works. We will be able to follow patients through care pathways, learning how we can make them more efficient, and ensuring their journeys are safe. The ability to collect and record patient outcomes means that we can compare ourselves to other organisations to ensure we are providing good quality outcomes.
By collecting patient reported outcomes we will see what works, and what doesn't work. This enables us to put Value Based Healthcare into practice.

D2K	K2P	P2D
•By analysing the data we collect it turns into information and knowledge. We can only change and improve our system if we understand it.	•We must then use the understanding we gain to inform , improve and transform practice. This is the most important step, and the hardest to achieve.	•To collect our data, we will need to enable clinicians and patients to record their activities digitally without interfering with the processes of care. Data must be collected and used in 'real-time' to maximise its usefulness in operational as well as planning services

In 5 years

Patients will have much more control over how and when they access services, and will be able to access more closer to home

Patients

- Patients will access their own health and care records, reports, and results.
- They will be able to see who else has accessed their information. They will be able to view appointments and re-schedule them via digital channels. They will be able to communicate securely with clinicians providing their care. They will have access to supporting health and care information designed tailored for their needs. They will have the power to share their information with anyone they wish to. They will be able to upload information from wearable devices, or care devices which are part of the 'Internet of Things'.

Clinicians

- Clinicians will access information about individual patients
- They will be able to communicate securely with other members of their clinical team, and in multi-disciplinary teams. They will be able to communicate securely with individual patients and will in many cases be supporting patient care in 'virtual' clinics using video communication technology familiar in other walks of life. securely and reliably via digital channels, which will include their own devices.

Local/National Data Resource

- The data collected will be used to build the foundation for a Learning Health and Care System
- Timely, high quality data on patient outcomes is used to enable the service to understand what works well, and what needs to be improved. Teams of trained data analysts will work closely with clinicians and service planners to derive knowledge from data. The focus will have moved further towards outcomes rather than the more traditional process measures.

Our promise

- Patients will be able to choose which information to share, and which they do not wish to share.
- Information will be visible across Wales, and across previous boundaries between primary and secondary care, health and social care, and public and third sector. Appropriate safeguards will ensure personal identifiable data is not shared where it should not be, or where patients have requested it should not be, but the default expectation will be that information will be shared to enable safe continuity of care seamlessly across the system.

Guiding Principles

A system built on data, delivered with care

Persistence and re-use of data

- Whenever digital information is collected, it will be stored in a form that enables it to be re-used by other appropriate applications. For example, if a patient has had an allergy recorded in a hospital clinic, that information will then be updated and re-used by another application used by a pharmacist, GP or other care provider. This will greatly enhance efficiency and safety.

Co-production through user-centered design

- The introduction of a digital process requires and understanding of what it means to the service users – both patients and clinicians. When introducing new digital solutions, patients and clinicians will therefore be involved in deciding what it should look like, where it fits in to their view of the service, and what benefits it might bring.

Digital as the enabler, not digital as a goal in itself

- Simply digitising a process seldom brings any benefits. It should instead provide an opportunity to review and change the care process, which will have been established around paper-based processes.

Iterative, agile design

- It is tempting to try and do everything at once, and to sponsor large-scale centrally controlled projects to achieve this. The so-called 'waterfall' approach does not generally work in digital health care. By the time the required governance and procurement cycles have been worked through, the digital landscape has often changed, and the solution acquired (and committed to) has been superseded. Instead, it is better to break projects down into smaller chunks using small, focused teams working in 'sprints' to achieve digital solutions which will be 'good enough' (although safe) rather than perfect initially, but which will then be changed in response to user-feedback in an iterative manner.

Innovation aligned to strategy

- CAV will continue to foster and encourage innovation, but will ensure that it is aligned with the digital strategy, and that any digital elements of innovation projects fit in with the digital architecture, and are capable of being scaled-up if they prove successful.

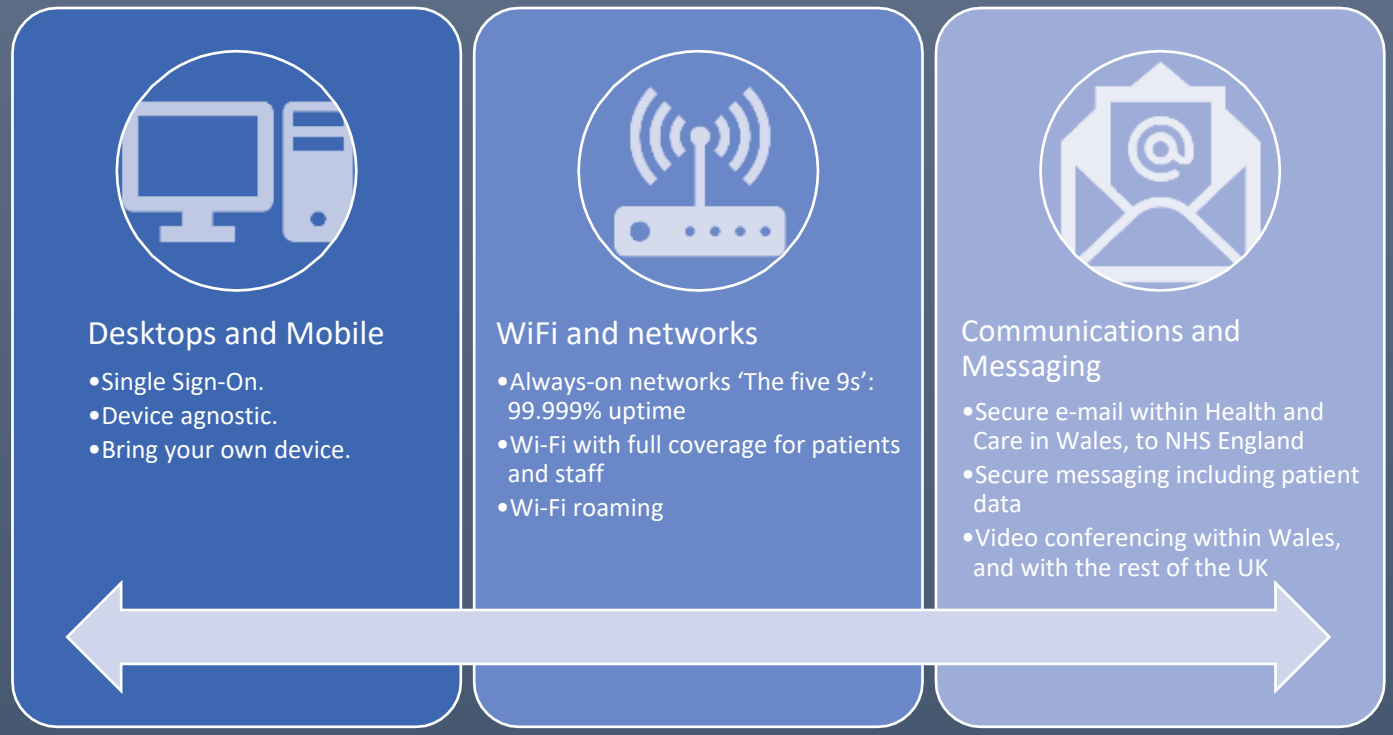
Democratise data, democratize knowledge

- The data collected by the organisation will produce large pools of 'big data' which is the foundation for the learning health system. With appropriate safeguards, this data will be made available to clinicians, managers and analysts across the organization. There are myriad ways of using, visualizing and interpreting data, and even in 5 years we will still only be beginning to understand how to do this. We need therefore to permit multiple stakeholders to innovate in making use of this data and turning it into knowledge. We will not constrain ourselves by assuming there is only one way of interpreting data – there are many mays to the truth!

Achieving the Vision

Stuff, Staff, Adaptive Change

Infrastructure



Without the basics, nothing else will be possible.

Before going further in this document, the importance of adequate infrastructure has to be highlighted. Without up to date devices, networks and wi-fi, any attempts to digitise the future will fail. We operate, and will always operate, in a resource limited environment. In those circumstances it is often tempting to cut costs in the less visible foundations of our services, and this has included technical equipment, associated staff and cybersecurity. This was recognised in the Welsh Audit Office review of Health Informatics in organisations across Wales in 2018. We recognise that failing to invest in and maintain infrastructure is ultimately counter-productive. It weakens the foundations of our digital system, and without these foundations no sustainable developments can take place. We will have to accept that much of the initial investment in our digital future will be used to address the under-investment of the past. Once that balance is restored, it can't be allowed to slip again.

Cybersecurity

Security Information and Event Management (SIEM)	- A software solution that aggregates and analyses activity from many different resources across our entire IT infrastructure
Nessus	- A remote security scanning tool
National Cyber Security Centre	- Access to CAV operating systems to monitor and provide support

Information Governance

This section provides a summary of the approach we wish to take to information governance.

Collecting health and care data on patients and service users requires then to trust our organisation to look after their data carefully, ensuring that only those who need to see the data access it, and that we safeguard it against inappropriate access or inappropriate sharing.

Legislation requiring us to do this in terms of common law duty of confidentiality and the general data protection regulation as well as the computer misuse act as an important safeguard for the public's trust. If we preach these rules we lose the trust of the public, and we will therefore not be able to use the information they share with us to benefit then and the system as a whole.

It is also important that data provided to us by clinicians is shared appropriately. Most patients think that we readily share information between clinicians, teams and other carers involved in providing services, and are often surprised if the discover this is not the case. In the past there has been a tendency to take a very restrictive approach when interpreting data protection legislation.

We need to take note of the general data protection regulation intention which is to enable information to be shared much more easily when it is appropriate to do so, but to give patients and carers the ability to control this without interfering with the processes of care. We are seeking to strengthen our information governance processes, and to ensure that important organisation level decisions about information sharing are taken in a proportionately taking into account both the clinical risks and their information governance risks, and involving legal and patient informed processes.

Digital Inclusion

Digital Inclusion is a social determinant of health

Like other inequalities, this means we need to ensure we take steps to address this imbalance so everyone in our community can take advantage of the digital future, and nobody is left disadvantaged
We will adopt the recommendations of the Gann report: 'Digital Inclusion in Health and Care in Wales'.

The Inverse Care Law applies to digital inclusion as it does to other aspects of healthcare. Sections of the population most in need of improved access to health care are also those less likely to be 'digitally included'.

85% of people in Wales use the internet – that means 15% do not.

Mainstream Digital Inclusion	Digital inclusion needs to move from the margins to the mainstream. The Gann report describes how local authorities have been more effective in digital inclusion than health care organisations. We will work with local authority partners to develop a more detailed and a more robust strategic approach to digital inclusion.
Use levers and Enablers	We will ensure that Wi-Fi is available freely across our health and care settings for patients and carers to use. We will invest in the Digital health literacy of our health and care staff to help ensure digital adoption by patients and service users., and frontline staff will be supported to become digital champions for their patients.
Scale Up Inclusion	We will sign up to the Digital Inclusion Charter. Without digital inclusion, the potential benefits of the patient channel work will not be realised. We need to learn from existing initiatives like Digital Communities Wales so we can ensure vulnerable people are not excluded from the benefits of digital.
Improve our knowledge	We will use the framework and tools available in the NHS Digital Inclusion Toolkit, and adopt any similar initiative that is developed in Wales. Even with digital skills and access to technology, people will not use digital health tools if they are not accessible and meaningful to them. Our promotion of user-centred design of all digital health products will include people who are less experienced digital users.

Internet use in Wales

People with a long-standing illness or disability	74%
Without disability	90%
Age 65-74	72%
Age 16 – 49	97%

Achieving the Vision
Stuff

How we will build the digital vision

The Digital Architecture:
understanding the lingo

Data repository
At the heart of any informatics or digital system is data stored on a computer hard drive, or where there is a lot of data, an array of hard drives (called a server).
Ories. The data held in these drives is usually organised in the form of a database or a collection of databases into which data can be added, removed, rearranged and analysed, either by programmes within the database or separate computer programmes.

Applications
The interface on the computer or mobile device which puts data into these databases or allows the data to be viewed are often called applications.
These applications are sometimes associated with programmes that manipulate the data in the ways described above, but increasingly such programming takes place ‘server side’ making the applications much simpler, and enabling easier ‘plug and play’ potential.
When used on mobile devices, these are usually referred to as ‘apps’.

Application Programme Interfaces (APIs)
These are, in effect, the connections or plugs which allow an application to interact with the data repositories and associated programmes.

Systems
Where a series of databases and applications exist for a particular ‘business domain’, for example pathology laboratories, the collection is referred to as a ‘system’. Each of these individual systems can either be acquired individually in a modular fashion, or as part of a large mega suite of many systems.

The Digital Architecture

Option One: the status quo

Once for Wales: modular ‘systems’

An enterprise architecture can be built up gradually, using the best available versions for particular business domains. The disadvantage of this ‘best of breed’ strategy is that the systems are often, in effect written in different languages, and in order to communicate with other systems, translation is required. In the digital world this is referred to as ‘interoperability’. This is complicated by the fact that many of the health organisations in Wales already had some modular systems of their own.

Cardiff and Vale have many dozens of information silos or information systems which have evolved over the years. In order to derive the full benefit of all this data, all of the systems which share information, but this would require very complex and labour-intensive translation. In fact, this requirement is so complex that experts question whether achieving interoperability for a health enterprise architecture in this way is even achievable.

This is broadly the approach that has been taken over the last few years in NHS Wales. This approach sought to either self-build or procure modular ‘systems’ to be implemented, usually as large national level projects rolled out across health boards in a staged fashion. These projects were centrally controlled and co-ordinated, but beset by delays, hampered by differing informatics architecture in different health boards and trusts, differing levels of digital maturity, and differing opinions as to the suitability and need for a given system in each organisation. Local organisations were unable to develop at their own pace, and to address their local priorities, but instead were constrained by a slower, less agile national approach. The Welsh Audit Office and Public Accounts Committee reviews of 2018 were critical of this way of working, and called for change. The architecture review commissioned by Welsh Government and published in 2019 calls for an end to this approach.

One positive benefit of the national level approach has been the ability to share information across health board boundaries, and is the envy of some of our neighbours.

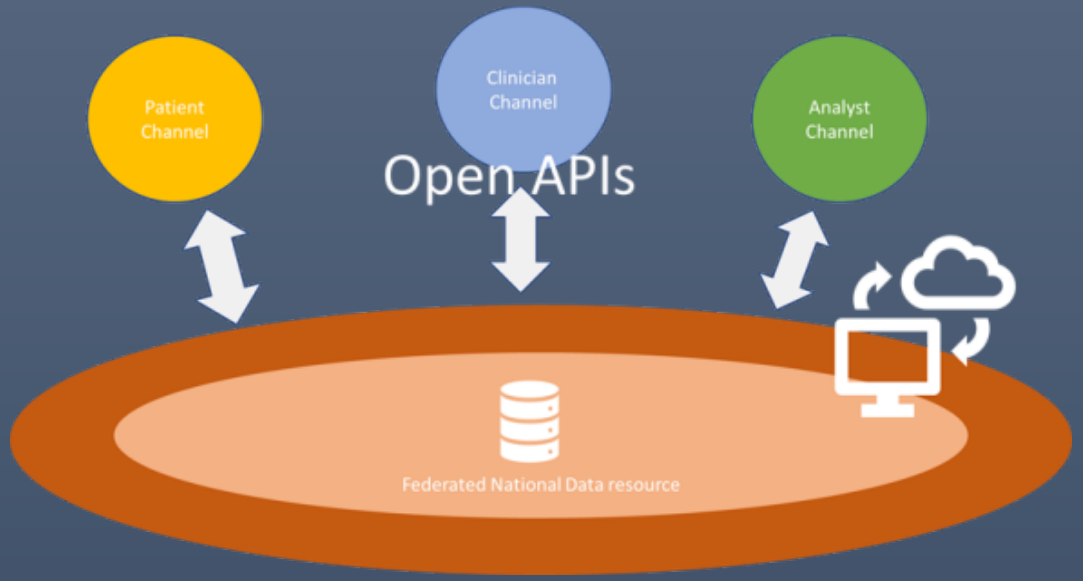
Option Two: Megasuite

Cerner, Epic, System C…

The second approach described is where a large provider has suite of systems written effectively in the same language and able to communicate with each other, providing digital part for several business domains, such as an electronic health record, electronic prescribing and decision support, and a laboratory system. The disadvantage of this approach is that such systems are very expensive, and even at best the provide less than 50% of the digital components for a typical healthcare organisation. Furthermore, these implementations, which are often called platforms, will generally only communicate with platforms created by the same provider. Thus if you are neighbouring health or care organisation uses a platform from a different provider you will not easily be able to share information, and it takes the service back to the interoperability problem. These can be considered closed platforms. This is an increasing problem for healthcare systems who have implemented mega suites.

This is the approach that has been taken over the past few years in NHS England where mega suite implementations using suppliers such as Cerner, Epic and Lorenzo have been implemented in the most digitally mature organisations (i.e. those with the infrastructure to support them), so called Global Digital Exemplar organisations and latterly, Fast Followers.

The Digital Architecture
Option three: Open Platform



Open, but not uncontrolled
Health data includes sensitive personally identifiable information. It is important to be clear that what is meant by 'open APIs' is that the configuration of these virtual plugs is made available only to developers of products who are trusted to hold such data by satisfying strict Information Governance requirements, and stringent Cyber-security standards. The APIs being 'Open' means that if they have achieved this status, they can design their solutions consistently with APIs made available to them, which increases the speed at which solutions can be developed.

What is an Open Platform?
The approach advocated by the architecture review is based upon the concept of an open platform. In this central collection of data is maintained according to a set of strict information and technical standards. This is particularly important because by ensuring that everything is recorded and described in the same way, and stored in the same format, the information can be retrieved and used reliably without the interoperability problems discussed above.

Mandated standards
The information platform can be imagined to be surrounded by a series of interfaces or virtual plugs the application program interfaces (APIs). These enable applications to contribute, view and analyse data in the way described above in applications integrated with other systems. However, the applications in this model are not specific to a particular system, but rather conform to the data and technical standards of the platform. This makes the process of introducing new applications when they emerge, and replacing old ones when they are superseded much easier.

Encourage innovation
By making the APIs open to trusted organisations and trusted suppliers, they can develop applications much more quickly and easily to the benefit of the service. This enables a flexible and agile approach for how our organisation and others in Wales collect, view and analyse patient information. The APIs can be designed to communicate with devices such as fitness trackers, heart rate monitors, medication pumps et cetera so that data can be provided in real-time without the need for staff for patients to input anything themselves. Much of the growth in the wider Digital Economy has occurred because suppliers have made their APIs 'open'.

The 'Single' Electronic Health and Care Record
The data collected on this platform can be used to inform individual patient care, as each element of data is identified as belonging to a unique patient, in this way you can see that the concept of a single electronic health record becomes difficult to visualise, because over time so much information and data could be gathered not just from individual interactions in clinic or hospital admissions in the way that traditional hospital wards are, but including information recorded on monitoring devices as described above. The single electronic health record actually becomes an enormous collection of data which can be visualised in a number of different ways according to the application suitable for the purpose at hand.

Clinician Channel

The ‘Electronic Health Record’

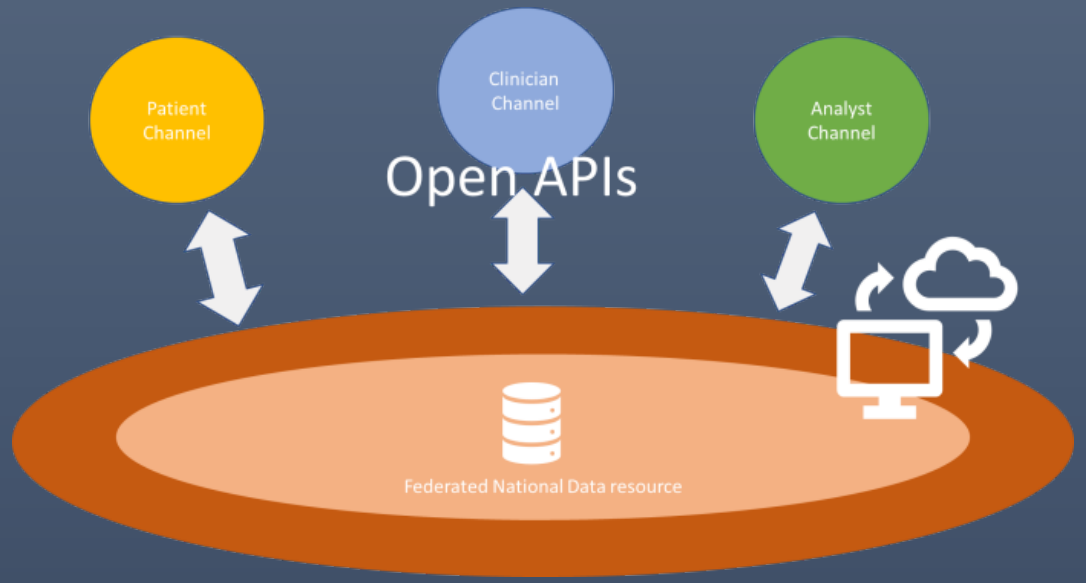
Applications used by clinicians to view results and reports, record clinical interactions and procedures, view images, prescribe medications, communicate with other clinicians.

Patient Channel

The ‘Personal Health Record’

Applications used by patients to book appointments, view results and reports, record outcomes, communicate with clinicians.

In effect, this creates a personal health and care record. Patients may upload information in symptom diaries, data from wearable health and fitness devices, and may choose to share some or all of this with clinicians providing their care.



Analyst Channel

Data to Knowledge

The applications which can intersact with data at various levels of aggregation from individual to population level which enable data to be turned into knowledge to understand, learn from and re-design the system.

Data Resource

Persistent and re-usable data

This is the pool of data held in accordance with strict information and technical standards so that it can be understood by and interact with applications via APIs . It is supported by an infrastructure that ensures its security. It’s physical location. The resource will actually comprise several ‘local’ data resources created by Health Boards and Trusts together with some nationally hosted resources – a so-called federated model. Although physically disparate, they exist in a single ‘cloud’ architecture.

Bear in mind that these ‘Channels’ are a conceptual representation to help understand how things fit together. In reality, many applications will overlap in terms of the users.

Once for Wales?

Alignment to National Strategy

One of the reasons highlighted in the Welsh Audit Office report of 2018 as leading to a lack of pace and scale in digital implementation in the Welsh health service relates to numerous attempts to ensure our Once for Wales approach to large systems.

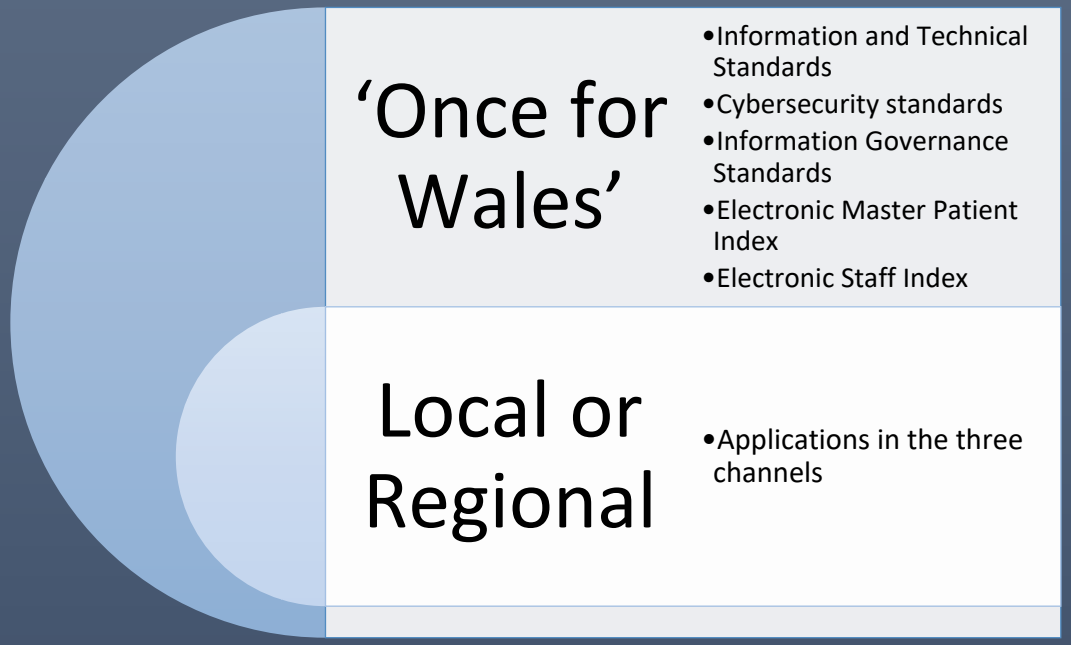
Lessons from abroad, lessons from home

It was clearly very attractive to think that for particular business domains one system across the country could be implemented very easily and with rapid agreement. This approach has been demonstrated in health systems across the world to be very difficult or impossible to achieve. The reality is that all organisations are at a different point in their digital journeys, and some have good systems for one business domain, and pure systems for another, but these won't necessarily correspond to those of the neighbours. The open platform approach requires that everyone agrees to provide information using the same standards and using the same technical organisation structure for the data, but leaves organisations free to source their own applications in a forum and at a time that suits them, and doesn't interfere with the operation of any other organisation.

Cultivate collaboration, mandate sparingly

Of course it may be the case that because applications become smaller and easier to design using open APIs, it may be easier to reach a national agreement to use a particular application for a particular business domain where there is a shared need and shared opinions, but importantly it need not be a mandatory requirement. Collaboration is probably more likely to occur as these applications, and the markets around them evolve in the next few years, but while that process is taking place it makes more sense to allow some flexibility at local and regional level.

Because of the importance that information in the platform is effectively written in the same language as explained previously, then it becomes very important that organisations agree to adhere to the information standards and the technical standards describing how that information is organised. It therefore means that once for Wales means the platform in the middle, but doesn't necessarily mean the applications around the outside.

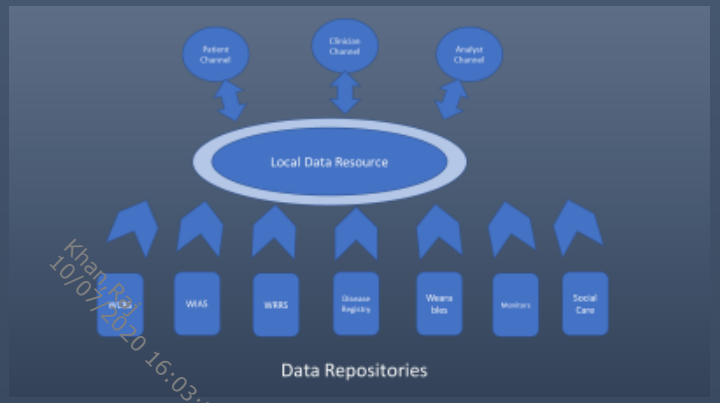


Working with our neighbours

Some of the elements required to build a Digital First approach may be more efficiently achieved by collaborating with our regional neighbours in Aneurin Bevan Health Board, Velindre NHS Trust and Cwm Taf University Health Board.

We will seek to build close working relationships around shared infrastructure, and seek to share learning with these organisations.

Local and National Data Resource



Building a Local Data Resource

Legacy data

In order to build a useful local data resource, which will in turn become part of the national data resource we need to make data we currently hold in individual data repositories available. This is not a simple matter of 'emptying' data into a new set of databases, unfortunately. The data needs to be 'translated' into a form that makes it available in a standardised format. This is called making the data 'interoperable'. This makes the data available to applications in the three channels referred to earlier.

The widely adopted standard for interoperability across health systems is called Fast Healthcare Interoperability Resource (FHIR) – pronounced 'fire'.

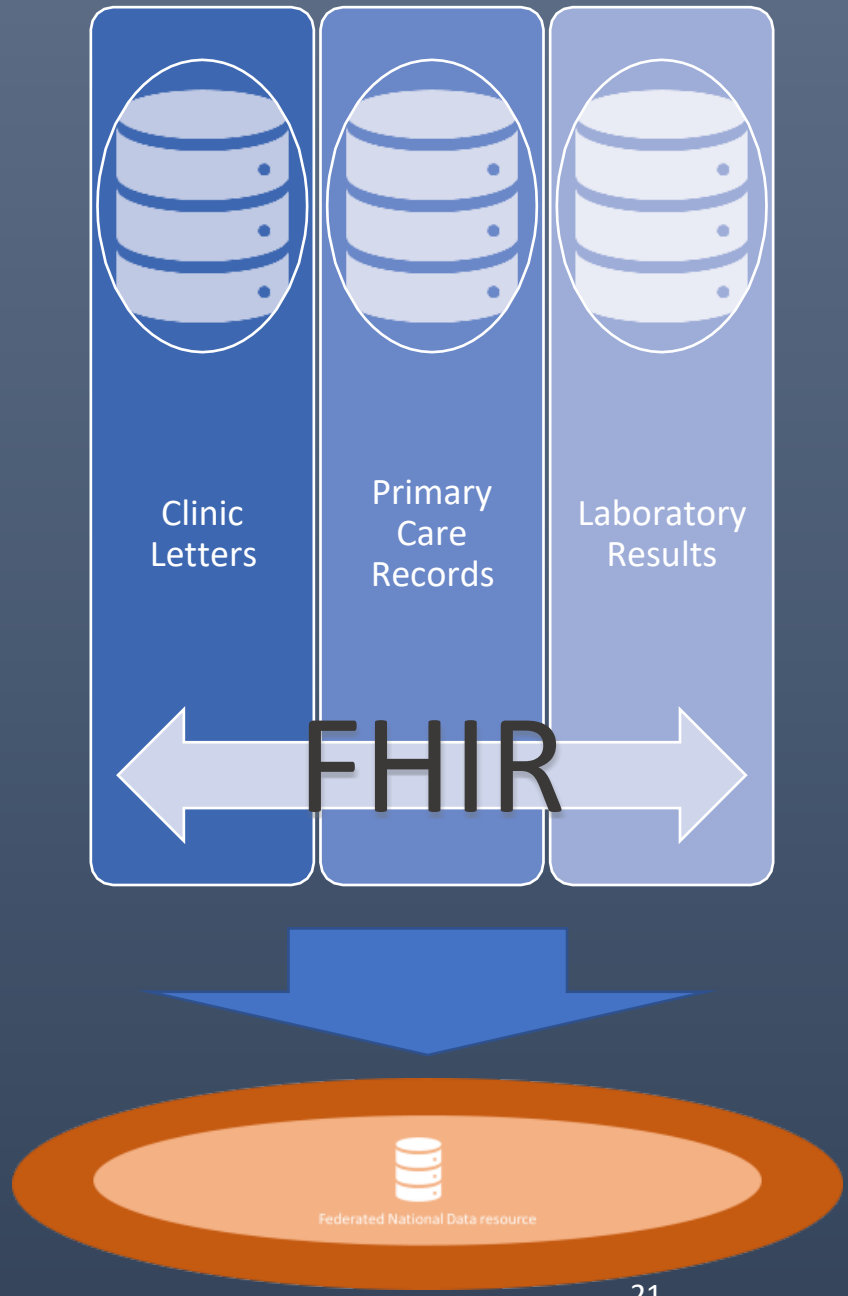
We will need to procure FHIR servers to store this data, and undertake work to convert legacy data into this format. This data varies from large stores of clinic letters, to smaller disease registers and bespoke team-specific databases.

New data

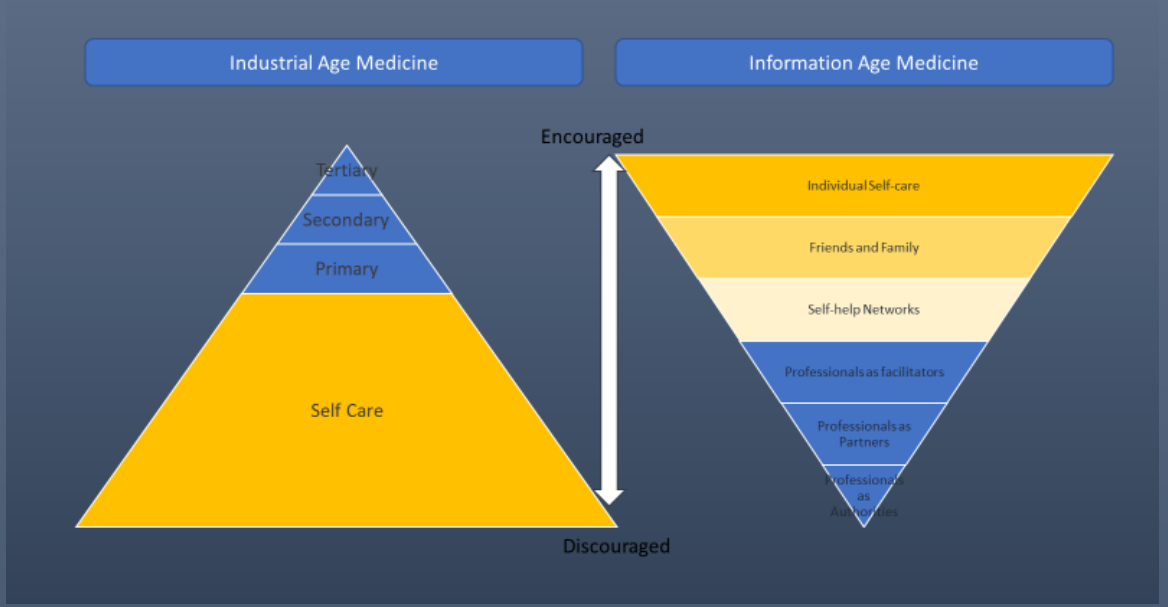
The disjointed silos of information we now seek to harmonise must be avoided in the future. Our strategy will be to avoid the creation of any information silos, and instead require that the data is FHIR compliant, and this will be essential for any third-party suppliers to comply with.

Open EHR

We will also look more favourably on products that use the Open Electronic Health Record structure. Using this approach, the data is effectively placed straight into the data resource without the need for translation.



