Public Finance & Performance Committee

Wed 17 July 2024, 14:00 - 15:30

Virtual - MS Teams

Agenda

14:00 - 14:10
10 min

1. Standing Items

1.1. Welcome & Introductions

John Union

1.2. Apologies for Absence

John Union

1.3. Declarations of Interest

John Union

1.4. Minutes from the Finance & Performance Committee meeting - 19 June 2024

John Union

1.4 Draft Finance and Performance Minutes 19.06.24 RM Reviewed (1).pdf (5 pages)

1.5. Actions following the Finance & Performance Committee meeting - 19 June 2024

1.5 Finance and Performance Action Log.pdf (1 pages)

1.6. Chairs Actions since previous meeting

John Union

14:10 - 14:50
40 min

2. Items for Review and Assurance

2.1. Finance Position Update - Month 3 Position & Savings Plan Progress

Catherine Phillips / Robert Mahoney / Andrew Gough

20 Minutes

2.1 Public Finance Committee SUMMARY Finance Position Report for Month 3.pdf (13 pages)

2.2. Operational Performance (including Diagnostics Update & Workforce Reshaping)

Paul Bostock

20 Minutes

2.2 Operational Performance report cover paper - Finance and Performance Committee July 24 (1).pdf (6 pages)
2.2a Integrated Performance Report (1).pdf (38 pages)
2.2b Appendix 1.pdf (1 pages)
2.2c Appendix 2.pdf (3 pages)

14:50 - 15:20
30 min

3. Items for Approval / Ratification

3.1. Business Cases

15 Minutes

3.1.1. Transforming Access to Medicine Business (TRAMS) Justification Case (Radiopharmacy)

Sarah Lloyd

- 3.1.1 TRAMS - Radio-Pharmaceutical Business Justification Case.pdf (3 pages)
- 3.1.1a Radiopharmacy BJC.pdf (39 pages)

3.1.2. Pentyrch Business Justification Case

Clare Evans

- 3.1.2 Pentyrch Branch Surgery Development BJC (2).pdf (6 pages)
- 3.1.2a Pentyrch Surgery BJC v6.2 (1).pdf (76 pages)

3.1.3. Digital Cellular Pathology Business Justification Case

Adam Christian

- 3.1.3 Digital Cellular Cover Report Finance.pdf (4 pages)
- 3.1.3a National Digital Cellular Pathology BJC.pdf (79 pages)

3.2. Draft Capital Plan

Geoff Walsh

10 Minutes

- 3.2 Annual Capital Plan 2024-25.pdf (7 pages)

15:20 - 15:20
0 min

4. Items for Noting & Information

No Items

15:20 - 15:20
0 min

5. Any Other Business

John Union

15:20 - 15:20
0 min

6. Review and Closure

John Union

6.1. Items to be deferred to Board / Committee

John Union

6.2. The date and time of the next Committee meeting: Wednesday 21st August 2024 via MS Teams

Chilcott,Rachel
21/08/2024 11:48:04

Unconfirmed Minutes of the Public Finance and Performance Committee Meeting
Held on 19 June 2024
Via MS Teams
Link to YouTube recording – Click Here
(If the link doesn't work, please copy & paste the link into your browser)

Chair:		
John Union	JU	Independent Member – Finance (Committee Chair – CC)
Present:		
David Edwards	DE	Independent Member – Information Communication & Technology (IM-ICT)
Ceri Phillips	CP	UHB Vice Chair (VC)
In Attendance:		
Andrew Gough	AG	Strategic Deputy Director of Finance (SDDF)
Robert Mahoney	RM	Operational Deputy Director of Finance (ODDF)
Suzanne Rankin	SR	Chief Executive Officer (CEO)
Matt Phillips	CP	Director of Corporate Governance
Jane Murphy	JM	Director of Nursing – Medicine Clinical Board (DNMCB)
Victoria Le Grys	VL	Programme Director – Shaping Our Future (PDSOF)
Catherine Wood	CW	Director of Operations – Children & Women (DOCW)
Adam Wright	AW	Director of Operational Planning and Performance (DOPP)
Urvisha Perez	UP	Wales Audit Office (WAO)
Secretariat:		
Nikki Regan	NR	Corporate Governance Officer
Apologies:		
Charles Janczewski	CJ	UHB Chair
Marie Davies	MD	Executive Director of Strategic Planning
Jason Roberts	JR	Executive Nurse Director
Paul Bostock	PB	Chief Operating Officer
Catherine Phillips	CP	Executive Director of Finance

Item No	Agenda Item	Action
FPC 19/06/001	**Welcome & Introduction** The Committee Chair (CC) welcomed everyone to the meeting.	
FPC 19/06/002	**Apologies for Absence** Apologies for Absence were noted. **The Finance and Performance Committee resolved that:** a) Apologies for Absence were noted.	
FPC 19/06/003	**Declarations of Interest** No Declarations of Interest were noted.	
FPC 19/06/004	**Minutes of the Finance and Performance Meeting held on 22 May 2024** The minutes of the meeting held on 22 May 2024 were received. **The Finance Committee resolved that:** a) The minutes of the Finance and Performance Committee meeting held on 22 May 2024, were held as a true and accurate record of the meeting.	
FPC 19/06/005	**Actions following the Finance and Performance Committee meeting on 22 May 2024** The Action log was received.	

Chilcott,Rachel 21/08/2024 11:48:04

	The Finance and Performance Committee resolved that: a) The Action Log for the Finance and Performance Committee was noted.	
FPC 19/06/006	**Chairs Action since previous meeting** There had been no Chair's Actions taken since the last meeting	
FPC 19/06/007	**Finance Position Update – Month 2 Position & Savings Plan Progress** The Finance Position Update – Month 2 Position & Savings Plan Progress was received. The ODDF advised the Committee that month 2 had seen a disappointing financial performance and had built on the trend of month 1. He added that at month 2, it had been expected that there would be a planned deficit of £2.650m (two twelfths of the annual planned deficit of £15.9m) but noted that the Health Board were £4.614m off the savings programme that would be needed by the current stage of the financial year and £1.557m off the operational position. It was noted that there was an ambition to recover that which was why the forecast deficit remained at £15.9m. The Committee were presented with the month 2 summary financial table which analysed the £8.821m overspend between income, pay and non-pay. A graph was also presented which Graph 1 showed the reported position at month 2 compared to the planned deficit and showed the actual position was £6.171m above the planned deficit because of the combined operational deficit and savings gap. It was noted that the forecast position assumed that it would be recovered over the course of the year through management action to ensure that services operated within delegated budgets. The ODDF noted that there was a key risk to bring to the attention of the Committee on Long Term Agreements (LTAs) and reminded the Committee that there had been an uplift of 3.67% in the allocation for 2023/24 and that the Financial Plan was based on the clear planning instructions from Welsh Government (WG) that all LTAs and SLAs should reflect uplifts in line with the general 2024-25 funding uplift provided in the 2024-25 Allocation Letter of that 3.67%. He added that unfortunately, colleagues in neighbouring Health Boards and other NHS Wales organisations had elected not to pass the 3.67% onto Cardiff and Vale UHB which caused a potential risk to the plan of a £5.274m shortfall in the income anticipated in the Financial Plan approved by the Board. The CEO noted that at a previous Board Development meeting the LTA uplift had been highlighted as a risk due to the mechanisms for agreeing the contractual arrangements. She planned to discuss with Chief Executive colleagues to reach an agreement prior to arbitration and highlighted the need to be consistent with the approach. The IM-ICT asked if there was a sense that the system with the financial pressures was working. The SDDF agreed the system required revision and noted there were only 2 net service providers in NHS Wales with the other 5 Health Boards being net commissioners (CAV UHB & SBUHB). The CEO explained that a review of the Joint Commissioning Committee (JCC) was recently undertaken and the issue was that the Health Board were a net provider when the majority of LHBs were commissioners. The ODDF noted the allocation uplift from Welsh Government had always previously been automatically added to LTAs and SLAs each year. The ODDF highlighted the key factors contributing to the financial pressures in each Clinical Board :-	

Chilcott,Rachel
21/08/2024 11:48:04

- Children & Women overspend was increased by increases in medical staff variable pay and lower anticipated performance income
- Mental Health clinical board reported an improved position due to the repatriation of out of area patients
- Primary care – the revised Optometry Contract negotiated with the profession by Welsh Government was causing an overspend. Ongoing discussion are being held with Welsh Government.
- COVID expenditure is forecast to be in line with funding received from Welsh Government (WG)
- Whilst there is pressure on the UHB capital plan, expenditure is forecast to remain within funding limits.
- The savings programme has made reasonable progress to date. However, this should be assessed within the context of the challenging £47.2m target that the UHB had set itself.
- Enhanced monitoring meetings were planned with all clinical boards to monitor and action savings where possible

It was noted that the Health Board would utilise the improvements in temporary pay trends and enhanced recruitment controls provided by the Corporate Vacancy Scrutiny Panel to provide some time for additional cost savings schemes to be identified and to bed in.

The Finance and Performance Committee resolved that:

a) The reported year to date overspend of £8.821m and the forecast deficit of £15.900m was noted
b) The month 2 operational overspend against plan of £1.557m with a further £4.614m savings gap was noted
c) The progress against the savings target, with £20.989m (44%) of green and amber schemes identified at Month 2 against the £47.2m target was noted
d) That delivery of the forecast is predicated on the confirmation of all expected income streams was noted.

FPC 19/06/008

Operational Performance

The DOPP highlighted the following points on Operational Performance:

- The Urgent & Emergency Care performance remained strong on ambulance handovers but there were challenges with waiting times in ED
- 898 patients waited more than 12 hours in ED during May 2024
- 22 Primary Care Practises reported high escalation levels with PCIC supporting these practises
- Compliance for Stroke pathways reduced in April but remained above the all Wales average
- An increase in the single cancer pathway performance to 63.7% for April 2024
- Long waiting elective patients - 12,300 patients waiting more than 12 months for an initial appointment/ 2816 patients waiting more than 2 years and113 patients waiting more than 3 years overall
- The 8 weeks waits for diagnostics had worsened and trajectories being finalised with diagnostics teams
- WG requested CAV to submit trajectories around Planned Care, Mental Health and Ambulance rates
- Mental Health demand had increased and noted the assessment waits had increased and have agreed a trajectory with NHS Wales

The VC noted the pressures in primary care were well documented and the level of activity that took place was monumental to the Health Board. He asked to what extent was needed to give more thought to reduce pressures elsewhere. He attended a workshop on the primary care model, and it was suggested more work was required to alleviate pressures.

Chilcott,Rachel
21/08/2024 11:48:04

The DOPP explained that through the 2023/24 annual planning process there were a small number of proposals which had been prioritised for investment, the majority of these were focused on Primary and Community Care. It was confirmed that the Health Board would be part of the cluster planning group, where there would be a huge organisational focus on that work.

	The VC noted that the Health Board were measured and assessed on the number of people waiting for secondary care / A&E but suggested to look at the people that the Health Board were helping keep safe at home. **The Finance and Performance Committee resolved:** a) The year-to-date position against key organisational performance indicators for 2023-24 and the update against the Operational Plan programmes was noted.	
FPC 19/06/009	**Decarbonisation Update** The PD -SOF highlighted the following on the Decarbonisation Update: • Q4 update outlined the 2023-24 plan with 47 of 54 actions being achieved • 3% of our carbon footprint had been avoided this year **The Finance and Performance Committee resolved:** a) The content of the Decarbonisation Report was noted.	
FPC 19/06/010	**Business Cases:** **Stroke Improvement** The DOPP highlighted the following on the Stroke Improvement Business Case: • This was previously highlighted for an area that was to be focused on • The Stroke rating for the Health Board was currently at B (A being the highest) • Support at Investment Group and SLB was confirmed on the agreement that the spend would begin predominantly in Q4 The VC welcomed the business case and added that it would be an investment that would generate returns. He suggested to spend wisely to put effective services in place. **CAVHIS** The DOPP noted the following on the CAVHIS Business Case: • The inclusion service would help 5 vulnerable areas which included: • homeless • sex workers • traveller communities • migrants • people in contact with the criminal justice service • £1.4mil was requested for a range of staff members • Support at Investment Group and SLB was confirmed on the agreement that the spend would begin in Q4 **The Finance and Performance Committee resolved:** • The Stroke Business Case was approved and; • The business case for the expansion of the Cardiff and Vale Health Inclusion Case	
FPC 19/06/010	**End of Year Financial Report for the Regional Partnership Board** This report was noted. **The Finance and Performance Committee resolved:** a) The end of year financial report for the Regional Partnership Board was noted.	
FPC 19/06/010	**Monthly Monitoring Return – Month 2** The Monthly Monitoring Return for month 2 was for information and noting.	

Chilcott,Rachel 21/08/2024 11:48:04

	The Finance and Performance Committee resolved: a) The monthly monitoring return for month 2 was noted.	
FPC 19/06/011	**Any Other Business** No other business was raised.	
	Date & time of next Meeting Wednesday 17th July 2024 via Teams	

Chilcott,Rachel
21/08/2024 11:48:04

Public Action Log

Following Finance and Performance Committee Meeting
19.06.2024
(For the Meeting 17 July 2024)

Completed actions					
REF	**SUBJECT**	**AGREED ACTION**	**ACTIONED TO**	**DATE**	**STATUS/COMMENTS**
FPC **19/06/007**	Finance Position Update – Month 2 Position & Savings Plan Progress	Committee to be kept updated on forecast position to provide assurance that savings could be received over the course of the financial year	Rob Mahoney	17.07.2024	**COMPLETED** Will form part of the Finance Position Update each month.
Actions referred to Board/Committees					

Chilcott,Rachel
21/08/2024 11:48:04

Report Title:	Finance Report for the Period Ended 30th June 2024			Agenda Item no.	2.1
Meeting:	Finance Committee	Public	x	Meeting Date:	17th July 2024
		Private			
Status *(please tick one only)*:	Assurance	X	Approval		Information
Lead Executive:	**Executive Director of Finance**				
Report Author (Title):	**Deputy Director of Finance (Operational)**				

Main Report
Background and current situation:

Summary

At Month 3 the UHB is reporting an overspend of £11.564m.

This is comprised of £5.151m unidentified savings, £2.438m of operational overspend and the planned deficit of £3.975m (three twelfths of the annual planned deficit of £15.9m set out in 2024-25 financial plan approved by the UHB Board and submitted to Welsh Government).