Patient Channel



Giving patients control

A famous diagram represented on this page shows Tom Ferguson's inverted triangles model when he forecast the likely effect of technological advances on patients' expectations of care.

This is entirely aligned to Prudent Health Care principles, and the strategy described in A Healthier Wales of enabling care closer to home, and providing support for patient's to maximise their well-being.

By allowing patients the ability to control their own journeys through healthcare, they benefit, and the whole system benefits. We can start to re-shape outpatient services such that patients are seen only when they need to be seen, and enabling interactions to take place remotely using video communication.

What will patients be able to do?

We want to allow patients to access test results without needing to come to clinic or to phone a service desk. We want them to be able to book and change appointments, record their outcomes (Patient Recorded Outcome Measures) and experiences (Patient Recorded Experience Measures).

They will be able to give access to carers or relatives, as they wish, and to be able to see who has access to their data.

There will be some information which it is inappropriate to share online, and where it may be harmful to see results without a face to face explanation, they can still be hidden, so the applications we use will need to allow some control of sharing from the clinician's as well as the patient's side.

National Patient Portal

We will collaborate with the national Patient Portal programme, which will provide a single secure portal which authenticates a patient's identity, and then allows access to various applications providing some of the functions mentioned. There will be more which evolve in future, and we will want to enable flexibility in enabling many applications to address functions which serve patient care as they become available.

But we don't have to wait until the portal is developed – we can go ahead and start to use some available applications in the meantime, using the principles described for the open platform approach.

Clinician Channel

Electronic Patient Record for Secondary Care
Community Care Record
Mental Health Care Record
Social Prescribing
Patient observations
Electronic prescribing

Viewing data

Clinicians must be able to see comprehensive information to inform the best care decisions for their patients. This will include information from their GP and community services, different secondary care settings, social care and third sector organisations. Many of our services are provided across a regional or National footprint, so the information must be visible across health board boundaries. 30% of our organisation work in the community, and it is vital that they can access this information via mobile devices. We know that increasingly our challenges relate to patients with multiple conditions, and in this group, care information is created in a large numbers of different settings.

Many patients would expect that we already allow information to flow seamlessly across these boundaries, and it is starting to. By putting our information onto one platform based on a Local and National Data Resource we can achieve this for everything.

We are already good at sharing clinical information, including laboratory results, clinical letters and reports and radiology images across health boards. We share images across primary care to secondary in Dermatology, and images of eye-conditions taken by local optometry services with secondary care ophthalmology services, but these are still pockets of digitally-enabled care rather than mainstream. We need to ensure that where such initiatives have proven successful, they will be scaled-up. This will be helped by improving our business change processes to ensure appropriate evaluation of project success, and also by describing scale up plans (and resource) in development cases.

Clinician Channel

The importance of coding

Making sure that information is recorded in a consistent way, and that each data item's meaning is interpreted correctly across applications, we need to fully implement the SNOMED-CT system. This stands for Systematised Nomenclature of Medical and Clinical Terms, and is the international standard, and has been formally adopted by the NHS in all Home Nations. Any systems we implement to act as data entry points to the Local and National Data Resource will need to have SNOMED-CT capabilities, and we will be working with local projects and with NWIS to enable this. Clinicians using the system will be able to pick from bespoke lists of commonly used terms to speed up data entry. The advantage of SNOMED-CT comes when data is aggregated, and clinicians want to understand features of patients with the same diagnosis, groups of diagnoses, particular procedures etc. It's hierarchical and conceptual nature will revolutionise how individual clinical team members can start to do their own exploration work for their patient groups, and it will greatly improve how the system can learn. For a better explanation of some of the detail see the NHS Digital website. For a simple animated explanation try this from NWIS

Entering data

Although we are getting better at sharing data across boundaries, that data is often not 'rich'. Much of our clinical information is held in the forms of clinical letters and discharge summaries. The information contained in these 'flat files' is not available to a computer to use – it needs to be read by a human being. All a computer can see is a document title, and some other coded information attached to it as 'metadata'. Our Patient Management System (PMS) records some information in a coded way where each item of data can be 'computed'. This is only a fraction of the clinically meaningful data we should be collecting, and in fact most of it is demographic content and a description of 'episodes' (admission, discharge, new clinic visit etc.). We Also know that even this small amount of data is not always correctly 'coded', and provided in a form that computers can do useful tasks with it, and we know that a lot of this coded information is incorrect. This, in turn makes information derived from it inaccurate or misleading.

We need to collect much richer data, we need it to be more accurate. We can do so by using a 'virtuous circle' effect of making data more visible. By improving the detail in information we 'code' (i.e. put into computable form), we will need to ensure it is entered in 'real-time, not as a bulk exercise from memory at a later time. This requires much more readily available devices to enter the data – but that also makes it easier to see pre-existing data. Because we will be using a platform around the national data resource, information which already exists (demographics, medicines, allergies, advanced care plans, problem lists), fields in data entry applications can be ready-populated making the update process more efficient. The process of real-time data entry will make the data more accurate.

Aggregated information will be available to clinical teams, and because this information is timely, any inaccuracies can be corrected quickly, and the data become useful. Much time currently is spent trying to derive information from data that we know is unreliable – over the period of this strategy, the quality of data will be driven up, its usefulness will be driven up, and the conversation will move away from disputing the data's accuracy, and onto converting what the data says into knowledge.

Clinician Channel

The electronic patient record (EPR)

For most of our clinical users in secondary care, a big gap in our digital capability is the ‘front end’ for putting this coded information into the LDR/CDR. We have some ability to put information in via either Welsh Clinical Portal and CAV portal, and some bespoke systems which input particular clinical-service information, often as part of a disease registry. In Mental Health and Community services we do have better functionality using PARIS, and we will evolve to contribute information collected in this way into a Welsh Community Care Information System (WCCIS).

Our strategy will be to develop a single entry portal where clinical information can be entered via any device from any location, but behind this portal the user will have the ability to access the information most important to them for a particular type of clinical interaction. This will involve a library of applications bespoke to particular user-requirements, but for the clinical user it will simply appear as one single interface, and will avoid the need to log in to multiple ‘systems’. This may or may not be Welsh Clinical Portal. The Architecture review requires that some work is done to ‘re-platform’ WCP to enable they type of arrangement just described, but it would also enable the use of another portal providing exactly the same functionality, giving us a choice as an organisation to adopt the interface our users prefer.

We are already starting to develop such a ‘front-end’ EPR for use in outpatients, currently called COM-2. It uses SNOMED-CT, and provides and retrieves data stored in the appropriate standards for the LDR/NDR.

Further into the future

This is a very rapidly evolving area. We know from health care systems that have had long-standing EPRs that the clinical users are not always in love with them. There is a feeling that the computer can start to come between the clinician and the patient. In the USA, hospitals have begun to employ teams of ‘medical scribes’ who record and enter information on behalf of clinicians who are better able to converse and make eye-contact with their patients rather than their computer screens. This is not a viable long term solution, but another emerging digital technology is. Natural Language Processing (NLP) is a use of machine learning/artificial intelligence algorithms which can ‘listen’ to a conversation and ‘understand’ what is being discussed, and what the outcomes are. If the current pace of evolution continues, then NLP may become our data entry assistants. We will continue to watch this space.

Analyst Channel

1. The learning health system
2. Outcomes over process
3. Analysts and data science working closely with clinicians
4. A ‘learning’ environment
5. Partnership with Universities and Industry

in this section talk about the fact that data is the most important way in which would be able to understand the services that we provide, whether being provided well whether the being provided in a timely fashion and whether the outcomes of good. The conversation here about how we make business systems visible to all clinicians across the organisation and there is a conversation about how we maximise the benefit of modern business informatics systems to generally automatic reports as well as self-service stuff

We also need to have a discussion in this section about the fact that telling the data into information is extremely important, but is quite difficult. That involves four relatively basic data good visualisation and an ability to have informed conversation with clinical users who actually unable to interpret what might be going on to explain some of the patterns described in the information.
Beyond this we need to make point that artificial intelligence requires data as its fuel and its only with this data resource that will be able to fully benefit from a high as it evolves.

WE NEED TO TALK ABOUT AI
This will be a short section emphasizing that AI is something to embrace, not fear.
Sometimes we are already using it because applications may be engineered using AI or Machine Learning.
The substrate for AI that we want to develop ourselves and with partners is good quality data held in a computable format. That is largely only available for images currently – we need to move to a world where it can be true of other clinical information recorded during care episodes.

Turning data into knowledge

Data doesn't turn into knowledge by magic. It is a process. It starts with good quality data, and requires people with different skill sets to visualise and explore patterns in the data. Features of interest may then be studied, and statistical learning techniques applied to this data to turn it into knowledge, and enable a deeper understanding of what happens to our patients, and of the services we offer. This requires clinicians working closely on a data to day basis with data analysts.

At it's most advanced level, the so-called 'statistical learning techniques' include machine learning, deep learning and artificial intelligence.

Currently we do visualisation, but then tend to jump straight to the end of the process, assuming we have understood the data and turned it into knowledge. For example, we look at historical activity data and extrapolate it to 'forecast' the future. This has utility, but is only scratching the surface of what we could do.

Quality 'real time' data	• An electronic health and care record • Structured data • Local and National Data Resource
Analytic capability and capacity	• Analysts • Clinicians to work with analysts • University partners • Industry partners

Achieving the Vision

Staff

Who will build the Digital Future?

Wachter principles

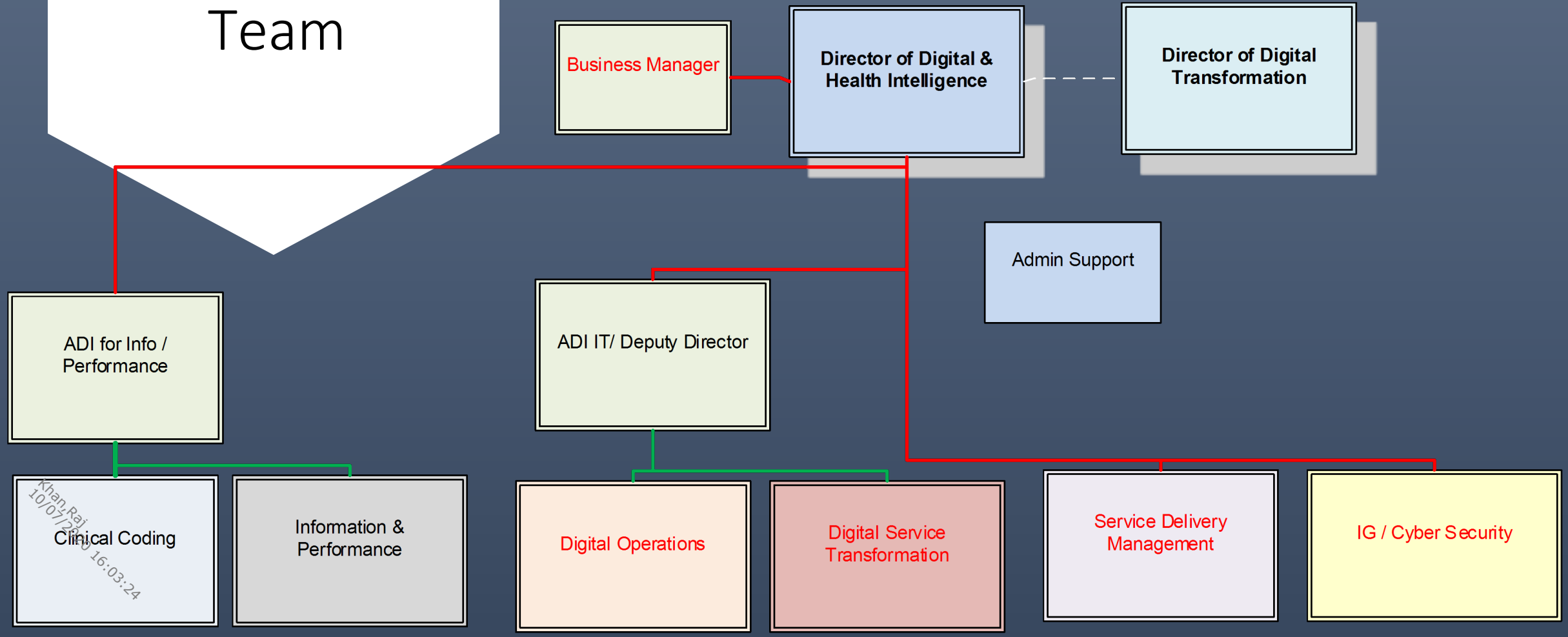
It’s about the people, stupid

Dr Robert Wachter’s seminal report into the failure of NPfIT in England established ten basic principles to learn from. We recognise that these lessons are not unique to England, but are generic, and apply to Health and Social Care digitalisation in Wales as elsewhere.

The overarching message from this report is the essential need for clinical engagement in the process of digital transformation.

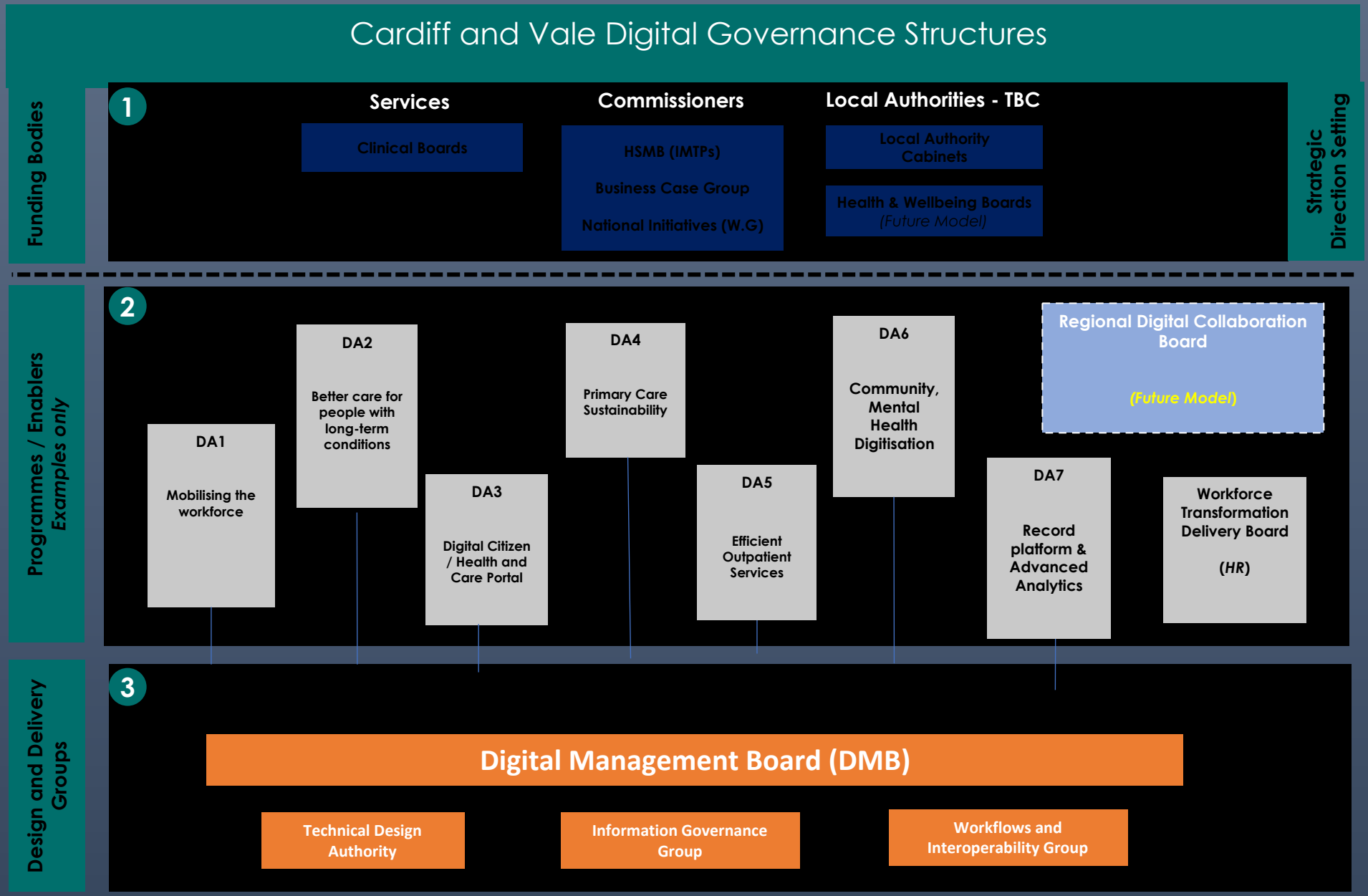
Digitise for the Correct Reasons.	•Don’t digitise for the sake of it – digitise to re-imagine how things can be done
It is Better to Get Digitisation Right Than to Do it Quickly	•Balance the immediate operational drivers with the overall strategic aim.
Return on Investment from Digitisation Is Not Just Financial	•There is a productivity paradox. It will take time to bed-in, it will take to transform – be patient, and evaluate against more than the bottom line
Balance appropriately between local/ regional control and engagement versus centralisation.	•Standardise the central architecture, but allow organisations and teams to innovate and set their own pace and prioirities
Interoperability Should be Built in from the Start	•Today’s solution is tomorrow’s legacy. We know that our information systems need to speak the same language, so don’t make life difficult for those who will inherit what we create.
While Privacy is Very Important, So Too is Data Sharing	•Information Governance Legislation (GDPR) has been introduced to encourage sharing of data safely and securely, not hinder it. Patients expect us to share their information to enable seamless, safe, efficient care.
Health IT Systems Must Embrace User-Centered Design	•Start from the patient’s perspective, and involve patients in re-designing systems.
Going Live With a Health IT System is the Beginning, Not the End.	•This is probably the most common mistake, and the biggest contributor to failed digital implementations. Digital solutions only work when people understand them, can use them, and know what they can enable – and that involves time and effort.
A Successful Digital Strategy Must be Multifaceted, and Requires Workforce Development	•If we want our users to benefit from digital solutions, our staff have to be enabled to use them. If we want to build a Learning Health System, we need to train and retain staff to analyse and derive knowledge from the data we collect.
Health IT Entails Both Technical and Adaptive Change	•Health and care systems are complex. Technical fixes alone cannot solve their problems. Staff and users must be able to transform the way they interact with services to achieve the quadruple aim of health and care. Clinical engagement is the key.

The Digital Team

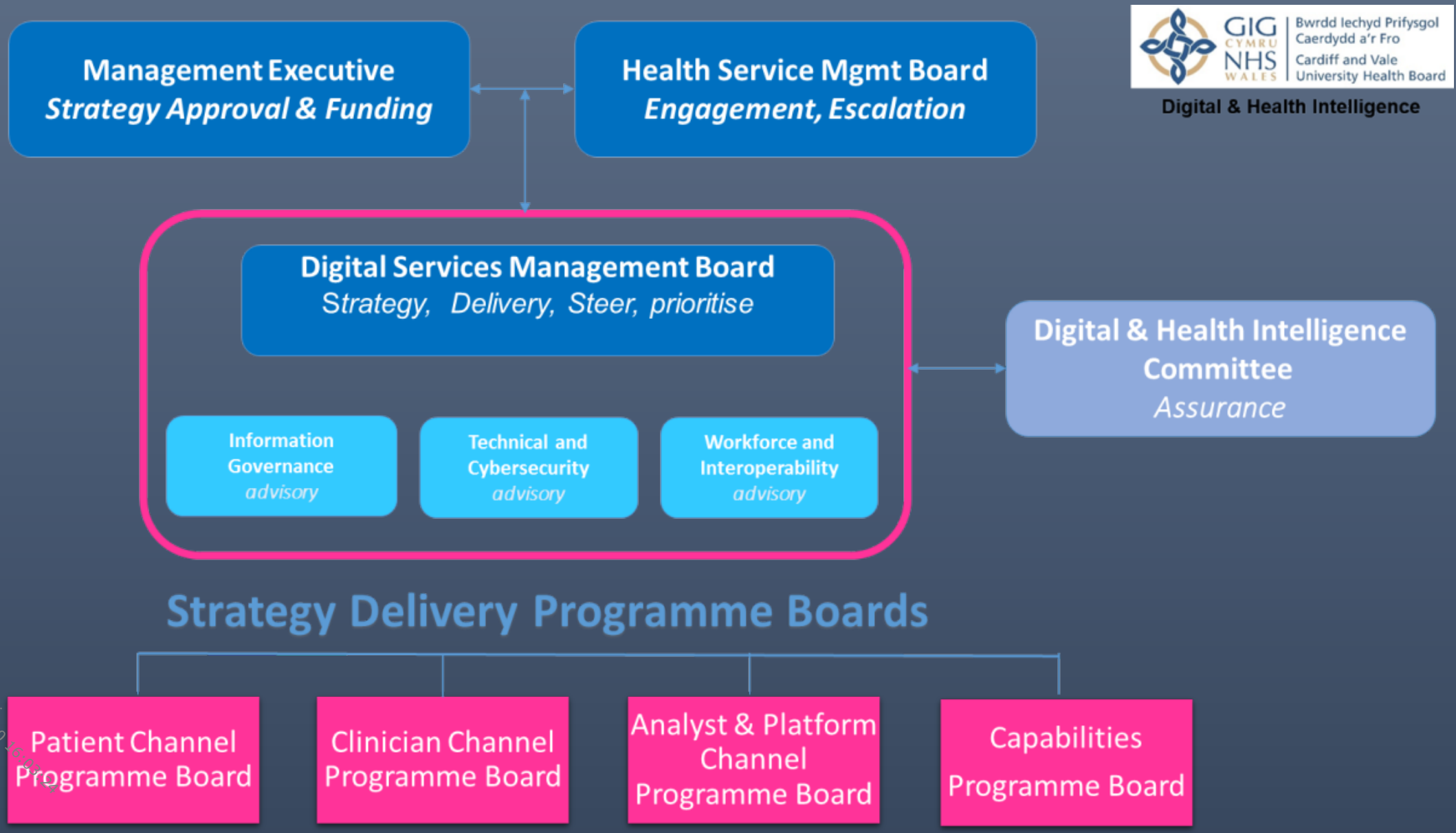


How the team is structured

Cardiff and Vale Digital Governance Structures



How digital is managed, co-ordinated and strategically aligned



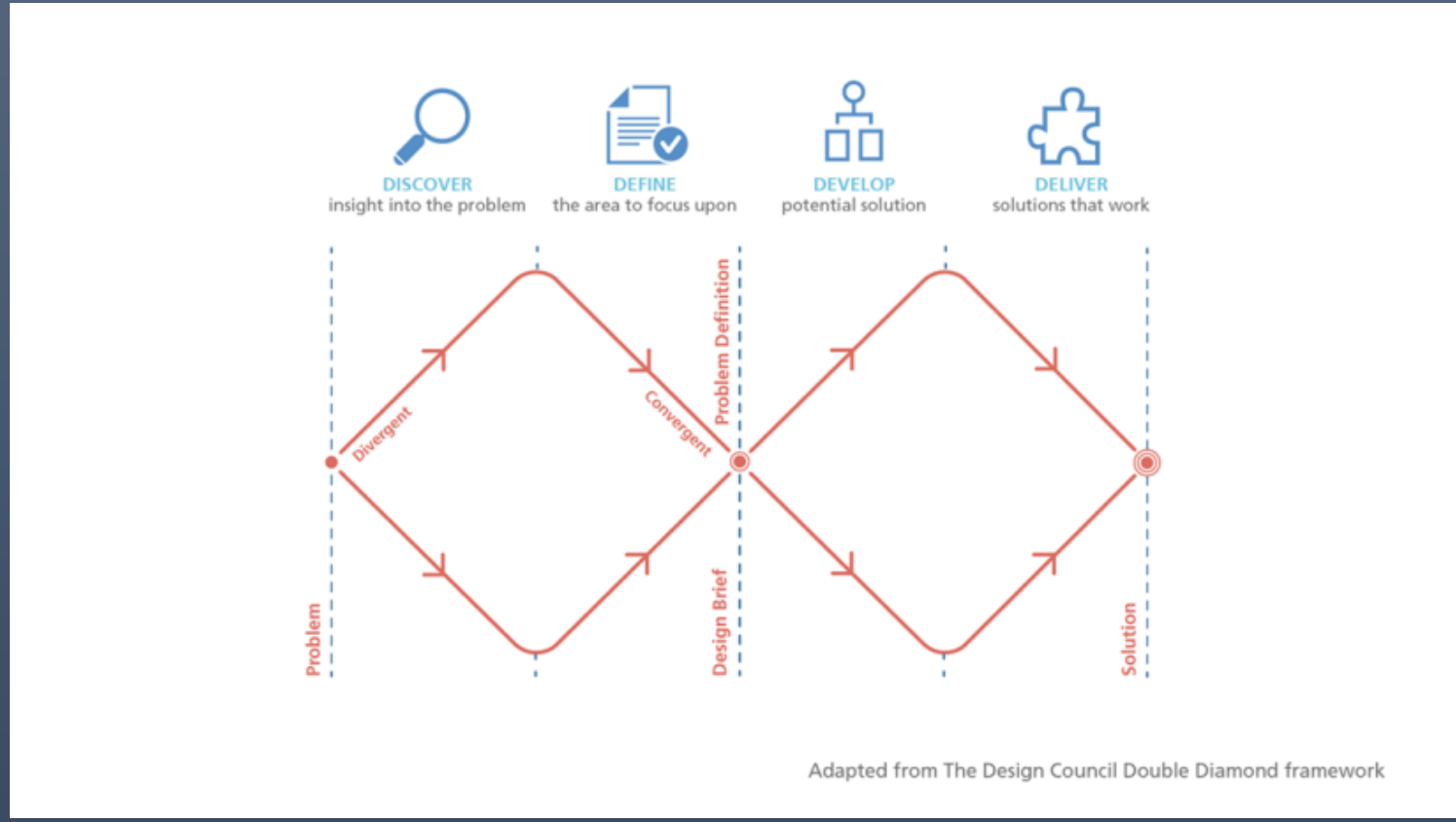
Achieving the Vision

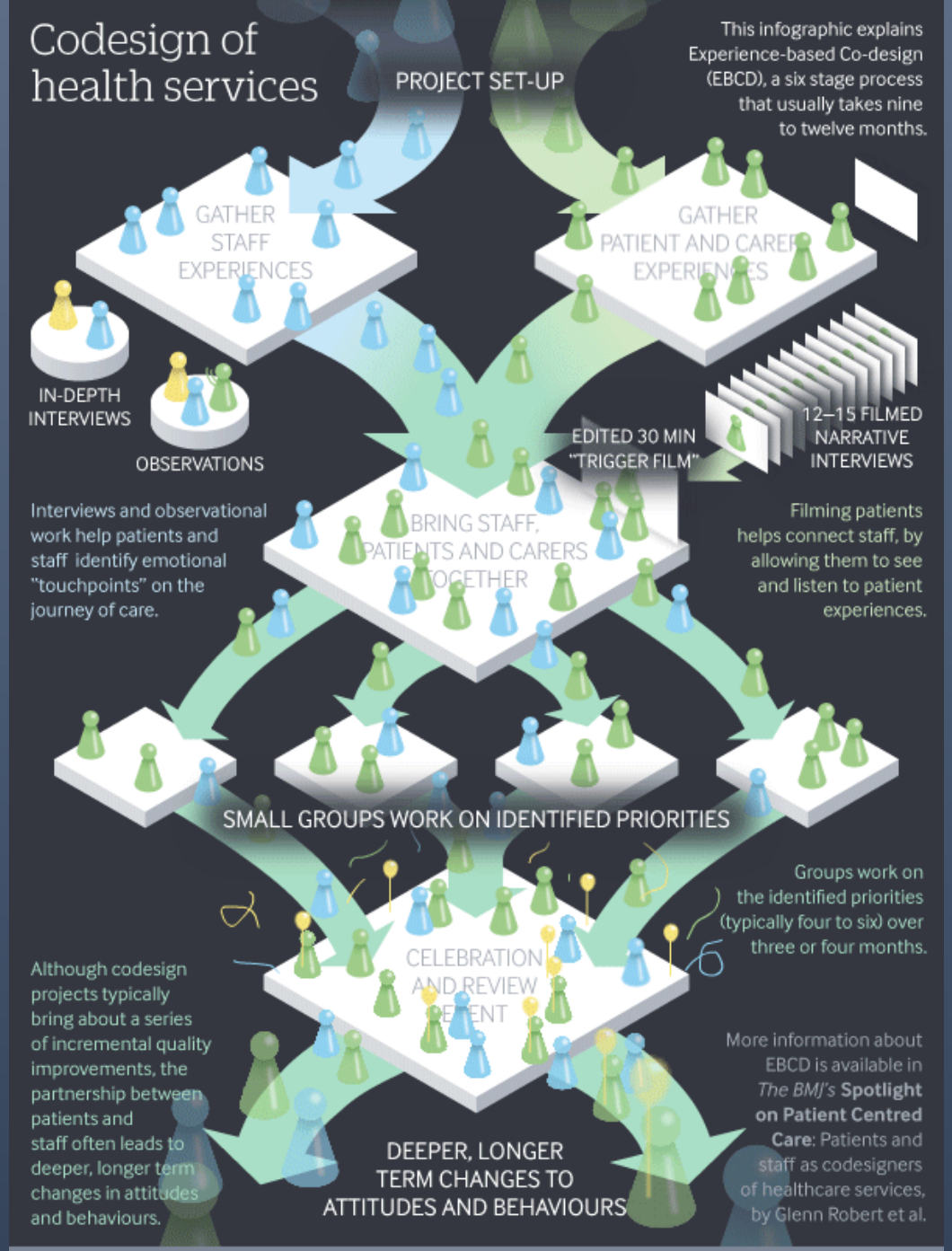
Adaptive Change

Using digital to transform the future

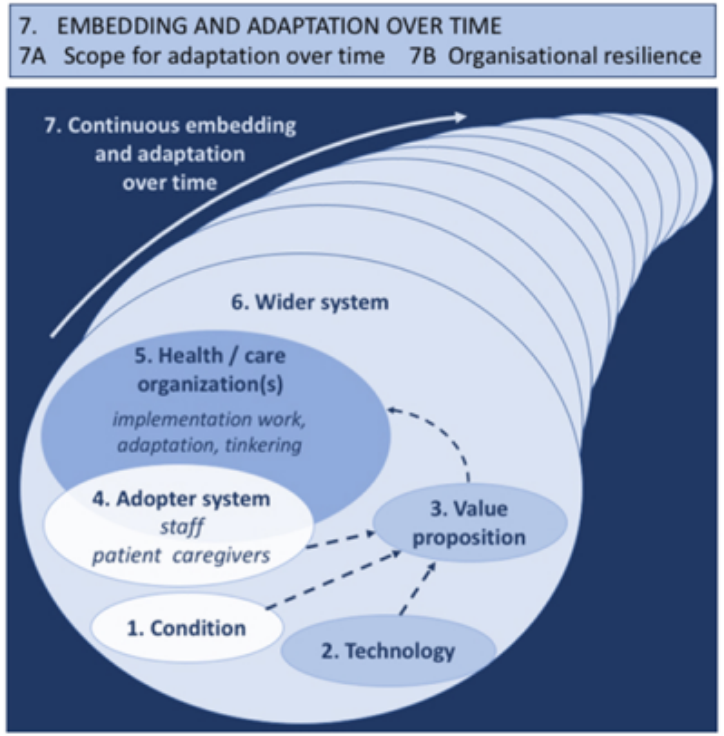
Khan,Raj
10/07/2020 16:03:24

Design Principles





Evaluation



7. EMBEDDING AND ADAPTATION OVER TIME
7A Scope for adaptation over time 7B Organisational resilience

6. WIDER SYSTEM
6A Political / policy
6B Regulatory / legal
6C Professional
6D Socio-cultural

5. ORGANISATION
5A Capacity to innovate (leadership etc)
5B Readiness for this technology / change
5C Nature of adoption / funding decision
5D Extent of change needed to routines
5E Work needed to implement change

4. ADOPTERS
4A Staff (role, identity)
4B Patient (simple v complex input)
4C Carers (available, nature of input)

1. CONDITION
1A Nature of condition or illness
1B Comorbidities, socio-cultural influences

2. TECHNOLOGY
2A Material features
2B Type of data generated
2C Knowledge needed to use
2D Technology supply model

3. VALUE PROPOSITION
3A Supply-side value (to developer)
3B Demand-side value (to patient)

Report Title:	**Digital Mobile Strategy – Progress**								
Meeting:	Digital and Health Intelligence Committee						**Meeting Date:**	8th October 2020	
Status:	**For Discussion**		**For Assurance**		**For Approval**		**For Information**		**x**
Lead Executive:	**Director of Digital & Health Intelligence**								
Report Author (Title):	**Director of Digital & Health Intelligence**								

Background and current situation:

The UHB is working with the National Mobilisation Programme and the Office 365 (Connecting NHS Wales) programme to enhance and develop its mobilisation strategy.

Further to the report in February 2020 we are pleased to report that Microsoft (MS) Teams has been rolled out to UHB staff supported by training advice and guidance resources as well as the opportunity to participate in some national training which focuses on particular aspects of MS Teams.

MS O365 email policies have been built, tested with small groups of users and is ready to be rolled out to the D&HI department as a Beta 'site' w/c 5 October 2020. Clinical Boards are being consulted on our best informed assessment of their licensing needs; we recognise we will need to exercise some flexibility about who has what licence and that we may need to make changes to our licensing position.

"InTune" is being used to manage mobile devices and a large project is underway in community to enroll over 1000 devices whilst multi-factor authorization will bring additional cyber resilience to our infrastructure.

The national tenant is going through a process of assurance. Once complete, NHS Wales organisations will be able to share sensitive information whilst complying with UK-National Cyber Security Centre guideline standards. Importantly, once assured, our staff will be able to use email to contact patients which is a significant limitation on us now.