The UHB is working to recover the month 3 operational and savings overspend to deliver the £15.900m planned deficit.

Table 1: Month 3 Financial Position 2024/25

	Month 3 Position £m	Forecast Year-End Position £m
Planned deficit	3.975	15.900
Savings Programme	5.151	0.000
Operational position (Surplus) / Deficit	2.438	0.000
Financial Position £m (Surplus) / Deficit £m	**11.564**	**15.900**

Financial Plan Approved by Board and submitted to Welsh Government

The UHB's Financial Plan in 2024-25 reflected the following key components:

- Brought forward underlying deficit of £60.9m
- 2024-25 Demand and cost growth and unavoidable investments of £45.4m

This brought the UHB's draft 2024-25 position to £106.3m deficit before the following new funding and savings programmes:

- Additional Allocations of £37.3m
- Anticipated pass-through funding on Long Term Agreements of £5.9m (3.67%)
- Savings plans to reduce expenditure by £47.2m

Chilcott, Rachel
21/08/2024 11:48:04

This resulted in a 2024-25 planning deficit of £15.9m that was approved by the UHB Board for submission to Welsh Government.

Discussions continue between the UHB and Welsh Government over the acceptability of this Financial Plan.

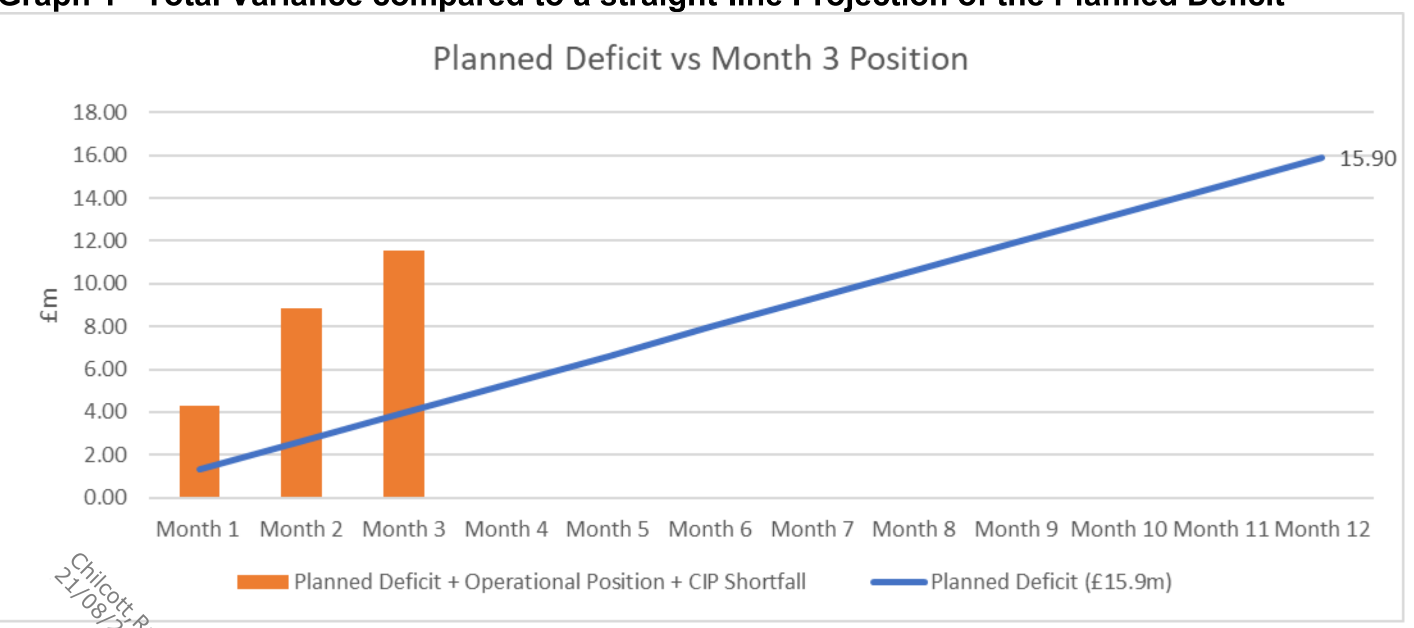
The submitted 2024-25 plan represents a failure of the UHB's statutory requirement to deliver a balanced financial plan over a three-year rolling period. The submitted Financial Plan has not been approved by Ministers and this will also represent the failure of a statutory financial duty if this situation remains.

Summary Financial Table
The following table analyses the £11.564m overspend at Month 3, between Income, Pay and Non-Pay.

Table 2: Summary Financial Position for the period ended 30th June 2024

Income/Pay/Non Pay	Memorandum Annual Budget £m	Current Period Actual £m	Total Variance (Fav)/Adv £m
In Month			
Income	(478.120)	(157.445)	(0.097)
Pay	225.364	75.314	0.472
Non Pay	252.756	83.549	1.044
Sub Total £m	0.000	1.418	1.418
2024/25 Planned Deficit	15.900	1.325	1.325
Variance to Plan £m	15.900	2.743	2.743
Cumulative			
Income	(478.120)	(479.053)	(0.933)
Pay	225.364	226.437	1.073
Non Pay	252.756	260.204	7.449
Sub Total £m	0.000	7.589	7.589
2024/25 Planned Deficit	15.900	3.975	3.975
Variance to Plan £m	15.900	11.564	11.564

Graph 1– Total Variance compared to a straight-line Projection of the Planned Deficit



Chilcott, Rachel
21/08/2024 10:48:04

Graph 1 shows the reported position at month 3 compared to the planned deficit. The actual position is £7.589m above the planned deficit because of the combined operational deficit and savings gap. The forecast position assumes that this will be recovered over the course of the year through management action to ensure that services operate within delegated budgets.

Long Term Agreements

NHS organisations are expected to have concluded discussions and signed contracts (Long Term Agreements and Service Level Agreements) between each other by the end of June 2024. Failure to do so obliges parties to submit arbitration briefs to Welsh Government to deliberate on and make a ruling.

The UHB's Financial Plan was based on the clear planning instructions from Welsh Government that all LTAs and SLAs should reflect uplifts in line with the general 2024-25 funding uplift provided in the 2024-25 Allocation Letter of 3.67%. This uplift was reflective of the increased cost of providing healthcare and delivering services by provider organisations.

The UHB has received and agreed offers, from a number of commissioners, which offered a range of percentage uplifts some of which were lower than 3.67% and proposed additional delivery of services from C&V UHB.

Discussions were concluded without the need to resort to arbitration and with most LTAs being uplifted in line with the Welsh Government guidelines. Some settlements will recover the necessary income to support the anticipated plan position with improved output and productivity.

Financial Performance of Clinical Boards

Budgets were set to include £12m of operational pressures in addition to recognising non recurrent savings. Financial performance for Month 3 by Clinical Board is shown in Table 3.

Table 3: Financial Performance for the period ended 30th June 2024

Clinical Board Cumulative	Operational Position (Surplus) / Deficit Variance £m	Savings Position (Surplus) / Deficit Variance £m	Total (Surplus) / Deficit Variance £m	Prior Month (Surplus) / Deficit Variance £m
Clinical Diagnostics & Therapeutics	3	577	580	417
Children & Women	959	660	1,619	883
Capital Estates and Facilities	(67)	396	330	347
Executives	(623)	139	(484)	83
Genomics	(13)	0	(13)	(12)
Medicine	1,644	846	2,490	1,442
Mental Health	135	519	654	623
PCIC	1,552	606	2,158	1,754
Specialist	8	564	572	547
Surgery	529	1,098	1,627	750
Clinical Board budgets to be delegated	(1,325)		(1,325)	(883)
Sub-Total Delegated Position	**2,803**	**5,406**	**8,209**	**5,950**
Central Budgets	(363)	(630)	(992)	(30)
Commissioning	(3)	375	372	250
Cost Improvement Themes	0	0	0	0
Total (Surplus)/Deficit	**2,438**	**5,151**	**7,589**	**6,171**
Planned Deficit	3,975	0	3,975	2,650
Total Operational (Surplus)/Deficit	**6,413**	**5,151**	**11,564**	**8,821**

The UHB reported an overspend of £7.589m against the draft financial plan for the year to date.

The £5.151m deficit against the £47.2m savings plan is due to the straight-line phasing of the gap against the target over months 1 to 12. The position is expected to be recovered as further schemes develop and mature during the financial year.

The pressures on operational positions, reported across delegated clinical boards, have been partially offset in Month 3 by a release of remaining plan provision to support known brought forward operational pressures. £5.3 million remains un-allocated at present, pending the agreement of recovery actions, most notably in the Medicine Clinical Board. The year to date impact of this reserve has been brought into the Month 3 position (This is included in Table 3 in the row 'Clinical Board budgets to be delegated').

Clinical Boards are anticipating managing the operational financial risks that they face within their delegated budgets. The most significant of these risks are outlined below:

C&W: Driven by increased variable medical pay spend (£0.390m) combined with lower than expected income from Joint Committee (£0.235m formerly WHSSC). It is early in the financial year and contract performance may correct itself as the year progresses.

Medicine: Driven by medical staff and registered nursing, where there is continuing scrutiny of temporary expenditure and a drive to recruit to substantive posts. It is anticipated that the focus on job planning, rota and sickness management will also reduce reliance on agency clinicians and that the benefits of bio-similar drugs switches will be realised in the latter half of the financial year.

Surgery: Significant costs have been incurred in the first quarter in respect of planned care initiatives where costs have exceeded available funding. The UHB's forecast position assumes that the cost profile will reduce as the year progresses and work is underway with the Chief Operating Officer to deliver on this basis. In addition, pressures are reported due to continuing costs arising from GP Interface sessions where non recurrent Welsh Government support has now ended.

PCIC: A new Optometry contract agreed between Welsh Government and community opticians in Wales has seen increased costs (£0.576m YTD) arising during implementation in 2024-25 without funding. The UHB is continuing to engage with Welsh Government to explore potential options to work within available funding The UHB's financial plan reshaped the funding framework for some PCIC urgent care initiatives which included the filling of community nursing posts. The savings to right-size the remaining urgent care programmes will be delivered in the second half of the financial year.

There have also been high costs associated with additional mental health support needed in respect of complex behavioural patients on a number of medical wards across UHW and UHL. These variable costs are borne by the Medicine and Children and Women's Clinical Boards.

Review meetings are scheduled with the Clinical Boards to assess their Month 3 positions and the robustness of actions to improve the financial outlook.

Welsh Government COVID 19 Allocations & Expenditure

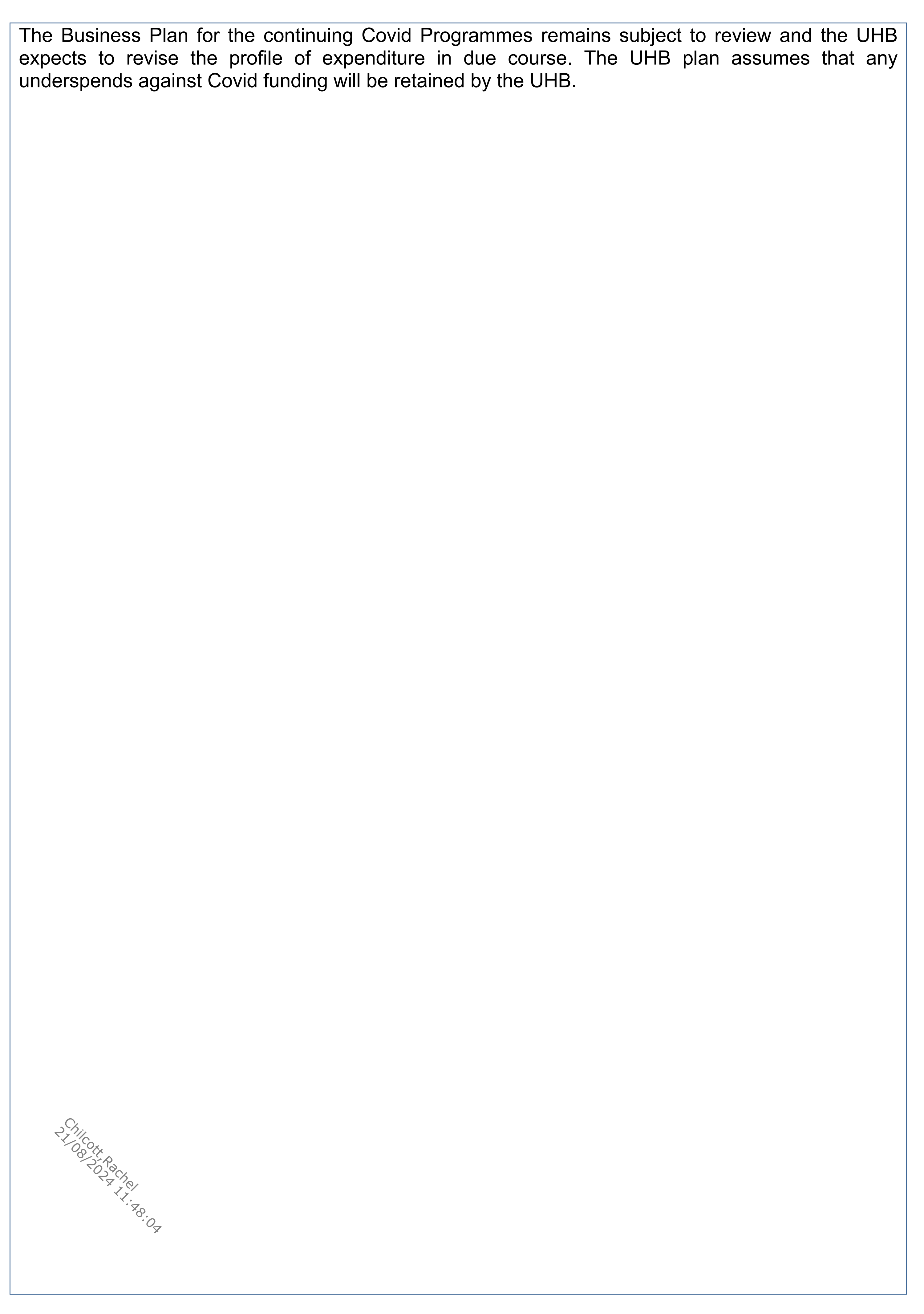
The expenditure for Month 3 is summarised in Table 4 below.