A roadmap has been developed at a high level and shared with the Patient Channel and Capability programme Boards on how the full deployment could be scheduled, subject to additional resources and is shown at Appendix 1.

Mobilising our workforce

This work extends beyond simply enabling staff to work at home or have access to files and information using O365 and MS Teams. It includes enabling staff to access all they need regardless of device or location including on their own device. It also includes the ability for staff to use devices within our estate for example to carry out electronic observations at the bedside, run virtual consultation software, use apps that support (for example) remote monitoring.

A series of personas are in development and an early draft is shared (Appendix 2). These have also been shared with the flexible working group (overseen by the Executive Director for Workforce & Organisational Development) for comment.

One of the outputs of this work will be information to help inform a service catalogue and technical plan of the changes we will need to make to our infrastructure and solutions from devices to unified comms in order to deliver the capabilities the Persona document begins to describe.

Desktop estate

A desktop upgrade programme to Windows 10 has been planned and will complete over the course of the next 7 months (delayed from earlier this year due to the re-prioritisation resulting from the Covid pandemic). Clinical prioritisation will inform which areas we should focus upon first for upgraded equipment.

We benefitted from a desktop device assessment using a software solution on a trial basis which delivered some very helpful data which included the ‘state’ of our desktop estate i.e. which equipment needs to be replaced and also helped inform our O365 licensing requirements. Unfortunately the software is too expensive for us to continue to use at this time however the information is proving invaluable in helping to inform a proposal for additional funding to improve the estate. As set out in our Digital Strategy, unless we do the basics, the transformation we desire will not be achievable. Slides at Appendix 3 give a high level view of the discovery work.

Digital Transformation roadmap

Early work is being carried out as we develop the Digital Strategy Governance Roadmap Enabling Programmes, which are gradually being socialised within the organisation and refined as we go along including recently at our first Teams Health Informatics Forum comprising interested clinical, nursing and allied health professionals as well as members of Digital and Health Intelligence. The roadmap is informed by discussions with staff within the organisation, international standards e.g. HIMSS, what is happening in NHSE Trusts many of whom are generally further ahead digitally which we can learn from.

The roadmap has been well received and will continue to improve as it is socialised and will soon be in a condition to be shared more formally.

Enterprise architecture and technical plans

The requirements of all the above are such that the UHB will need to consider how the infrastructure will need to change in the short and medium to longer term. This work is subject to the new structure being fully implemented which includes an EA post and is dependent upon additional funding to baseline our establishment budget.

Resourcing our plans

CAV expenditure on ICT remains below the recommended level. This legacy investment deficit is evident in the 'state' of our estate at all layers from server to desktop and telecomms. Creative and innovation management has continued to enable the UHB to respond to crises such as Covid (reported to DHIC in July 2020) and now, plan for winter by making improvements at the front door in UHL and UHW. The deficit needs to be improved upon to enable CAV to achieve its aspirations to deliver modern, innovative, cutting edge health and care.

Work has started to identify at an enterprise level spend on IT and digital solutions and how this can be leveraged to improve the estate, release efficiency to reinvest in digital. This is a complex process which will take some time. A plan is being formulated and an update will be provided at the next DHIC.

None of our plans are deliverable beyond the very basics without a sustained increase in funding.

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

The approach identified, once assessed and resourced, offers a number of benefits:

Platform-agnostic approach – able to support devices with either Windows 10, iOS or Android.

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

The UHB will be able to consider the appropriate mix of mobile devices over the project lifetime. Lack of experience (both technical and end-user) with non-windows platforms means we should take a risk-managed approach to their roll-out. A complete switch to iOS or Android would be risky and undesirable, however introduction of some of these devices into the fleet will introduce some resilience, and support the specialisation of use-cases for mobilisation.

Replacement of the remaining 623 devices in financial years 2021/22 and 2022/23 without any agreement that funding will be available in these years. This should be taken as an indication of need, which should inform financial planning in these years.

The UHB should consider the prioritisation of the InTune device managment tools as part of the local O365 implementation. Progress with these tools is important in ensuring changeover to Windows 10 for both existing and new mobile devices.

The UHB will need to resource and carry out a migration from the legacy Citrix infrastructure onto the newer RDS service in parallel, and will need to manage any potential conflict with the Windows 10 migration timelines.

Data usage may increase on devices utilising the newer model, particularly if Windows 10 makes devices more user-friendly; increased data usage will carry a revenue cost.

Recommendation:

The Committee is asked to:

NOTE progress with the Digital Mobile Strategy for the UHB.

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	x
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		Involvement	
Equality and Health Impact Assessment Completed:	Not Applicable								

PRODUCT	CAPABILITY	Resource (technical implementation)	Resource (business change)	Scale	Workload type	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4
TEAMS	chat message file share (collaborate), video calling	WER	Required	Medium	**Project**		Available						
Multi Factor Authentication (MFA)	Secures access to Teams and O365 using modern cyber protocols	WER	Required	*Small*	**Guidance**		Available						
INTUNE	manage corporate mobile device fleet remotely	Partly WER	Required	Medium	**Project**		Available						
	secure corporate data and reduce IG loss risks	Partly WER	Required	Medium			Available						
	connect any managed device over any wifi connection	Partly WER	Required	Medium			Available						
	access email, calendar, ciontacts on my CAV device - replacing BBGood for some users	Partly WER	Required	Medium			Available						
EXCHANGE MIGRATION	access mail, calendar, contacts on any device including my personal device (use your own device)	Partly WER	Required	**Large**	**Project**			In progress					
	Book and conduct virtual meetings - voice and video, replacing Skype	Partly WER	Required	**Large**				In progress					
	Use Teams for patient virtual consultations	Partly WER	Required	**Large**				In progress					
	Transcription - autoatically transcribe voice and video conversations - internally and with patients	Partly WER	Required	**Large**				In progress					
	Broadcast (film) public meetings e.g. Board meetings (also need STREAM)	Partly WER	Required	**Large**				In progress					
OFFICE PRO+	standardised CAV desktop - the same version of MS Office for all staff	WER	WER?	Medium	**Project**								
FORMS (and FORMS PRO)	e-forms, surveys, data collection - internal e.g. staff surveys. ***Potential to use externally TBA***	Required	Required	Medium	**Guidance**				Available				
BOOKINGS	choose and book' for internal online appointment bookings and management of apptmts e.g. apptmt reminders (external TBA)	Required	Required	Medium	**Guidance**				Available				
PLANNER	Task mgmt and visualtisation tool (like Trello boards…)	Required	Required	*Small*	**Guidance**				Available				
YAMMER	Workplace social network - may not be needed given Teams			-	-				Available				
STREAM	Video hosting e.g. physio exercise videos, replace Zoom for Live events - up to 10,000 people! (also need Exchange Migration)	Required	Required	Medium	**Guidance**					Available			
SWAY (DEMONSTRATION REQUIRED TO REALISE FULL POTENTIAL)	Interactive presentation, information stories - renders automatically to fit any mobile (smart) device screen	Required	Required	Medium	**Guidance**					Available			
	organises and presents information consistently regadless of what device you are consuming it on	Required	Required	Medium						Available			
FLOW	Automated workflow - corporate workflow solution	Required	Required	**Large**	**Workpackages**					Available			
	Create bots (Robotoic Process Automation) to manageprocesses and tasks 24/7 where these can be automated	Required	Required	**Large**						Available			
POWERAPPS	Low code development platform - e.g. external bookings, reporting type solutions	Required	Required	**Large**	**Workpackages**					Available			
PowerBI	Analyse platform - ability to visualise complex data e.g. capacity across the UHB	Required	Required	**Large**	**Workpackages**					Available			
PROJECT ONLINE	Project planning & management tool - tasks, gantt charts, RAID, risk issue, benefit logs *An update of MSProject*	Required	Required	*Small*	**Guidance**						Available Available		
SHAREPOINT	Collaborate with wider public sector in Wales as well as internally	Required	Required	Medium	**Project**								
	Ability to collaborate with any organisation in any sector where they also have enterprise MSTeams	Required	Required	Medium									
	Modern intranet tool/microsite	Required	Required	**Large**									
	Potential to migrate all S and H drive documentation so that it is accessible on any device including my own	Required	Required	**Large**									

CAV Persona's for digital mobilisation of the workforce – Devices and Connectivity

Persona	Devices and connectivity
Paul is … **'Any' member of CAV staff** **Works at different times on different days, sometimes in different places**	• Can access any CAV device and with his Nadex logon is able to reach any application he is authorised to access • He only needs one log in password for everything. This log-in never changes, he has a 'password for life' during his employment with CAV • Look and feel is the same, regardless of what device he chooses to access his work information and when he updates information (his own, a patients), he only has to do it once • He has 'follow me' telephony which he can easily turn on and off if he doesn't want calls to reach him, including he can have calls come through to his personal device, confident that his personal number won't be visible to anyone • He has been given training in how to use CAV digital equipment and telephony however he finds it confusing if he has to make choices about e.g. which WiFi to select (why can't it just do it automatically?) or remembering multiple passwords. Luckily his individual one login automatically connects him to everything he needs, He doesn't even need to remember this password but in case he has a problem, D&HI have prepared self-help videos on how to manage occasional technical difficulties which are available on Youtube – Alexa style • He can use digital devices including touch screens, even if he is in PPE • Can collaborate with anyone internal or external to the organisation using a secure collaboration platform & initiate this himself • Has biometric access to log in to the CAV network which works on any device, regardless of whether he is in or out of the office and connectivity is always secure • He can connect to the CAV network from anywhere with an internet connection • He is fully up to date with what is happening in the organisation because he has access to Corporate Comms, Intranet, Staff App, internet access
Phil is … **A dedicated fixed desk worker within the UHB estate. He is a ward clerk /receptionist/EA/ medical secretary**	• Fixed desktop with full access to all required applications and secure connectivity. He makes and receives phone calls from people internal and external to the organisation, from across the world. • Equipped for full VC and softphone telephony (Teams, Skype) • May use digital dictation software
Nigel is ….	• Much of Nigels work is done on the go so he needs a small portable device that he doesn't have to keep logging in and out of and that stays permanently connected. He's happy to use his own device but some of his colleagues aren't.

CAV Persona's for digital mobilisation of the workforce – Devices and Connectivity

Flexible within the hospital estate – a member of facilities / estates. He is a porter / cleaner / caterer / grounds person. **Sometimes he is active in areas of shared estate. His work means he could be located anywhere that CAV has a presence.**	• Productivity - Eform or App based reporting of issues seen, completion of digital inspection reports etc and uses camera to take pictures of issues noted as part of reporting to send to hub or supervisor – these drive workflow and reporting ○ Filling in e-forms means he needs a slightly larger screen size because he has to press or move radar buttons, sometimes wearing gloves or protective equipment • He needs mobile voice & text - he gets lots of calls directing him to different work areas during the day and he often needs to talk on the phone with colleagues
Sandra is ….. **A Hospital based clinician / nurse / therapist – her work place might be in a fixed place or she may be flexible within the hospital estate** **She does everything electronically, there are no longer Ward based paper records** **Anything she can access in the office, she can also access at home and can access everything on her own device(s) if she wants to**	Sandra can see everything she needs about the patient including information from primary, community, secondary care and other agencies where applicable. This might be a shared care record or it might be an EPR/EHR. • She has access to O365, Teams & Skype. Can respond to a Telephone Advice & Guidance (TAG) call and / or deliver a virtual consultation utilising the inherent functionality of my smartphone device • Individual tablets are available for staff that need them because they are moving around the hospital, able to access clinical and productivity apps with seamless connectivity to secure staff WiFi channel (any CAV site) <u>Shared Tablets</u> • Are used on Wards for bedside obs, ward rounds, viewing images – can input directly to Tablet which will update the electronic patient record ○ Sometimes uses voice commands to update patient records • to film patient information videos which can be uploaded directly to PHR or a clinical system • to facilitate a conversation between patient and carer/family/agency such as social care or MH if needed • Has access on the Ward to full fixed desktop with access to all clinical and productivity apps, IP telephony & VC & headsets • May use digital dictation software
Mark is …. **a peripatetic worker. He WAH some of the time, moves between health and care settings in**	Connectivity of voice and data giving access to everything he needs about the patient including information from primary, community, secondary care and other agencies where applicable. This might be a shared care record between agencies or it might be an integrated CAV EPR/EHR, regardless of where he is working

CAV Persona's for digital mobilisation of the workforce – Devices and Connectivity

hospital, community, the local Council and other public sector settings. **He also spends time working with patients in their own work, education and home settings.** **Mark delivers some national services so sometimes has to travel across the UK.**	Equipment must be 'easy' 'seamless' to use and lightweight. Ideally he can use his own equipment – in fact any device connected to the internet - to get to what he needs. • He uses O365, Teams & Skype and other collaboration platforms as well as Shared drives, not necessarily provided by CAV. • Has wants to respond to a Telephone Advice & Guidance (TAG) call and / or deliver a virtual consultation utilising the inherent functionality of the device(s) he has with him e.g. built in Camera, Contacts etc. • Films patient information videos or may need to download and view videos emailed or sent via an App, portal or up/downloaded directly to a clinical system • Can initiate / deliver a virtual consultation between patient and carer/family/agency • Has full access to all clinical, administrative, personnel and productivity apps with secure connectivity over any WiFi • May use digital dictation software
Vicky is ….. **Exec, manager, back office worker who works at home all some of the time**	• UYOD smartphone with access to O365, Teams & Skype. Can respond to a Telephone Advice & Guidance (TAG) call and / or deliver a virtual consultation utilising the inherent functionality of my smartphone device • Has full access to all required applications and secure connectivity over any WiFi opn any device, CAV or personal and it's all linked e.g. like one account incorporate Apps • Equipped for full VC and softphone telephony (Teams, Skype) and other platforms, can 'App' with impunity
Gareth is …. **A dedicated home based worker**	Gareth doesn't have a dedicated room to work in at home so he needs a work solution that doesn't take up too much space and is portable. He needs access to his full desktop i.e. all required applications and secure connectivity over home WiFi. • Equipped for full VC and telephony (Teams, Skype). Can respond to a Telephone Advice & Guidance (TAG) call and / or deliver a virtual consultation • May use digital dictation software
Bank staff, honorary contracts, nadex account holders	What is the solution – develop persona
Honorary contacts	What is the solution – develop persona

State of the estate

Extract from our Digital Strategy approved August 2020

Without the basics, nothing else will be possible.

Before going further in this document, the importance of adequate infrastructure has to be highlighted. Without up to date devices, networks and wi-fi, any attempts to digitise the future will fail. We operate, and will always operate, in a resource limited environment. In those circumstances it is often tempting to cut costs in the less visible foundations of our services, and this has included technical equipment, associated staff and cybersecurity. This was recognised in the Welsh Audit Office review of Health Informatics in organisations across Wales in 2018. We recognise that failing to invest in and maintain infrastructure is ultimately counter-productive. It weakens the foundations of our digital system, and without these foundations no sustainable developments can take place. We will have to accept that much of the initial investment in our digital future will be used to address the under-investment of the past. Once that balance is restored, it can't be allowed to slip again.

4 to 34 minutes logging in times on PCs

Lakeside (Systrack) benefit estimate

- A 10% improvement on log in times delivers these benefits
- Productivity gain - 7 minutes/day per machine = 4,884 hours 'recovered' productivity per week
- £2,461,662 in recovered productivity per year (based on £14/hr average wage)

Khan,Raj
10/07/2020 16:03:24

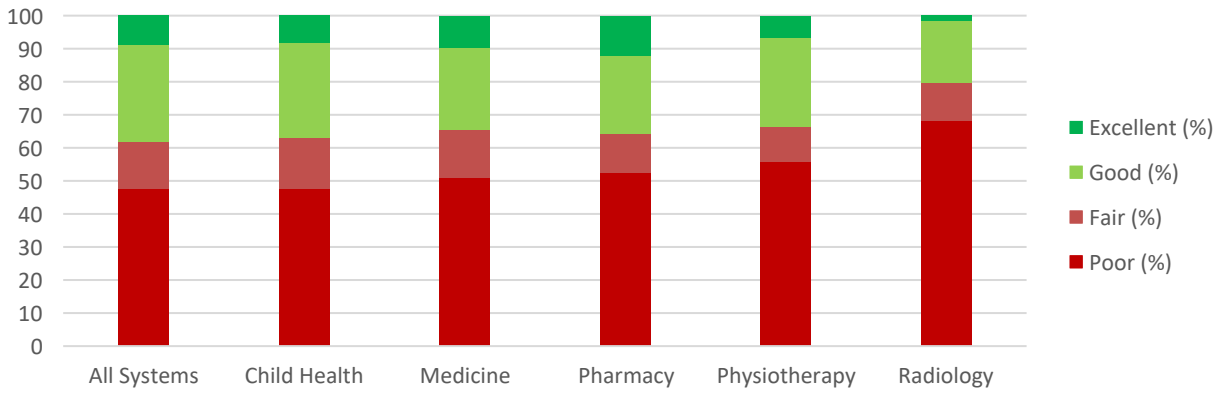
82%
Poor hea
Average health of users

2.1M
Hours per a
Productivity loss of users

Disk
Performance & Thr
Main reason for productivity loss

997K
Faults per
Total no. of applicat[illegible]

Health by Group

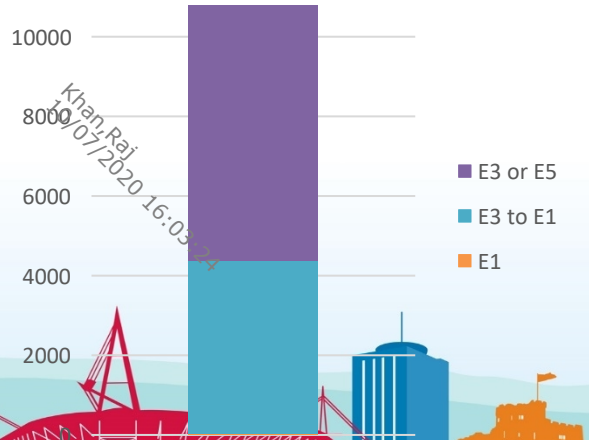


Ability of hardware to run O365

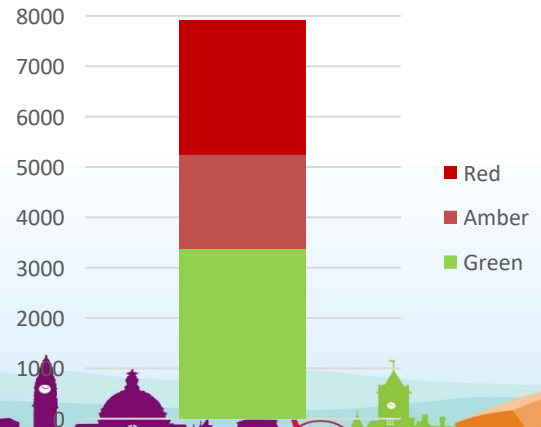
Model	Manufacturer	Value	Average Health	Total Num Systems	Disk
DQ45CB	OEGStone	52.44	52.44	133	1320.64
DH61CR	OEGStone	66.84	66.84	1908	2067.12
MS-7817	OEGStone	68.98	68.98	718	2091.25
H81M-P33 (MS-7817)	OEGStone	76.59	76.59	1495	1375.67
W54_55SU1,SUW	OEGStone	87.58	87.58	164	621.6
SATELLITE PRO A50-C	Toshiba	89.77	89.77	203	178.98
BOAMOT-481	OEGStone	91.84	91.84	1196	145.43
H110M-A/DP	OEGStone	92.27	92.27	240	107.85

Transformation

365 License Bands



Windows 10 Readiness



End user analytics

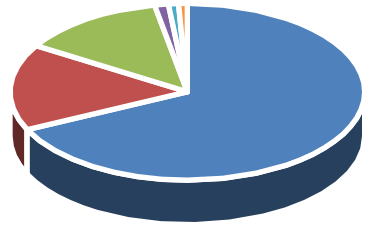
Best User

99.8% Quality Time
0.3 Hrs Productivity Impact

Worst User

10% Quality Time
130 Hrs Productivity Impact

Top Application Faults



Internet Explorer
McAfee
Search Indexer
Adobe Acrobat
OUTLOOK.EXE
SyncAppvPublishingServer.exe

Report Title:	**Committee Effectiveness Review 2019-20 Results and Actions**							
Meeting:	Digital Health & Intelligence Committee					**Meeting Date:**	8 Oct 2020	
Status:	**For Discussion**	**x**	**For Assurance**		**For Approval**	**x**	**For Information**	
Lead Executive:	**Director of Corporate Governance**							
Report Author (Title):	**Head of Corporate Governance**							

SITUATION

It is good practice and good governance for Committees of the Board to undertake a self-assessment of their effectiveness on an annual basis, in line with the requirement of Standing Orders. This is done for all Committees of the Board.

As the Committee was only formed in August 2019 this is the first time it has completed an annual self-assessment. The survey questions were selected based on their inclusion as key considerations in the Good Governance Handbook. Survey Monkey was used as a tool to gather the feedback.

ASSESSMENT

Attached at appendix 1 are the results for the Committee Effectiveness review undertaken by Committee Members in addition to the Executive Director Lead for the Committee; where comments have been provided these are also included.

Attached at appendix 2 is a proposed action plan to improve the areas in which the results fell below 100%.

RECOMMENDATION

The Committee is asked to:

- Note the results of the Committee's self-assessment Effectiveness Review for 2019-20.
- Approve the action plan for improvement to be completed by March 2021 in preparation for the next annual self-assessment which will feed into the 2020-21 Annual Governance Statement.

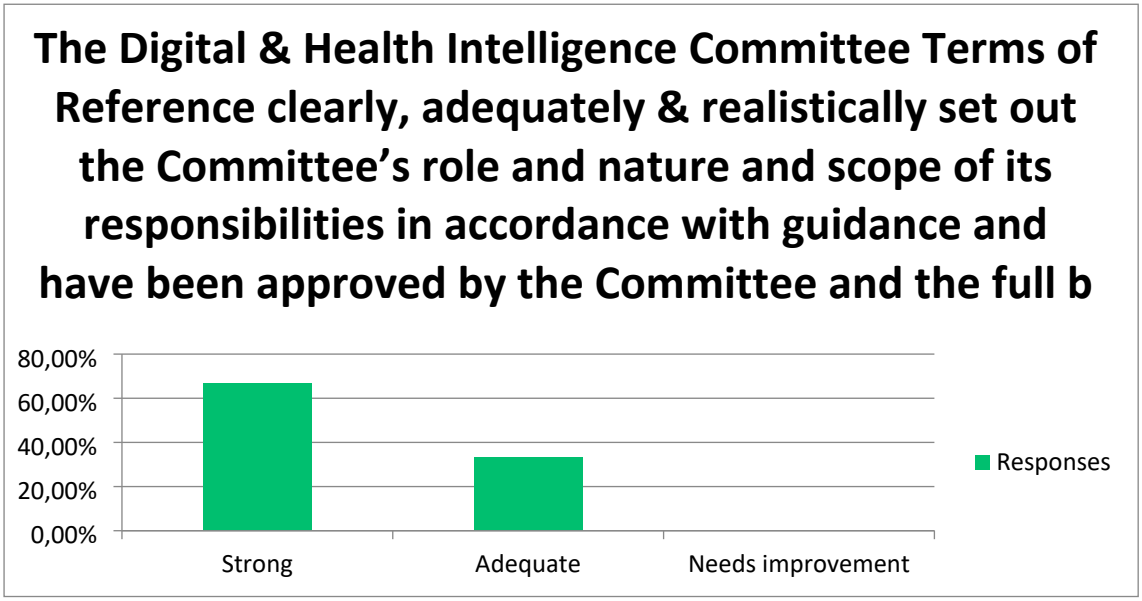
Shaping our Future Wellbeing Strategic Objectives *The UHB objectives relevant to this report*			
1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	x	7. Be a great place to work and learn	x
3. All take responsibility for improving our health and wellbeing	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									
Prevention		Long term	x	Integration		Collaboration		Involvement	
Equality and Health Impact Assessment Completed:	Not Applicable								

Appendix 1

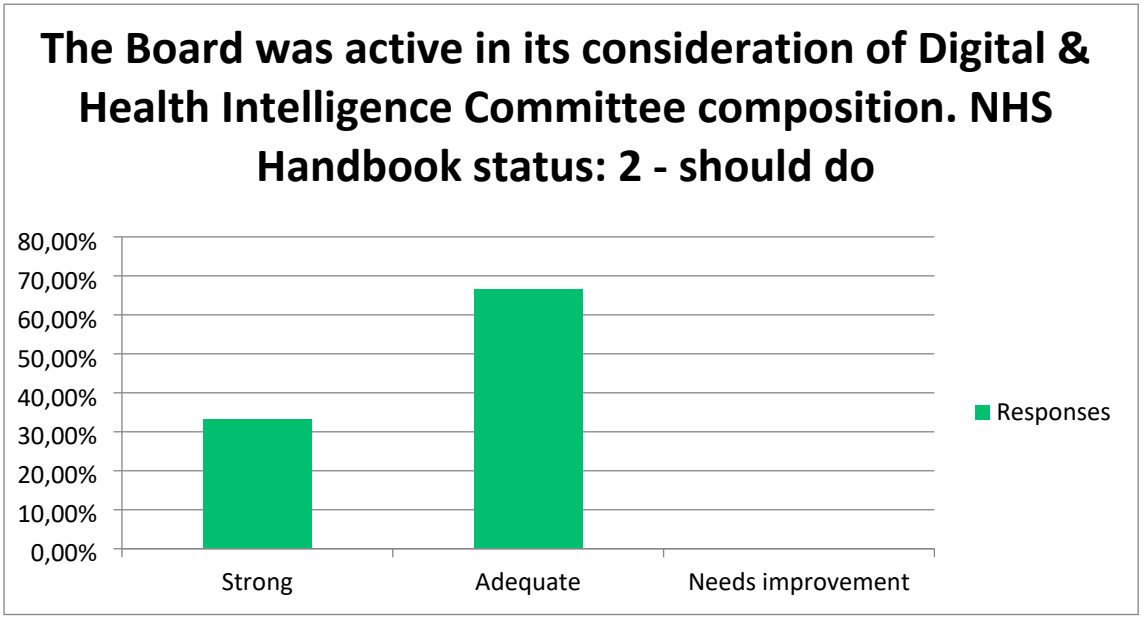
Digital Health & Intelligence Committee Effectiveness Results 2019-20



Comments

"Terms of Reference have been recently re-set to ensure the Committee is more strategically focused".

"A relatively new Committee that has commenced its work very well. Probably scope to revisit the TOR after the first 12 months to see if improvements can be made as the organisation increases its use of digital technology".

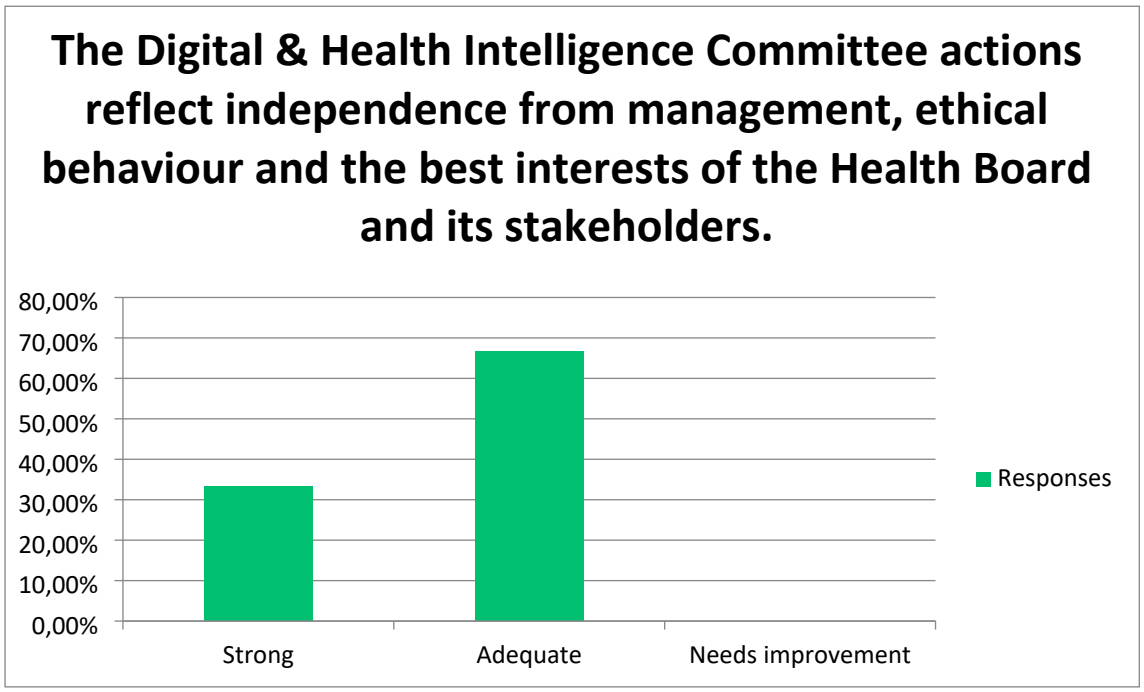


Comments

"Awareness at Board level has improved but still needs further attention. This Committee will help considerably".

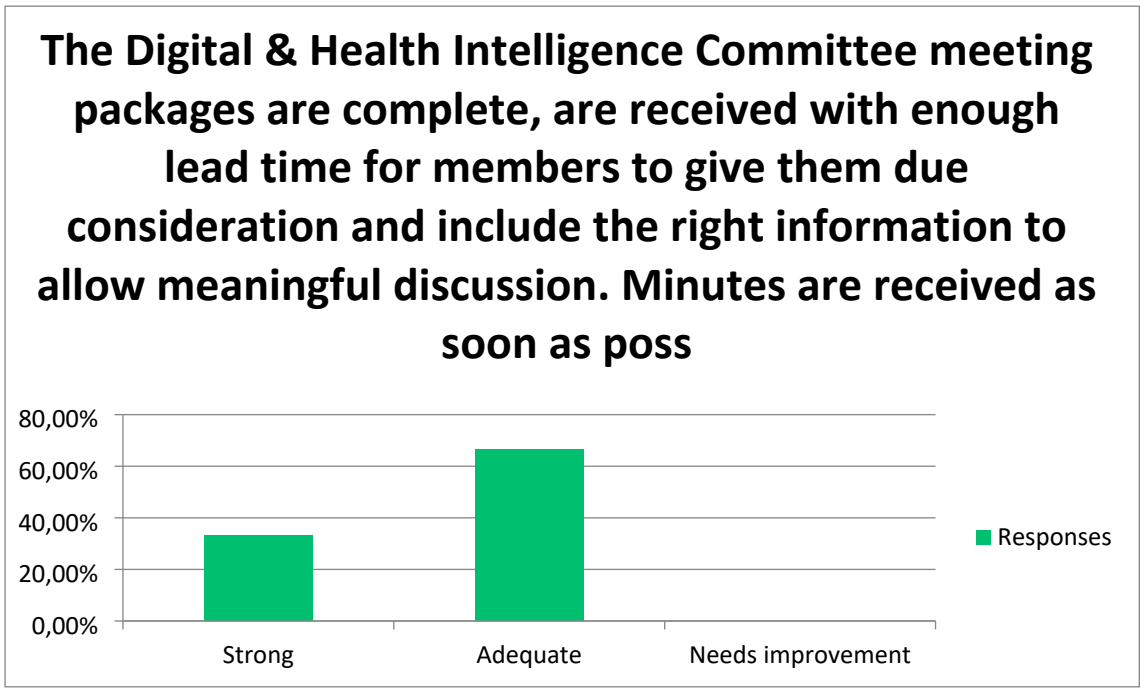
Appendix 1

Digital Health & Intelligence Committee Effectiveness Results 2019-20



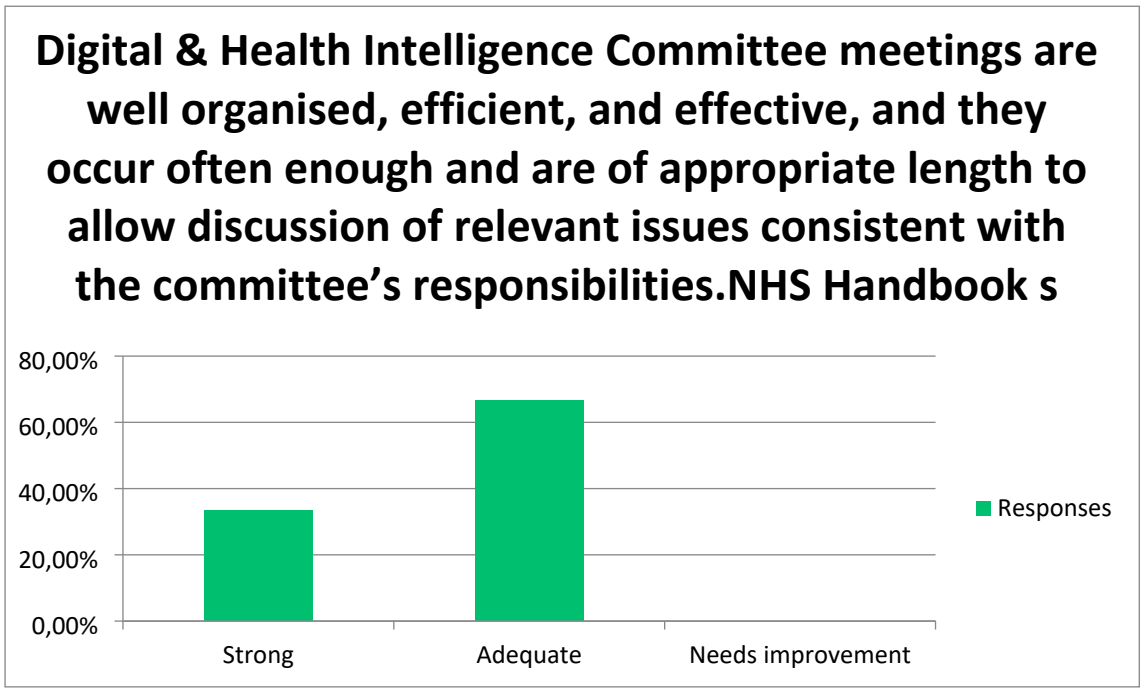
Comments

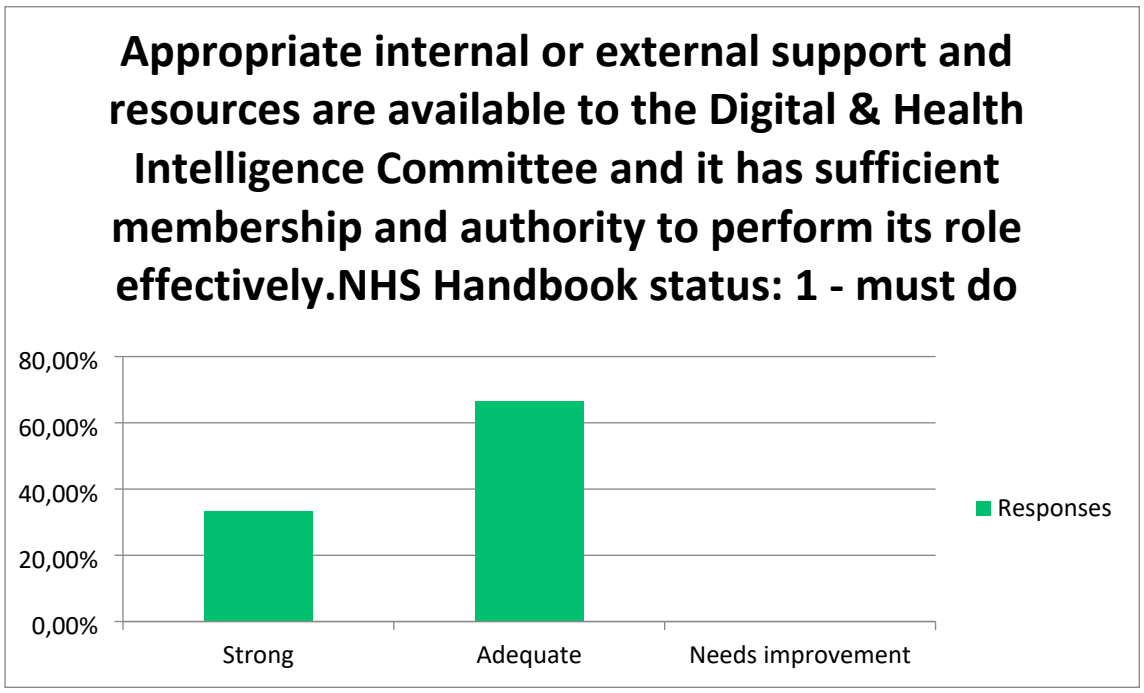
"A positive lead provide by the Chair of the Committee in this regard".