Table 4: Summary of Month 3 COVID 19 Net Expenditure

	Month 3 £m	Forecast £m	Funded by WG £m	Variance to Plan/Funding £m
Health Protection/Vaccination & PPE	2.260	9.040	9.040	0.000
Long Covid	0.286	1.144	1.144	0.000
Sub Total WG Funded Covid Expenditure £m	**2.546**	**10.184**	**10.184**	**0.000**

Chilcott,Rachel
21/08/2024 11:48:04

Funding for local response costs is allocated to Clinical Boards through the UHB's Financial Plan. However, local response expenditure is no longer funded directly by Welsh Government and residual costs are reported within delegated clinical board positions and not included in table 4 above.



The Business Plan for the continuing Covid Programmes remains subject to review and the UHB expects to revise the profile of expenditure in due course. The UHB plan assumes that any underspends against Covid funding will be retained by the UHB.

Chilcott,Rachel
21/08/2024 11:48:04

Financial Risks

Table 5 summarises the Finance Department's Risk Register. The key risk which feeds the UHB Corporate Risk Register is the failure of the UHB to deliver a breakeven position by 2024-25 year end with a current planned deficit of £15.9m.

Table 5: Risk Register at June 2024

Finance Risk	Rating	Comment
The submitted Financial Plan has a planned deficit of £15.9m for 2024/25. This does not allow the Minister to approve the an IMTP due to the lack of financial balance over a three year rolling period. How ever the 2024-25 Financial plan does require support from Welsh Government even in the absence of Ministerial approval.	15	The UHB has developed a plan w hich has a deficit of £15.9m in 2024-25 and break even positions in FY 2026 and FY 2027 w hich the Minister is not able to approve. Support for the one year 2024-25 financial plan w ill be required. Welsh Government has not confirmed its support at the present time. Enhanced Monitoring meetings w ith Welsh Government at Executive level continue to discuss this issue.
Due to a planned deficit of £15.9m for 2024/25 the UHB is unable to achieve financial balance over a three year rolling period. This does not allow the Minister to approve the UHB IMTP (Three year plan) and has contributed to the UHB follow ing Enhanced Monitoring arrangements by Welsh Government.	15	The failure to submit a balance plan for 2024-25 means that the UHB cannot achieve its statutory duty to balance over a three year rolling period. The UHB has plans to return the UHB to financial balance in FY 2025 and 2026. Progress is monitored internally through established governance reporting and monitoring arrangements through operational teams, Finance Committee and Board Internal Audit provides assurance that controls are in place. Enhanced Monitoring meetings and Joint Executive meetings w ith Welsh Government maintain discussions over progress tow ards a financially balanced three year IMTP .
Achievement of Capital statutory breakeven duty The Health Board has a capital allocation, w hich it should not exceed on a three year rolling basis.	8	The current 2024-25 UHB Capital Plan is structured to remain w ithin the Capital Resource Limit. Capital Management Group manages the capital programme and reports into the Management Executive. Governance reporting and monitoring arrangements through the Finance Committee, Board and WG. Internal Audit provides assurance that controls are in place.
Failure to adequately manage budget pressures in line w ith the submitted £15.9m deficit plan for 2024-25	20	The period to Month 3 has reported financial pressures against the £47.2m savings target and operational pressures w ithin delegated positions. The requirement to manage budget pressures is clearly communicated to primary budget holders. Enhanced monitoring of delegated financial positions is exercised through monthly meetings including Executive Performance Review s w ith each Clinical Board; Monthly Finance meetings w ith all Clinical Boards and COOs Office; w eekly Savings meetings of delegated budget holders; and bi w eekly multi leadership Sustainability Board meetings chaired by the CEO.
A recurrent Cost Improvement Programme target of £47.2m has been set for 2024/25. Failure to deliver this level of saving in 2024-25 impacts the ability of the UHB to meet its planned 2024/25 deficit of £15.9m. This combined w ith any savings w hich are achieved but non recurrently impacts the ability of the UHB to deliver financial balance in future financial years	20	The CIP savings target has been clearly communicated and delegated to budget holders. At Month 2, only £25.8m of Green and Amber schemes against the £47.2m target have been identified as recurrent in nature. A CIP pipeline tracker is in place w ith a w eekly monitoring progress across the organisation. Monthly Financial Clearance Meeting include specific focus on CIPs. Further focus is provided in Executive / Clinical Board Performance Review s, bi w eekly Sustainability Boards and w eekly Savings meetings. Governance reporting and monitoring arrangements through the Finance Committee and Board.
2024-25 LTA framew ork in NHS Wales.	15	LTAS have now been agreed w ith Commissioners, generally in line w ith the guideline 3.67% uplift recommended by Welsh Government. Elements of income w ill be contingent on improved LTA outturn performamnce and this remains a risk for the UHB.
Remain w ithin Cash limit	15	The UHB w ill require cash support from WG for the 24/25 planned deficit of £15.9m alongside w orking capital for any movements from the 2023/24 balance sheet. In addition outstanding allocations from previous financial years to be confirmed by WG in 2024-25 may bring forw ard the point of the year w hen cash controls w ill require consideration. Cash controls w ill include the careful management of creditor payment feeds and potential compromise the achievement of the UHB's payment performance targets.

Gillcott, Rachel
21/08/2024 11:48:04

Savings Programme Update

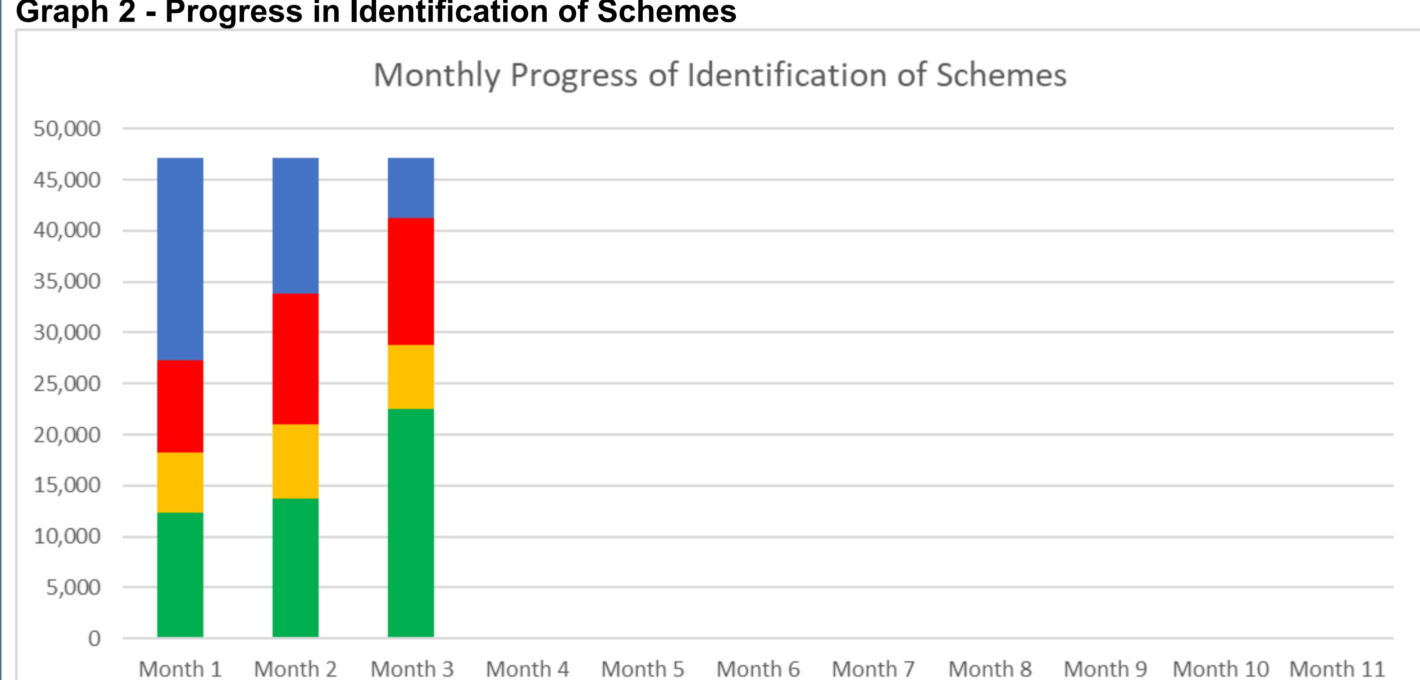
At month 3, £28.750m of green and amber savings had been identified towards the £47.2m savings target. £15.199m of these schemes are recurrent. This represents an increase of £7.761m from Month1 and identifies 61% of the annual target.

The reported gap in identified savings incorporates red schemes and the unidentified balance. Red schemes are not included in accordance with the instruction from Welsh Government that red schemes are excluded from the Monthly Monitoring Returns savings tables. However, a proportion of red schemes are expected to deliver in 2024/25. At a 50% delivery level an additional £6.243m of savings schemes for 2024-25 would be reported as identified at Month 3.

The total of green, amber and red schemes (£41.247m) represents 87% of the annual target.

The progress in the identification of schemes during the year is shown in the graph below:

Graph 2 - Progress in Identification of Schemes



Further detail of the progress by Clinical Boards and Improvement Themes is provided in Table 6.

Chilcott,Rachel
21/08/2024 11:48:04

Table 6: Savings Schemes

Clinical/Service Board	24-25 Target £'000	Green £'000	Amber £'000	Sub Total Green & Amber £'000	Red £'000	Total Savings Identified £'000
Capital Estates and Facilities	947	698	262	960	100	1,060
Children and Women	1,304	685	349	1,034	271	1,305
Clinical Diagnostics and Therapeutics	1,199	632	92	724	109	833
Corporate Executives	501	949	0	949	503	1,452
Medicine	1,379	134	150	284	150	434
Mental Health	1,079	58	343	401	56	457
Primary, Community and Intermediate Care	2,423	1,259	260	1,519	999	2,518
Specialist Services	1,482	811	601	1,411	125	1,536
Surgical Services	1,689	433	556	989	242	1,231
Subtotal - Grip and Control	**12,000**	**5,659**	**2,613**	**8,272**	**2,554**	**10,826**
Medicines Management	4,530	2,733	1,595	4,328	248	4,576
Reducing Length of Stay	3,500	2,856	0	2,856	1,250	4,106
Optimising Planned Care	1,000	0	0	0	897	897
Income Generation	1,000	426	173	599	273	871
Continuing Healthcare	2,500	135	763	898	1,099	1,997
Facilities and Estates / Service Reconfiguration	500	0	0	0	606	606
Value/Clinical Variation	0	0	0	0	0	0
Procurement	5,000	3,297	436	3,734	507	4,241
Recording Patient Care	1,500	0	0	0	150	150
Other Digital Benefits	0	0	0	0	50	50
Workforce - Temporary Pay	7,403	3,370	400	3,770	4,145	7,916
Workforce Reshaping	8,268	1,018	275	1,293	717	2,010
Corporate Opportunities	0	3,000	0	3,000	0	3,000
Subtotal Cost Improvement Themes	**35,200**	**16,836**	**3,642**	**20,478**	**9,942**	**30,420**
Total Savings Position	**47,200**	**22,495**	**6,255**	**28,750**	**12,497**	**41,246**

Key:
Green Schemes: Complete, appropriate to complexity, project plan in place, brief available reflecting timescales, milestones, enablers and risk considered. Complete project brief provides clear base for financial assessment.

Amber Schemes: Clear components of project plan in place with elements not fully confirmed and addressed.

Red schemes: Pipeline schemes yet to be finalised.

At month 3, £15.199m of the identified green and amber schemes and £5.141m of red schemes were recurrent.

Achievement of financial sustainability and recurrent financial balance by the end of 2025/26

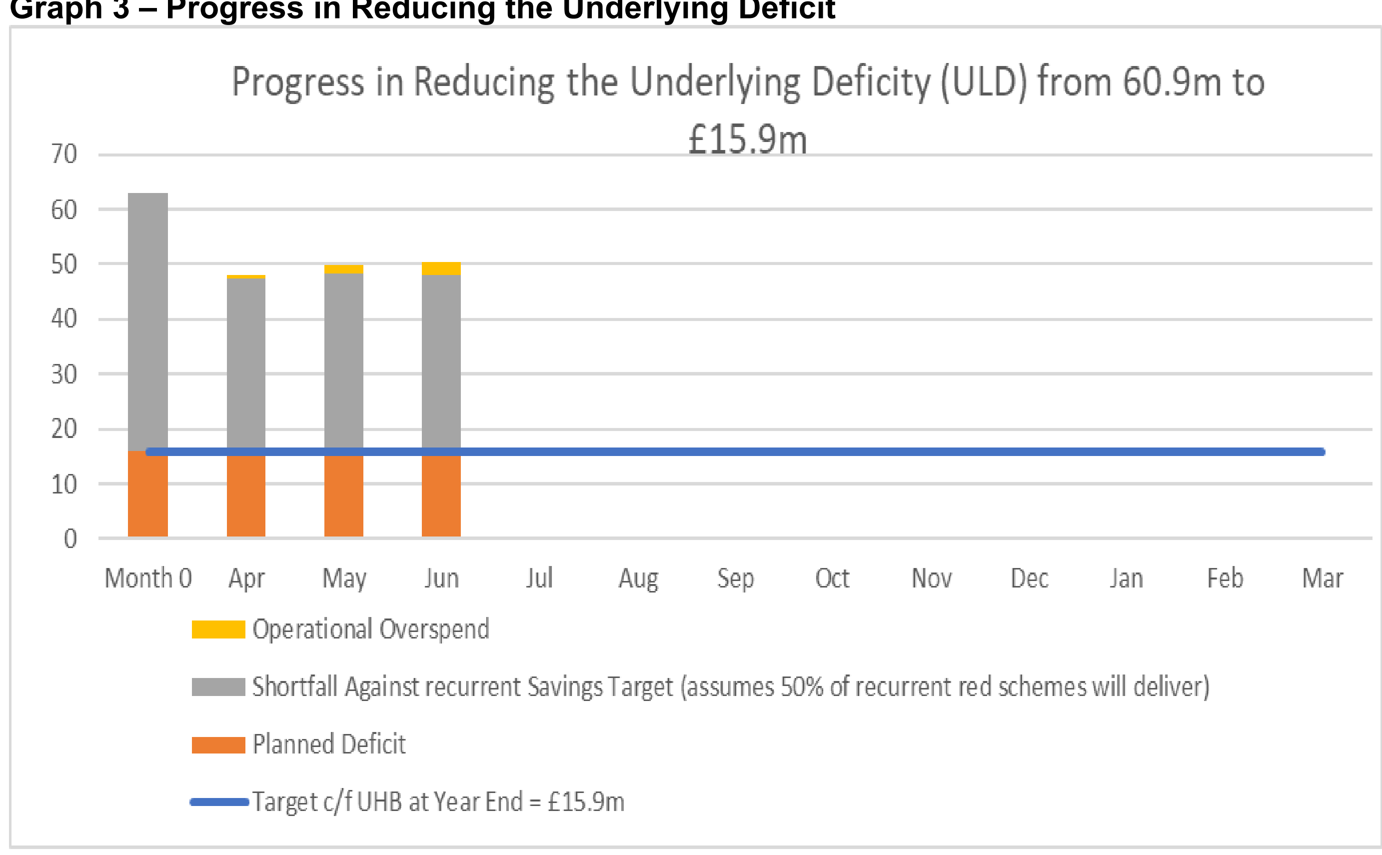
The draft financial plan requires the UHB to meet its £47.2m Recurrent Savings target and deliver a balanced recurrent operational position to reduce the brought forward underlying deficit (ULD) from £60.9m to £15.9m at the end of 2024/25.