Appendix 1

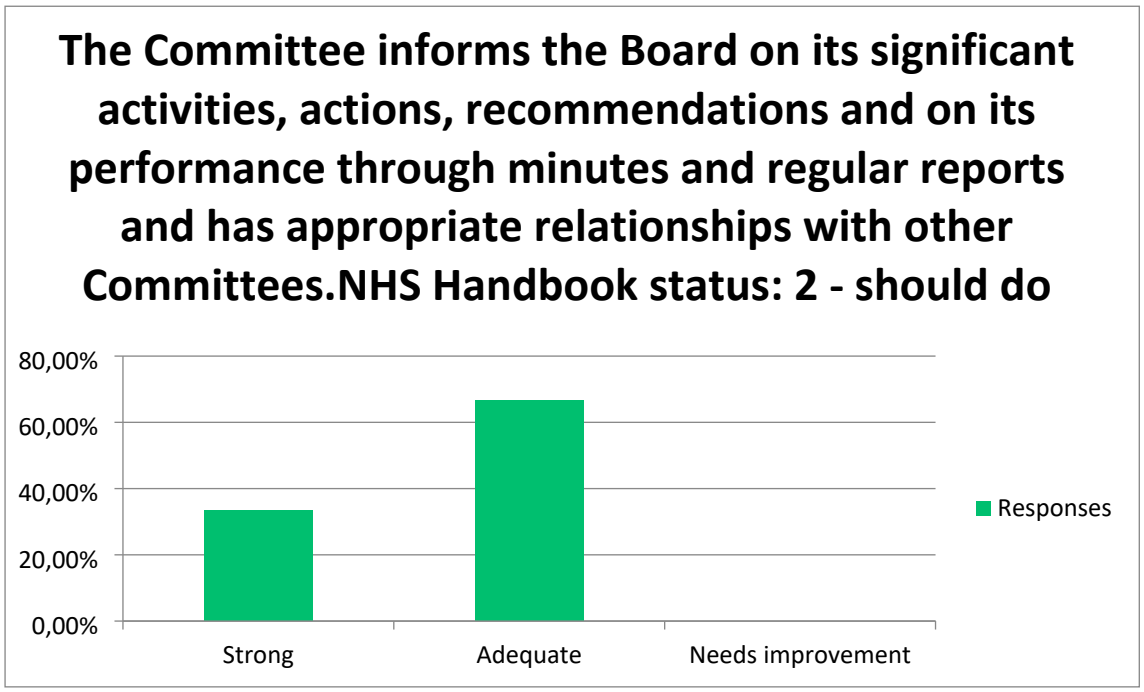
Digital Health & Intelligence Committee Effectiveness Results 2019-20

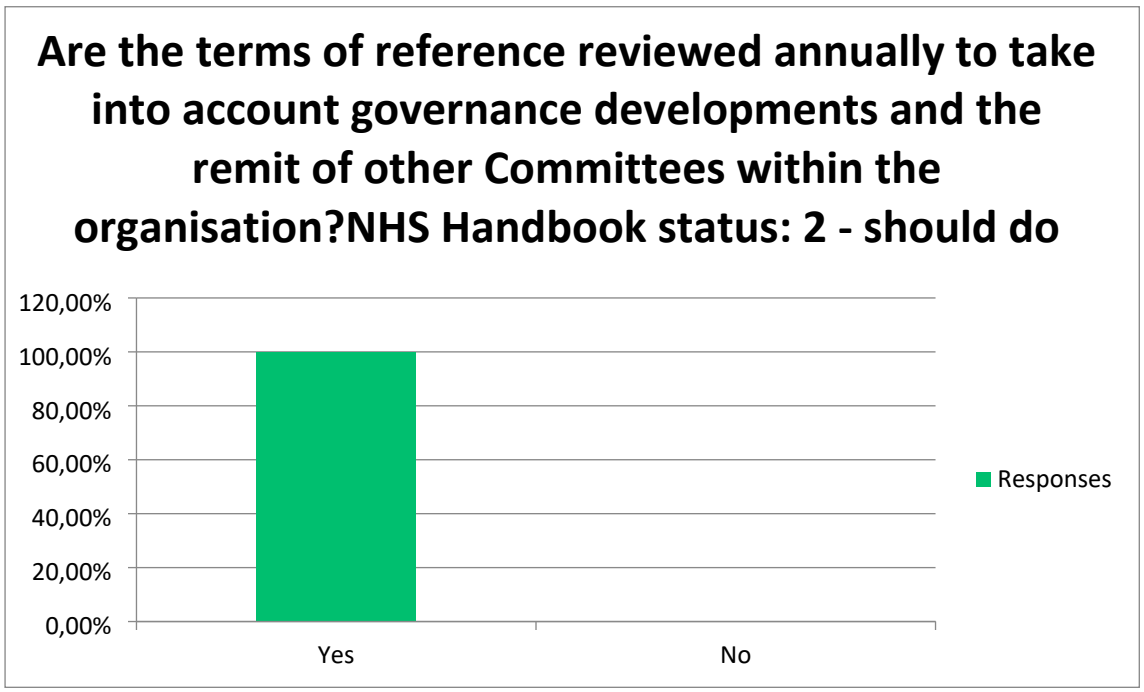




Appendix 1

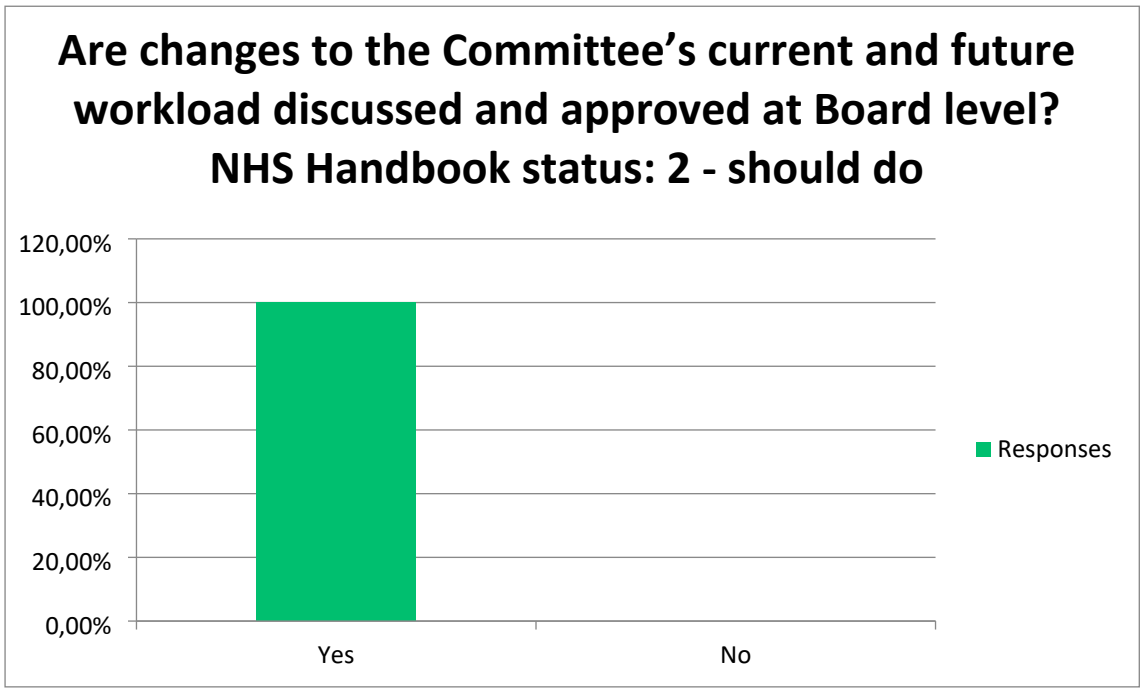
Digital Health & Intelligence Committee Effectiveness Results 2019-20

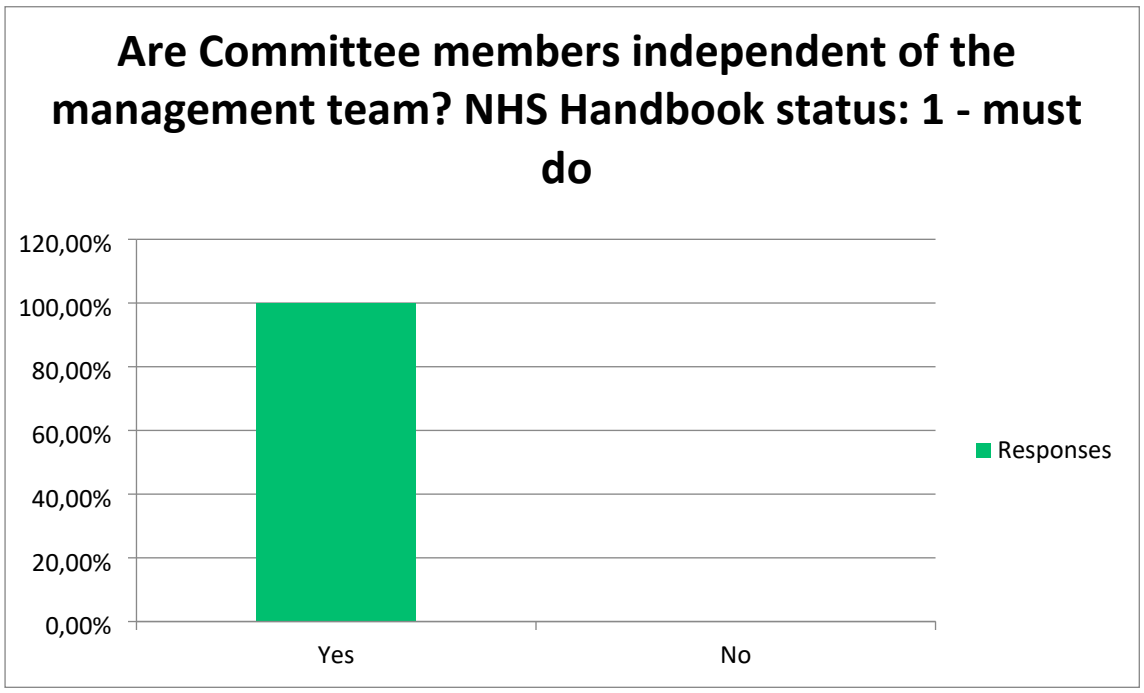




Appendix 1

Digital Health & Intelligence Committee Effectiveness Results 2019-20



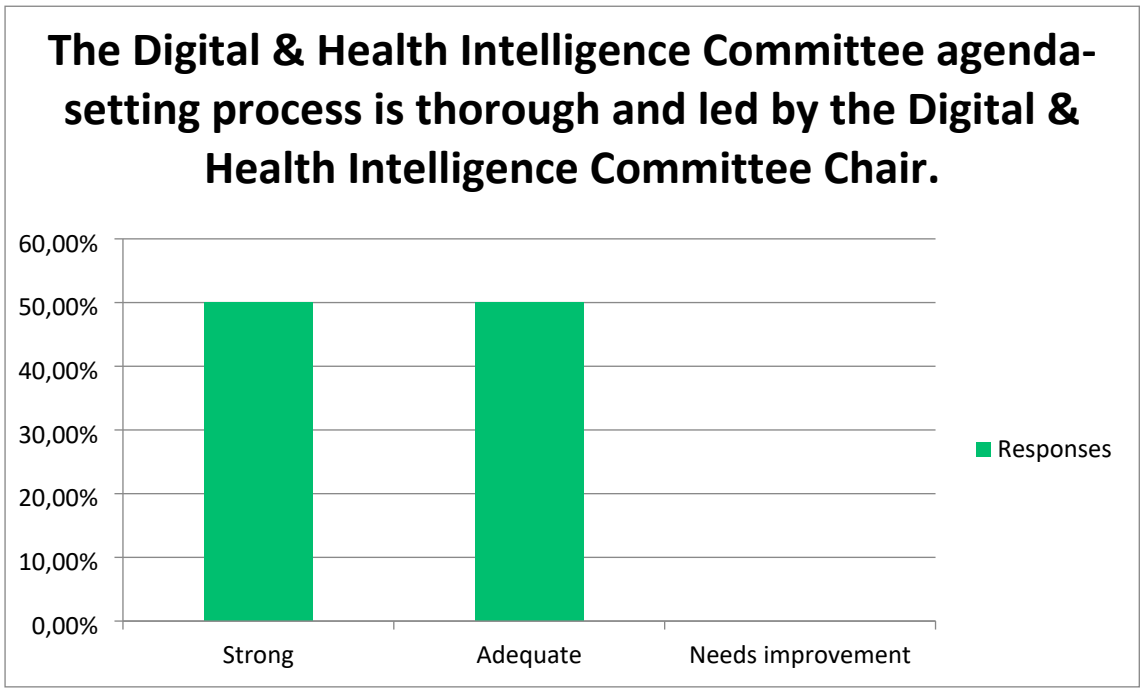


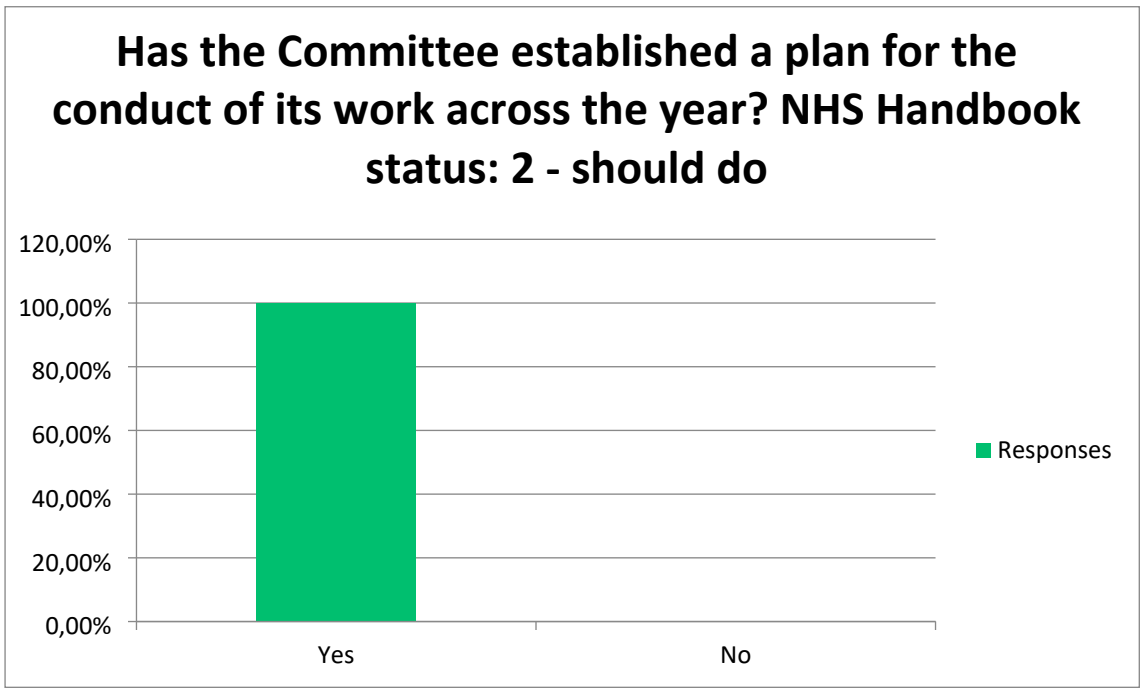
Comments

"There is an appropriate mix of management and independent members".

Appendix 1

Digital Health & Intelligence Committee Effectiveness Results 2019-20





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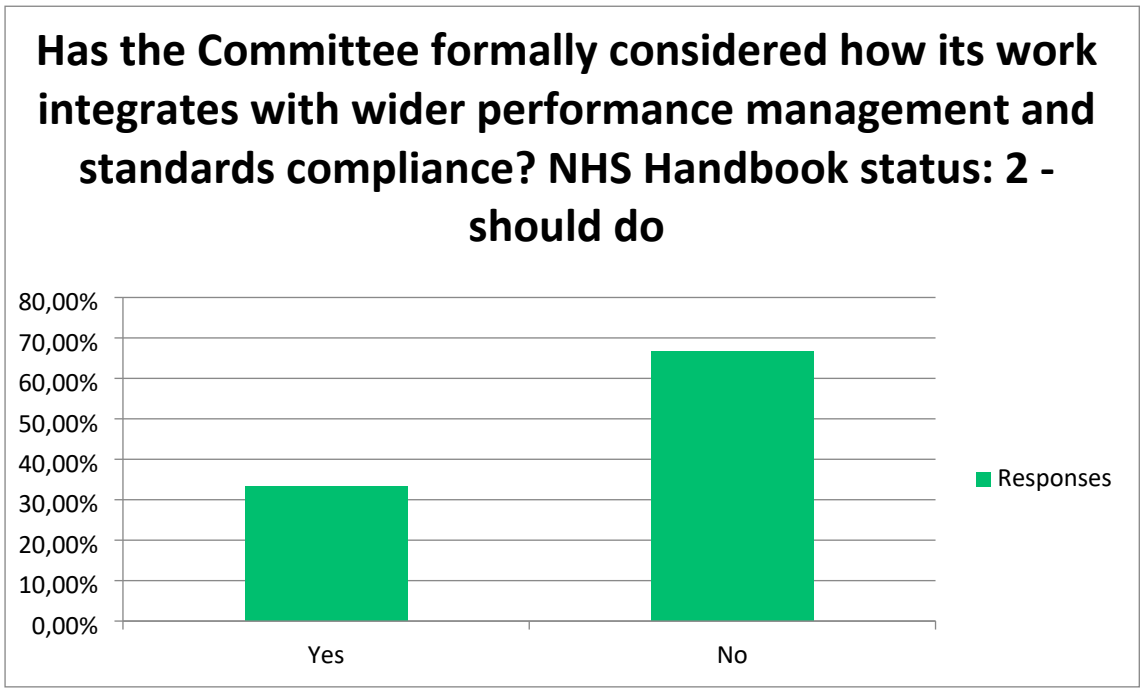
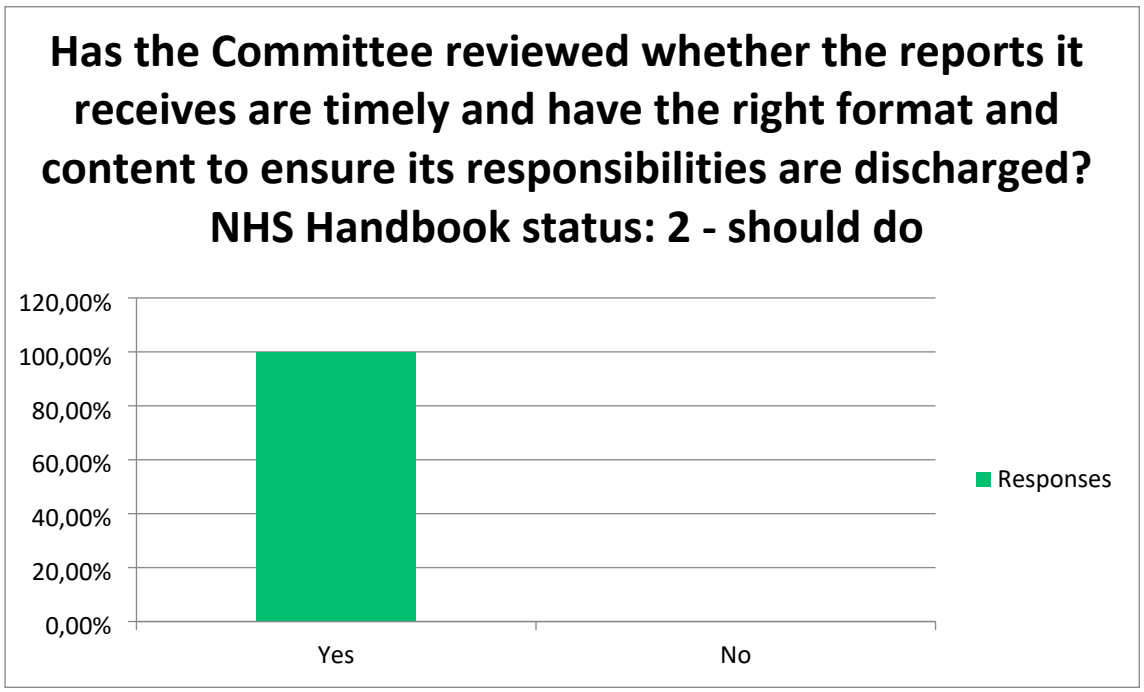
Digital Health & Intelligence Committee Effectiveness Results 2019-20





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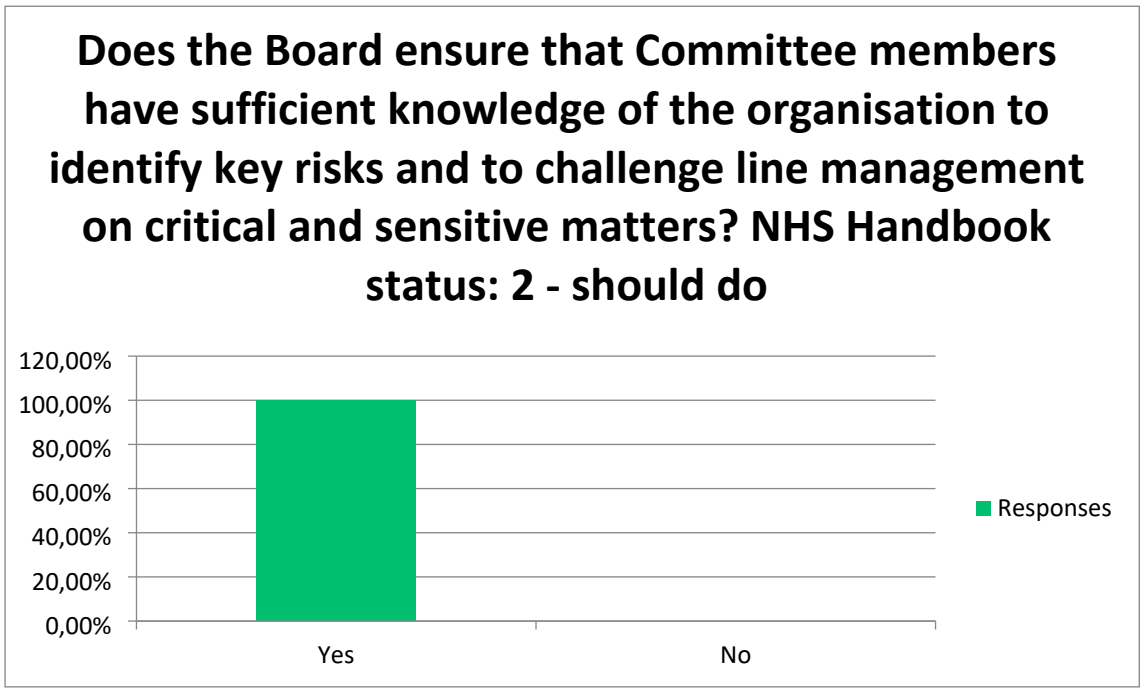
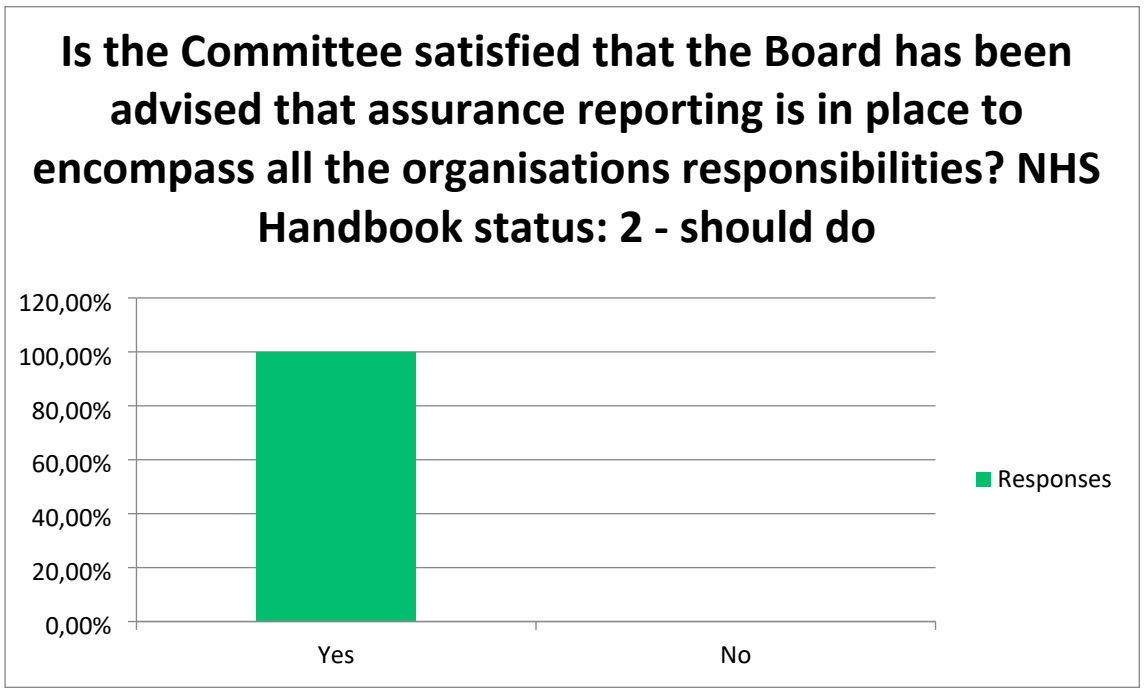
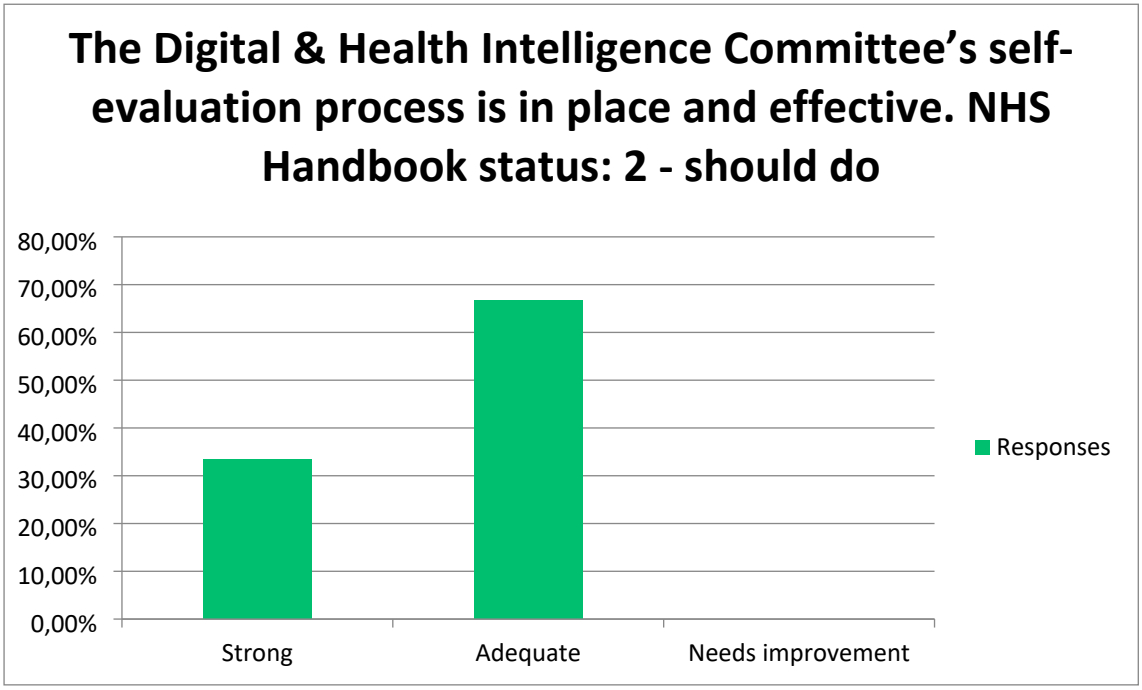
Digital Health & Intelligence Committee Effectiveness Results 2019-20

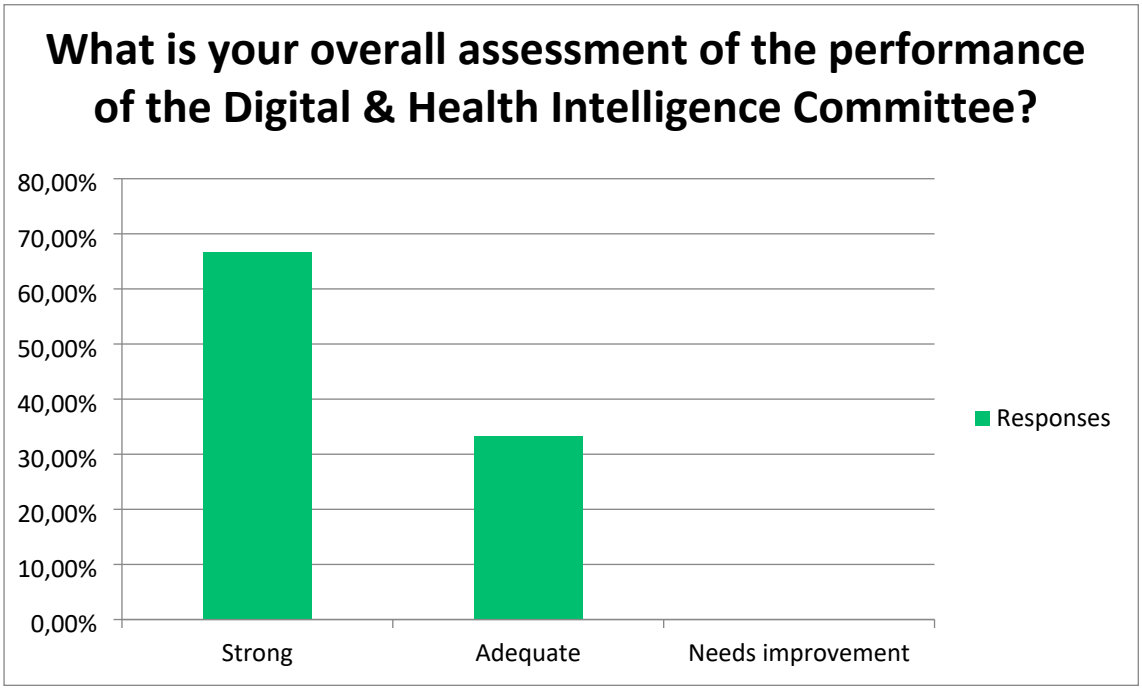




Appendix 1

Digital Health & Intelligence Committee Effectiveness Results 2019-20





Comments

"A relatively new Committee that is very well chaired and making good progress".

"The Committee has been greatly strengthened in recent months by the appointment of the Transformation Director and the Digital Intelligence Director. Also by the membership which includes the Chair and Vice Chair".

Appendix 2

Digital Health & Intelligence Committee – Self Assessment 2020 Action Plan

Question asked	Action Required	Lead	Timescale to complete
The Digital & Health Intelligence Committee Terms of Reference clearly, adequately & realistically set out the Committee's role and nature and scope of its responsibilities in accordance with guidance and have been approved by the Committee and the full Board.	Terms of Reference and Committee Work plan were reviewed and approved by the Committee in February 2020 and the Board in March 2020.	Director of Corporate Governance	March 2021 for next review
The Board was active in its consideration of Digital & Health Intelligence Committee composition.	Terms of Reference setting out Committee composition are annually reviewed and approved by the Board.	Director of Corporate Governance	March 2021 for next review
The Digital & Health Intelligence Committee actions reflect independence from management, ethical behaviour and the best interests of the Health Board and its stakeholders.	The Chair and Vice Chair of the Committee are Independent Board Members and membership composition includes other Independent Members to ensure this standard is met.	Chair/Director of Corporate Governance	March 2021 for next review
The Digital & Health Intelligence 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.	Meeting packages to be reviewed and uploaded within the timescales set out within Standing Orders. The Corporate Governance Department have clear timescales for delivery and Executive Directors are also required to ensure their reports are submitted on time. The Corporate Governance Department and Executive Director Teams are working closely to achieve this. The issuing of rules for submitting of papers, will further strengthen this in 2020.	Director of Corporate Governance / Executive Lead	From October 2020
Digital & Health Intelligence 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.	Robust agenda setting with Chair and Executive Director which is overseen by the Director of Corporate Governance will improve on this going forward.	Director of Corporate Governance / Executive Lead and Committee Chair	By November 2020 and March 2021 for next review
Appropriate internal or external support and resources are available to the Digital & Health Intelligence Committee and it has sufficient membership and authority to perform its role effectively.	To consider at next agenda setting support and resources to be provided to improve the Committee's scrutiny and effectiveness.	Chair/Director of Corporate Governance	By December 2020
The Committee informs the Board on its significant activities, actions, recommendations and on its performance through minutes and regular	Chair's reports, Committee annual reports and confirmed Committee	Chair/Director of Corporate	From April 2020

reports and has appropriate relationships with other Committees.	minutes will continue to be fed onto Board. The Director of Corporate Governance will continue to support the Chair to ensure items are fed into other Committees as appropriate.	Governance	
The Digital & Health Intelligence Committee agenda-setting process is thorough and led by the Digital & Health Intelligence Committee Chair.	The Committee work plan will support this. The Chair, with the support of the Director of Corporate Governance, will lead the agenda setting and ensure that items are appropriate.	Chair/Director of Corporate Governance	From September 2020
Has the Committee formally considered how its work integrates with wider performance management and standards compliance?	Relevant performance management / standards to be collated for discussion and appropriate actions identified. Results will be fed back to the Committee.	Committee Chair and Director of Corporate Governance	By November 2020
The Digital & Health Intelligence Committee's self-evaluation process is in place and effective.	The Committee has undertaken the first of its annual self-assessments and will continue this annual reflection in keeping with all other Committees of the Board.	Director of Corporate Governance	March 2021 for next review
What is your overall assessment of the performance of the Digital & Health Intelligence Committee?	Overall, the Committee assessment shows it moving in the right direction and completion of this action plan will further improve the position.	Director of Corporate Governance	The March 2021 self-assessment will measure effectiveness of improvements made.

Report Title:	**GP Pilot Action Plan**								
Meeting:	Digital & Health Intelligence Committee						**Meeting Date:**	8th October 2020	
Status:	**For Discussion**		**For Assurance**		**For Approval**	**x**	**For Information**		
Lead Executive:	**Director of Digital & Health Intelligence**								
Report Author (Title):	**Information Governance Manager** **Director of Digital & Health Intelligence**								

Background and current situation:

In early 2018, GPs at the Llan Health Centre piloted extending access to UHB patient records via the CAV portal. This facilitated access to any patient within CAV Portal, as opposed to just those patients registered within that particular practice.

This model aligns to how GPs access patients' results within Welsh Clinical Portal (WCP) and negates the need for manual access to be granted on a case by case basis. The result of the pilot was seen as a precursor to informing a decision on whether extended access should be provided to all CAV portal users.

In March 2020, the importance of instant GP access to CAV results and letters was recognized as part of the response to the Covid-19 pandemic resulting in the Medical Director granting approval for wider deployment of access by GPs to any patient within the CAV portal.

IT development was undertaken and by the end of March 2020 all GPs within Cardiff and Vale were able to access any patient within the CAV Portal.

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

Whilst widely supported, the pilot wasn't progressed beyond Llan Health Centre. The action remained a long-standing ITGSC and DHIC item with no clear owner or responsible party.

There have been some lessons learned in terms of accountability and ownership. The change in personnel during this time (2018 through to 2020) was clearly a factor.

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

The change in process has facilitated quicker access to CAV results and letters. This also bypasses the manual process of updating PMS following a GP request for access providing a more responsive service to patients.

Recommendation:

To note and ratify the actions taken to achieve closure on this plan.

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	X	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	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		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

Report Title:	**Digital & Health Intelligence – Digital Transformation Progress Report**								
Meeting:	**Digital and Health Intelligence Committee**						**Meeting Date:**	8th October 2020	
Status:	**For Discussion**		**For Assurance**		**x**	**For Approval**		**For Information**	
Lead Executive:	**Director of Digital and Health Intelligence**								
Report Author (Title):	**Assistant Director of IT**								

Background and current situation:

The UHB has a constantly evolving 3 year strategic outline plan for informatics development designed to underpin delivery of our strategy, IMTP, transformation programme and the Welsh Government's Healthier Wales and Informed Health and Care policies and strategies.

The D&HI directorate are committed to moving towards the use of dashboards to provide effective visual presentations on status, issues, trends and risks across the broad work-plans.

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

The Work Plan to support the emerging Digital Strategy (2020-2025) consists of multiple projects and programmes, both local and national.

Future reporting on progress will require the development of a set of dashboards. These will be shared and used to report progress at future Committee meetings.

A summary of progress across Digital transformation work over the past 6 months from March to September 2020 is set out as follows:

COVID Digital support

The Department of Digital and Health Intelligence has completely re-focused its work plan to prioritise Digital Initiatives to support the UHB in addressing the impact of Covid-19.

Huge progress has been made across many areas and work is ongoing including the following examples:

- Commissioning and de-commissioning of the IT infrastructure at DHH
- Planning for the commissioning of the 400 bed Lakeside wing at UHW to open in November 2020
- Enabling and supporting thousands of staff to work from home
- Enabling virtual meetings through the extensive deployment of Teams and Office 365, consultations via Attend Anywhere and Consultant connect
- Delivering the Test Trace Protect Project

- Delivering all the Digital Infrastructure redesign initiatives to support implementation of Green Zones
- Upgrading of PMS system and Business Intelligence system in support of COVID
- Preparation and planning for the delivery of the **mass Covid immunisation project**

C&V Data Repository

This work stream focusses on accessible data, through sharing and wider clinical use of data stored in GP, community, mental health, EU, outpatient, theatre and maternity information systems. Work is continuing to deliver phase 1 of the Clinical Data Repository (CDR) with preparation including hardware and training on FHIR (Fast Healthcare Interoperability Resources), which is the standard describing data resources and APIs for exchanging electronic health data. This will feed into the National Data Resource programme led by NWIS.

Intelligent Citizen Portal

Intelligent Citizen Portal – renamed **Personal Health Record** (PHR) mobilising to onboard specialties' patients at a rate of 4 specialties per month from November. Prioritisation has been agreed by the Patient Channel Programme Board and discussions with the first clinics start w/c 28/09/20. An onboarding process has been developed to enable specialties to proceed to using the platform for their patients at pace. The project team is working through some issues with a hybrid mail provider.

Integrated Digital Health and Care Record

Work has progressed with enabling multi-disciplinary teams to share common records, e.g. use of Vision 360 GP clinical record system to allow clinicians to see primary care data at a cluster level. GPs can now access and see community data via the PARIS system.

Data to Knowledge

Data being shared with Lightfoot to support the "signals from noise" insights work has increased from 5 to 7 days a week and in addition key data types have increased in frequency from 24 hours to 12 hours (admissions) and 1 hour (EU), allowing for better planning and resource management. Additional data types have been added including most recently the Covid status of inpatients, CAV 24/7, Radiology and GP OOH (Adastra). Work is continuing to determine a framework and process by which information sharing between health and social care providers can become routine, creating a unified view of patient demand for core services, understanding patient flow between organisations and patient outcomes and interventions.

The frequency and scope of data being loaded into the Health Board's Corporate Data Warehouse has also been extended to support Covid. Operational dashboards have been produced in the Business Intelligence System which refresh every 10 minutes showing the current situation in EU and on wards. Covid antigen test data has been linked to PMS and Paris activity for analysis and is also available to view in dashboards at community level for Cardiff and Vale residents and significant groups such as nursing homes and key workers.

The key enabler programmes include the **digitally included population** where work to extend the availability of free wi-fi across the C&V estate is being progressed as well as improving access and reducing costs of translation services by greater use of digital applications. In supporting the

digitally enabled workforce, we are embarking on a programme of PC replacement, including mobile devices where more appropriate; we recognize the importance of training and developing staff in the use of digital technologies and are developing training and support via web-based means as well as retaining a training function. The **architecture and infrastructure** requirements to support our digital strategy require additional storage and server capabilities, which are being addressed via the discretionary capital budget.

A more detailed update on progress against specific projects forms the remainder of this report.

Local / National Projects

- A managed service for **digital dictation and transcription** is being investigated.
- **Spend** on IT & digital across the organization is being collected with a view to looking at opportunities for consolidation and aggregation across the diverse estate.
- Draft persona's have been developed to support **staff mobilisation** – from devices at the bedside for electronic observations to peripatetic working. This is raising discussions about use your own device (BYOD), a virtualised desktop and more unified communications.
- Pharmacy system replacement programme – NWIS have delayed go live until May 2021 at the earliest due to covid related activities taking priority.
- National Critical Care system – Welsh Government funding has been approved, award of contract is complete, successful supplier is Ascom. A technical review of current infrastructure within the ITU units is underway in readiness for implementation by 2022.
- Carecube scheduling system – support Cardiology (Cath Lab) in the implementation of a new scheduling system – go live delayed until IT resource becomes available to support.
- Adastra –upgrade to the infrastructure and application is now complete and deployed. The application has been moved from the citrix farm onto the new robust RDS platform.
- 24/7 Service – CRI has been built and included new network infrastructure and installation of PC / Printers and phones next stage is to deploy the 4Net software which requires network resource, however work has progress and looking to have live by the end of October 2020.
- Philips Cardiology system upgrade –IT preparation work with the service ongoing. Agreeing costs of new servers with service, once agreed will plan go live date.
- Chemocare Version 6 Upgrade – IG agreements signed off Sept 2020, planning to start upgrade early 2021.
- Windows 10/Office365 implementation – ongoing throughout 2020 and early 2021.
- Consultant Connect – Telephone Advice and Guidance service to connect primary care clinicians with secondary care. Service went live June 2020, currently in use across all CAV GP surgeries and 15 secondary care specialties. Qualitative evaluation and further roll out ongoing.

Welsh Clinical Portal and GP Test Requesting

- Pathology Electronic Test Requesting continues to be rolled out across the UHB. Recent go lives include Maternity, Dental and Pre Op Assessment Unit and Paediatric Inpatients. Planning is underway for implementation in Paediatric Outpatients, Paediatric Oncology, CAVOC (Orthopaedic inpatient & outpatients) and Emergency Unit.
- WCP Results and Notifications functionality is being implemented in additional specialties following the successful pilot in Gastroenterology.
- Result Notification pilots extended to Gastroenterology Consultants, Haematology

Consultants, Metabolic Medicine and the Haemophilia Centre. Pilots are underway for services utilising the Teamwork Preferences feature.

- The GP Test Requesting Pilot at Saltmead Medical Practice is continuing with Penarth Healthcare Partnership planned to be the second practice to pilot. The project has received several expressions of interest from other practices.
- GPTR Pilot was put on hold in March due to issues users experienced with Zebra label printing. NWIS plan to resolve the issue by implementing a new zebra label printing template. CAV are planning to restart the GPTR pilot initially with The Vale Group GPs in October 2020.
- Implementation of MTeD in Maternity took place in February 2020 following Pharmacy Medicine Order Sets (MOSs) approval by CAV Medicines Management Group.
- Pathology Electronic Test Requesting continues to be rolled out across the UHB. Recent go lives have been in Maternity, Dental and Pre Op Assessment Unit and Paediatric Inpatients. Planning is underway for implementation in Paediatric Outpatients, Paediatric Oncology, CAVOC (Orthopaedic inpatient & outpatients) and Emergency Unit.
- ETR Rolled out to Major Trauma Unit and Neo-natal with roll-out complete for Paediatrics.
- COVID Testing using the all-Wales WCP instance in place in both UHW and UHL Emergency Units, allowing SMS results to be sent to patients not required to stay in hospital.
- WCP v3.11 User Acceptance Testing was completed on 6 March 2020. This version containing Radiology Test Requesting remains in pilot in CTM UHB prior to being rolled out to other health boards.
- WCP version 3.11.1 was deployed to CAV live environment on 31 March 2020. Enhancements:
    - Electronic Results Sign Off
    - R&N and Discharge Advice Letter (DAL) Awaiting or Sign Off Dashboard
    - All Wales patient Search
    - Radiology PACS Images where enabled in this version on 9 April 2020
    - The National COVID 19 Mortality eForm was introduced on 22 April 2020.
- Prepared and deployed WCP 3.11.1 for use in Dragon Heart Hospital in April 2020
- User Acceptance Testing of WCP version 3.11.2 commenced on 1 July, was completed on 1 September and was deployed to the CAV live environment on 2 September 2020.
- WCP Mobile Application rolled out and available to all Consultants and Junior Doctors

PARIS

- Expansion of GPs direct access to PARIS in support of cluster working agreed to be expanded across the region. Rollout will be through Q4 2020/Q1 2021.
- Overhaul of PARIS solution (major efficiency version change from vendors) in testing and preparation for Feb 2021 rollout. In-system dashboards, navigation shortcuts, customisation and Subject access request (SAR) are all major component parts. This is the focus of PARIS based workload for Q4 2020/Q1 2021.

- Social prescribing platform specified, IG assessed, and procured (Elemental). Currently being configured for use, and developed in sprints with the vendors. Go-Live was August 2020.
- Discharge Hub – Enabled and established for south west cluster, giving access to PARIS, WCP, GP record, and Council record (CareFirst). Making this the most richly informed MDT group in Wales. This successful solution will now be augmented and include frequent fliers to out of hours for the Cardiff SW cluster, another first for CaV in Wales.

National Eye Care Digitisation Programme

- The National EPR for Ophthalmology has been awarded to ToukanLabs (open Eyes) a 100% HTML product. The licence agreement enables every Optometrist in NHS Wales's connectivity to the EPR with read/write access.
- Those Organisations with the NHS England DSKtoolKit will be recognised in NHS Wales, these are Non Independent Organisations such as Specsavers, Vision Express and connect via the NWIS EMS Platform the Independent Optometry Practices will connect via MobileIron.
- C&V UHB are the pathfinder organisation on behalf of NHS Wales and have gone paperless in Glaucoma and Unscheduled Care and have been shortlisted in the National Building Better Healthcare Awards and two recent submissions to the annual Health Service Journal Awards.
    - Between March and September we have seen more than 1,000 Unscheduled Care patients (92) in five practices that were all previously seen in the Emergency Eye Clinic in the UHW
    - In November 2020, C&VUHB will be the pathfinder organisation to go paperless with Cataracts with four consultants
- Between July and September more than 700 low risk Glaucoma patients have been seen in five Optometry Practices to the UHB via Meraki Technology with the consultants providing Virtual Clinics to support the management of the patients.
- We have recently agreed a pilot project with Carl Zeiss to connect a further 9 practices with Carl Zeiss Humphrey Field Machines in Cardiff and the Vale of Glamorgan to push Glaucoma Images automatically back to the UHW
    - Phase II will be the interfacing with the UHB PMS to alert the Consultant that a Glaucoma Patient has been seen in one of these 9 practices and have a clinic appointment booked in more than three months, can this appointment therefore be moved back.
- The OpenEyes system will be live to NHS Wales to support the Glaucoma pathway in the first quarter of 2021.
- The first phase of the electronic referrals from all Wales Optometric Practices is planned to be operation in the first quarter 2021. We have showcased a "mock-up design to the senior Optometry Leads/Ophthalmology Consultants in Wales and the Welsh Government and has been well received which will enable an electronic referral to be processed in less than two minutes and attaching images of the eye.

- Major Trauma System. Due to launch in UHW in 2020, including regulatory submissions to the Trauma Audit & Research Network (TARN), rehab prescriptions and M&M processes. Core functionality is mostly in place with phase 2 work underway. Phase 1 of the MTC system went live in September (14th). Further ongoing work as new requirements of the clinical centre are brought on line.

- Work is underway on a replacement for CAV Portal, built upon the existing "Cardiff Portal Lite" application. Work completed – implementation phase requires phased migration of user accounts which is currently underway.

- Medical Records Filing Library app. Controls placement of clinical notes and efficiency improvements in storage: Completed

- Single Cancer Pathway - Discussions have taken place with the trackers within Cancer services. COM2 rollout will play a big part in this development.

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

Assurance is provided by regular internal updates and planning reviews with items for exception highlighted to the Digital Health and Intelligence Committee.

Recommendation:

The Committee is asked to:

- **NOTE** the progress across the IT Delivery Programme.

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	x
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		Collaboration	x	Involvement	
Equality and Health Impact Assessment Completed:	Not Applicable								

Report Title:	**Digital Strategy – Plan on a Page**							
Meeting:	Digital & Health Intelligence Committee					**Meeting Date:**	8th October 2020	
Status:	**For Discussion**		**For Assurance**	**X**	**For Approval**		**For Information**	
Lead Executive:	**Director of Digital & Health Intelligence**							
Report Author (Title):	**Director of Digital & Health Intelligence**							

Background and current situation:

Following the approval of the Digital Strategy, ratified by D&HI Committee and subsequently approved by the UHB Board, it was agreed to produce a brief document to show the aims and ambitions of the Strategy on one page.

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

The Digital Strategy roadmap slide deck at Appendix 1 is a first draft of setting out the plan via the enabling programmes.

The slide on page 5 sets out the deliverables envisaged across the timeline (2020 to 2025) as well as describing where those products or outputs will be managed, overseen and owned.

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

Each of the progarmme boards overseeing the various channels and capabilities will comprise representation from services, including clincial lead information staff (CLIOs) from across all Clinical Boards.

Recommendation:

The Committee is asked to:

- **NOTE** the progress being made in developing a plan on a page to support the roadmap for delivery of the Digital Strategy.

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	x
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care	x

			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								

Digital & Health Intelligence

Digital Strategy

DRAFT

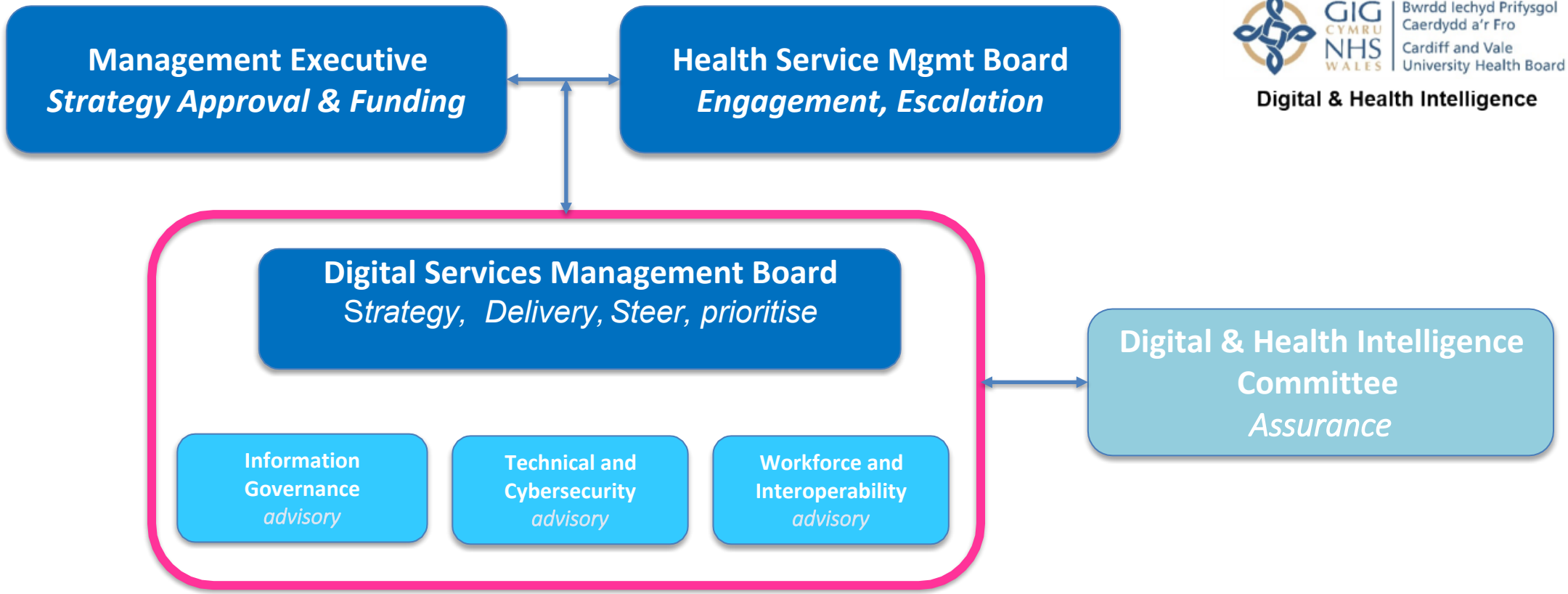
Governance

Roadmap

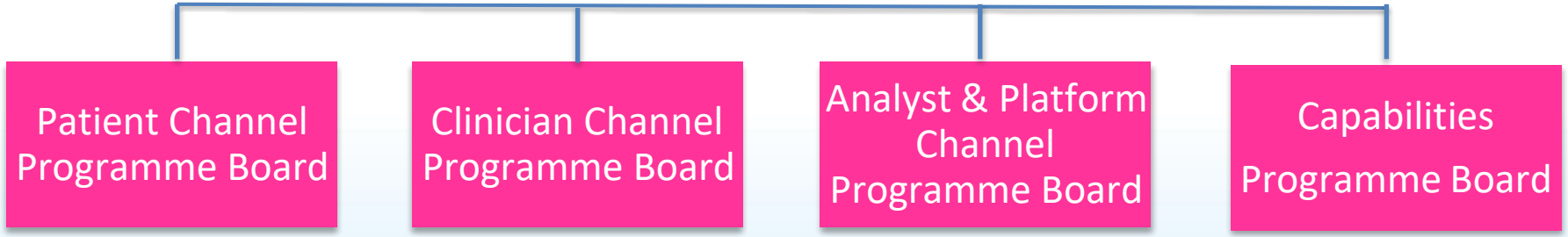
Enabling programmes

October 2020

Governance



Strategy Delivery Programme Boards



Roadmap summary

CAV Digital Strategy

+

International Standards for digital maturity

HIMSS

=

DIGITAL CAPABILITIES

Draft roadmap

Digital & Health Intelligence

2020

2025

Patient Channel Programme Board	Clinician Channel Programme Board	Analyst & Platform Channel Programme Board	Capabilities Programme Board
Covid response	Telephone advice & guidance Digital dictation & Transcription	SNOMED CT – all PAS in UHB	O365 and MSTeams • chat message video calling • file share (collaborate)
Virtual Consultations	Digital primary care	Analyse platform - ability to visualise complex data e.g. capacity across the UHB	Upgrade desktop estate & Windows 10 upgrade
E-Consent	Scheduling – community nursing Online referrals/e-referrals	Clinical Data repository (CDR) / Local data repository (LDR) and National data repository (NDR)	Staff mobilisation inc. UYOD 'Making things easier for staff'
Personal Health Record with PREMS/PROMS	Electronic Patient record Electronic Health record Clinical / specialty applications	E-health platform	Staff WiFi channel with seamless connectivity throughout the estate
Shared health and care record Across multiple agencies	Electronic pathology ordering Electronic observations (e-obs) Extend POCT	Interoperability internally & between agencies	Enablers inc. virtual desktop
Broadcast (film) public meetings e.g. Board meetings	ePMA – electronic prescribing & medicines administration Single Sign On (completed)	Scan4Safety (completed)	Managed print
Digital post Letters, Correspondence & Leaflets		Process automation (bots, AI)	'Smart' staff cards – log-in, door access, secure print, permits

Making it easier for our staff

- Password for life
- Automated password reset
- Up to date internal directories
- New intranet with fresh content and search capability
- Workflow e.g. links and flow between EU work station and ward workstation; for job/task management
- Access almost everything on any device including your own (ambitious!)
- Email accounts for all staff (jncluding students, facilities etc)
- Roster / rota solutions for all staff
- And there will be more ….

Khan,Raj 10/07/2020 16:03

Note

MS Teams has many capabilities that can respond to a lot of our requirements. These are not all detailed here …

Enabling works

State of the estate

Extract from our Digital Strategy approved August 2020

Without the basics, nothing else will be possible.

Before going further in this document, the importance of adequate infrastructure has to be highlighted. Without up to date devices, networks and wi-fi, any attempts to digitise the future will fail. We operate, and will always operate, in a resource limited environment. In those circumstances it is often tempting to cut costs in the less visible foundations of our services, and this has included technical equipment, associated staff and cybersecurity. This was recognised in the Welsh Audit Office review of Health Informatics in organisations across Wales in 2018. We recognise that failing to invest in and maintain infrastructure is ultimately counter-productive. It weakens the foundations of our digital system, and without these foundations no sustainable developments can take place. We will have to accept that much of the initial investment in our digital future will be used to address the under-investment of the past. Once that balance is restored, it can't be allowed to slip again.

4 to 34 minutes logging in times on PCs

Lakeside (Systrack) benefit estimate

- A 10% improvement on log in times delivers these benefits
- Productivity gain - 7 minutes/day per machine = 4,884 hours 'recovered' productivity per week
- £2,461,662 in recovered productivity per year (based on £14/hr average wage)

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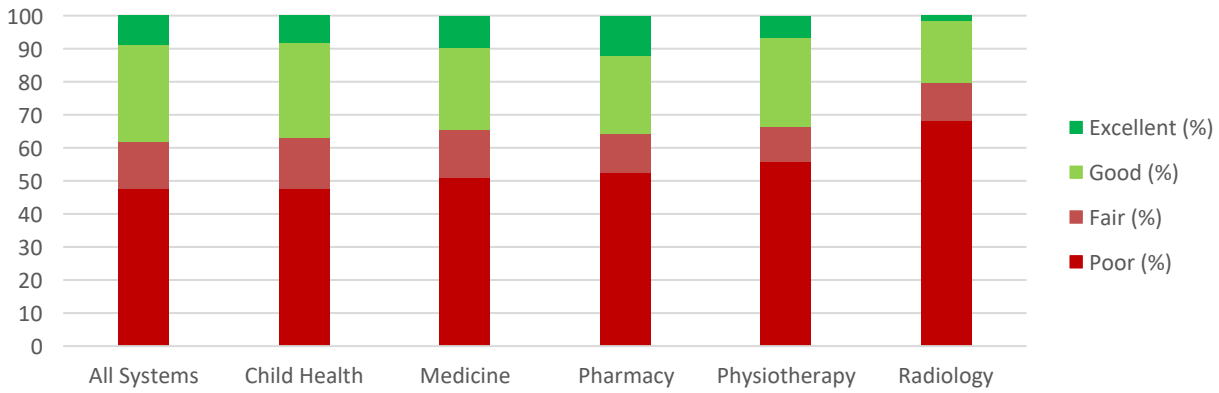
82%
Poor hea
Average health of users

2.1M
Hours per a
Productivity loss of users

Disk
Performance & Thr
Main reason for productivity loss

997K
Faults per
Total no. of applicat[illegible]

Health by Group

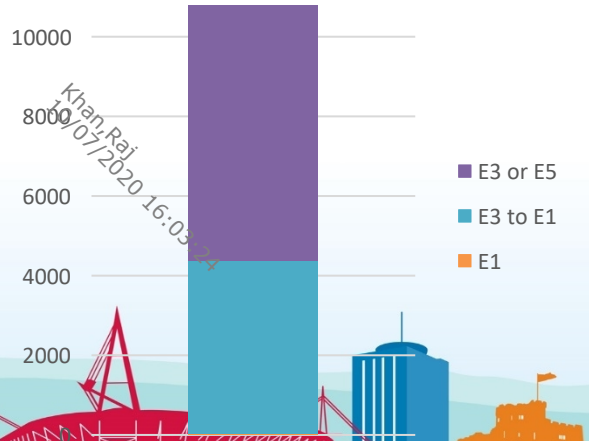


Ability of hardware to run O365

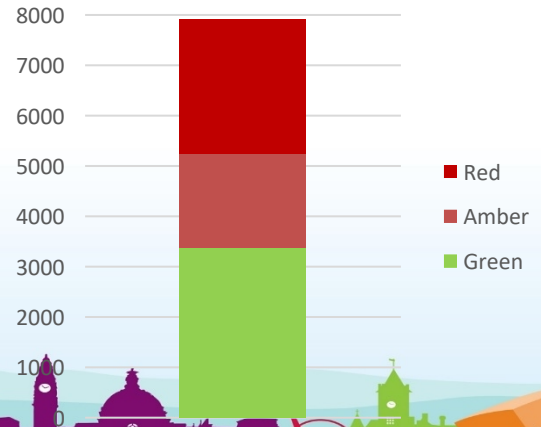
Model	Manufacturer	Value	Average Health	Total Num Systems	Disk
DQ45CB	OEGStone	52.44	52.44	133	1320.64
DH61CR	OEGStone	66.84	66.84	1908	2067.12
MS-7817	OEGStone	68.98	68.98	718	2091.25
H81M-P33 (MS-7817)	OEGStone	76.59	76.59	1495	1375.67
W54_55SU1,SUW	OEGStone	87.58	87.58	164	621.6
SATELLITE PRO A50-C	Toshiba	89.77	89.77	203	178.98
BOAMOT-481	OEGStone	91.84	91.84	1196	145.43
H110M-A/DP	OEGStone	92.27	92.27	240	107.85

Transformation

365 License Bands



Windows 10 Readiness



End user analytics

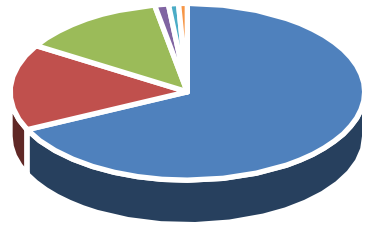
Best User

99.8% Quality Time
0.3 Hrs Productivity Impact

Worst User

10% Quality Time
130 Hrs Productivity Impact

Top Application Faults



Internet Explorer
McAfee
Search Indexer
Adobe Acrobat
OUTLOOK.EXE
SyncAppvPublishingServer.exe

Report Title:	**Information Governance Data and Compliance**								
Meeting:	**Digital Health Intelligence Committee**						**Meeting Date:**	**8th October 2020**	
Status:	**For Discussion**		**For Assurance**		**x**	**For Approval**		**For Information**	
Lead Executive:	**Director of Digital Health Intelligence**								
Report Author (Title):	**Information Governance Manager**								

Background and current situation:

This report contains key information governance issues considered by the responsible Executive Director, Senior Information Risk Owner (SIRO) and Data Protection Officer (DPO). Specifically it provides information on the following areas of Information Governance within Cardiff and Vale University Health Board (the UHB).

- Information Governance (IG) Staffing levels and capacity
- Data Protection Act - Serious Incident Summary and Report
- Freedom of Information Act - Activity and Compliance
- Data Protection Act (DPA) - subject access requests (SAR)
- Compliance monitoring/National Integrated Intelligent Auditing Solution (NIIAS)

Each individual report contains specific details relevant to the subject area, and includes updated information since the previous report to the Digital Health Intelligence Committee (DHIC) on how the UHB has complied with the obligations of each piece of legislation that satisfy the information governance requirements.

Cardiff and Vale University Health Board (the UHB) is required to ensure that it complies with all the legislative requirements placed upon it. In respect of Information Governance the relevant legislation which largely impacts on this work is the Data Protection Act 2018 (DPA), General Data Protection Regulation (GDPR) and the Freedom of Information Act 2000 (FOI).

Quarterly reports are produced for the DHIC to receive assurance that the UHB continues to monitor and action breaches of the GDPR / DPA 2018 and that FOI requests and SAR are actively processed within the legislative time frame that applies and that any areas causing concern or issues identified are addressed.

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

The overall Information Governance Department establishment has reduced by 1.57 WTE.

The number of information governance related incidents raised and reviewed remains high but the number of incidents reported to the ICO continues to be low.

SAR compliance has been sustained despite the continuing pressures departments face when balancing legislative requirements with our Covid-19 response.

FOI compliance has dropped significantly. This is as a result of the pragmatic approach that the Information Governance Department adopted in response to Covid-19.

National Intelligent Integrated Audit System (NIIAS) monitoring has been put on hold whilst the Information Governance Department responds to competing pressures.

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

ASSESSMENT

1. **Information Governance Staffing Levels and Capacity**

Information Governance staffing levels are stable. The staffing structure is as follows:

- David Thomas, Director of Digital and Health Intelligence is the Senior Information Risk Owner
- Stuart Walker, Medical Director, is the Caldicott Guardian
- James Webb is the interim Data Protection Officer
- The information governance department is currently resourced at 4.23 WTE. This represents a reduction of 1.57 WTE since the start of this financial year.