At month 3, the UHB had identified £15.199m of recurrent green and amber savings. In addition, it is assumed that 50% of the £5.141m of red schemes would be achieved recurrently.

A £2.438m operational overspend was reported at month 3 and this will also need to be managed to a balanced position at year end to meet the target ULD.

In summary, a further £32.001m of recurrent savings and a balanced operational position are required to enable the UHB to reduce its ULD to £15.9m at the end of March as illustrated by Graph 3

Graph 3 – Progress in Reducing the Underlying Deficit



Cash Flow Forecast

The closing cash balance at the end of June, was £2.181m.

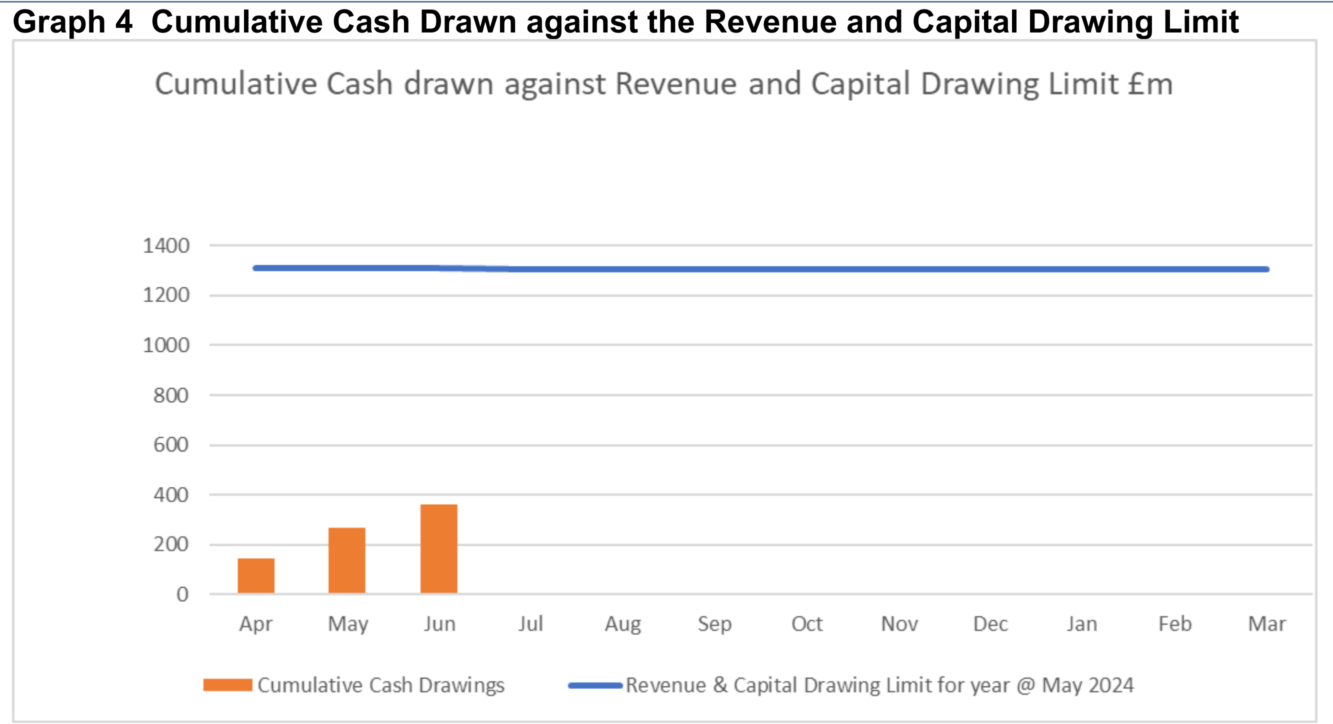
In due course, the UHB expects to seek Finance Committee and Board approval to request £15.900m strategic cash support from Welsh Government to cover the cash shortfall arising from the forecast deficit.

Graph 4 below outlines Cumulative Cash Drawn against the Revenue and Capital Drawing Limit

In addition to cash drawn from Welsh Government, the UHB cashflow will depend on the recovery of a circa £615m additional income through LTA and other income agreements.

Chilcott,Rachel
21/08/2024 11:48:44

Graph 4 Cumulative Cash Drawn against the Revenue and Capital Drawing Limit



Public Sector Payment Compliance

The UHB's public sector payment compliance performance is above the target of 95%. Performance for the month to the end of June was 97.8% for the year to date as illustrated in Graph 5 below.

Graph 5 – Public Sector Payment Compliance

Chilcott,Rachel
21/08/2024 11:48:04

Capital

The UHBs approved capital resource limit is £33.942m in line with the latest CRL received from Welsh Government on the 20th of June 2024. This comprises of £13.564m discretionary funding and £20.288m towards specific projects (including Efab, Interventional Neuroradiology Equipment, Mortuary, UHW Lift Refurb and upgrade).

The capital programme is planned and monitored through the UHBs Capital Management Group (CMG) and the UHB forecasts that it will remain within its CRL in 2024-25.

Table 7: Finance - Key Performance Indicator Dashboard at June 2024

	STATUS REPORT				
Measure	June 2024	RAG Rating	Latest Trend	Target	Time Period
Deliver 2024/25 Draft Financial Plan	£11.564m deficit at month 3, being £3.975m forecast deficit, £5.151m savings gap and a £2.438m operational overspend.	R	↓	Deliver 2023/24 £15.900m Revised Planned Deficit	M3 2024-25
Return to Financial Balance and approved IMTP status	Achieve financial sustainability and recurrent financial balance by the end of 2025/26. At month 3, the UHB is reporting a £2.438m operational ovesrpend and a £32.001m shortfall against the £47.2m recurrent savings target.	R	↓	Reduce c/f underlying defict to £15.900m at year end	M3 2024-25
Management of operational budget pressures	The UHB reported a £2.438m operational overspend at month 3.	R	↓	Operational Spend to be maintained within Budgets	M3 2024-25
Delivery of recurrent £47.2m savings target	£28.750m Green and Amber schemes identified at month 3, of which £15.199m were recurrent.	R	⑨	£47.2m	M3 2024-25
Remain within Cash Limit	The UHB forecasts to remain within its 2024/25 cash limit, on the assumption that strategic cash support is provided for the forecast deficit.	A	⑨	To remain within Cash Limit	M3 2024-25

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

The UHB 2024-25 Financial Plan is based on a forecast deficit of £15.900m. The month 3 position is a reported overspend of £11.564m, which is £7.589m above the £3.975m straight line profile of the planned deficit.

As at month 3 £28.750m of green and amber savings schemes were identified against the £47.2m savings target. Further work, focus and resolve is required to identify sufficient schemes to deliver this target.

Public Sector Payments are above the 95% target and the UHB forecast that it will remain within its Capital Resource Limit.

Chilcott, Rachel
21/08/2024 11:48:04

Recommendation:

At Month 3 the Committee are requested to:

- **NOTE** the reported year to date overspend of £11.564m and the forecast deficit of £15.900m.
- **NOTE** the month 3 operational overspend against plan of £2.438m with a further £5.151m savings gap.
- **NOTE** the progress against the savings target, with £28.750m (61%) of green and amber schemes identified at Month 3 against the £47.2m target.
- **NOTE** that delivery of the forecast is predicated on the confirmation of all expected income streams including Welsh Government anticipated allocations and LTA performance income.

Link to Strategic Objectives of Shaping our Future Wellbeing:
Please tick as relevant

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

Prevention		Long term	x	Integration		Collaboration		Involvement	

Impact Assessment:
Please state yes or no for each category. If yes please provide further details.

Risk: Yes
No

Safety: Yes/No
No

Financial: Yes
As detailed in the report.

Workforce: Yes/No
No

Legal: Yes/No
No

Reputational: Yes/No
Yes, if forecast financial position is not delivered.

Socio Economic: Yes/No

Chillcott, Rachel
21/08/2024 11:48:04

No	
Equality and Health: Yes/No	
No	
Decarbonisation: Yes/No	
No	
Approval/Scrutiny Route:	
Finance Committee	Date: 17th July 2024

Chilcott,Rachel
21/08/2024 11:48:04

Report Title:	Operational Performance Report			Agenda Item no.	2.2
Meeting:	Finance and Performance Committee	Public	X	Meeting Date:	17/07/24
		Private			
Status *(please tick one only)*:	Assurance	X	Approval		Information	
Lead Executive:	Chief Operating Officer				
Report Author (Title):	Head of Performance				

Main Report
Background and current situation:

Background and current situation:

The Operations and Information Teams have redesigned the Integrated Performance Report to better meet the requirements of the Board, it's Committees and improve performance reporting for the Health Board as a whole, both internally and externally. This updated report incorporates progress against the Cabinet Secretary's priorities and our performance ambitions/IMTP priorities. It also includes performance against the updated NHS Performance Framework for 24/25.

The sections of the full report covering Operation Performance, which are pertinent to the Finance and Performance Committee are:
Section 1: Ministerial Priorities
Section 2: Quadruple Aim 2

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

Urgent and Emergency Care
Delays to ambulance handovers and patient waiting times in Emergency Units markedly improved through 23/24 – the UHB eliminated 4-hour delays and significantly reduced 3, 2 and 1 hours delays at UHW. Recent performance has been affected by unseasonal operational pressures through May and June which has impacted both ambulance handover times and the length of time patients some patients are waiting in the Emergency Unit before admission, transfer or discharge. Since December 2023, where the number of 1-hour ambulance delays reduced to 167, the number has risen to 343 in May and is above our trajectory. We have seen a similar picture for 12-hour EU waits where reductions through Q3 have not been sustained during 2024. Despite these challenges, the UHB is still the best performing Health Board in Wales and we have outlined an improvement trajectory to meet our own, and the Cabinet Secretary's, ambitions.

Performance against the standards within the National Falls and Fragility Fracture Audit Programme (FFFAP) has shown improvement against our historic trends. However, the improvements are not necessarily reflected by the annualised KPI metrics. Rapid fracture pathway improvements have led to a significant reduction in the median time taken for patients to get to the ward – this reduction has been maintained though some very challenging weeks through the whole winter period and beyond. Compliance with the KPI for Admission to a Specialist Ward and Prompt Surgery remains well above the NHFD average. Using the annualised NHFD data, the UHB are at or above the national average for 7 of the 8 KPIs. While we are below the average using annualized data for KPI5 (Not Delirious Post-op), compliance has improved from March last year. Our recent breach analysis has shown a high number of 'clinical exceptions' as part of our recorded door to ward breaches which can impact our performance as these times are still recorded in our compliance data.

Chilcott,Rachel
27/08/2024 11:48:04

April saw a drop in our compliance against some key SSNAP measures for our Stroke Pathway. The percentage of patients directly admitted to the stroke unit within 4-hours reduced to 43.5% but remains significantly above the All Wales average. Our percentage compliance and median time to ward and

CT scan remains improved from our performance in 2022, we continue to work across Clinical Boards to progress the Stroke Service Improvement Plan. April saw a high number of stroke patients admitted to UHW with a higher number of hemorrhagic stroke patients who are non-suitable for thrombolysis/thrombectomy. As a result, April saw our thrombolysis rate drop to 14.5% following consecutive months at over 20%. This does, however, remain above the Wales average.

Our SSNAP grade improved to A for the period July-September 2023, this was a significant improvement from the previous quarters and a reflection of the work undertaken by the teams. Our most recent review saw a drop to Grade B but performance remains improved from last year. The challenges in delivering consistent performance in Stroke pathways have been well documented, particularly out of hours. A plan for investing in the front end of our stroke pathway has received endorsement at Finance and Performance Committee and will progress for consideration at Board in July.

Hospital Flow and Discharge

The proportion of beds occupied by long length-of-stay patients has fluctuated in recent months as additional beds have been opened and closed in line with the winter plan. The number of delayed pathways of care reduced in March, April and May 2024 and we continue to work with colleagues across the health and social care system to reduce delays in patient's care pathways. Reducing the time patients spend in hospital is a current operational focus. The ongoing work focusses on patients and family, our clinicians, integrated discharge service, hub and flow teams. It is anticipated that this work will result in an improved experience and shorter length of stay for patients, and deliver operation benefits such as improved flow, taking some pressure out of the Emergency Unit. Delayed pathways of Care remain an area of national focus and our monthly delays are highlighted in Section 1 of the accompanying IPR – we are currently delivering our commitment to reduce against the same period in 23/24.

In addition to the monthly POCD census, patients with a length of stay >7 and >21 days in acute beds forms part of our weekly 'hot' reporting and end of month snapshots are provided in the IPR. We have seen a fluctuating picture as we moved through Q1, however, the most recently reported weekly snapshot has shown a reduction from the end of Q4. Our nationally submitted data on emergency admissions with a 21-day length of stay shows also a reduction from March to April.

Cancer

Our compliance with the 62-day Single Cancer Pathway standard improved in December to 70.2%, our highest performance since the development of the Single Cancer Pathway. As forecasted we saw a drop in compliance to 64.4% in January and 60.8% in February, with continued Junior Doctor industrial action a factor through Q4. In March our SCP performance improved to 62.3%, with a further increase to 63.7% in April. The pathology delays experienced in March mean than our May performance is forecast to reduce as patients treated in May were potentially impacted by delays in this part of their pathway.