2. **Data Protection Act – Serious Incident Report**

Date reported: Q1&Q2 2020/2021

During Q1&Q2 (excluding September) 2020/2021, the Information Governance Department reviewed 346 incidents via the UHB's e-Datix incident module. 196 incidents were considered to be IG related and the UHB felt it necessary to discuss 1 incident with the ICO. Following this discussion, the decision was made that the breach failed to meet the reporting threshold so it was logged and managed internally. Further details of which are provided in the Private agenda of the Committee.

As per the GDPR action plan, the Medical Director has sent out communication to staff to ensure that IG related incidents are recorded on e-Datix the same day of the incident occurring.

3. **Freedom of Information Act**

The 20 day compliance rate for 2020/2021 (April to July) can be broken down as follows:

	Total requests	Compliant requests	Compliance %
Apr-20	20	4	20%
May-20	31	17	55%
Jun-20	38	15	39%
Jul-20	48	18	38%

Average compliance for 2019/20 was 85%.

The drop in compliance for 2020/21 was completely expected following the reprioritising of work in response to the Covid-19 outbreak. The Information Governance Department needed to ensure that UHB staff with typical FOI responding duties were not to be distracted at such a critical time. A flexible approach was adopted. This position was adopted across NHS Wales and local procedures were discussed with the Information Commissioner's Office. Regrettably, emergency UK Covid-19 legislation did not remove the responsibility for public authorities to respond to FOI requests altogether, so the Information Governance Department will need to ensure that the 65 outstanding requests are completed.

The UHB saw a 15% decrease in requests compared to the same period last year.

4. Subject Access Requests Processed

4.1 Health Records requests 2020/2021 (April to July)

	Total requests	Compliant requests	Compliance %
Apr-20	213	186	87%
May-20	238	191	80%
Jun-20	301	270	90%
Jul-20	308	275	89%

Despite the increased pressures of maintaining social distancing in a small busy office, and the additional burden on clinical time to sign off records disclosure, Health Records staff have maintained a high level of compliance.

The UHB saw a drop of approximately 23% in requests in comparison to this time last year. Whilst a drop was anticipated, given the widely appreciated pressures the NHS were under at the peak of the Covid-19 outbreak, the volume of requests is surprising.

The average compliance for 2019/20 was 77%. Figures so far for 2020/21 therefore represents a continued improvement.

4 .2 Non Health Records

A total of 11 subject access requests submitted for non-health records have been received so far for 2020/21 (April to July). Similarly to FOI requests, the Information Governance Department have taken a pragmatic approach to ensure UHB staff are not distracted from delivering healthcare at such a significant time. 8 requests were responded to within the legislated time frame.

Compliance for 2019/20 was 82%

5. Compliance Monitoring/NIIAS

Due to re-prioritisation of resource in response to Covid-19, NIIAS monitoring has not been undertaken during 2020/2021.

6. Information Governance Mandatory Training

Overall UHB Information Governance training compliance is currently 69% and is broken down by Clinical Boards as follows.

Clinical Board	Compliance
All Wales Genomics Service	74%
Capital, Estates & Facilities	81%
Children & Women Clinical Board	73%
Clinical Diagnostics & Therapeutics Clinical Board	78%
Corporate Executives	72%
Medicine Clinical Board	59%
Mental Health Clinical Board	61%
Primary, Community Intermediate Care Clinical Board	73%
Specialist Services Clinical Board	67%
Surgical Services Clinical Board	61%
UHB	**69%**

This represents a drop of 3% since figures were last provided to the Committee. Whilst this can most likely be explained as a consequence of competing priorities due to Covid-19, combined with an increase in home working, the previous baseline was already an area of concern. Via the Medical Director's communications, staff were also made aware of the requirement to complete their mandatory Information Governance training. A communications and engagement plan to improve mandatory training compliance will be presented to the next Digital Health Intelligence Committee.

ASSURANCE is provided by:

- Reports detailing compliance against legislative requirements.

Recommendation:

The Committee is asked to:

- **RECEIVE** and **NOTE** a series of updates relating to significant Information Governance 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	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		Collaboration		Involvement	
Equality and Health Impact Assessment Completed:	Not Applicable								

Report Title:	**Clinical Coding – Performance Data**										
Meeting:	**Digital Health Intelligence Committee**							**Meeting Date:**	**8th October 2020**		
Status:	**For Discussion**		**For Assurance**	**x**	**For Approval**		**For Information**				
Lead Executive:	**Director of Digital Health Intelligence**										
Report Author (Title):	**Information Governance Manager**										

Background and current situation:

Situation

This report considers the performance of the Clinical Coding department. Clinical Coding performance is measured against Welsh Government targets in terms of its completeness and accuracy.

Background

All secondary care organisations are mandated to translate medical terms used in the inpatient setting that describe a patient's complaint, problem, diagnosis, treatment into a sequence of alphanumerical codes standardised by national guidelines . This permits easy storage, retrieval and analysis of the data for the purpose of, for example, patient-level costing, clinical research and audit, clinical benchmarking, case-mix management and statistics.

All Clinical Coding departments are mandated by Welsh Government to submit a minimum of 95% completeness within 30 days of discharge. Coding departments are audited each year by NWIS and accuracy is based on a requirement for a year-on-year improvement. The UHB is required to code approximately 160,000 finished consultant episodes (FCEs) per annum.

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

Overall UHB Clinical Coding completeness for 2019/2020 was 97.6%.

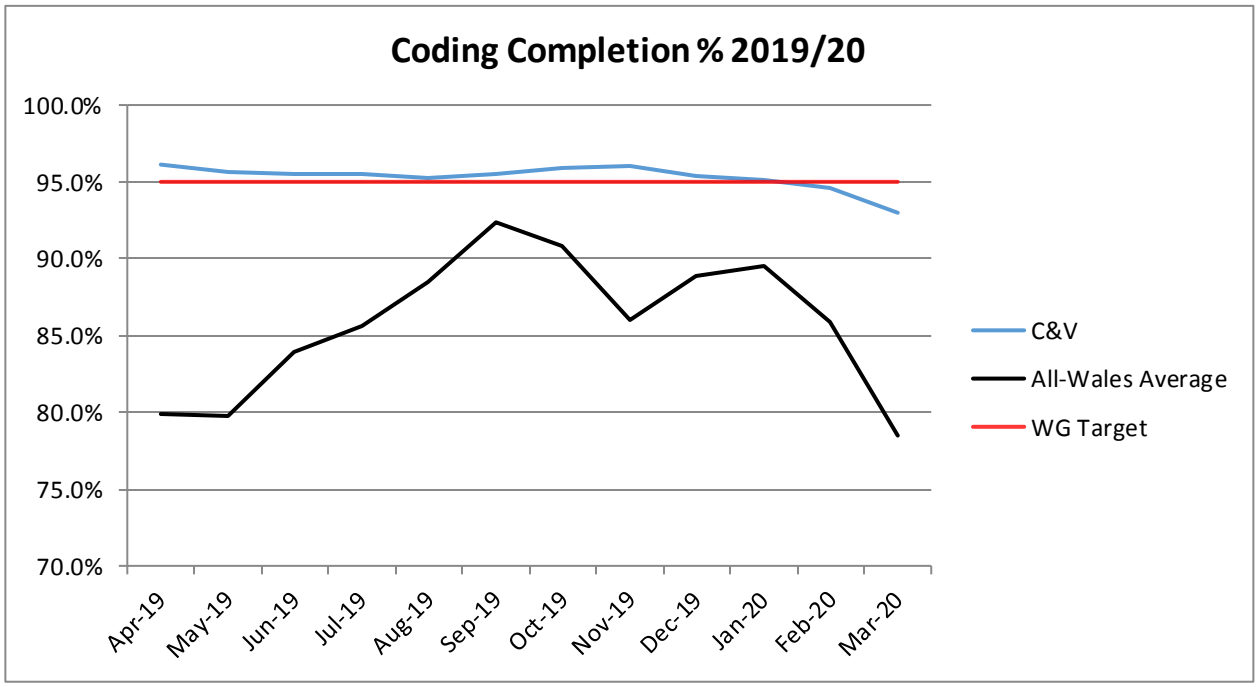
Monthly completeness for 2020/21 continues to be above the 95% target after recovering from a dip during February, March and April 2020.

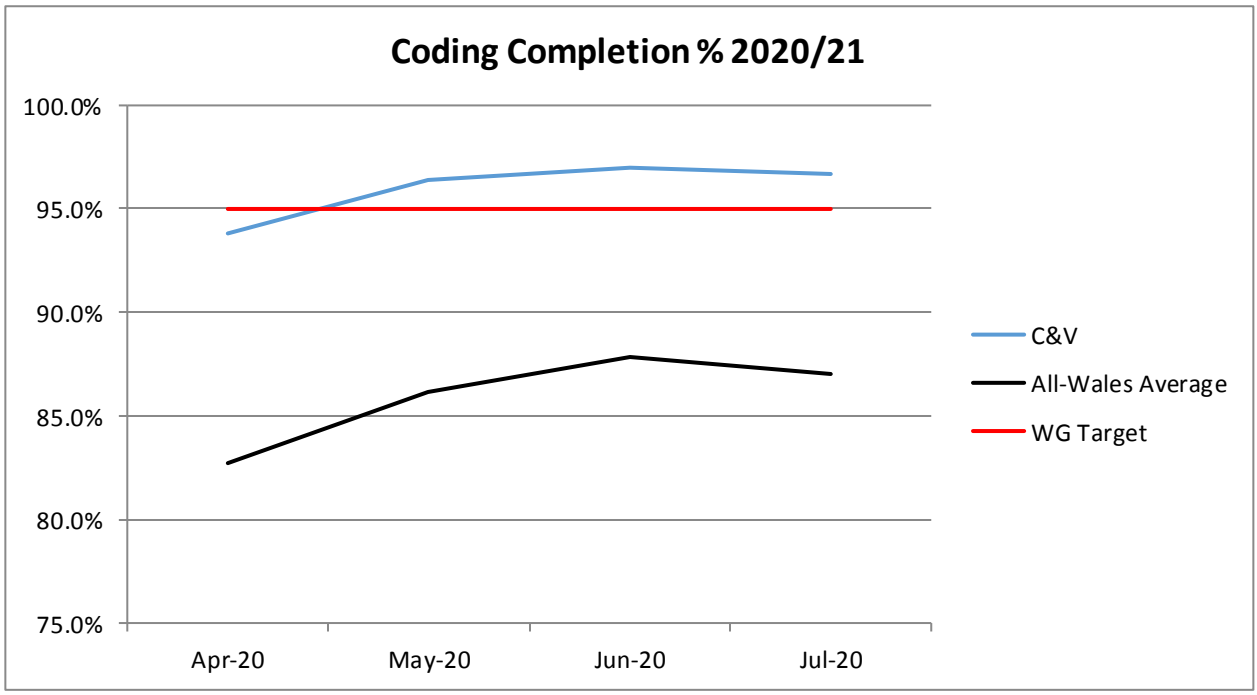
There have been no further audits on coding accuracy since the previous performance paper. The July 2020 audit was postponed by NWIS due to Covid-19 and a further limited audit is now anticipated in November/December 2020.

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

The following graphs compare the UHB's coding completeness within one month (frozen) against the Welsh Government target and the all-Wales average. The drop, as a Covid-19 consequence, was quickly recovered by May 2020 and figures have stabilised since. Whilst coding completeness

remains positive, it is important to note that the total number of FCEs for 2020/21 has reduced by approximately 42% compared to the same time last year.





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Exact figures since the previous coding performance paper are shown below:

2019/20	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20
C&V	96.0%	95.4%	95.2%	94.6%	93.0%	93.8%	96.4%	97.0%	96.7%

The UHB's final coding figures for 2019/20 end-of-year submission are shown below:

C&V Total FCEs created	156,457
C&V Total FCEs coded	152,731
C&V Total %	**97.6%**
All-Wales total %	93.8%

Assurance is provided by:

- The UHB's ongoing level of compliance with Welsh Assembly accuracy and completion targets.

Recommendation

The Committee is asked to:

- **Note** the performance of the UHB's Clinical Coding Department.

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	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	x	Integration		Collaboration		Involvement	

Equality and Health Impact Assessment Completed:	Not Applicable

Report Title:	**Joint IMT Risk Register**								
Meeting:	Digital and Health Intelligence Committee					**Meeting Date:**	8th Oct 2020		
Status:	**For Discussion**		**For Assurance**		**For Approval**		**For Information**	**X**	
Lead Executive:	**Director of Digital and Health Intelligence**								
Report Author (Title):	**Director of Digital and Health Intelligence**								

Background and current situation:

The joint IMT Risk register is a combined register consisting of digital / Information Governance and Information / Performance risks.

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

There are currently 16 joint IMT risks identified in the register:

1 risk in red status with a score of 20 relating to:

- Cyber Security

12 risks in amber status with various scores which include:

- Software End of Life Implications
- Server Infrastructure
- Insufficient Resource – Capital & Revenue
- UHB Standard Data Processing
- Governance framework (IG policies and procedures)
- Data availability
- Compliance with data protection legislation
- Data Quality
- NWIS Governance
- End of Life Infrastructure (access devices)
- Clinical Records Incomplete
- Outcome Measures

3 risks have been reduced on this report to yellow status which include:

- WLIMS
- WCCIS Local team not resourced

- Effective resource utilisation

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

Risk Register is attached.

Recommendation:

The Committee is asked to:

- **NOTE** progress and updates to the Risk Register report.

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:	Not Applicable

Objective	Risk Title	Principal Risks	Opened Date	Review Date	Risk Type	Exec lead for the corporate objective	Corp assessment of Impact	Corp assessment of Likelihood	Total	Risk Score (Target)	Risk Level (Target)	Mitigation Action	Further action agreed	Source of control	Lead Committee
6.8.11 A4/0023	Cyber Security	The Cyber Security threats to service continuity	13.12.2013	29.09.2020	Cyber /Service Interruptions	DD&HI	5	4	20	10	MODERATE	The UHB has in place a number of Cyber security precautions. These have include the implementation of additional VLAN's and/or firewalls/ACL's segmenting and an increased level of device patching. However further necessary work is dependent on additional capacity to supplement the current level of staffing within the department.	The requirements to address the resourcing of Cyber Security Management have been acknowledged in an approved but unfunded UHB Business Case. The requirements have been further highlighted in the National Stratia Cyber security review. Plans are currently under discussion at Welsh Government level to resource Health Boards to undertake additional Cyber security monitoring tasks. All of these requirements have been acknowledged and are included in the current re-organisation plans within the Digital and Health Intelligence Department. **Sept 20: Interim, contract staff with expert cyber knbowldge have been employed to progress essentuial cyber remedial works. this will allow the UHB to fully deploy the cyber schanning tools to effectively manage the increased cyber risks being reported at this time. Discussions with other HBs taking place to look at pooled or shared cyber resources, given the shortage of skilled resources.**	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
6.8.9 A5/0013	Software End of Life implications	The UHB is at risk because its PCs require upgrading to Windows 10 due to support ending for Windows 7 in January 2020. There are potentially significant issues with compatibility with applications systems in use both Nationally and within the HB specifically. The UHB has circa 11,000 devices (laptops and PCs) that require operating systems upgrade; of these, 5,500 will additionally require either replacement or physical hardware upgrade.	01.06.2019	29.09.2020	Cyber /Service Interruptions	DD&HI	**4**	**4**	16	10	MODERATE	update 02/08/19: Microsoft will offer extended support on Windows 7 as part of the all Wales MS 065 contract recently negotiated and in place for all NHS organisations in Wales. This will provide support for Windows 7 PCs, beyond 2020.	The Firepower Firewalls have been configured to stop ALL Internet access, if/when a possible serious virus attack is identified and will implemented immediately. Microsoft Windows 10 security support has been extended to March 2021. **Sept 2020: The UHB is utilising WAG Digital investment to implement the address the MS Windows 10 migration programme. The UHB is actively engaged with Welsh Government and has been allocated £1,450,000 Capital and £1,336,000 revenue as part of the Digital Priorities Investment Fund (DPIF) for 2019/20. Non compliant devices will be upgraded or replaced to ensure devices are Cyber compliant using the Win10 operating system. The UHB is also leading with NWIS in undertaking a review of National Infrastructure requirements as part of the plans to significantly increase Digital investment in Wales going forwards. Although the commencement of the project has been delayed because of COVID, the period has been used address technical issues and recruit staff to the UHB Windows 10 team who will work with a Dell Managed Service Team to complete the project**	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
6.8.6 A3/0110	Server Infrastructure	The IM&T Department is actively implementing a vFarm infrastructure that significantly reduces costs whilst dramatically increasing resilience of Server Systems. However, the cost savings are to the Health Board as a whole and Service Departments in particular and come at an increased cost to IM&T specifically. This infrastructure requires core investment to complete and revenue based support to maintain. There is a requirement to also retain a minimal number of physical servers for those systems not capable of virtualisation.	13.12.2013	29.09.2020	Service Interruptions	DD&HI	4	4	16	10	MODERATE	Whilst the processes in place provide adequate protection of server infrastructure in line with the availability of existing resources, the UHB should identify funding for the vFarm infrastructure if these improvements are to be maintained. Failure to do so will dramatically increase costs to the UHB as a whole and reduce availability and resilience of implemented systems.	The UHB recognises that it is necessary to ensure appropriate capital and revenue funding is made available to address this risk on an ongoing basis as outlined on the UHB corporate Risk Register. Over recent years significant progress has been made with capital investment. This progress will need to be maintained on an ongoing basis in capital and revenue investment. **Sept 2020: Whilst only a further £250K discretionary capital has been allocated so far for 2020/21 the UHB is actively engaged with Welsh Government in undertaking a review of National Infrastructure requirements as part of the plans to significantly increase Digital investment in Wales. In addition the Digital infrastructure 5 year sustainability plan has been updated to ensure that highest priority risks are addressed first with any available funding.**	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
6.8.1 A2/0004	Insufficient Resource - Capital and Revenue	The delivery of the IM&T Strategic Work plan is based on the UHB being able to ensure that the IM&T Department is appropriately resourced to manage infrastructure and deliver projects. All bench marking information indicates that the UHB is significantly under resourced in this area. **Consequence:** Inability to support operational and strategic delivery at pace required, reliance on outsourcing at enhanced cost, non compliance with legislation (FOI / GDPR)	13.12.2013	29.09.2020	Capital / HR / Service Interruptions	DD&HI	5	3	15	10	MODERATE	The UHB continues to address priority areas in relation to its infrastructure management and strategic programme.	**Sept 2020 Whilst only a further £250K discretionary capital has been allocated so far for 20/21 the UHB is actively engaged with Welsh Government in undertaking a review of National Infrastructure requirements as part of the plans to significantly increase Digital investment in Wales. In addition the Digital infrastructure 5 year sustainability plan has been updated to ensure that highest priority risks are addressed first with any available funding.**	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
Obtaining information fairly and efficiently	Compliance with data protection legislation	Risk:- Non compliance with Data Protection & Confidentiality Legislation - the UHB's progress in taking forward the action plan to reduce the risk of non compliance following the ICO's assessment of our 'reasonable assurance' with the GDPR/ DPA is not sufficient to mitigate the risk of non compliance with Data Protection Legislation. **Consequence:** Mistrust of our population and other stakeholders resulting in their unwillingness to share / divulge essential information, Significantly financial penalties - and increasing post BA case	28.09.2015	29.09.2020	Governance / Clinical	DD&HI	**4**	**3**	12	**9**	MODERATE	Clinical Board assurance and co-ordinated mitigation of risk being developed via quality and safety meetings. Ownership and community of practice anticipated to develop across IAOs/IAAs from this. GDPR awareness being used to ensure Leaders and asset owners are reminded of existing requirements and mandatory nature of the asset register. Options for enabling messaging in compliance with legislation has been considered by clinical and executives on a number of occasions, and UHB close to agreement.	Restructuring of IG department will increase amount of expert resource. Resolution of long term absence will also increase available expertise and resource to support GDPR plan, and manage the operational requirements on the corporate department. Ongoing implementation of GDPR/ICO action plan. **The Information Governance team have developed a work plan to review and update all outstanding policy and procedure doucments in the CDF and these are scheduled to be complete by December 2020. Implementing the action plan will reduce the risk,**	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
Recording information accurately and reliably	Data quality	High level risk - core business activities potentially compromised as a result of weaknesses in assurance framework in areas listed below: Absence of Standard Operating Procedures to administer patient activity, Low take up of staff training in Standard Operating Procedures to administer patient activity, Incorrect/incomplete/late recording of activity Absence of ISO 27001 certification. **Consequences:** Potential for poorer patient outcomes and experience, analysis and benchmarking flawed resulting in poor decision making, under recovery of income, inability to maximise potential of R&D	19.02.2018	29.09.2020	Governance	DD&HI	**4**	**3**	12	**8**	MODERATE	Further re-invigoration of the role out of COM2 will increase clinically validated data. Updates and training programme scheduled for mental health and our partners in order to address issues identified in recording and reporting compliance with parts 2 and 3 of the mental health measures. New dashboard release will expose greater amount of data to users, in a more user friendly way, enabling validation by relevant clinicians. Data quality group has established a work plan to improve quality and completeness of data and how it is presented.	Data Quality Group needs to be refocussed. It is currently not meeting due to IG staffing pressures. Sept 20 Data Quality will be addressed via the new governance arrangements - sepcifically the Analyst Channel Programme Board; plans to establish this board in October 2020.	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
Using information effectively and ethically	Use of UHB standard data processing contract now incorporated within procurement's standard toolkit and deployed for all relevant procurements	Risk: obligations and accountabilities relating to the way data is handled are not formalised Consequence: the UHB could suffer detriment and/or have difficulties applying remedies against a third party if data is not handled appropriately	16.02.2018	29.09.2020	Governance	SIRO/DD&HI	4	3	12	7	MODERATE	Library of outline documents for sharing data available, with completion of these supported by corporate information governance department. Requirements to use and refer to are being emphasised within the training.	Procurement are greatly assisting process by referring all issues involving data sharing to the corporate IG department. Working with ICO on specific issues relating to the patient portal.	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
Effective governance, leadership and accountability	Governance framework (IG policies and procedures)	Risk: IG policies and procedures are not up to date/do not cover all relevant areas. Procedures are not aligned to relevant national policies. Consequence: Lack of clarity in terms of how the UHB expects its staff to work to in order for relevant accountabilities to be discharged.	16.02.2018	29.09.2020	Governance	SIRO/DD&HI	4	3	12	6	MODERATE	Update: Controlled document framework requirements delayed due to resource constraints - Integrated IG policy is live and covers a number of existing policies.	Restructuring of IG department will increase amount of expert resource. Investment in training will also increase available expertise to support the review of policies. **A formal review of policies and procedures is underway.**	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
Effective governance, leadership and accountability	NWIS Governance	Governance arrangements for overseeing and challenging NWIS are weak. There is insufficient transparency, blurred lines of accountability and they lack a clear set of priorities **Consequences:** The significant resource we provide to NWIS is not optimally used to support the UHB in delivering its statutory obligations nor in supporting us to deliver our strategic objectives as identified in "Shaping Our Future Wellbeing"	02.02.2018	29.09.2020	Governance	DD&HI/ DOTH	**3**	**4**	12	**1**	Low	UHB is engaged with WG and NHS peers to take forward the recommendations of the WAO review of NWIS with a view to addressing the numerous risks identified in the report.	**CAV involvement in National programme activities and Governance review. Opporunity to influece the new SHA replacing NWIS via the consultation exercise which has commenced (Sept 20)**	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
Sharing information appropriately and lawfully	Data availability	**Risk:** Accessibility of data: UHB does not have an ability to access and use the data it requires to carry out its full range of statutory obligations and enable delivery of our strategy and IMTP. . Specific risks - lack of access to GP data and the UHB's data residing in NWIS supplied applications (e.g. WCRS, WRRS) **Consequence** - Inability to deliver strategic UHBs, namely - Supporting people in choosing healthy behaviours, - Encouraging self management of conditions, - Enabling people to maintain or recover their health in or as close to home as possible, - Creating value by enabling the achievement of outcomes and experience that matter to people at appropriate cost, - Enable and accelerate the adoption of evidence based practice, standardising as appropriate	28.09.2015	29.09.2020	Clinical / Service / Business Interruption	DD&HI	**3**	**4**	12	**1**	Low	Approach identified to work with C&V GPs to share data across care sectors to inform improvement and to gain a better understanding of need, demand and the capacity available to meet it. National data repository programme will provide access to tools and expertise	National Architectural design group and interoperability group being set up in line with Once for Wales agreement and WG Informatics statement of intent should provide medium term solution. HB taking forward data acquisition programme in line with the development of the electronic care record.	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI

Objective	Risk Title	Principal Risks	Opened Date	Review Date	Risk Type	Exec lead for the corporate objective	Corp assessment of Impact	Corp assessment of Likelihood	Total	Risk Score (Target)	Risk Level (Target)	Mitigation Action	Further action agreed	Source of control	Lead Committee
6.8.2 A3/0104	End of Life Infrastructure (access devices)	Each year a number of access devices (PC's , laptops, netbooks etc.) fall in to the category of being end of life. The Health Board's clinical and business needs requires continued and expanding use access devices. This infrastructure has a maximum lifespan of typically 5 years and then requires replacement.	13.12.2013	29.09.2020	Service Interruptions	DD&HI	3	4	12	10	MODERATE	There is an impact to Business and Clinical Systems because of the age of the hardware and clinical/business application software - replacement relates to the availability of resources and departmental agreement/priorities.	The UHB recognises that it is necessary to ensure appropriate capital and revenue funding is made available to address this risk on an ongoing basis as outlined on the UHB corporate Risk Register. Over recent years significant progress has been made with capital investment. **Sept 2020: This progress will need to be maintained on an ongoing basis in capital and revenue investment. Whilst only a further £250K discretionary capital has been allocated so far for 2020/21 the UHB is actively engaged with Welsh Government and has been allocated £1,450,000 Capital and £1,336,000 revenue as part of the Digital Priorities Investment Fund (DPIF) for 2019/20. The UHB is also leading with NWIS in undertaking a review of National Infrastructure requirements as part of the plans to significantly increase Digital investment in Wales going forwards. In addition the Digital Infrastructure 5 year sustainability plan has been updated to ensure that highest priority risks are addressed first with any available funding.**	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
Recording information accurately and reliably	Clinical Records Incomplete	**Risk:** Clinical records are not joined up across disciplines, care settings or geographical boundaries resulting in incomplete and out of date patient information. Summary information is not routinely shared across systems. Differing local service models which are also going through a period of significant change mean access to appropriate data is an increasing need. **Consequence** is unsupported clinical decision-making, introducing patient harm and/or disadvantage and failure to meet NHS Wales digital strategy	28.09.2015	29.09.2020	Clinical	MD	3	4	12	6	MODERAT	UHB architectural design to be reviewed to consider local data repository for bringing together in a usable way clinical information held in numerous clinical systems. UHB working through a programme to implement once for Wales requirements for data and technical interoperability standards.	National prioritisation for NWIS to open up the national data repositories. **Jan 2020: NDR & CDR workshops to understand the technical roadmap this will be picked up via the national IT infrastructure review being undertaken in Feb / March 2020 . The new governance model supprting the Digital strategy delivery will address via the clinician channel porgramme board, which is being established in October 2020.**	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
Using information effectively and ethically	Outcome Measures	**Risk**: Unavailability of full, consistent care delivery information results in an inability to ascertain outcomes of care we provide, and commission, plan and improve services accordingly. **Consequence -** Low assurance on safety, quality and effectiveness of services and satisfaction with services, sub optimal decision making, inability to execute policy and strategy, reputational damage.	28.09.2015	29.09.2020	Business and Organisational Strategy	DD&HI	3	4	12	4	MODERAT	Analysis and wider engagement and communication of outcome and audit data, triangulated with efficiencies and effectiveness data as part of Medical Director led programme established. UHB and national investment in data repositories and clinical forms will support programme	Acceleration of programme. This will be addressed via the Digital Stategy enablers programme and clinician and analyst channels programme boards (Oct 2020)	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
6.8.12 A4/0024	WLIMS	The Welsh Pathology Information management system (WLIMS) implementation has taken longer than envisaged. As a result of this all Health Boards will not have migrated off their legacy pathology systems (Telepath) by end of March 2018, which is when their current telepath contracts will expire (contract currently in extension).		29.09.2020	Clinical Service Interruptions	DD&HI	5	2	10	10	MODERATE	The UHB engaged with NWIS and other Health Boards to evaluate options available to mitigate this risk.	It has been agreed to upgrade Telepath Hardware and Software to mitigate risks. Telepath application software has been upgraded to latest version - Hardware has been installed - System has now been configured by DXC - final testing/validation now complete - **Went live 23rd Nov 2019** **Sept 2020 : WLIMS continues to fall short of the full range of functionality. Therefore Telepath**	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
Effective governance, leadership and accountability	Effective resource utilisation	With an increasingly restricted resource, the UHB requires assurance that digital effort is expended in the most benefits laden workload. Benefits based prioritisation requires robust and matured benefits tracking and a matured reprioritisation mechanism. This requires some changes of technique within the Digital department.	01.10.2018	29.09.2020	Governance	DD&HI	3	3	9	**4**	MODERAT	Establishment of a formalised corporate prioritisation mechanism based on benefits and corporate drivers for change.	New digital directorate's operating model (being implemented in Sept/Oct 2019) will require a change in governance and priority setting across the digital arena at the UHB. A proposed digital design group will be established to set direction and priorities for the Digital and Health Intelligence functions. **Terms of Reference with HSMB. Jan 2020 Digital strategy being developed. Digital Management Board established.**	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI
6.8.13 A4/0025	WCCIS local teams not resourced	Risk: The delivery and implementation of a single instance of national Mental Health, Community and Therapies System (WCCIS) requires significant local resource to co-ordinate work streams and implement key deliverables across the UHB. Consequence: Delayed milestones, poor quality deliverables and ultimately delayed realisation of benefits. Critical deliverables are being held up, including: local business case; delivery of full functionality against the Statement of Requirements; delivery of	2018	29.09.2020	Business and Organisational Strategy	DOI	4	2	8	1	MODERATE	Update 18/11/2019: Temporary posts have been funded from regional ICF monies, including 2 Business Analyst posts, regional technical , programme and project lead resources. Implementation in the UHB remains dependent on delivery of extensive functional enhancements, for which there is currently no delivery roadmap.	UHB is working with NWIS, WG and Regional IHSCP on review of WCCIS deliverables including health functionality, information standards, data migration and reviewed commercial arrangements. **ICF funding has been confirmed for 2019/20 and 2020/21 based on assessment of WCCIS impact for integrated Vale of Glamorgan teams and for paper-based therapeutics teams in the UHB.**	Digital & Health Intelligence Committee established to oversee progress Standards for Health Services: Information management and communications technology	D&HI

Report Title:	**IMT Audit Assurance**						
Meeting:	**Digital and Health Intelligence Committee**				**Meeting Date:**	8th October 2020	
Status:	**For Discussion**		**For Assurance**		**For Approval**		**For Information**
Lead Executive:	**Director of Digital and Health Intelligence**						
Report Author (Title):	**Senior Programme Manager**						

Background and current situation:

Audits undertaken in 2017 /18 comprise of the following:

Maternity - Audit complete with one outstanding action

Virtualisation - Audit complete with all actions complete to be removed from Audit Assurance Plan

Audits undertaken in 2018 /19 comprise of the following:

Cyber security - Audit complete with all actions complete to be removed from the Audit Assurance plan

Audits undertaken in 19/20 as previously reported are complete

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

A brief update on progress against recommendations is shown below the full report is attached:

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

Assurance is provided by: Regular reviews of recommendations within the Digital & Health Intelligence senior management meetings.

Recommendation:

The Board is asked to:

- NOTE progress and updates to the IMT Audit Assurance report.

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	X
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	X

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

Khan,Raj
10/07/2020 16:03:24

Cardiff and Vale University Health Board Audit Assurance Review Plan

Internal Audit Plan 2018/19

Planned output	Audit Ref	Corporate Risk Register	Outline Scope	Indicative Audit days	Executive Lead	Outline timing
IM&T						
Cyber Security			Audit Complete and attached		Director Digital & Health Intelligence	

Internal Audit Plan 2017/18
April 2017 NHS Wales Shared Services Partnership Audit and Assurance Services

Planned output	Audit Ref	Corporate Risk Register	Outline Scope	Indicative Audit days	Executive Lead	Outline timing
IM&T						
Virtulisation			Review the security and resilience of the updated virtualised environment.	15 days	Director of Therapies	Q3

Contents

Audit	Progress	Notes
Cyber Security	No actions complete as yet due to the following Welsh Government are reviewing the £25:£25M Capital & Revenue funding offer which will include funding for Cyber security staff. It is anticipated that the outcome of this review will report in the Autumn in the meantime the UHB continues to address highest Cyber security risk on a prioritised basis within existing resources.	Welsh Government Digital funding confirmed in November 2019 However delays with matching and banding of posts have resulted in posts being put on hold via vacancy panel. **Oct 2020** Resources being procured by a framework agency on a temporary basis, pending recurrent funding. Closed in September 2020 corporate audit tracker return
Virtualisation	3 actions outstanding: The UHB has recently agreed and started the recruitment process to fill one of the existing vacancies within the Server Team with a view to increasing the pool of resources. Currently at the very early stages of preparing documentation. It will not be possible to upskill existing staff due to the demand on their time in undertaking other tasks. Once the vacancy (above) is filled this may enable opportunities for upskilling. Further actions to be complete by March 2019 - Continue to monitor progress	Recruitment process underway with 2 x Band 7 and 1 x Band 6 Server resource advertise via NHS jobs with a closing date of the 30th January 2020 **October 2020** – Recruitment process complete and successful – Key personnel now in situ – all actions now complete.
Maternity	1 action still open - Development now agreed with supplier with no cost to the service. Awaiting confirmation of timescales	Continue to monitor progress –Service has confirmed development required will be available in Version 1.8 of the system which should be available later this year quarter 4 – previously reported quarter 3 but due to Covid upgrade has been moved to quarter 4 – continue to monitor progress.

Cyber Security Audit Report May 2019

Risk & Recommendation	Priority	Management Response	Responsible Officer	Previously agreed actions	Current Status
Finding 1 – Resource and Actions (Operating effectiveness) **Finding** The Stratia report identified the need for investment in cyber security staff in order to improve the UHBs position. However this has not been provided and the majority of the actions defined within the Stratia report have not been completed with the main reason for the lack of action being a lack of resource within IM&T. This has been exacerbated by key staff having left, which has led to the organisation struggling to meet the day to day demands with little scope for improvements. This leads to an increased risk of vulnerabilities existing and being exploited within the organisation. **Risk** Poor or non-existent stewardship in relation to cyber-security. **Recommendation** A review of the resources available within IM&T and the requirements of the organisation should be undertaken to ensure that the department can appropriately meet the demands. Additional investment should be considered in order to provide a cyber security function.	**High**	A review of the current IT and Information departments has been completed and a restructure proposal created. This includes additional cyber security resources to manage and deliver the NESSUS and SIEM requirements, utilising the additional funding being made available by Welsh Government.	David Thomas Deadline Sept 2019	Welsh Government are reviewing the £25:£25M Capital & Revenue funding offer which will include funding for Cyber security staff. It is anticipated that the outcome of this review will report in the Autumn in the meantime the UHB continues to address highest Cyber security risk on a prioritised basis within existing resources	In anticipation of receiving WG funding, resources have been procured by a framework agency on a temporary basis, pending recurrent funding. Closed in September 2020 corporate audit tracker return
Finding 2 – Management Process (design)	**High**	The restructure of the directorate includes additional resource to manage cyber	David Thomas	In anticipation of receiving WG	In anticipation of receiving WG

Risk & Recommendation	Priority	Management Response	Responsible Officer	Previously agreed actions	Current Status
Finding Due to the lack of a cyber security lead, cyber security is dealt with in a reactive and ad hoc manner without any structure as there is no formal / operational cyber security group and currently no reporting process for cyber security or KPI reporting on this. This means that the UHB is not fully sighted on its cyber security position. **Risk** Poor or non-existent stewardship in relation to cyber-security. **Recommendation** An active monitoring process which feeds into KPI reporting should be developed and maintained within IM&T.		security issues. A key role for this function will be the development of a monitoring system that supports the KPI reporting against cyber security.	Deadline Sept 2019	funding, resources are being recruited to in November 2019. In the meantime, monitoring process has been developed with the technical IT team. Delays in WG funding have impacted on the recruitment. A further review process for all vacancies resulted in more delay	funding, resources have been procured by a framework agency on a temporary basis, pending recurrent funding. Closed in September 2020 corporate audit tracker return
Finding 3 – Lead Role (Operating effectiveness) **Finding** There is no current operational lead for cyber security and no structured programme to improve the UHBs position with respect to cyber security. Without this role being extant and operational the UHB will not be able to fully reduce its cyber security risks. **Risk** Poor or non-existent stewardship in relation to cyber-security. **Recommendation** Resources should be provided to allow for a cyber security role to be properly defined and operating appropriately.	**High**	The restructure of the IT and information functions being proposed will result in the establishment of cyber security roles which will monitor and respond to cyber incidents and will develop policy, processes and procedures to reduce the likelihood of a cyber security incident.	David Thomas Deadline Sept 2019	In anticipation of receiving WG funding, resources are being recruited to in November 2019. This includes a Head of Cyber Security position Slippage due to lateness in the allocation of funding and the need to band roles has coincided with the freeze on new recruitment	In anticipation of receiving WG funding, resources have been procured by a framework agency on a temporary basis, pending recurrent funding. Closed in September 2020 corporate audit tracker return
Finding 4 – Active Monitoring (Operating effectiveness)	**High**	The creation of new cyber security roles in the restructured directorate will mean that a	David Thomas	Delays in matching posts	In anticipation of receiving WG

Risk & Recommendation	Priority	Management Response	Responsible Officer	Previously agreed actions	Current Status
Finding Although the Health Board has security tools in place, due to a lack of resource it has not maximised the benefits of these with Nessus (a vulnerability scanner) not being used. In addition, the organisation does not have the ability to efficiently deal with a cyber incident as it has not yet enacted the national Security Incident and Event Management (SIEM) product, and there is no incident response plan in place. As such the organisation is not fully able to quantify and fix its vulnerabilities, and would find it difficult to identify and deal with a malicious actor gaining access to the network. **Risk** Risk of loss of IT services as a result of attack from entities external to the organisation, exploiting common vulnerabilities. **Recommendation** Active monitoring should be established. A Cyber response plan should be developed.		proactive stance on monitoring of cyber security is created as part of a wider Cyber response plan, which will also incorporate use of the NESSUS and SIEM solutions.	Sept 2019	(banding) and recruitment freeze have impacted on the recruitment process.	funding, resources have been procured by a framework agency on a temporary basis, pending recurrent funding. Closed in September 2020 corporate audit tracker return
Finding 5 – Old software (Operating effectiveness) **Finding** The organisation continues to use a number of devices running old software (operating system, servers, databases) and is also using old hardware such as switches. Although these are known to IM&T, there is no formal, resourced plan to remove all of these.	Medium	A formal plan is in the early stages of production and will address removal of aged and insecure software as well as devices. This will be implemented by the cyber security team proposed in the new directorate structure.	David Thomas Deadline Sept 2019		A deployment programme is underway and patching / updates are included as part of this programme. Complete

Risk & Recommendation	Priority	Management Response	Responsible Officer	Previously agreed actions	Current Status
Until these are updated / removed the organisation will be at increased risk of a cyber attack, or a that a cyber attack becomes more widespread within the UHB as older devices contain security vulnerabilities and no longer have manufacturer support. **Risk** Risk of loss of IT services as a result of attack from entities external to the organisation, exploiting common vulnerabilities. **Recommendation** A formal, resourced plan for the removal of old software and devices should be established.					
Finding 6 – Patching (Operating effectiveness) **Finding** There are weaknesses within the patching regimen for the organisation: • for desktops, although patching is automatic, there are some where this process is not working and so the pc is not getting the patch; • for servers, patching is manual, with the timing of patching varying dependant on the nature of the server. Some can be patched and restarted, however some that are running clinical systems cannot be taken down, and are therefore patched opportunistically. However there is no formal patch plan / process that set this out; • for firmware / network hardware, this is also on an ad	Medium	Patching of PCs is being investigated as time allows to identify the scale of the risk. A patch management procedure will be developed to address matching of all devices. This procedure will describe how patches and updates will be managed, with reference to the national standards and alerts managed through NWIS.	David Thomas Deadline Sept 2019		A deployment programme is in place and patching/ updates are included as part of this programme. Additional capital investment is being utilised to upgrade infrastructure including the move to Windows 10 operating system. Complete

Risk & Recommendation	Priority	Management Response	Responsible Officer	Previously agreed actions	Current Status
hoc basis without a formalised structure. Without a formal procedure that defines the patching mechanism for all items within the UHB, there is a risk that vital updates will be missed and the UHB will be exposed to unnecessary risk. **Risk** Risk of loss of IT services as a result of attack from entities external to the organisation, exploiting common vulnerabilities. **Recommendation** A formal patch management procedure should be developed that sets out the mechanisms for patching / updating all items within the Health Board.					
Finding 7 – Staff awareness (Operating effectiveness) **Finding** Although there is an Information Security Policy, together with other related policies, there is no structured mechanism for providing regular updates / reminders to staff on good practice related to cyber security. Studies have shown that in general, employee actions / mistakes have led to approximately 50% of breaches. As such, this leads to an increased risk to the Health Board. **Risk** Poor or non-existent stewardship in relation to cyber-security. **Recommendation**	Medium	The profile of cyber security will be raised via the creation of regular proactive bulletins, available to all staff via the intranet, which will remind staff of good practice.	David Thomas Deadline Sept 2019	In Progress - Communications in relation to Cyber will be ongoing and also form part of the Window 10 / office 365 deployments	Window10 / 0365 programmes are underway with communications being drafted to remind staff of good practice re cyber security Complete

Risk & Recommendation	Priority	Management Response	Responsible Officer	Previously agreed actions	Current Status
Regular cyber security "bulletins" should be published via the intranet, with reminders of good practice.					
Finding 8 – Security Policy (Operating effectiveness) **Finding** The IT Security Policy is out of date as it dates from 2015 with the next review date given as 31 march 2018. The policy still refers to the Data Protection Act 1998 and not the GDPR. **Risk** Poor or non-existent stewardship in relation to cyber-security. **Recommendation** The IT Security Policy should be reviewed and updated.	Medium	The current IT security policy is scheduled to be reviewed to reflect changes in legislation, IT architecture and national policy.	David Thomas Deadline Sept 2019		The IT security policy is incorporated within the overall IG policy which has been approved by the DHIC (Dec 2019) Complete

Virtualisation Audit Report December 2017

Risk & Recommendation	Priority	Management Response	Responsible Officer	Previously agreed actions	Current Status
R1 – Resilience **Finding** There are weaknesses regarding the resilience of the server team and the virtual environment. The team responsible for managing the virtual environment is very small, with knowledge concentrated in a limited number of staff. Although the wider IT team can provide support on an on-going basis the UHB is at risk should any significant event occur when the key staff members are absent. **Recommendation** *The UHB should consider widening the pool of staff with the skills to manage the virtual environment by:* *- recruitment; and* *- up skilling existing staff and providing protected time to develop the skills.*	**High**	The IT Department will review potential opportunities for recruitment and training and provide an update on potential for progress. ***October 2018 – update*** *The UHB has recently agreed and started the recruitment process to fill the existing vacancy within the Server Team with a view to increasing the pool of resources. Currently at the very early stages of preparing documentation.* *It will not be possible to upskill existing staff due to the demand on their time in undertaking other tasks. Once the vacancy (above) is filled this may enable opportunities for upskilling.*	Phil Clee / N Lewis 6 months	Due to be complete Sept 2018 New completion date March 2019 *(See management response update)* Actions being addressed by the departmental restructure process which is ongoing and recruitment process will begin November 2019 Recruitment for key server team personnel underway. A skill set review is being done aligned to ensure the right skill to deliver the digital plans	**October 2020** Recruitment process has been successful key personnel now in situ *Complete*
R2 –Patching **Finding** Although the ESXi hosts are currently patched and up to date, there is no formal SOP for patching these, and	**Medium**	Agreed ***October 2018 – update*** *The demand on existing resources prevents this approach being changed. Once the recruitment of new Server Team*	Phil Clee / N Lewis 6months	Due to be complete Sept 2018 New completion date March 2019	**October 2020** Recruitment process has

Risk & Recommendation	Priority	Management Response	Responsible Officer	Previously agreed actions	Current Status
patching is done on an ad-hoc / infrequent basis. This is partly due to the small size of the team and the lack of a test environment which would allow for verification that the updates are safe / stable. This introduces the risk of a significant weakness being unpatched in the future **Recommendation** *A formal SOP should be developed setting out the basis for patching / updating ESXi hosts and the mechanism for doing this.* *Consideration should be given to providing a test environment.*		*staff is completed the opportunity to formalise this approach will be reviewed.*		*(See management response update)* Recruitment for key server team personnel underway. A skill set review is being done aligned to ensure the right skill to deliver the digital plans	been successful key personnel now in situ Complete
R3 – VM Creation **Finding** VMs are created from pre created template, however there is no SOP for this process. Given that there are only 2 people who create VMs this leaves the UHB at risk in the event of loss of staff, as any replacements couldn't easily pick up the role. **Recommendation** *A SOP for VM creation should be developed, setting out the process and the location of the templates*. Khan,Raj 10/07/2020 16:03:24	Medium	Agreed ***October 2018 – Update*** *The demand on existing resources prevents this approach being changed. Once the recruitment of new Server Team staff is completed the opportunity to formalise this approach will be reviewed.*	Phil Clee / N Lewis 6 months	Due to be complete Sept 2018 New completion date March 2019 *(See management response update)* Recruitment for key server team personnel underway. A skill set review is being done aligned to ensure the right skill to deliver the digital plans	**October 2020** Recruitment process has been successful key personnel now in situ Complete

Maternity Audit Report June 2015

Risk & Recommendation	Priority	Management Response	Responsible Officer	Previously agreed actions	Current Status
R2. Password reset A standard set of rules and questions should be put in place and completed before a password reset is granted to ensure appropriateness	MEDIUM	This function needs to go through Euroking for a system modification. We have no control over any upgrade dates. This will need to go through a major development with them so will take time and require approval from Euroking.	System Administrator Head of Operational Delivery	Still awaiting development from EuroKing Discussion underway with other HBs to support the development and split the costs for E3 development due to financial position. Previous Update: Meeting with Euroking in February 2018 to discuss progress but restricted due to Euroking system modification **Jan 2019** Due to be delivered next financial year 2019. Jan 2019 Service awaiting confirmation from EuroKing to find out which upgrade it will be developed in. **July 2019**	**Partially Complete:** **Oct 2020** Service has confirmed development required will be available in Version 1.8 of the system which should be available later this year.

Risk & Recommendation	Priority	Management Response	Responsible Officer	Previously agreed actions	Current Status
				Awaiting confirmation of date from supplier for upgrade to the system – continue to monitor this action. Development now agreed with supplier with no cost to the service. Monitor progress of development & implementation. **February 2020** Service has confirmed development required will be available in Version 1.8 of the system which should be available later this year.	

Report Title:	**Information Governance Audit Assurance Tracker**							
Meeting:	Digital and Health Intelligence Committee					**Meeting Date:**	8th October 2020	
Status:	**For Discussion**		**For Assurance**		**For Approval**		**For Information**	**x**
Lead Executive:	**Director of Digital and Health Intelligence**							
Report Author (Title):	**Information Governance Manager**							

Background and current situation:

The UHB's audit tracker comprises of audits completed by Internal Audit and Audit Wales.

The 2020 ICO audit is to be considered by the Audit Committee prior to inclusion on the external audit tracker. The recommendations from this audit are presented as item 3.8 of the Committee agenda.

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

An update on progress against the Information Governance recommendations is shown in Appendix 1 and Appendix 2.

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

All but one action has been closed, either as a result of completion or because the recommendations are replicated in the recent ICO audit. Appendix 1 provides an update on the Internal Audit Recommendations. Appendix 2 provides an update on the WAO Audit Recommendations.

Assurance is provided by: Regular reviews of recommendations within the Digital & Health Intelligence senior management meetings.

Recommendation:

The Committee is asked to:

- **NOTE** progress and updates to the Information Governance Audit Tracker.

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	

CARING FOR PEOPLE
KEEPING PEOPLE WELL

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board

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:	Not Applicable

Audit	Audit Log Ref No.	Audit Reference	Financial Year Fieldwork Undertaken	Final Report Issued on	Audit Title	Executive Lead for Report	Audit Rating	No. of Recs Made	Rec No.	Rec. Rating	Recommendation Narrative	Risk Identified/Intended Outcome	Management Response	Executive Lead for Recommendation	Operational Lead for Recommendation	Agreed Implementation Date	Committee Implementation Monitored by	Updated Implementation Date	Status	Please confirm if completed (c), partially completed (pc), no action taken (na)	Executive Update	Action Taken	Update on Action Agreed at the Last Audit Committee	Status of Report Overall
IA 1819	IA 39 1819	CUHB1819.25	2018-19	01/02/2019	Information Governance: Gener	Director of Transformation and Informatics	Limited	12	R1/12	H	The UHB should consider establishing a GDPR group with representation from all clinical boards. The function of the group should be to ensure appropriate compliance actions are taken and to provide assurance that the UHB has good processes to ensure compliance with the GDPR.	Insufficient preparation for the new GDPR resulting in non-compliance with the requirements of the regulation.	The UHB has adapted the all Wales IG policy. As part of the process to formal adoption, consultation and impact assessment will be taking place through which we anticipate identification of all clinical board requirements and prioritised action. The UHB sees placing responsibility and accountability as close as possible to the operational front line as the key to having an empowered and engaged workforce. Thus we see that the role of the corporate IG department is to design delivery of compliance and to provide specialist advice, rather than co-ordinate and deliver. It is accepted that as resources and expertise accumulate in line with expectation, there is more the central team can do on communication and engagement including the creation of a virtual mutually supporting networking of IAOs / IAAs. As recommended this will include setting up a GDPR group for a year.	Director of Transformation & Informatics	Head of IG	01/03/2019	IG&T		closed	completed	IG representation at CB Q&A groups being trialed to ensure pertinent principles of the GDPR are being adhered to. The Digital Service Management Board has responsibility for delivering the digital transformation, supported by an Information Governance group that includes representation from clinical boards.			Audit open over 12 months
IA 1819	IA 39 1819	CUHB1819.25	2018-19	01/02/2019	Information Governance: Gener	Director of Transformation and Informatics	Limited		R2/12	H	The resource requirement for the Information Governance team should be fully assessed and resource provided appropriately.	Insufficient preparation for the new GDPR resulting in non-compliance with the requirements of the regulation.	In the context of the UK wide economy growing at a lower rate than: patient expectation, demand and health care cost inflation, the UHB has had to take business decisions in order to deliver a financially balanced plan. We recognise these have had significant consequences on many of our staff and resulted in high levels of sickness which have only made the position harder for all. We fully appreciate that a once in a generational change to IG legislation coincided with difficult financial circumstances has presented us with a challenge, but we would contend that this was a short sharp shock to the system which is now being adopted into routine ways of working as knowledge and awareness builds from experiential learning. As such we anticipate that by the end of Q1 2019/20 we will have increased the number of whole time equivalents in place and working by a whole time equivalent, taking the operational staffing levels to 4.8 wte, which will continue to be complimented by specialist advice from both Welsh Health Legal and Risk and a local legal firm. To confirm the financial resource for this external support is available within the UHB's budget.	Director of Transformation & Informatics	Head of IG	30/09/2019	IG&T		closed	completed	The IG function has been increased and strengthened as part of the Digital & Health Intelligence directorate restructure.			Audit open over 12 months
IA 1819	IA 39 1819	CUHB1819.25	2018-19	01/02/2019	Information Governance: Gener	Director of Transformation and Informatics	Limited		R3/12	H	A revised Subject Access Procedure should be completed, placed on the intranet and flagged to all staff.	Insufficient preparation for the new GDPR resulting in non-compliance with the requirements of the regulation.	Accepted	Director of Transformation & Informatics	Head of IG	itional Implementati	IG&T		Closed	c	SAR procedure live			Audit open over 12 months
IA 1819	IA 39 1819	CUHB1819.25	2018-19	01/02/2019	Information Governance: Gener	Director of Transformation and Informatics	Limited		R4/12	M	The IG webpages should be updated to ensure they present current, accurate information.	Insufficient preparation for the new GDPR resulting in non-compliance with the requirements of the regulation.	The contact details will be updated shortly. As noted above the department has been short staffed and there has needed to be a prioritisation between designing and mitigating significant risks to noncompliance and making general information available. The UHB has engaged widely on the DPA 2018 and is intending to use the consultation on the IG policy as a further vehicle for promoting awareness and setting out expectations	Director of Transformation & Informatics	General Manager Medicine & Dermatology / IAO - Dermatology	01/03/2019	IG&T		Closed	c	Website has been updated			Audit open over 12 months
IA 1819	IA 39 1819	CUHB1819.25	2018-19	01/02/2019	Information Governance: Gener	Director of Transformation and Informatics	Limited		R5/12	M	The UHB should seek to ensure all staff complete the IG training module.	Controls not operating resulting in non-compliance.	Management Response Accept – The UHB is engaged nationally in the development of the e-learning package and has licenses for its use. We intend to make use of this national initiative in line with its roll out plan.	Director of Transformation & Informatics	Medicine Clinical Directors, Directorate Managers and IAOs	30/09/2019	IG&T		Closed	c	This has been consolidated into a single IG action plan which has been updated in preparation for the Digital & Health Intelligence Committee meeting in Sept 2020.			Audit open over 12 months
IA 1819	IA 39 1819	CUHB1819.25	2018-19	01/02/2019	Information Governance: Gener	Director of Transformation and Informatics	Limited		R6/12	M	Training on GDPR should be enhanced and provided to all staff acting in an IAO or IAA role. Further information should be passed to Directorates on the specific actions to be undertaken following GDPR.	Controls not operating resulting in non-compliance.	Training is via the mandatory training route described in recommendation 5. The UHB will take actions to ensure we have asset registers and awareness of GDPR within dermatology and across the medicine clinical board as an early priority. Within clinical boards there will be further emphasis and engagement on the responsibilities and requirements for IAO/IAA roles, in order to enable appropriate senior staff to be allocated/trained, follow-on implementation of sub-board training arrangements	Director of Transformation & Informatics	Head of IG	30/09/2019	IG&T		closed	c	IAR completed. TNA is being undertaken as recommended by 2020 ICO audit.			Audit open over 12 months
IA 1920		CUHB-1920-23	2019-20	24/01/2020	Freedom of Information	Director of Transformation and Informatics	Reasonable	7	R1/7	H	The Health Board should take steps to ensure the continuity of the FoI management function, and that all necessary knowledge and expertise currently being utilised is able to be retained, especially if/when personnel changes occur.	Non-compliance with FoI	Both of the fixed term contracts are being addressed and are being made permanent in the new Digital structures.	Director of Transformation & Informatics	Director of Digital & Health Intelligence/ By March 2020				closed	completed	JDs agreed - recruitment to permanent positions was planned for early Summer (Covid-19 caused delay). Roles being advertised internally.			Audit open over 6 months
IA 1920		CUHB-1920-23	2019-20	24/01/2020	Freedom of Information	Director of Transformation and Informatics	Reasonable	7	R7/7	L	FoI certification or additional FoI training should be available for team members whose role involves processing and answering FoI requests.	Non-compliance with FoI	FOI lead in discussion with NWIS re national approach to training.	Director of Transformation & Informatics	Information Governance Manager/ Q1 2020/21				Open	pc	potential training opportunities discussed at local and national level;			audit open over 3 months

Audit Log Ref No.	Audit Reference	Financial Year Fieldwork Undertaken	Final Report Issued on	Audit Title	Executive Lead for Report	No. of Recs Made	Rec No.	Recommendation Narrative	Risk Identified/Intended Outcome	Management Response	Executive Lead for Recommendation	Operational Lead for Recommendation	Agreed Implementation Date	Committee Implementation Monitored by	Updated Implementation Date	Recommendation Status [RAG Rating]	Please confirm if completed (c), partially completed (pc), no action taken (na)	Executive Update	Update on Action Agreed at the Last Audit Committee	Status
WAO 1	1025A2019-20	2018-19	Jan-19	Structured Assessment 2018	Chief Executive Officer		R1f/11	R6 [2017] The Health Board needs to focus its attention on strengthening its information governance arrangements in readiness for the General Data Protection Regulations, which come into force in May 2018. This should include: • updating the information governance strategy; • putting in place arrangements for monitoring compliance of the primary care information governance toolkit; and • developing and completing an Information Asset Register; • ensuring that an identified data protection officer is in place; and • improving the uptake of information governance training.	Not Provided	Progress to date: • An up-to-date Information Governance strategy has been approved by DHIC. The Health Board has drafted its strategic approach in the Information Governance Policy. The Health Board plans to agree and implement this approach later in 2018. • NWIS has developed the information governance toolkit for primary care GP's and intend to monitor compliance at a GP cluster level. These compliance monitoring arrangements for are still being developed. The Primary Care Clinical Board is liaising with the NHS Wales Informatics Service to confirm and agree these arrangements. • Information asset registers have been completed within the corporate directorates and clinical boards. The Health Board is planning further work to ensure that IARs are continually reviewed and developed. • An interim Data Protection Officer (DPO) is in post as required under the GDPR. • More staff have completed information governance training. However, compliance with information governance training (69%) is well below the national target (95%).	Director of Transformation and Informatics		Dec-16	Audit and Assurance Committee	Dec-19	complete	complete			Open
WAO 1	1025A2019-20	2018-19	Jan-19	Structured Assessment 2018	Chief Executive Officer		R7/11	The Health Board should complete the outstanding actions from the Information Commissioner's Office (ICO) 2016 review of the Health Board's data protection arrangements.		CAV UHB is committed to continually improving mitigation of its risks of non-compliance. We are taking an improvement approach in line with the rest of Wales and in regular discussion with the ICO's office. Recommendations from the ICO's 2020 audit of the UHB's Information Governance and Accountability will supersede the 2016 work plan.	Director of Transformation and Informatics		Jun-19	Audit and Assurance Committee		complete	complete	an update ICO action plan will be submitted to the D&HI Committee in Sept 2020 which will confirm the actions against the ICO audit on IG that was carried out in Qtr 4 2019/20		Open
WAO 1	1025A2019-20	2018-19	Jan-19	Structured Assessment 2018	Chief Executive Officer		R8/11	The Health Board should achieve full compliance with the General Data Protection Requirement by May 2019.		Delivery of the CAV UHB's updated action plan will reduce the risks we carry in relation to noncompliance with GDPR. Prioritisation of risks and mitigating actions are part of our continuous improvement plan, aimed at achieving full GDPR compliance during 2019.	Director of Transformation and Informatics		Dec-19	Audit and Assurance Committee		complete	complete			Open
WAO 1	1025A2019-20	2018-19	Jan-19	Structured Assessment 2018	Chief Executive Officer		R9/11	The Health Board should improve its response times to requests for information from Freedom of Information Act and Data Protection Subject Access Requests.		The appointment of additional staff to process the increasing number of FOIs and SARs has resulted in a significant improvement in the timeframe in which the UHB is able to respond to requests. This will be monitored as we continue to move towards achieving fully compliant response times.	Director of Transformation and Informatics		Mar-19	Audit and Assurance Committee		complete	complete			Open

Report Title:	**ICO Recommendations and Action Plan**								
Meeting:	**Digital Health Intelligence Committee**						**Meeting Date:**	**8th October 2020**	
Status:	**For Discussion**		**For Assurance**		**x**	**For Approval**		**For Information**	
Lead Executive:	**Director of Digital Health Intelligence**								
Report Author (Title):	**Information Governance Manager**								

Background and current situation:

In February 2020 the Information Commissioner's Office (ICO) undertook an audit of the UHB's Information Governance & Accountability and Cyber Security.

Following the 2020 audit, the ICO have upgraded their assurance of the UHB's Information Governance & Accountability and Cyber Security to 'Reasonable'. The findings and recommendations of the audit report, which was reported to the previous Digital Health Intelligence Committee in July, now form the basis of the Information Governance Department's work plan.

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

The action plan presented in **Appendix 2** pragmatically starts to address the findings and recommendations from the 2020 ICO audit.

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

ASSESSMENT

The recommendations in full, along with the UHB's management response can be found as **Appendix 1.** In total there were 25 Governance and Accountability recommendations ranging from low priority to urgent. To ensure that the recommendations are actioned in a pragmatic way, the existing Information Governance action plan (**Appendix 2**) has been updated to reflect recommendations from the most recent ICO audit. This action plan will continue to be maintained and will be presented to future Digital Health Intelligence Committees.

ASSURANCE is provided by:

The progress made since the last ICO audit conducted in 2016 and the action plan attached as **Appendix 2**.

Recommendation:

The Committee is asked to:

- **NOTE** the Information Governance Department's action plan which will ensure that the ICO's recommendations are addressed.

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	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		Collaboration		Involvement	

Equality and Health Impact Assessment Completed:	Not Applicable

ICO Data Protection Audit - Action Plan

Controller	Cardiff and Vale University Health Board
Report Date	March 2020

Audit Action Plan								Audit Action Plan Update		
Ref	Non-conformity	Recommendation	Priority	Accepted / Partially Accepted / Rejected	Agreed Action	Implementation Date	Owner	Update at XX months	Action Status	Evidence item(s) provided
	Non-conformity	Recommendation	Priority							Priority
A1	The Information Governance Executive Team (IGET)does not have set Terms of Reference (ToR). This gives rise to the risk that items requiring discussion regarding the oversight and for Information governance and data protection compliance might not be brought up for discussion.	To ensure that the IGET covers all necessary topics during meetings the organisation should introduce an set of formal ToRs	Low	Accept	Following a review, IGET has been replaced by a new IG Group. The ToR are enclosed.	Q2 2020/21	IG Manager			
A2	It was identified that several key IT polices are past their review date including the current IT Security policy, the Access Control policy and IT Security Procedure. This gives rise to the risk of breaches occurring due to outdated information or incorrect directions. (See Nonconformity B22)	To ensure that policies remain fit for purpose and that staff have appropriate direction and information to avoid the risk of data protection breaches, the organisation should ensure that they are subject to timely routine review.	High	Accept	All D&HI policies to be reviewed and updated if necessary	Q2 2020/21	IT Security Manager			
A3	The organisation does not have a process in place to ensure staff have read key IG policies. This could lead to breaches being caused by staff being unaware of their responsibilities and taking action without reference to guidance.	To ensure that staff are fully aware of the responsibilities regarding IG, the organisation should consider means by which assurance can be given that staff have read appropriate policies and therefore are aware of organisational requirements and their responsibilities	Medium	Partially accept	IG Manager to investigate the feasibility of implementing a process that provides this assurance	Q3 2020/21	IG Manager			
A4	A recent training needs analysis (TNA) for staff has not been undertaken. This gives rise to the risk that staff have not received appropriate training for the responsibilities of their role.	To ensure that staff receive the appropriate level of IG training for their role, regular training needs analysis should be undertaken in order to inform the IG training programme	Medium	Accept	There currently is a national piece of work looking at the different training requirements across NHS staff in Wales. This is being considered at the Information Governance Management Advisory Group (IGMAG)	Q4	IG Manager			
A5	As detailed above the organisation has not completed a TNA which includes specific IG related roles Training and skills requirements for IG roles have not been included in relevant job descriptions. The organisation should clearly record what training or skills are required in order to avoid the risk that staff have insufficient training for their roles.	In order to ensure that specialised roles with IG responsibility have received appropriate training to carry out their role effectively, a training needs analysis for these roles should be undertaken. To ensure that training requirements for staff with specialised DP roles are recognised and formalised, these should be included in all job descriptions of roles with IG responsibilities. This should ensure that staff can carry out their roles effectively	High	Accept	For the following staff, a TNA shall be undertaken separate to the piece of work referenced in A4: Caldicott Guardian, SIRO, Data Protection Officer, Information Asset Owners, Information Asset Administrators	Q2 2020/21	IG Manager			
A6	The IG policy does not outline in detail how data protection compliance is to be monitored; without proper monitoring, there could be a risk of breaches of legislation.	The organisation should provide detailed information about how compliance with data protection policies and procedures is to be monitored to give assurance regarding observance.	High	Accept	The IG Policy will be reviewed and consideration given to potential data protection compliance monitoring.	Q2 2020/21	IG Manager			
A7	KPIs regarding elements of records management such as file retrieval statistics, adherence to disposal schedules, performance of system in place to index and track paper files containing personal data are not currently reported. This gives rise to the risk of the organisation not having full awareness or oversight of possible breaches of the legislation/	To ensure that management have a complete picture of performance and compliance, and provide assurance that the organisation is complying with the relevant legislation, the reporting of KPIs relating to records management should be reinstated	High	Accept	The reporting of such measures, as outlined, may be more appropriately, and may already be, reported at a Medical Records Group. If this isn't the case, the IG Manager will work with the Medical Records management to ensure that these KPIs are reported.	Q1 2020/21	IG Manager/ CD&T DM			
A8	While the organisation's IG Policy advocates ensuring processing activities are documented effectively and accurately, the Systems IAR does not show the lawful bases for processing the information as required by the policy This could mean that the organisation does not have a clear understanding of their information processing, and could lead to a breach of legislation.	The organisation should ensure that all areas have carried out comprehensive data mapping exercises to ensure that the there is a clear understanding and documentation of information processing in line with the requirements of the organisation's IG policy and national legislation.	High	Accept	All IAR are currently being centrally collated. A review will be conducted to ensure that IAO are correctly capturing lawful basis etc...	Q2 2020/21	IG Manager			
A9	Evidence has not been seen to show a full Record of Processing Activities (ROPA). This may mean that the organisation is in breach of the legislation by not having complete or accurate documentation of all processing activities.	The organisation should ensure that it has a complete ROPA which includes all the information required by the legislation, so they are aware of all information held and the flows of information within the organisation, and have assurance that the record is an accurate and complete account of that processing.	High	Accept	Ensure that a ROPA is undertaken in line with Art 30 of the GDPR.	Q2 2020/21	IG Manager			
A10	The organisation does not have an overarching RoPA fully documenting all processing activities is in line with the requirements set out in Article 30 of the GDPR. This risks the organisation not having full oversight of the processing activities undertaken.	The organisation should ensure that there is an internal record which documents all processing activities in line with the legislation. This will provide assurance that all information processed is recorded as required by the appropriate legislation.	High	Accept	Ensure that a ROPA is undertaken in line with Art 30 of the GDPR.	Q2 2020/21	IG Manager			
A11	The organisation has not identified and documented a lawful basis and an additional condition for processing criminal data. This gives rise to the risk of the organisation making inappropriate choices and not meeting their obligations under GDPR Articles 5 (1) (a), 5 (2), 6, and 9. Section 6 of the Privacy Notice documents the lawful bases for each processing activity but the organisation has not recorded why they were determined. The organisation may thereby risk making wrong choices and not meeting their obligations under the relevant legislation. The IG Policy does not clearly put in place procedures to ensure the lawful basis is identified before starting any new processing of personal data or special category data. This gives rise to the risk of incorrect lawful bases being relied upon and therefore to a breach of the legislation.	The organisation should review the purposes of processing activities to ensure that they identify and document a lawful basis for general processing and an additional condition for processing criminal offence data, and therefore obtain assurance that they meet their obligations under the current legislation. The organisation should ensure that it documents the reasons for determining the lawful bases for each processing activity. Otherwise they risk failing to correctly identify the lawful basis for processing and not meeting their obligations under the relevant legislation. The organisation should ensure that there are clear procedures in place to ensure that the t lawful basis is identified before starting any new processing of personal data or special category data. This will provide assurance that the organisation is relying on the correct lawful bases as required by the legislation.	High	Partially accept	Review Privacy Notice and IG Policy to ensure lawful basis for processing criminal data is clearly documented. 5.2.5.1 of the IG Policy (Data Protection Impact Assessment) states that 'All new projects or major new flows of information must consider information governance practices from the outset' and 'In order to identify information risks, a DPIA must be completed'. This is the point at which the lawful basis will be determined by theIG dept. The UHB's Privacy Notice does not document the lawful basis for each processing activity. We would be unable to document within the scope of the Privacy Notice the lawful basis for each of the UHB's numerous processing activities.	Q2 2020/21	IG Manager			
A12	There is no documented consideration of the requirements of Article 9 of the GDPR and schedule 1 of the DPA 2018 as pert of the determination of the condition for processing. The organisation could risk a breach of the legislation by not being able to show how a determination was reached.	The organisation should document its lawful bases for processing special category data is correct based on the requirements of Article 9 of the GDPR and Schedule 1 of the DPA 2018 to provide assurance that it has appropriately considered how a determination was reached.	High	Accept	Ensure that our lawful basis for processing special category data is reviewed and documented	Q1 2020/21	IG Manager			
A13	There is no Appropriate Policy Document in place to support the accuracy of determined lawful bases as required by Schedule 1 of the DPA 2018 and the organisation is at risk of breaching the legislation.	The organisation should ensure that there is an APD in place to define which schedule 1 conditions are relied on, so that the organisation is in compliance with the legislation. In order to ensure compliance with the legislation, the organisation should further: Create an APD which considers what procedures are in place to ensure compliance with the Article 5 principles of GDPR. Ensure the APD considers how special category data will be treated for retention and erasure purposes Ensure the APD defines a responsible individual for the processing activity	Urgent	Accept	APD to be implemented	Q1 2020/21	IG Manager			