Every quarter the UHB submits a refreshed position on our historic data to capture any treatments from previous months which have been confirmed as cancer since the original submission. The table below shows the rolling 12-month position including the latest data refresh for Q3 where we have seen improvements in the monthly compliance for October and November.

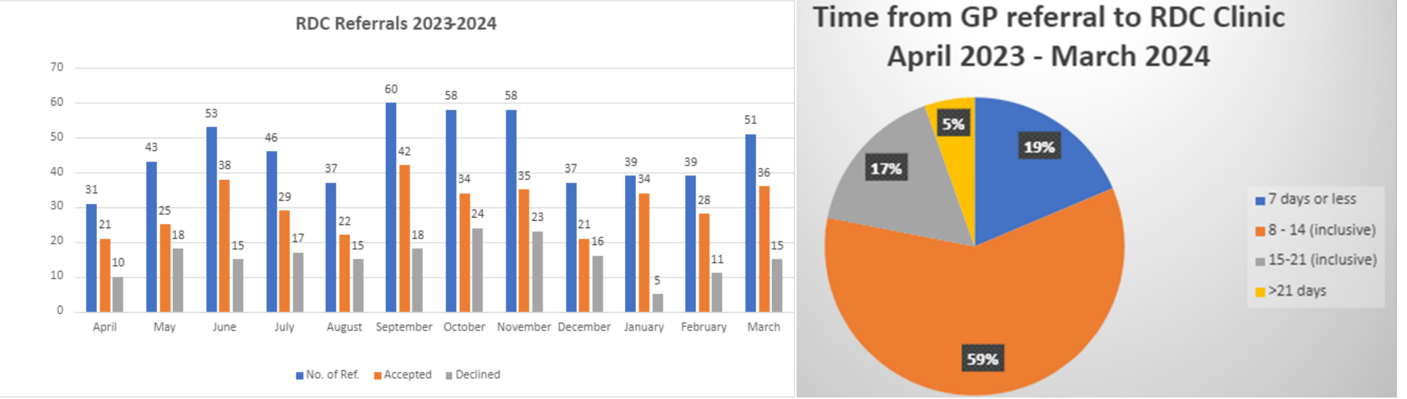
SCP compliance	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Original submission	58.5%	55.1%	61.5%	62.2%	64.2%	61.7%	62.0%	65.6%	66.4%	56.6%	64.7%	58.0%	70.2%
Compliance following quaterly refresh	62.8%	57.5%	62.9%	63.5%	66.0%	64.5%	63.6%	67.5%	65.9%	57.8%	66.3%	62.4%	70.2%

Chilcott, Rachel 21/08/2024 11:48:06

In April 2023 the UHB formally launched our Rapid Diagnostics Centre (RDC) as part of the National Programme, driven by the Wales Cancer Network and Welsh Government. RDCs provide an accelerated diagnostic pathway for patients who present to primary care with vague, but concerning, symptoms which may be indicative of cancer. Research has shown that up to 50% of patients

diagnosed with cancer present to their GP with vague, non-specific symptoms that do not fit the site-specific referral criteria set out in NICE guidance. Traditional referral systems often lead to delays and unnecessary investigations for these patients. The UHB's clinic follows a 2-stop model offering radiology appointment in advance of an outpatient review. In the first year of operation 552 referrals were made to the RDC with a total of 22 cancers, across 14 different tumour groups, diagnosed as a result of the investigations. The majority of patients attended the RDC in under 14 days. In addition to cancer diagnoses made, 178 patients received a non-cancer diagnosis across a number of physical and mental health conditions.

This year will see increased work with Primary Care, though educational sessions and embedding lessons from patient and clinician feedback gathered through PROMS and PREMS across the RDC network in collaboration with Welsh Cancer Network colleagues



Planned Care

The numbers of patients waiting on an RTT waiting list has increased this month. We continue to focus on long-waiting cohorts and Cancer pathways with weekly scrutiny against the national standards and ministerial ambitions.

At the end of April there were 2,816 patients waiting 2 years for treatment, which represents 1.88% of patients on a waiting list. This remains a considerable improvement from previous months but there are still too many patients waiting too long for treatment across a number of key services. We continue to focus on the small number of spinal patients who are waiting over 4-years for treatment, in addition to continuing to reduce the number of patients waiting over 3-years which are mainly concentrated in spines and urology.

Last year we did not deliver our commitment to reduce 52-week outpatient waits to fewer than 9000. Our work to eliminate 3-year outpatient waits and reduce the number of 2-year waits has improved outpatient waiting times, but we continue to see high volumes of 52-week outpatient waits within some of our treatment specialties where we are focusing on reducing long waits across the pathway. We continue to address outpatient waits through activity, validation and pathway redesign to ensure only those who need secondary care intervention are referred. April saw an increase in the number of patients waiting over 52 weeks for their first outpatient appointment, with the number of breaches forecast to increase as we move through Q1. This is not a UHB wide issue and we have seen a reduction in the number of specialties reporting 52-week waits. We continue to work with specialties, particularly in Paediatrics and Medicine, to reduce to or maintain their outpatient waits below 52 weeks.

Through our planned care programme we are increasing the visibility of productivity and efficiency data. Outpatient, diagnostic and theatre productivity are central to reducing waiting times for patients and delivery of the Ministerial ambitions, we have included trended data in these areas as part of the attached IPR and will expand the number of measures in line with GIRFT recommendations once the datasets have been agreed. A particular area for improvement is outpatient DNA rates, this will be partially addressed through the reintroduction of the Patient Participation Booking system, but also through improved patient engagement at specialty level.

We have seen a reduction in the number of 100% delayed follow-up outpatient appointments over the last year. We have widened our focus to all patients who are delayed, not just those who are 100%

beyond their follow-up target. From April 2024 we are only reporting the total number of patients who are a delayed follow-up as we work to reduce this cohort of patients. At the time of writing there are 54,153 patients who are past their target date for a follow-up appointment, of these 20 were over 2 years past their target date as shown below:

Overdue Follow-up Outpatients							
Clinical Board	Months past target date	22/04/2024	30/04/2024	07/05/2024	13/05/2024	20/05/2024	28/05/2024
Total	Total overdue	56473	55457	55429	55316	54641	54153
	Over 18 months	498	267	231	236	165	175
	Over 24 months	108	66	39	23	17	20
Surgery	Over 18 months	125	56	55	53	41	47
	Over 24 months	30	13	12	8	7	7
Children & Women	Over 18 months	88	87	53	62	13	23
	Over 24 months	23	20	5	5	4	4
Specialist	Over 18 months	187	71	69	54	46	44
	Over 24 months	47	27	17	5	2	5
Medicine	Over 18 months	86	40	41	54	51	47
	Over 24 months	4	2	1	1	0	0

Clinical Boards are working through their action plans to reduce these numbers with specific focus on the longest delays. The table above shows the reduction in the total number of delayed appointments and the impact of the focused work on the longest delays. there are a small group of patients who have been given appointments in the coming weeks and others who have had their follow-up target extended following clinical validation and notes reviews. We continue to validate the waiting lists and work is ongoing to refine our patient management systems to improve data quality of follow-up outpatient lists. The use of See on Symptoms (SOS) and Patient Initiated Follow-up (PIFU) pathways is an important tool in the management of follow-up services and we continue to develop their use across our services with additional clinical support from specialties who have successfully implemented these pathways. The number of patients overdue for follow-up appointments will be an area of significant focus through this year.

Diagnostics

The waiting list position for Diagnostics has deteriorated in recent months, with particular challenges in Radiology and Endoscopy. It is anticipated that the upcoming development of a Community Diagnostic Hub, and interim use of mobile facilities will address radiological backlogs. From December we have seen sustained improvements for MRI and CT, however, the number of patients waiting 8 weeks for a non-obstetric Ultrasound continues to grow. Improvement trajectories will have been finalised with the Chief Operating Officer, with a separate update being brought to this Board Development session.

Endoscopy capacity has been focused on Cancer, Urgent and long waiting surveillance patients. The service has an improvement plan, with additional theatre and insourcing capacity, aligned to a longer-term workforce plan to further address the deterioration in the length of wait. The number of 8-week waits has continued to increase through Q4 and into Q1, albeit at a slower rate than through the rest of the year.

Mental Health

Demand for adult and children's Mental Health services remains significantly above pre-Covid levels, including an increased presentation of patients with complex mental health and behavioral needs. Part 1a compliance for adults fell in January 2024 and we reported 37.5% compliance with the 28-day standard, while this improved to 90% in February, the team expected this performance to fluctuate in Q1 as the service work though the referrals to recover the position. In March 2024 we reported 54% compliance, with a further reduction in April reported. Performance is expected to remain low through this year and recover to compliance in Q4. Part 1b compliance remains strong with >99% of patients receiving interventions within 28 months on the vast majority of months. Part 2 compliance remains challenged, an improvement trajectory has been shared with NHS Executive colleagues, with Part 1 service developments supporting improvements.

For children and young people, Part 1a compliance dropped below the 80% standard at 78% in January as a result of a number of factors including workforce challenges and the number of complex cases. Part 1a compliance improved to 91% in February, remaining high in March (92%) and April (91%). Part 1b remains challenged as the team work through the backlog, further impacted by an increased in referrals through the summer months. A full demand and capacity review has taken place which acknowledges the services reduced capacity to deliver interventions within 28 days due to vacancies and sickness. The team are developing a psychoeducation resource and looking to recruit additional support workers to deliver this. A recovery plan was presented as part of the Executive led Clinical Board Review sessions which sees recovery of compliance by the end of Q2.

Primary and Community Care

We continue to see a high number of GP practices in high escalation (level 3 and 4), reflecting the pressures on all parts of our health system. Our primary care teams continue to support practices as required and work has been ongoing at a national level to negotiate changes to the GMS contract for 2023-24. Despite a lack of consensus, there has been a mutual decision to conclude negotiations for this year's settlement which will see a £20m financial investment into GMS across Wales.

Through this year greater visibility will be brought the activity carried out in Primary and Community Care. Work is ongoing to provide high level data across a number of services; this data will be updated as available and is intended to demonstrate the volume of activity undertaken through primacy and community care services. GMS saw an increase in calls, appointments and items issued via prescription from the previous month.

GMS activity	April 2024
Calls to GP surgeries	404,932
GP appointments offered	269,319
Items issued via presciption	778,026

Source: Primary Care Information Portal. Note: *The analyses and associated visualizations presented within this tile of the Primary Care Information Portal (PCIP) are a product of source data that has been provided at the initial stages of a quality improvement process and as such the completeness, accuracy, and validity of this source data (and hence any analyses/visualizations derived from such data) cannot be guaranteed.*

We continue to see high utilisation of our Urgent Primary Care Centers across Cardiff and the Vale. Overall utilisation remained above 90% in May 2024, with total utilisation across all 6 sites at 94%, with c5700 appointment booked in month.

Recommendation:

The Finance and Performance Committee is asked to **NOTE** the year to date position against key organisational performance indicators for 2023-24 and the update against the Operational Plan programmes.

Link to Strategic Objectives of Shaping our Future Wellbeing:
Please tick as relevant

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	a
2. Deliver outcomes that matter to people	a	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	a

Chilcott, Rachel
21/08/2024 11:48:04

4. Offer services that deliver the population health our citizens are entitled to expect	a	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	a	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*									
Prevention		Long term	a	Integration	a	Collaboration		Involvement	

Impact Assessment: *Please state yes or no for each category. If yes please provide further details.*
Risk: No
Safety: No
Financial: No
Workforce: No
Legal: No
Reputational: No
Socio Economic: No
Equality and Health: No
Decarbonisation: No

Approval/Scrutiny Route:	
Committee/Group/Exec	Date:

Chilcott,Rachel
21/08/2024 11:48:04

Cardiff and Vale Integrated Performance Report

2024/25

June 2024

Chilcott,Rachel
21/08/2024 11:48:04

Report Contents

1. Cabinet Secretary Priorities

2. Cardiff and Vale Performance Report

Click on a hyperlink to navigate directly to the section required

Chilcott,Rachel
21/08/2024 11:48:04

Return to Main Menu

The Cabinet Secretary for Health and Social Services has set out National Programmes of work covering the priority areas of delivery. These priority areas are:

- Enhanced Care in the Community, with a focus on reducing delayed pathways of care
- Primary and Community Care, with a focus on improving access and shifting resources into primary and community care
- Urgent and Emergency Care, with a focus on delivery of the 6 goals programme
- Planned Care and Cancer, with a focus on reducing the longest waits
- Mental Health, including CAMHS, with a focus on delivery of the national programme

Further to these priority areas the Welsh Government and NHS Wales have identified 8 Key Performance Indicators across Urgent and Emergency Care, Cancer, Diagnostics, Elective Care and Mental Health Services.

Section 1 provides an overview of the Health Board performance of the Key Performance Indicators outlined by Welsh Government and Health Board commitments related to the delivery of the priority areas.

For a more in-depth view on performance for each priority, please follow the links in the NHS Performance Report column.