A14	At the time of the audit, it was possible to access an out-of-date 'Access to Information' leaflet on the organisation's public website. There was also not a clear link from the front page to the Privacy Notice; this was found the privacy notice regarding the website itself. There was no clear link form the front page of the organisation's website to the Privacy Notice; this was found the privacy notice regarding the website itself. This gives rise to the risk of the organisation breaching data protection legislation by not having privacy information easily available to data subjects.	In order to be sure that it is keeping to data protection legislation by providing accurate processing information, the organisation should ensure that only current and accurate privacy information containing all the information as required under Articles 13 & 14 of the GDPR is available on its website. To ensure that it is upholding the requirement for data subjects to be properly informed of how their information is being processed, the organisation should ensure there is a clear link to the general privacy notice from the front page of its website.	High	Accept	UHB website to be reviewed and any old documentation removed. Access to privacy notice considered.	Q2 2020/21	IG Manager			
A15	There is no documented process to ensure that, if personal data is obtained from a source other than the individual it relates to, privacy information is provided to individuals within one month of obtaining the data.	The organisation should ensure that there is a process in place to provide privacy information to individuals if personal data obtained from a source other than the individual it relates to. This should be recorded on privacy information to make sure that the organisation is fulfilling its obligations in regard to the data which it processes.	Medium	Reject	In the context of referrals into the UHB and out of the UHB, the patient is likely to already be aware of this dataflow. This represents an exemption under Article 14 (5)(a) of the GDPR. In all other cases, we believe that manually informing individuals of this information would represent a 'disproportionate effort' given that we are unable to determine what a referring organisation has made their patients aware of and the volume of referrals received by the UHB -- therefore being exempt under Art 14(5)(b).					
A16	Privacy information is published via the website or hard coy information in clinics but not actively published in other ways. This may put the organisation at risk of not adequately providing privacy information as required by the legislation.	The organisation should consider additional means in which privacy information can be promoted or made available to individuals, to ensure that it does not rely on passive communication which risks individuals not being made aware of how their data is processed. This would help ensure that the a organisation is not in breach of legislation.	Medium	Accept	Will raise at the national Information Governance Group to investigate how other UHBs/Trusts are achieving this requirement.	Q2 2020/21	IG Manager			
A17	Alternative versions of the privacy notice for children or those who may have difficulty understanding the standard notice have not been considered. The organisation risks breaching the legislation If the data subject cannot understand the provided privacy information as it has effectively not been provided to theding m in this case.	To ensure that privacy information is available to all areas of the population the organisation must consider means of providing information to those who may not understand the standard notice. This would help ensure that the a organisation is not in breach of legislation, and al data subjects can understand the provided privacy information.	High	Partially accept	To consider alternative versions are available to ensure all data subjects can understand their rights and how their data is processed. The UHB was of the view that the current privacy notice satisfied this requirement but this will be reviewed.	Q2 2020/21	IG Manager			
A18	The organisation does not carry out user testing or analyse complaints from the public to evaluate how effective their privacy information is. If there is no check on the effectiveness of the communication of privacy information, the organisation has no assurance that data subjects are actually receiving the privacy information. A log of historical privacy notices is not maintained. This would allow the organisation to check on what privacy information was provided to data subjects at what date.	In order to ensure that the privacy information is effective, the organisation should consider means to evaluate how effective it is by means of user testing or evaluation of complaints. This would provide the organisation with assurance that they were effectively providing privacy information as required by the legislation. A log of historical Privacy Notices should be maintained to allow a review of what privacy information was provided to data subjects on what date. This would provide the organisation with assurance that it has carried out effective reviews of privacy information.	Low	Partially accept	A log of privacy notices should be kept and maintained. The IG dept will work with the Concerns to ensure that a mechanism is introduced to ensure any concerns received about the Privacy Notice are fed back to the IG dept and used to inform future publications of the Privacy Notice.	Q2 2020/21	IG Manager			
A19	The online training does not cover fair processing. This creates a risk that staff will not be aware of the organisation's fair processing policies and may lead to breaches of the legislation by staff who collect personal data who may give data subjects he wrong information.	The organisation should ensure that all staff receive regular training and refresher training on fair processing policies and privacy information.	High	Partially accept	Will speak to NWIS regarding national e-learning module to understand whether training on fair processing can be incorporated. The IG dept will also add guidance to its internal webpage for staff engagin with patients.	Q2 2020/21	IG Manager			
A20	The organisation has not documented what information must be given to the ICO in the event of a breach. This risks the organisation being in breach of the legislation by failing to report a breach correctly.	The organisation should ensure that it has documented what information needs to be given to the ICO in the event of a reportable data breach. This will provide assurance that breaches are being reported in accordance with the legislation.	Low	Accept	Procedure detailing breach reporting procedure and what detail needs to be provided should be created	Q3 2020/21	IG Manager			
A21	Although affected individuals are informed where it is deemed to be appropriate, there is no formal requirement recorded as to what information is provided to them. The organisation risks being in breach of GDPR if they fail to inform affected data subjects appropriately about a breach.	To ensure that the organisation notifies individuals appropriately where there their personal data has been breached, the organisation should ensure that there is a documented procedure to ensure that the following is included in all breach reporting: the DPO details, a description of the likely consequences of the breach and a description of the measures taken to deal with the breach (including mitigating any possible adverse effects). This will help the organisation keep to the legislation when informing individuals about a data breach.	High	Accept	Procedure detailing breach reporting procedure and what detail needs to be provided should be created	Q3 2020/21	IG Manager			
A22	Retained data is not routinely reviewed on a regular basis for minimisation or pseudonymisation. This may give rise to the risk of the organisation not processing the least information possible in line with the requirements of the legislation.	Retained data should be reviewed on regular basis to identify any opportunities for minimisation or pseudonymisation of data to provide assurance for the organisation that they process the least information possible in line with the legislation.	Medium	Accept	This should be achieved by regular review of IAR. Linked to A23.	Q3 2020/21	IG Manager			
A23	Policies seen do not make it clear what level of access there is for IAOs to the DPO and SIRO. This gives rise to the risk of IAOs not being carrying out their roles assigned to them in relation to risk management effectively. IAOs are not clear whether the role is included in their job descriptions. This risks the roles not being recognised or understood by the IAOs as time passes or personnel change and therefore that they will not effectively carry out their roles regarding risk management.	To ensure that the IAO function is effective, the organisation should formalise the appropriate level of access which IAOs have to the SIRO and DPO, and ensure that designated IAO responsibility is included in job descriptions. This will provide assurance to the organisation that the IAOs are able to effectively carry out their role in the risk management process as required in legislation. When IAO responsibility has been included in job descriptions, the organisation should ensure that all staff are aware of this and what the responsibility entails. This will provide further assurance to the organisation that the IAOs will effectively carry out their role in the risk management process as required in legislation.	Medium	Accept	The IG dept suggests that the role of IAO is assigned to a designated level of management across the organisation (e.g. Directorate Manager/General Manager) and that this role is incorporated into Job descriptions.	Q3 2020/21	IG Manager			
A24	No recent training needs analysis has been carried out for IAOs, and some IAOs are unsure as to whether training has been received. This gives rise to the risk that they will not carry out their roles in information risk management effectively as required by legislation.	The organisation should ensure that all staff with specific information risk roles receive regular training to provide assurance that they are able to carry out their roles effectively with regard to information risk.	High	Accept	TNA to be performed. National piece of work currently being undertaken.	Q4 2020/21	IG Manager			
A25	It is not clear whether IAOS are routinely consulted on project and change management processes, and whether they have adequate links to IG meetings. This may give risk to the risk that they are not adequately undertaking their roles in the risk management process, which cold lead to a breach of legislation.	To ensure that staff with specific risk management roles are fulfilling those roles effectively, the organisation should formalise means by which IAOs are routinely consulted on project and change management processes s and attend or are able to feed into IG meetings. This will provide assurance that they are carrying out their roles in relation to risk management effectively and thereby reduce the risk of a breach of legislation through information risk not being handled properly.	Medium	Accept	This is being considered by the IG group which will feed into Digital Management Board	Q2 2020/21	IG Manager			

Information Governance Audit Work Plan September 2020

UHB Ref:	ICO Ref:	Priority	Recommendation	Action	Current Status/Completion Date
R1	A13	Urgent	The organisation should ensure that there is an Appropriate Policy Document (APD) in place to define which schedule 1 conditions are relied on, so that the organisation is in compliance with the legislation. In order to ensure compliance with the legislation, the organisation should further: Create an APD which considers what procedures are in place to ensure compliance with the Article 5 principles of GDPR. Ensure the APD considers how special category data will be treated for retention and erasure purposes Ensure the APD defines a responsible individual for the processing activity.	APD to be completed and published.	**Complete**. APD published on intranet and public internet
R2	A2	High	To ensure that policies remain fit for purpose and that staff have appropriate direction and information to avoid the risk of data protection breaches, the organisation should ensure that they are subject to timely routine review.	All D&HI policies to be reviewed and updated if necessary.	In Progress. All out of date IG related policies have been identified and are in the process of being reviewed. Competition date: Q3 2020/21

R3	A12	High	The organisation should document its lawful bases for processing special category data is correct based on the requirements of Article 9 of the GDPR and Schedule 1 of the DPA 2018 to provide assurance that it has appropriately considered how a determination was reached.	Ensure that our lawful basis for processing special category data is reviewed and documented.	**Complete**. Added to the UHB's Privacy Notice, published on Internet site.
R4	A19	High	The organisation should ensure that all staff receive regular training and refresher training on fair processing policies and privacy information.	The UHB will speak to NWIS regarding national e-learning module to understand whether training on fair processing can be incorporated. The IG department will also add guidance to its internal webpage for staff engaging with patients.	In Progress. Anticipated completion by start of Q4. NWIS contacted regarding updating provisions of national mandatory e–learning.
R5	A1	Low	To ensure that the Information Governance Executive Team covers all necessary topics during meetings the organisation should introduce an set of formal ToRs	Following a review, IGET has been replaced by a new IG Group. The ToR are enclosed.	**Complete**. ToR for the IG Group are in place.

Report Title:	**Digital Delivery Programme – Exception & Issues Report**								
Meeting:	Digital and Health Intelligence Committee					**Meeting Date:**	8th October 2020		
Status:	**For Discussion**		**For Assurance**		**For Approval**		**For Information**	**X**	
Lead Executive:	**Director of Digital and Health Intelligence**								
Report Author (Title):	**Assistant Director of IT**								

Background and current situation:

This paper provides a high level exception report on the high priority programmes within CAV UHB's IT Delivery Plan.

The UHB has a constantly evolving 3 year strategic outline plan for informatics development designed to underpin delivery of our emerging digital strategy, IMTP, transformation programme and the Welsh Government's Healthier Wales and Informed Health and Care policies and strategies.

Our plan includes the **3 overarching delivery programmes:**

- Intelligent Citizen Portal - this focusses on the implementation of the "Patient Knows Best" system to provide an integrated portal solution
- Integrated digital health and care record – enabling the sharing of patient data from multiple systems across health and social care
- Data to knowledge programme- gaining insights via "signals from Noise" working with our partner, Lightfoot Solutions.

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

Exception items raised for noting:

High level issues to report to the DHIC:

Intelligent Citizen Portal: renamed **Personal Health Record** (PHR) is mobilising to onboard specialties at a rate of 4 per month from November. Prioritisation has been agreed by the Patient Channel Programme Board and discussions with the first clinics start w/c 28/09/20, building on previous work. We are starting with the service areas closest to being 'ready'. An onboarding process has been developed to enable specialties to proceed to using the platform for their patients at pace. The project team is working through some issues with a hybrid mail provider.

Data to knowledge programme: Frequency of data shared with Lightfoot has moved from 5 to 7 days a week and in addition key data types have increased in frequency from 24 hours to 12 hours (admissions) and 1 hour (EU). Additional data types have been added including most recently the Covid status of inpatients, CAV 24/7, Radiology and GP OOH (Adastra).

WCCIS: WCCIS continues to fall functionally short of the procurement SoR, as well as UHB requirements. A roadmap for delivery of some relevant functionality (supporting the ABHB implementation of WCCIS for Mental Health services) has been produced, but does not contain delivery timescales. The regional partnership board has agreed that, as an interim measure, alternative mechanisms for sharing information across health and social care should be investigated. The UHB commitment to adopt WCCIS at a point when it is functionally mature still stands.

WG Digital Funding Programme 2019/20: The UHB has been successful in gaining a WG Digital Funding allocation for 2019/20 of £1,450,000 capital and £1,336,000 revenue to help commence the delivery of an exciting programme of Digital Infrastructure transformation in the following areas:

- Windows 10 implementation Programme
- Launch of Office 365 programme
- Investment in Cyber security Infrastructure and Team
- Expansion of pervasive WiFi
- Mobilisation Programme

Despite delays because of Covid the department has recruited a dedicated team to deliver Windows 10, procured all devices necessary as part of the upgrade process, and secured a managed service arrangement with Dell to help deployment with a plan to deliver over the next 8 months.

Windows 10 upgrade programme: Despite Covid related delays the department has recruited a dedicated team to deliver Windows 10, procured all devices necessary as part of the upgrade process, and secured a managed service arrangement with Dell to support deployment, planning to deliver over the next 7 months.

The original plan to commence deployment of the Win 10 programme was April 2020, however due to Covid pressures and lock down the programme was put on hold. Work has recommenced and a deployment pilot will begin mid-October, in Pharmacy UHW, Audiology and Media resources.

Office 0365 Programme: In March 2020 the national O365 programme was accelerated to enable a priority roll-out of Microsoft Teams. The UHB has aligned to this acceleration as closely as possible, and made Teams available to all staff in the Health Board who have an email account. The focus of the local Team is now on email migration, with the first batches of accounts being migrated to O365 from w/c 28th September. Migrations from H: drives to OneDrive and from S: drives to Sharepoint are yet to be prioritised. The UHB has also been an early adopter of inTune mobile device management (MDM). This is key to enabling the migration of 1000+ Community and Mental Health mobile working devices to Windows 10.

Due to the acceleration of the national programme, the UHB is lagging behind in its overall capability to support the implementation of the full Office 365 roll-out, and it will be challenging for the UHB to realise value-for-money from the Microsoft contract unless significant business change resource is made available to support this.

Further alignment of this work plan to reflect the Digital Strategy work programme structures and governance model is taking place.

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

WCCIS: assurance is provided through ongoing local and regional involvement in national programme groups, including the new Service Management Board.

Windows 10 Upgrade: Plans have now been finalised to work with a supply partner to upgrade the entire UHB 11000 device infrastructure to Windows 10 by April 2021. A programme has commenced, facilitated by WG Digital funding, to deliver this during 2020 /2021.

WG Digital Funding Programme 2019/20: Plans are in place with Finance, Procurement and Recruitment to take forward the components outlined in the programme for 21019/20. All procurements now complete. Funding for 20/21 remains unclear due to other Covid related pressures at Welsh Government.

Office 0365 Programme: The UHB is working with the National 0365 programme board on planning arrangements to migrate to 0365 and a UHB 0365 Project Board has been established.

Recommendation:

The Committee is asked to:

- **NOTE** the areas of exception which require further attention and consideration.

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	X
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	X

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

Report Title:	**Schedule of Control Documents (Policies & Procedures)**								
Meeting:	**Digital & Health Intelligence Committee**						**Meeting Date:**	8th October 2020	
Status:	**For Discussion**		**For Assurance**		**For Approval**		**For Information**		**X**
Lead Executive:	**Director of Digital & Health Intelligence**								
Report Author (Title):	**Director of Digital & Health Intelligence**								

Background and current situation:

The Digital and Health Intelligence Department are responsible for the development, maintenance and review of specific policies and procedures relating to Information Governance and IT Security.

The list of policies and procedures which either need to be updated or deleted as they have been superseded is shown at Appendix 1.

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

The attached list of IG and IT policies and procedures are in need of review. Progress has been made with the approval of the over arching IG Policy. The IG Team will undertake the review of the remaining documents on a prioritised basis.

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

Although the completion of the review of all policies and procedures has been delayed as a result of transfer of Digital resources and priorities to addressing the COVID crisis, the approval of the new Information Governance Policy has helped provide a framework for the co-ordination of all related IG and IT policies and procedures going forward.

As a result of this a number of policies and procedures have been removed from the list as superseded or deleted.

This objective will be further enhanced by the establishment of the new Information Governance and IT Security team (including Cyber security) within the Digital and Health Intelligence Department.

There remain a number of policies and procedures on the attached appendix which require review as their review date has past. With the establishment of the new team these documents will now be updated in priority order.

Recommendation:

The Committee is asked to **NOTE** progress to date and plans to address the review of remaining documents.

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	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		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	x

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

Policy/Procedure	Action	Detail
Data Protection Guidance for Researchers	**Update**	Review and update with R&D input
Remote Access Software	**Update**	To be reviewed and updated
Internet and email monitoring, administration and reporting protocol	**Update**	Review and update with IT input
Emailing Patients Template Protocol	**Update**	To be reviewed and updated
IT Security Policy	**Delete**	IG policy covers Information Security
Freedom of Information Policy	**Delete**	FOI procedure covers all necessary content and referenced in IG policy.
Transportation of Personal Identifiable Information	**Update**	To be reviewed and updated
Information Governance Corporate Training Policy	**Update**	To be updated
Information Risk Management Procedure	**Update**	To be updated
Data Quality Management Procedure	**Update**	To be updated
Information Asset Procedure	**Update**	To be updated
Personal Information use and disclosure of and the duty to share guidance	**Update**	To be reviewed and updated
Data Quality Policy	**Update**	To be updated
Information Governance Operational Management Responsibilities Procedure	**Update**	To be reviewed and updated
Records Management Procedure	**Update**	Review and update with Med Records input
Contractual Clauses and Arrangements Procedure	**Update**	To be reviewed and updated
Clauses within Employment Contracts Procedure	**Update**	To be reviewed and updated
Information Technology Security Procedure	**Delete**	IG policy covers Information Security
IT Security off site mobile computing procedure	**Update**	To be reviewed and updated
Anti-virus guidance	**Update**	To be reviewed and updated
IT Business Continuity Guidance	**Update**	To be reviewed and updated
IT Security Internet Use Local Procedure	**Delete**	IG policy covers internet use
IT Security Email Local Procedure	**Delete**	IG policy covers emails
IT Security Equipment Procedure Guidance	**Update**	To be reviewed and updated
IT Security Incidents (Breach) Guidance	**Update**	To be reviewed and updated
IT Security Software Licensing Procedure	**Update**	To be reviewed and updated

CAPITAL MANAGEMENT GROUP
MINUTES OF THE MEETING HELD MONDAY 17TH AUGUST 2020
VIA SKYPE

Present:
Geoff Walsh, Director of Capital, Estates and Facilities (Chair)
Bob Chadwick, Executive Director of Finance
Nigel Mason, Business Manager
Chris Lewis, Deputy Finance Director
Lee Davies, Director of Operations
Steve Curry, Chief Operating Officer
Fiona Jenkins, Executive Director of Therapies
Nigel Lewis, Assistant Director of IM&T

In attendance: Zoe Riden-Phillips

1.	**INTRODUCTIONS AND APOLOGIES FOR ABSENCE** Apologies were received from Abigail Harris, Marie Davies and Clive Morgan
2.	**NOTES FROM THE PREVIOUS MEETING** The notes of the previous meeting were accepted as a true and accurate record **2.1 ACTION LOG** A number of the items on the action log had been closed with relevant information provided. CMG20/07-06: The 'Philips' equipment required for ITU was scheduled to be reviewed and discussed at the meeting CMG20/07-07: The digital priorities were included in the monthly report for discussion. CMG20/07-08: NL had met with Angela Parratt, who was developing a digital transformation programme in line with the previously discussed digital strategy. There were no capital requirements outlined to date although it was anticipated that these would be reported at the next meeting.
3.	**CAPITAL MANAGEMENT REPORT** **3.1 EXECUTIVE SUMMARY**

GW presented the capital management report and confirmed that the UHB had received £3.916m of additional funding support from Welsh Government (WG) in relation to the 'COVID19 funding requirements for 2020-21 (Tranche2)'

The funding was reflected in the current CRL, dated 10 August 2020. The CRL was £45.548m which included £14.548m Discretionary Allocation and £30.734m approved 'All Wales Capital Funding.

3.2 PROJECT INITIATION ENQUIRIES

There were no enquiries submitted for capital funding support within the reporting month.

3.3 FINANCIAL SUMMARY

The UHB were reporting a potential £4.212m over commitment which related to unapproved funding for the Green Zones and fees expended to date for Business Cases in development.
The development of Ward C3 as the Interim Polytrauma Unit had been given approval and was included within the programme.

The Director of Capital Estates and Facilities had presented a 'Capital financial summary' paper to Management Executives (ME), 3 August 2020 to report an update on the Health Boards capital programme and in particular, the financial position, including the risks associated with progressing a number of the schemes without Welsh Government (WG) funding support.
The paper provided an option to recover the £4.212m shortfall which was supported by ME. This included:

- Reduction of the Backlog Estates, Medical Equipment and IM&T allocation by 50%
- Suspending the development of the CRI Health and Wellbeing Centre, Radiopharmacy,(following completion of OBC) and Park View Wellbeing Hub Business Cases
- Reduction of Estate Compliance Budget

GW highlighted the significant risk of reducing the Estate Compliance budget which could impact on the UHB statutory and mandatory obligations.

BC advised that ME had agreed that 'Refurbishment of the Mortuary UHW' scheme was to progress following the previous inspection by the Human Tissue Authority (HTA). The UHB were required to review the options following written correspondence from the Coroner, confirming that developing a 'Super Mortuary' was not being progressed. GW confirmed that £150k had been identified to progress at risk with the development of the business case. The CMG approved the funding to progress with scheme.

BC queried if everything had been captured within the report. GW raised concerns regarding the requests for additional works for the Green Zones at both UHL&UHW. A recent progress report, developed by the Head of

	Discretionary Capital, indicated that additional works in the region of £150k had been requested at UHW. • **CMG17/08-01 GW agreed to liaise directly with LD&SC to review**
3.1	**MAJOR CAPITAL REPORTS** **BUSINESS CASES IN DEVELOPMENT** WG had issued scrutiny queries to the UHB in relation to the Strategic Outline Case for the Reprovision of the CAVOC Theatres at UHL. The UHB were in the process of developing a response by 30/08/2020. The Full Business Case for Maelfa Wellbeing hub had been submitted to WG following UHB Board approval in July 2020. Issues remained unresolved in relation to the land transfer agreement and planning application for the development of the Outline Business Case for Penarth Wellbeing Hub. **4.1 MATRIX EXCEPTION REPORTING** GW provided an overview of the high risk capital schemes in development. **UHW Major Trauma & Vascular Hybrid (MTVH) Theatre (2.1.1)** The development of the MTVH Theatre OBC remained on programme for submission to WG in September 2020. As agreed by ME, the scheme would not be progressing to Full Business Case, unless WG confirmed the availability of capital funding. The UHB were not in a position to progress at risk with the development of the FBC and the procurement of the specialist equipment associated with the Vascular Hybrid Theatre. The clinical teams were reviewing the selection process following OJEU submissions. **Interim Major Trauma Centre Works (2.1.2)** GW reported that the works to EU had recommenced 27/07/2020, the anticipated completion date was 30/09/2020 with the additional resuscitation facility. **CT Scanner (2.1.2b)** VEAT notice associated with the CT scanner had expired, GW awaited confirmation from the Head of Procurement to progress with the appointment of GE to develop the design and fit out works. **Genomics (2.1.3)** Development of the OBC was progressing well with submission to WG scheduled September 2020. GW reported the risk associated with the forecast spend against the budget. This was being reviewed with the design team and user group. The UHB and Genomics Partnership Wales member, met with WG colleagues to discuss and propose the option of submitting the FBC at the earlier date of

March 2020, as opposed to May 2020 as scheduled, to avoid the potential delay of approval due to WG election process 'Purdah' in May 2020.

CAVOC Theatres UHL (2.1.4)
The UHB were not in a position to progress with development of the OBC until WG approval of the SOC and funding had been received.

Rookwood Relocation (2.1.5)
GW reported that the projected overspend of £856,461K as indicated in the latest coat advisors report. The UHB were in discussion with WG to identify recovery of the costs associated with the delays due to COVID and the unforeseen additional requirements following the Grenfell enquiry.

Cystic Fibrosis (2.1.6)
GW reported an approximate 4 week delay to the completion of the scheme due to the workforce restrictions and social distancing requirements in relation to COVID19 'lockdown' period.

CRI Building 4 & 11 and DATT Modular Build (2.1.7)
Cost pressures were reported in association with the modular build to accommodate the DATT Service. The team were reviewing the options to improve the position.

Radiopharmacy (2.1.8)
The OBC was scheduled to be presented at UHB Board in September 2020 for approval to submit to WG. It was anticipated that, due to the importance of the scheme, and commitments made to the MHRA, development of the FBC would progress. However, the UHB were not in a financial position to support the excessive fees in relation to the detailed design and market testing processes.

FJ asked GW if discussions had been held with MT to identify a way forward to satisfy the MHRA. GW confirmed that he had liaised with MT, MT proposed acceleration of the programme although at a recent meeting, WG colleagues indicated that the availability of capital funding had not improved, as previously reported.
To accelerate the programme, the UHB would be required to seek approval from WG to reduce the detailed design and market testing under the framework requirements for FBC level. The scheme would be further impacted with a higher risk.

Engineering Infrastructure – Substation (2.1.9)
The UHB had received planning permission for the development of the new substation at UHL to provide additional electrical substation and additional medical gases supply.
Tender return was due early September 2020 to allow the business case to be presented at UHB Board in November 2020 for approval to submit to WG.
WG had indicated financial support due to the potential loss of services.

Green Zones UHW & UHL (2.1.10 / 11)
The Head of Discretionary Capital continued to issue a weekly progress and issues report to the key members including Chief Operating Officer, Director of Operations and CD&T Clinical Board members.

Work continued with the relevant teams to finalise the items of West 6 Ward to progress with the scheme.

CRI SARC (2.1.12)
GW had provided two options to the partner organisations to improve the current facilities, on an interim basis, pending development of a new regional facility. Budget costs of the options had been issued to the project lead at Gwent police for review and consideration.

Park View Wellbeing Hub (2.1.13)
As part of the financial recovery, which was presented at ME, it was agreed to step down the design team and SCP at the end of August 2020. An instruction to step down was scheduled to be issued to the respective consultants, unless funding support be provided by WG.

GW had advised WG of the intention to stop the work progressing until further notice.

Penarth Wellbeing Hub (2.1.15)
AH had been in discussion with Rob Thomas, Vale of Glamorgan Council, to confirmation of the LA's position.
GW proposed that the CMG support the decision to step down the design team and SCP until the UHB had received feedback from VoG Council.
The UHB had been unable to develop the level of work required for the business case for some 6 months. CL requested if the UHB would be required to cover any abortive costs. GW advised that the UHB continued to pay the design team on a monthly basis, although the biggest risk to the organisation was that of the VoG Council being unsupportive of the development on the specified site which would require a review of the long term sustainability of the project.

UHW Theatre 0 and Sterile Store (2.1.16)
Annual validation reports had identified that the ventilation plant in the area was non compliant and required a separate plant to serve the theatre and other areas, as per Health Technical Memorandum (HTM)

Works were unable to progress at present due to the location of Theatre 0, within the Green Zone. It was confirmed that the issue would be managed until the team were able to undertake the works.

Maternity Air Plant (2.1.17)
Validation reports had identified that the ventilation plant was at its 'end of useful life' and recent tests indicated that the air flow was 'variable'.

At present there was no funding available within the programme for the replacement of the plant. This was highlighted as high risk.

Mortuary Roof UHL (2.1.18)
GW reported the long standing issues with the mortuary roof and that the use of additional mortuary capacity would be required in the event of a second wave of COVID19.

CRI Out of Hours Call Centre (2.1.19)
The 24/7 out of hours call centre at CRI had been completed and was operational from August 5th 2020.

Pembroke House Refurbishment (2.1.20)
The UHB had committed to undertake bathroom refurbishment works at Pembroke House, following the similar works at Carmarthen House. However, this was unable to progress until the next financial year due the lack of availability of capital funding.

HCID (2.1.21)
Since completion of the facility, CEF have received requests from various users for additional works. GW proposed that GW/SC/LD review and agree a way forward. SC agreed to review a reporting structure on a more regular basis. To be discussed as agenda item number

CRI Site Redevelopment Business Case (Inc. Safeguarding works (2.1.22)
The UHB were scheduled to submit the OBC to WG in January 2021, however, would not be proceeding to FBC unless funding support was approved by WG.

CAPITAL DEVELOPMENT SCHEDULE

The full detailed schedule of Major and Discretionary Capital Schemes and Business Cases in development was highlighted for noting within the body of the CMG report.

GANTT CHART

The GANTT chart provided an overview of the timelines of the schemes and business cases in development.

LETTERS OF APPROVAL

One letter of approval for funding support from WG had been received within the reporting month;
Award of Funding to Cardiff and Vale University Health Board in respect of the COVID – 19 Funding requirements for 2020-21 (Tranche 2 – July 2020) at the sum of £3.916m.

ESTATE COMPLIANCE

The Estate Compliance report was highlighted for noting within the body of the report.

4.0	**CAPITAL PROGRAMME GOVERNANCE PROCESS** SC advised that the proposed draft process did not directly address the aim that was discussed and reviewed, to identify a bespoke and focussed approach to how the executive members would manage specific requests, and remove the capital planning team from being in the position to arbitrate. BC was in agreement. SC advised that a regular team meeting be established to discuss exceptions and urgent requests for capital funding support. BC confirmed that the CMG Sub Group had been arranged to meet on a fortnightly basis and proposed that a brief be issued to the Clinical Boards providing an overview of the CRL and discretionary capital allocation, the process to follow for requesting capital funding and accepting the final decision agreed by the group. **CMG17/08-02 GW agreed to develop a flowchart of the proposed process and liaise directly with LD&SC for approval and implementation.**
5.0	**MEDICAL EQUIPMENT** FJ presented the medical equipment report and requested that a decision be made on the new heart and lung machine and associated equipment for Cardiothoracic surgery at UHL. The request was reported at the previous meeting. CM had identified lease options although it was indicated that procurement of the equipment was the best value for money, with the outright purchase price £170k against the 2 year lease of £112k. CL advised that he had reviewed the SBAR and on review of the pressures on the capital programme, the lease agreement would be the favoured approach over the 2 year period for the HLN component. However, the CDI component at £30k, was best value if purchased. FJ advised that the Clinical Board had confirmed that funding for the maintenance of the equipment had been identified within their allocated budgets. FJ was happy to continue based on the advice provided by the Deputy Director of Finance. The CMG approved the purchase and lease.
4.0	**IM&T** NL presented the IM&T report and provided an update of the IM&T 5 year structure and sustainability plan that identified the costs of replacement of internal physical hardware associated with delivery of the Data Network, Voice Infrastructure, Desktops, Laptops and Netbooks Hardware for the period beginning 2019/20.

	As per action from the previous meeting NL had developed the IM&T priorities of the £250k capital investment allocation. The priorities were outlined and split into two lists: Priority list 1 consisted of: • £50k – Data Network to replace CISCO switches that were 'end of life' • £100k – Virtual Servers, the replacement of Servers, software operating systems and backup licences • £50k – Backup infrastructure • £50k – Storage to keep up with the current and forecast demand The priority 2 reserve list proposed the following, should additional discretionary capital funding be made available within the financial year: • £75k – Virtual Servers • £50k – Backup infrastructure • £75k – Data Network • £50k – PC's and Laptops The CMG approved the priority list 1 and noted the reserve list and the appendices of the report.
5.0	**ANY OTHER BUSINESS** There was no other business discussed at the meeting
6.0	**DATE AND TIME OF NEXT MEETING** Monday 21st September 2020, 10am – Skype