Chilcott,Rachel
21/08/2024 11:48:04

Return to Main Menu

Priority	Aim	C&V Commitment	Commitment to meet national standard?	By When	In Month Performance against C&V commitment	Link in Performance Report
Enhanced Care in the Community	**Measure:** Number of delayed transfers of care. **National standard/ambition:** 12 month reduction trend **Reporting period:** Monthly	Reduction against 23/24	Yes	Mar-25	179 May-24	Hyperlink to section
Primary and Community Care	**Measure:** General Medical Services – Number of GP practices achieving core access standards **National standard/ambition:** 100% **Reporting period:** Annual – in month position for information	100%	Yes	Mar-25	100% Apr-24	Hyperlink to section
	Measure: General Dental Services - % of contract value fulfilled **National standard:** 30% of contract value by end Q2, 100% Q4 **Reporting period:** Monthly	25% Q1 50%Q2 75% Q3 100% Q4	Yes	Mar-25	13.7% May-24 (incomplete for Q1)	Hyperlink to section
Urgent and Emergency Care	**Measure:** Number of patients who spend 12 hours or more in all major and minor emergency care facilities from arrival until admission, transfer or discharge **National standard/ambition:** 20% reduction by September 2024, further 20% reduction by March 2025 **Reporting period:** Monthly	670 Sept-24 532 Mar-25	Yes	Mar-25	847 April-24	Hyperlink to section
	Measure: Number of ambulance patient handovers over 1 hour **National standard/ambition:** 30% reduction by December 2024 **Reporting period:** Monthly	232	Yes	Dec-25	343 April-24	Hyperlink to section

Chilcott, Rachel
21/08/2024 11:48:04

Performance Key: Meeting standard / trajectory off target/trajectory

Priority	Aim	C&V Commitment	Commitment to meet national standard?	By When	In Month Performance against C&V commitment	Link in Performance Report
Mental Health	**Measure:** Percentage of therapeutic interventions started within (up to and including) 28 days following an assessment by LPMHSS for people age under 18 years **National standard/ambition:** 80% by end of December 2024 **Reporting period:** Monthly	80%	Yes	Dec-24	20% Apr-24	Hyperlink to section
	Measure: Percentage of therapeutic interventions started within (up to and including) 28 days following an assessment by LPMHSS for adults age 18 years and over **National standard/ambition:** 80% by end of December 2024 **Reporting period:** Monthly	99%	Yes	Dec-24	100% Apr-24	Hyperlink to section

Chilcott,Rachel
21/08/2024 11:48:04

Priority	Aim	C&V Commitment	Commitment to meet national standard?	By When	In Month Performance against C&V commitment	Link in Performance Report
Planned Care and Cancer	**Measure:** Number of patients waiting more than 52 weeks for a new outpatient appointment **National standard/ambition:** 40% reduction by end of September 2024, 0 by end of March 2025 **Reporting period:** Monthly	10,825 Sep-24 9,823 Mar-25	No		13,285 May-24	Hyperlink to section
	Measure: Number of patients waiting more than 104 weeks for referral to treatment **National standard/ambition:** 0 by end of December 2024 **Reporting period:** Monthly	1,989 Dec-25	No		3,018 May-24	Hyperlink to section
	Measure: Percentage of patients starting their first definitive treatment within 62 days from point of suspicion (regardless of the referral route) **National standard/ambition:** 60% by end of December 2024, 70% by end of March 2025 **Reporting period:** Monthly	70% Dec-25	Yes	Dec-25	63.7% Apr-24	Hyperlink to section
	Measure: Number of patients waiting more than 8 weeks for a specified diagnostic **National standard/ambition**: 95% of patients waiting less than 8 weeks by end of December 2024 **Reporting period:** Monthly	11,908 Dec-25	No		15,425 May-25	Hyperlink to section

Chilcott,Rachel 21/08/2024 11:48:04

Performance Key: Meeting standard / trajectory off target/trajectory

Section 2: Cardiff and Vale Performance Report

The Performance Report section provides detail of UHB performance across the quadruple aims.

Detail on what is included under each quadruple aim is provided below.

A summary of performance is provided against the priority UHB ambition under each aim, including detail of annual plan commit ments. Performance against the relevant NHS Performance Frameworks measures is provided under each aim.

National Performance Framework monitoring data is available from DHCW showing performance across all Welsh Health Boards and Trusts (where relevant). This information can be accessed by clicking here.

Return to Main Menu

Number	Aim	Contents
Aim 1	People in Wales have improved health and well-being with better prevention and self-management	Public Health
Aim 2	People in Wales have better quality and more accessible health and social care services, enabled by digital and supported by engagement	Urgent and Emergency Care Inpatient Flow, Discharge and Front Door Alternatives to Admission Community and Urgent Primary Care Priority Services RTT Waiting Times Planned Care Cancer, Diagnostics and Therapies Primary and Community Care Whole System Evaluation and Supporting Patients Whilst Waiting Mental Health
Aim 3	The health and social care workforce in Wales is motivated and sustainable	People and Culture
Aim 4	Wales has a higher value health and social care system that has demonstrated rapid improvement and innovation, enabled by data and focused on outcomes.	Quality, Safety and Experience Financial Performance

Chilcott, Rachel
21/08/2024 11:48:44

Priority	Performance Summary	Reported Period	Performance against standard	Data
Health Protection	**Seasonal respiratory infections** **Immunisation** – COVID-19 and influenza • The Covid-19 vaccine spring booster campaign is now underway and it has delivered 28,657 vaccines since the 2nd of April when the campaign started. Eligibility groups are individuals aged 6 months and over who are immunosuppressed, residents in a care home for older adults, adults aged 75 years and over. This amounts to an eligible population of 55,751 in Cardiff and the Vale and the current vaccine coverage is therefore 51.70%. **Surveillance** • Influenza activity is low and continuing to decrease • Hospital admissions for Covid-19 increased from mid April, peaking in early May; since the second week of May the trend is unclear but remains elevated. PCR incidence and positivity peaked mid May and are both now declining • Omicron sub-variant JN.1 remains the most prevalent variant in Wales • There are currently **3** Covid-19 outbreaks and **zero** incidents in hospital; and **zero** influenza incidents or outbreaks. • Since the start of April 2024, **143** bed days have been lost due to Covid-19 incidents or outbreaks, and **7** bed days have been lost due to influenza incidents or outbreaks • 16% of C&V UHB staff sickness during April 2024 was due to influenza/COVID-19/respiratory conditions (data for May awaited). • RSV activity in under 5s remains at low intensity • Whooping cough notification levels across Wales remain high overall, though confirmed cases peaked mid/end April and are now declining	Week 21	Below standard	Wales COVID-19 vaccination surveillance weekly report.pdf Infant COVID-19 vaccination. https://public.tableau.com/app/profile/public.health.wales.health.protection/viz/RapidCOVID-19virology-Public/Vaccination Weekly COVID-19 vaccination report by health board https://www2.nphs.wales.nhs.uk/CommunitySurveillanceDocs.nsf/3dc04669c9e1eaa880257062003b246b/cf7a9a9adcddbb0a8025866b003a51a1/$FILE/Wales%20COVID-19%20vaccination%20surveillance%20weekly%20report.pdf Source: PHW weekly flu/ARI report

Chilcott,Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reported Period	Performance against standard	Data
Health Protection	**Routine childhood immunisation** • 79.1% of children are up to date with vaccination at age 4, which is below the target of 95% and a Welsh average of 84.7%, uptake of all childhood vaccinations at age 5 is 85.7% which is still below the Welsh average of 88%.	Q2 2023/24 Oct 2023 – Dec 2023	Below standard	Cardiff & Vale UHB quarterly COVER trends Cardiff and Vale UHB Source quarterly COVER data
Health Protection	**Health Protection System** • The Cardiff and Vale Health Protection Plan has been fully signed off via partnership governance processes (completed April 2024) • An action plan for 2024/25 is being developed, following a partnership workshop in May 2024, to further strengthen the agreed approach. • A measles action plan is under development.	Q4 2024/25	Meeting standard	*n/a*

Chilcott, Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reported Period	Performance against standard	Data
Health Improvement	**Healthy weight:** • 77.5% of reception aged children in Cardiff and Vale of Glamorgan are categorised as healthy weight (Child Measurement Programme, 2022/23). Cardiff and Vale have the highest proportion of healthy weight children compared to other Health Board areas based on the latest available data; and is equal to the English average for 2022/23 of 77.5%). The healthy weight local target for 2022/23 was 75%, which we met. Data produced annually. • 40% of adults in Cardiff and Vale of Glamorgan are a healthy weight, as compared to 36% of the Welsh average (NSfW, 2021/22+2022/23); 39% are eating five portions of fruit/vegetables a day, compared to 30% in Wales (NSfW, 2021/22+2022/23) and 68% are meeting physical activity guidelines of being active for at least 150 minutes per week, as compared to 57% in Wales (NSfW, 2021/22+2022/23)*. There are no comparable data in other UK countries due to different methodologies being used • Differences remain between our most and least deprived communities with levels of healthy weight lower, and consumption of fruit and vegetables/physical activity levels also lower in the most deprived areas of Cardiff and Vale. **Weight management services** • % people with body mass index (BMI)>30 who can be treated through: ○ Level 2 services: 1.6% (target: 1.5%) ○ Level 3 services: 0.2% (target: 0.5%)	Q4 2023/24	**Healthy weight:** Above standard **Weight management services:** Level 2 above standard Level 3 below standard	Cardiff and Vale of Glamorgan Child Measurement Programme - Healthy Weight trend - Reception Year children 90.0, 80.0, 70.0, 60.0, 50.0, 40.0, 30.0, 20.0, 10.0, 0.0 2011/12, 2012/13, 2013/14, 2014/15, 2015/16, 2016/17, 2017/18, 2018/19, 2019/20, 2020/21, 2021/22, 2022/23 Cardiff and Vale UHB, Cardiff, Vale of Glamorgan, Wales

For areas of underperformance please see cover paper for details on actions being taken

Chilcott,Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reported Period	Performance against standard	Data

Health Improvement	**Tobacco**
	• 13% of Cardiff and Vale of Glamorgan smoke.
	• NHS Wales Performance Measure - Percentage of adult smokers who make a quit attempt via smoking cessation services - Target = 5% annually.
	  • In Quarter 3 (the most up to date data received) 0.6 % of smokers set a firm quit date (this is below target). 68% of these quit smoking at 4 weeks (in total from Help Me Quit [HMQ], Pharmacy Level 3 and Hospital Smoking Cessation Service combined) This breaks down by service as follows:
	  • HMQ community – 79% of Treated Smokers had quit smoking at 4 weeks.
	  • Level 3 Pharmacy –39% of Treated Smokers had quit smoking at 4 weeks.
	  • Hospital Service - 74% of Treated Smokers had quit smoking at 4 weeks.
		Quarter 3 2023/24	Smokers setting quit date:
			
			Below standard for percentage of adult smokers who make a quit attempt
			
			Meeting or exceeding standard for 4 week quits
				Graph showing 4 week quit rates by service, in percentages
				100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%
				2022-2023: Quarter 1, Quarter 2, Quarter 3, Quarter 4
				2023/24: Quarter 1, Quarter 2, Quarter 3
				HMQ, L3, Hospital, QTR TOTALS, Tier 1 Target

Chilcott, Rachel
21/08/2024 11:48:04

Smoking and substance misuse

NHS Wales Performance Framework measures

No.	Performance Measure	Reported Period	Performance Standard	In Month Performance	Trend			
					Q1	Q2	Q3	Q4
1.	Percentage of adult smokers who make a quit attempt via smoking cessation services	1 April 23 2023 to 31 March 2023	0.8% (per quarter)	0.6% Below standard	0.6%	0.6%	0.6%	TBC
2.	Percentage of adult smokers who make a quit attempt via smoking cessation services who are CO-validated as quit at 4 weeks. ***CO validated quits are being recorded from 1.4.24 as per guidance from Welsh Gov.***	1 April 23 2023 to 31 March 2023	40%	68% Exceeding standard	59%	68%	68%	TBC
3.	Percentage of people who have been referred to health board services who have completed treatment for substance misuse (drugs and alcohol)	No data yet available. Data to be supplied by substance misuse team and updated by UHB analysis team						

Chair's objectives

No.	Performance Measure	Reported Period	Performance Standard	In Month Performance	Trend			
					Q1	Q2	Q3	Q4
n/a	% of pregnant people undergoing CO testing at their initial booking appointment	Q4	100%	96.51% Below standard	86%	85.7%	93%	96.1%
n/a	% of pregnant smokers who are referred to smoking cessation support following initial booking assessment	Q4	100%	36% Below standard	49%	49%	50%	36%

Chilcott, Rachel
21/08/2024 11:48:04

Immunisation and vaccination

NHS Wales Performance Framework measures and Chair's objectives

No.	Performance Measure	Reported Period	Performance Standard	In Month Performance	Trend			
4.	Percentage of children who are up to date with the scheduled vaccinations by age 5 ('4 in 1' preschool booster, the Hib/MenC booster and the second MMR dose)	1 October 2023 to 30 December 2023	95%	85.7% Below standard	**Q1**	**Q2**	**Q3**	**Q4**
					83.7	83.5	85.7	84.8
5.	Percentage of children receiving the Human Papillomavirus (HPV) vaccination by the age of 15 *Applicable during: 01.04.2023 - 30.06.2023 and 01.01.2024 - 31.03.2024 (still awaiting data for the 2024 HPV campaign)*	1 January 2023 to 30 June 2023	90%	74.4% Below standard	**Q1**	**Q2**	**Q3**	**Q4**
					74.4	72.6	70.3	71.3
6.	Percentage uptake of the influenza vaccination amongst adults aged 65 years and over *Applicable during: 01.09.2023 - 31.03.2024 (autumn booster campaign concluded)*	1 September 2023 to 31 March 2024	75%	72.8% Below standard	**01/03/24**	**26/03/24**	**27/12/23**	**16/02/24**
					72.8%	72.8%	70.9%	72.6%
7.	Percentage uptake of the COVID-19 vaccination for those eligible *Applicable during: Spring Booster 01.04.2023 - 30.06.2023 Autumn Booster 01.09.2023 - 31.03.2024 (autumn booster campaign concluded)*	1 September 2023 to 31 March 2024	75%	51.7% Below standard	**25/04/24**	**04/06/24**		
					20.8%	51.7%		

Chilcott,Rachel 21/08/2024 11:48:04

Weight Management Services

Chair's objectives

No.	Performance Measure	Reported Period	Performance Standard	In Month Performance	Trend
n/a	% of people with BMI > 30 that can be treated through Level 2 Weight Management Services	May 2024	1.5%	1.6% Above standard	
n/a	% of people with BMI > 30 that can be treated through Level 3 Weight Management Services	May 2024	0.5%	0.2% Below standard	

Chilcott,Rachel 21/08/2024 11:48:04

Screening

NHS Wales Performance Framework measures

No.	Performance Measure	Reported Period	Performance Standard	In Month Performance	Trend			
8.	Percentage of patients offered an index colonoscopy procedure within 4 weeks of booking their Specialist Screening Practitioner assessment appointment	Mar-24	90%	**31.1%** Below standard	Dec-23: 22.90%	Jan-24: 22.50%	Feb-24: 25.20%	Mar-24: 31.10%
9.	Percentage of well babies entering the new-born hearing screening programme who complete screening within 4 weeks	Mar-24	90%	**96.4%** Above standard	Dec-23: 91.20%	Jan-24: 94.50%	Feb-24: 97.70%	Mar-24: 96.40%
10.	Percentage of eligible new-born babies who have a conclusive bloodspot screening result by day 17 of life	Apr-24	95%	**96.2%** Above standard	Jan-24: 95.10%	Feb-24: 95.90%	Mar-24: 96.10%	Apr-24: 96.20%

Chilcott,Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reporting Period	Performance against standard	Data
Primary, Community and Out of Hospital Care	**Urgent Primary Care Centre Utilisation – Maintain 90% utilisation** In May utilisation was 94% and remains above our commitment **Safe@home referrals – Increase to 6 accepted referrals per day in Q1 to 30 per day in Q4** Q1 to date 160 referrals were accepted by S@H – Capacity to accept 6 referrals per day from July 2024 **Community visits – 95% of face-to-face visits within 8 hours** Q1 to date 96% compliance with 8-hour standard	May-24	94% utilisation Above standard To date 160 accepted referrals Below standard 96% Above standard	UPCC Utilisation
Emergency Department and Same Day Emergency Care	**Ambulance handover delays – eliminate 2-hour delays. Reduce lost minutes per arrival to <20. National Commitment to reduce 1-hour delays by 30% by December** In May we reported 23 2-hour ambulance delays, above our ambition of 0 In May we reported 342 1-hour ambulance delays, above our trajectory to reduce by 30% by Q3. In May we reported lost minutes per arrival had reduced to 20 **ED waits - No patients waiting >24 hours in ED, 93% of patients waiting <12 hours in ED in Q1 (94% Q2, 95% Q3, 95% Q4)** In May we reported an increase in patients waiting 12-hours in EU compared to April. This equates to 92.5% of attendances waiting less than 12-hours and below our ambition for Q1 **SDEC units – Increase attendances compared to the same period 23/24** In May we reported an increase in activity compared to April, however this is slightly below our May 2023 activity. A drop in medical SDEC has been noted and the team have identified a potential underreporting of attendances which is being investigated – attendances are forecast to increase in June,	May-24	23 2-hour delays Above standard 342 1-hour delays Above standard 20 minutes lost/arrival Above standard 92.% patients <12h Below standard 1700 SDEC attends Below standard	Ambulance handover >1 hour EU more than 12 hours Number of patients seen in SDECs
Reducing time in hospital and Continuity of Care	**Length of stay - <20% patients in acute beds to have a LOS >21 days, <40% patients in acute beds to have a LOS >7 days** This data is a monthly snapshot taken at on the final Friday of each month. At the end off May 29.3% of patients in acute beds had a LOS of >7 days, 55.2% >21 days – reduced from April's snapshot but above out ambition **Pathway of Care Delays – Reduction in number of POCD compared to same period in 23/24** In April 2024 the number of POCDs was 179 – this is below the number of delays reported in April 2023 in line with our ambition	May-24 Apr-24	29.3% >7d Above standard 55.2% >21d Above standard 179 Below standard	Delayed Pathways of Care)

Calcott, Rachel 07/08/2024 11:48:04

Priority	Performance Summary	Reporting Period	Performance against standard	Data
High Impact Pathways - Stroke	**CT scan – 70% of patients scanned within 1 hour of arrival at EU** In April 49.4% of patients were received their CT scan within 1 hour of arrival at EU, below our ambition. **Thrombolysis – 20% thrombolysis rate** In April 14.5% of stroke patients were thrombolysed. April saw a high number of patients presenting with haemorrhagic strokes, which are not suitable for thrombolysis. The thrombolysis rate is forecast to improve in May, **Admission – 80 % of patients admitted directly to the stroke unit within 4 hours** In April 43.5% of patients were admitted directly to the Stroke Unit within 4 hours. Door-to-ward pathways continue to be impacted by operational pressures within the Emergency Unit All our Stoke performance measures are below our ambitions for performance through the stroke pathway. We have seen considerable improvements compared to last year – a business case for development of the service is being presented this month which will allow more sustainable improvements to be embedded Overall Stroke performance is assessed through the Sentinel Stroke National Audit Programme (SSNAP) – which uses metrics across the whole patient pathway. In the most recent assessment period UHW received a grade B.	Apr-24	49.4% Below standard 14.5% Thrombolysis Below standard 43.5% Door-to-ward Below standard	CT Scan within 1 hour Stroke patient thrombolysis rate Direct admission to stroke unit within 4 hours
High Impact pathways – Hip fracture	**Hip Fracture Door to Ward time – 60% of patients admitted to the ward within 4 hours Q1, 65% Q2, 70% Q3, 75% Q4** Door to Ward time is the first KPI used by the National Hip Fracture Database to monitor national performance across the patient pathway. In April 32% of patients were admitted to the ward within 4 hours. This is below our ambition but well above the national annualised average of 8.3%.	Apr-24	32% Below standard	Admitted within 4 hours

Chilcott, Rachel
21/08/2024 11:48:04

C&V Priorities and Annual Plan Commitments

Priority	Performance Summary	Reporting Period	Performance against standard	Data
Primary and Community Care	**GMS access – 100% of practices achieving core access standards** In April 100% of practices met the standard – the official data is provided annual but our monthly tracking data will be updated here for information **GDS access – 25% of contract value by end Q1, 50% Q2, 75% Q3, 100% Q4** At the end of May 13.7% of the contract value had been delivered. Q1 data will be available next month **Pharmacy access – 95% of practices providing Clinical Community Pharmacy Service (CCPS) in Q1, 10% increase PIP sites each Quarter** In May 99% of practices were providing CCPS services **Optometry – 95% of practices providing WGOS1+2** Reporting from Q2	Apr-24 May-24	100% Meeting standard 13.7% Below standard (end Q1) 99% Above standard	Trending available from end of Q1
Cancer	**Single Cancer Pathway – 70% of patients to receive their first definitive treatment within 62 days by Q3, as per nationally submitted trajectory** In April 63.7% of patients received their first definitive treatment within 62 days. This was 0.3% below our trajectory. We have forecast a drop in compliance with the SCP in May, due to pathology delays experienced through March, but aim to remain on trajectory to meet the Welsh Government ambition of 60% by December and 70% by March 2025.	Apr-24	63.7% Below standard	% cancer patients starting treatment waiting 62 days 80% 70% 60% 50% 40% Mar-24 Apr-24 May-24 Jun-24 Jul-24 Aug-24 Sep-24 Oct-24 Nov-24 Dec-24 Jan-25 Feb-25 Mar-25 Trajectory / SCP performance

Chilcott,Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reporting Period	Performance against standard	Data
Outpatient and Treatment waiting times	**Outpatient waiting times – Reduction in the number of patients waiting 52 weeks for a first outpatient appointment** In April there were 12,695 patients waiting 52 weeks for their first outpatient appointment. This is above the Welsh Government ambition but as per our trajectory to reduce the number of breaches by March 2025. **Treatment waiting times – Reduction in the number of patients waiting 104 weeks for treatment** In April there were 2,816 patients waiting 104 weeks for treatment. This is above the Welsh Government ambition but as per our trajectory to reduce the number of breaches by March 2025.	April-24	12,695 patients Above standard 2,816 patients Above standard	52 week New Outpatient waits (chart: Trajectory; >52 Weeks New OP; Apr-24 to Dec-24) 104 week treatment waits (chart: Trajectory; >104 Weeks; Apr-24 to Dec-24)
Diagnostics and Therapies	**Diagnostics – Reduction in the number of patients waiting over 8 weeks for a specified diagnostic** In May 15,245 patients were waiting over 8 weeks for a specified diagnostic, an increase from April and above our trajectory agreed with Welsh Government. Narrative **Therapies – No patients waiting over 14 weeks for Therapy – Q3** In May 491 patients were waiting over 14 weeks for therapies, a small increase from April and above our commitment for Q3.	May-24	15,245 patients Diagnostics Above trajectory 491 patients Therapies Above standard (Q3)	Patients waiting >8 weeks - Diagnostics (chart: Trajectory; Waiting over 8 Weeks; Apr-24 to Mar-25) Patients waiting >14 weeks - Therapies (chart: Waiting over 14 Weeks; Standard Q3; Apr-24 to Mar-25)

Chilcott, Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reporting Period	Performance against standard	Data
Waiting times	**Cardiothoracic Surgery – Reduce wait for outpatients to <16 weeks Q2, reduce wait to treatment to <52 weeks Q2** In May there were 20 patients waiting over 16 weeks for a new outpatient appointment and 10 patients waiting over 52 weeks for surgery **Neurosurgery – Reduce wait for treatment to <40 weeks Q3, reduce wait for outpatients to <18 weeks Q4** In May there were 12 patients waiting over 18 weeks for a new outpatient appointment and 3 patients waiting over 40 weeks for surgery	May-24	20 Patients Above standard (Q2) 12 patients Outpatients Above standard (Q3) 3 patients Treatment Above standard (Q4)	16 week Outpatient waits - Cardiothoracics (>16 week new OP waits; Standard Q2) Outpatient and treatment waits - Neurosurgery (>18 week new OP waits; >40 week treatment; Standard)
Intensive Care Unit	**Delayed Transfers of Care – Reduce the % DTOC bed occupancy against the same period in 23/24** April saw a reduction in ITU DTOCs compared to March. However, this remained above our ambition to reduce from 23/24 levels due to increased operational pressures through the month.	Apr-24	9.4% Above standard	ITU - Delayed Transfers of Care (% DTOCs 24/25; Standard 23/24)

Chilcott,Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reporting Period	Performance against standard	Data
Paediatric waiting times	**New Outpatient waits – 0 patients waiting over 52 weeks for outpatients in Q1** In May there were 0 patients waiting over 52 weeks for a new outpatient appointment **Therapy waits – 0 patients waiting over 14 weeks for Therapies in Q3** In May there were 252 paediatric patients waiting over 14 weeks for Therapies (123 in Dietetics and 129 in Occupational Therapy)	May-24	0 Meeting standard 252 Above standard (Q3)	
Emotional Health and Wellbeing	**Percentage of Local Primary Mental Health Support Service (LPMHSS) assessments undertaken within (up to and including) 28 days from the date of receipt of referral for under 18s – 80% compliance with the Standard of <28 days in Q1** In May 95% of assessments were completed within 28 days **Percentage of therapeutic interventions started within (up to and including) 28 days following an assessment by Local Primary Mental Health Support Service (LPMHSS) for under 18s – 80% compliance with standard in Q3** In May 14% of interventions were started within 28 days, this is below the standard for Q3 but in line with our improvement trajectory **Percentage of patients with a valid Care and Treatment plan – 80% compliance with standard in Q3** In May 88% of patients had a valid Care and Treatment Plan, above our ambition	May-24	95% Part 1a Above standard 14% Part 1b Below standard 88% Part 2 Above standard	
Neurodevelopment	**Neurodevelopment assessment - Reduce the longest wait to 140 weeks in Q4** In May the longest wait for a neurodevelopment assessment was 166 weeks, this is above our ambition for delivery in Q4 but is improved from 23/24	May-24	166 Above standard (Q4)	

Chilcott, Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reporting Period	Performance against standard	Data
Mental Health Measures – Part 1a	**Percentage of Local Primary Mental Health Support Service (LPMHSS) assessments undertaken within (up to and including) 28 days from the date of receipt of referral for adults aged 18 years and over – 80% compliance with the Standard of <28 days in Q2** In April 16% of patients received their assessment within 28 days – this is in line with our forecast position but below the standard we are looking to achieve by the end of Q2. Referrals to the service remain high.	Apr-24	16% Part 1a Below standard (Q2)	LPMHSS assessments started 28 days - Adults 100%, 80%, 60%, 40%, 20%, 0% Mar-24, Apr-24, May-24, Jun-24, Jul-24, Aug-24, Sep-24, Oct-24, Nov-24, Dec-24, Jan-25, Feb-25, Mar-25 Performance, Standard Q2
Mental Health Measures – Part 1b	**Percentage of therapeutic interventions started within (up to and including) 28 days following an assessment by Local Primary Mental Health Support Service (LPMHSS) for adults – 80% compliance with standard in Q1** In April 100% of therapeutic interventions were started within 28 days of assessment, above the standard and in line with our trajectory submitted to Welsh Government.	Apr-24	100% Part 1b Above standard	LPMHSS interventions started 28 days - Adults 100%, 95%, 90%, 85%, 80% Mar-24, Apr-24, May-24, Jun-24, Jul-24, Aug-24, Sep-24, Oct-24, Nov-24, Dec-24 Trajectory, Performance
Mental Health Measures – Part 2	**Percentage of patients with a valid Care and Treatment plan – 80% compliance with standard in Q3** In April 61% of patients had a valid Care and Treatment plan, an improvement from March following focused work from the teams. Performance remains below the standard for Q3 – the RAMP protocol and Part 1 schemes have been approved though the MH Liason Committee to support longer term improvements in compliance	Apr-24	61% Part 2 Below standard (Q3)	Valid Treatment Plan - Adults 100%, 80%, 60%, 40%, 20%, 0% Mar-24, Apr-24, May-24, Jun-24, Jul-24, Aug-24, Sep-24, Oct-24, Nov-24, Dec-24, Jan-25, Feb-25, Mar-25 Performance, Standard Q3

Chilcott, Rachel
21/08/2024 11:48:04

No.	Performance Measure	Reported Period	Performance Standard	In Month Performance	Trend
11.	Percentage of GP practices that have achieved all standards set out in the National Access Standards for In-hours	2022/23	100%	**98.2%** Below standard	19/20: 93.4%; 20/21: 95.0%; 21/22: 96.5%; 22/23: 98.2%
12.	Percentage of patients (aged 12 years and over) with diabetes who received all eight NICE recommended care processes	Apr-24	Improvement compared to the same month in the previous year	**47.5%** Above standard	Jan-24: 45.20%; Feb-24: 46.10%; Mar-24: 46.90%; Apr-24: 47.50%
13.	Percentage of the primary care dental services (GDS) contract value delivered (for courses of treatment for new, new urgent and historic patients)	Apr-May 24	A month on month increase towards a minimum of 30% contract value delivered by 30 September 2024 and 100% by 31 March 2025	**13.7%** Below standard	Apr-24: 4.90%; May-24: 13.70%
14.	Number of consultations delivered through the Pharmacist Independent Prescribing Service (PIPS)	Apr-24	Increase compared to the same month in the previous year	**1,628** Above standard	Jan-24: 1452; Feb-24: 1724; Mar-24: 1649; Apr-24: 1628
15.	Percentage of Local Primary Mental Health Support Service (LMPHSS) assessments undertaken within (up to and including) 28 days from the date of receipt of referral for people aged under 18 years	Apr-24	80%	**91%** Above standard	Jan-24: 78%; Feb-24: 91%; Mar-24: 91%; Apr-24: 91%
16.	Percentage of therapeutic interventions started within (up to and including) 28 days following an assessment by Local Primary Mental Health Support Service (LPMHSS) for people aged under 18 years	Apr-24	80%	**24%** Below standard	Jan-24: 14%; Feb-24: 19%; Mar-24: 23%; Apr-24: 24%
17.	Percentage of Local Primary Mental Health Support Service (LPMHSS) assessments undertaken within (up to and including) 28 days from the date of receipt of referral for adults aged 18 years and over	Apr-24	80%	**16.1%** Below standard	Jan-24: 37.5%; Feb-24: 91.0%; Mar-24: 53.9%; Apr-24: 16.1%
18.	Percentage of therapeutic interventions started within (up to and including) 28 days following an assessment by Local Primary Mental Health Support Service (LPMHSS) for adults aged 18 years and over	Apr-24	80%	**100%** Above standard	Jan-24: 100.0%; Feb-24: 100.0%; Mar-24: 100.0%; Apr-24: 100.0%
19	Percentage of emergency responses to red calls arriving within (up to and including) 8 minutes	May-24	65%	**52%** Below standard	Feb-24: 44%; Mar-24: 54%; Apr-24: 51%; May-24: 52%
20.	Median emergency response time to amber calls	Apr-24	12 month reduction trend	**01:07:22** Above standard	Jan-24: 01:16:33; Feb-24: 01:17:05; Mar-24: 01:14:44; Apr-24: 01:07:22

Chilcott,Rachel
21/08/2024 11:48:04

NHS Wales Performance Framework Measures

No.	Performance Measure	Reported Period	Performance Standard	In Month Performance	Trend
21.	Median time from arrival at an emergency department to triage by a clinician	Apr-24	15 minutes or less	**20** Above standard	Jan-24: 20; Feb-24: 21; Mar-24: 20; Apr-24: 20
22.	Median time from arrival at an emergency department to assessment by a clinical decision maker	Apr-24	60 minutes or less	**64** Above standard	Jan-24: 53; Feb-24: 61; Mar-24: 63; Apr-24: 64
23.	Percentage of patients who spend less than 4 hours in all major and minor emergency care (i.e. A&E) facilities from arrival until admission, transfer or discharge	May-24	Improvement compared to the same month in the previous year, towards the national target of 95%	**63.7%** Below standard	Feb-24: 64.4%; Mar-24: 64.5%; Apr-24: 64.7%; Apr-24: 63.7%
24.	Number of patients who spend 12 hours or more in all hospital major and minor emergency care facilities from arrival until admission, transfer, or discharge	May-24	Reduction compared to the same month in the previous year, towards the national target of zero	**898** Above standard	Feb-24: 792; Mar-24: 814; Apr-24: 829; Apr-24: 898
25.	Percentage of patients starting their first definitive cancer treatment within 62 days from point of suspicion (regardless of the referral route)	Apr-24	12 month improvement trend towards a national target of 80% by 31 March 2026	**63.7%** Below standard	Jan-24: 64.4%; Feb-24: 60.8%; Mar-24: 62.3%; Apr-24: 63.7%
26.	Number of patients waiting more than 8 weeks for a specified diagnostic	Apr-24	0	**14,835** Above standard	Jan-24: 14329; Feb-24: 13908; Mar-24: 14454; Apr-24: 14835
27.	Percentage of children (aged under 18 years) waiting 14 weeks or less for a specified Allied Health Professional therapy	Apr-24	100%	**81.45%** Below standard	Jan-24: 79.74%; Feb-24: 77.94%; Mar-24: 77.99%; Apr-24: 81.45%
28.	Number of patients (all ages) waiting more than 14 weeks for a specified therapy	Apr-24	0	**485** Above standard	Jan-24: 1591; Feb-24: 1405; Mar-24: 1337; Apr-24: 485
29.	Number of patients (all ages) waiting more than 14 weeks for audiology	May-24	0	**50** Above standard	Feb-24: 206; Mar-24: 0; Apr-24: 13; May-24: 50

Chilcott,Rachel
21/08/2024 11:48:04

NHS Wales Performance Framework Measures

No.	Performance Measure	Reported Period	Performance Standard	In Month Performance	Trend
30.	Number of patients waiting more than 52 weeks for a new outpatient appointment	Apr-24	0	**12,695** Above standard	Jan-24: 11993; Feb-24: 12310; Mar-24: 11759; Apr-24: 12695
31.	Number of patients waiting for a follow-up outpatient appointment who are delayed by over 100%	Apr-24	Reduction compared to the same month in the previous year	**26,338** Below standard	Jan-24: 32644; Feb-24: 29685; Mar-24: 28020; Apr-24: 26338
32.	Number of patients waiting more than 104 weeks for referral to treatment	Apr-24	0	**2,816** Above standard	Jan-24: 3943; Feb-24: 3764; Mar-24: 2681; Apr-24: 2816
33.	Number of patients waiting more than 52 weeks for referral to treatment	Apr-24	Month on month reduction towards the national target of zero by 30 June 2025	**32,436** Above standard	Jan-24: 29854; Feb-24: 30757; Mar-24: 31124; Apr-24: 32436
34.	Percentage of children and young people waiting less than 26 weeks to start an ADHD or ASD neurodevelopment assessment	Apr-24	80%	**20%** Below standard	Jan-24: 22%; Feb-24: 22%; Mar-24: 19%; Apr-24: 20%
35.	Percentage of patients waiting less than 26 weeks to start a psychological therapy in Specialist Adult Mental Health	Apr-24	80%	**62%** Below standard	Jan-24: 62%; Feb-24: 63%; Mar-24: 56%; Apr-24: 62%

Chilcott,Rachel
21/08/2024 11:48:04

Return to Main Menu

Productivity and Efficiency measures

Return to Section Menu

Measure		Internal standard	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Trend
Outpatients	% DNAs - New appointments	5%	12.5%	11.2%	11.1%	9.9%	10.2%	11.2%	10.9%	10.6%	10.3%	10.3%	10.1%	11.4%	9.7%	
	% DNAs - Follow-up appointments	5%	13.0%	13.0%	12.7%	12.1%	12.2%	12.3%	12.1%	12.2%	13.2%	13.0%	12.4%	14.3%	12.3%	
Endoscopy	% room utilisation	90%	75%	87%	82%	95%	91%	95%	88%	87%	76%	70%	73%	83%	72%	
	% utilisation (activity points available)	95%	71%	75%	74%	93%	83%	90%	82%	79%	69%	84%	94%	83%	83%	
Theatres	Average turnaround time (minutes)	10	15.2	14.5	17.5	16.0	18.2	16.1	17.2	16.5	17.1	18.3	16.4	16.7	17.1	
	% of theatre session utilisation	95%	87%	90%	81%	81%	81%	83%	84%	88%	80%	75%	77%	73%	86%	
	% in session utilisation	85%	77%	78%	77%	79%	78%	78%	80%	77%	77%	77%	80%	78%	79%	
	<24 hour elective cancellations		238	314	344	293	292	255	308	338	322	267	289	209	296	
	% theatre activity as Daycase	TBC - will be added following confirmation of GIRFT dataset														
	'High Volume Low Complexity' volume	TBC - will be added following confirmation of GIRFT dataset														
Waiting list	Total RTT waiting list volume	N/A	126262	128670	131664	134603	135686	136185	140725	141684	141828	142758	145810	147620	149805	
Inpatient	Delayed pathways of Care - Mental Health	217		43	39	45	36	36	31	41	36	37	38	41	38	
	Delayed Pathways of Care - non-Mental Health			204	178	171	140	124	142	150	114	173	200	170	145	
	7 day LOS on Acute Wards (snapshot)	<40%				58.1%	58.9%	57.2%	59.3%	57.6%	56.5%	56.8%	59.2%	57.7%	56.8%	
	21 day LOS on Acute Wards (snapshot)	<20%				31.3%	34.4%	33.7%	32.2%	28.7%	28.0%	29.8%	32.5%	32.9%	32.0%	

Chilcott,Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reported Period	Performance against standard	Data
Turnover	The overall trend is downwards since Jun-23; the rates have fallen from 13.00% at Jun-23 to 11.26% in May-24 UHB wide. This is a net 1.74% decrease, which represents 249 WTE fewer leavers. The top 5 reasons recorded for leaving are; 'Voluntary Resignation - Work Life Balance', 'Voluntary Resignation - To undertake further education or training', 'Voluntary Resignation – Relocation'. 'Voluntary Resignation – Promotion' and 'Voluntary Resignation - Other/Not Known.	May-24		Turnover Rate
Sickness Absence	Rates remain high; although the rates appear to be the falling towards more 'normal' levels. The monthly sickness rate for May-24 was 5.16%. The 12-month cumulative rate has fallen steadily over the past 12 months to 6.21% (by comparison with May-23, which was 6.84%).	May-24		In-Month and Year to Date Sickness Rates
Statutory and Mandatory Training	The overall compliance rates rose for May-24 to 83.61%, 1.39% below the overall target. The compliance for All-Wales Genomics Services, Capital, Estates & Facilities, Clinical Diagnostics & Therapeutics, Children & Women's and PCIC are above the 85% target, and Corporate Executives, Mental Health and Specialist Services are above 80% compliance. The compliance with Fire training was 73.41% for May-23. All Wales Genomics Service have reached 86.57%, but the compliance for all of the other Clinical Boards is below the 85% compliance target.	May-24		Statutory & Mandatory e-Learning Compliance Rate Fire e-Learning Compliance Rate
Values Based Appraisal	VBA compliance fell marginally during May-24 to 81.85%. All Wales Genomics Service, Capital, Estates & Facilities and Children & Women's have exceeded the 85% target. PCIC, Surgical Services, Medicine and Corporate are over 80%.	May-24		VBA Compliance Rate

Olcott, Rachel 17/07/2024 11:48:04

Priority	Performance Summary	Reported Period	Performance against standard	Data
Employee Relations	As can be seen in the graph the number of employee relations cases the People Services team are supporting has risen in the past 12 months and the number of disciplinary cases is at the UHB Target. The People Services Team continue to analyse trends of employee relations cases to develop bespoke training packages or additional toolkits/support services where appropriate.	May-24		Employee Relations Cases (chart: Disciplinary, Target Disciplinary Cases, Respect and Resolution, Appeals; Jun-23 to May-24)
Job Plans	The vast majority of clinicians have now engaged with job planning and have a job plan in the system, however only 32.12% have an agreed job plan that has been signed off within the past 12 months. A further 27.32% have an agreed job plan that was last reviewed and signed off before Jun-23.	May-24		Job Plan Compliance Rate (chart: % Target, % Compliance, % Job Plan Agreed; Jun-23 to May-24)
Medical Appraisals	The rate of compliance with Medical Appraisal has risen slightly for May-24, to 81.11%, but remains below the 85% target.	May-24		Medical Appraisal Compliance Rate (chart: % Target, % Compliance; Jun-23 to May-24)

Chilcott,Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reported Period	Performance against standard	Data
Staff in Post	The overall Health Board Staffing Numbers have increased in the last 12 months by 436 WTE, to 15,013.01 WTE. The change in the split between permanent and fixed-term as shown in the graph is largely due to validation of the ESR data held for staff contract type.	May-24		WTE Permanent and Fixed-Term Staff in Post Numbers (Permanent (Left Axis); Fixed-Term Temp (Right Axis))
Variable Pay (Bank, Agency, Overtime..)	The trend of proportion of the pay bill spend on variable pay (Bank, Agency, overtime etc.) continues to fall. At Jun-23 the percentage was 9.65% of the total spend on pay, but in May-24 had fallen to 8.26%. It must however be borne in mind that the total pay bill is increasing.	May-24		Proportion of Total Pay Bill Attributable to Variable Pay (% Variable Pay; Linear (% Variable Pay))
Monthly agency spend as % of total pay bill	The proportion of the total pay bill attributed to Agency continues to fall. At Jun-23 the percentage was 1.99% of the total spend on pay, but in May-24 had fallen to 0.93%. It must however be borne in mind that the total pay bill is increasing.	May-24		Agency Spend as % of Total Pay Bill

Chilcott,Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reported Period	Performance against standard	Data
Time to Hire	The All-Wales target for recruitment Time to Hire (the time interval between vacancy creation and successful candidate ready for start date) is 71 days, and the NHS Wales average is 61 days. The figure for Cardiff & Vale uHB for May-24 was 84 days.	May-24		Time to Hire Target (Days); Time to Hire (Days)
Time to Shortlist	The All-Wales target for recruitment Time to Shortlist (the time interval between vacancy closure and shortlisting completion) is 3 days, and the NHS Wales average is 7 days. The figure for Cardiff & Vale uHB for May-24 was 6 days.	May-24		Time to Shortlist Target (Days); Time to Shortlist (Days)

Chilcott,Rachel
21/08/2024 11:48:04

No.	Performance Measure	Reported Period	Performance Standard	In Month Performance	Trend
36.	Percentage of sickness absence rate of staff	May-24	12 month reduction trend (6%)	**5.16%** Below standard	Feb-24: 6.41%; Mar-24: 5.90%; Apr-24: 5.79%; May-24: 5.16%
37.	Turnover rate for nurse and midwifery registered staff leaving NHS Wales	May-24	Rolling 12 month reduction against a baseline of 2019-20 (7-9%)	**11.26%** Above standard	Feb-24: 11.47%; Mar-24: 11.41%; Apr-24: 11.39%; May-24: 11.26%
38.	Agency spend as a percentage of the total pay bill	May-24	12 month reduction trend	**0.93%** Below standard	Feb-24: 1.39%; Mar-24: 0.60%; Apr-24: 0.91%; May-24: 0.93%
39.	Percentage headcount by organisation who have had a Personal Appraisal and Development Review (PADR)/medical appraisal in the previous 12 months (excluding doctors and dentists in training)	May-24	85%	**81.80%** Below standard	Feb-24: 74.52%; Mar-24: 80.36%; Apr-24: 81.98%; May-24: 81.80%

Chilcott,Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reporting Period	Performance against standard	Data
Concerns 30 day performance	**Welsh Government target for responding to concerns is 75% within 30 working days** **During April and May 24, the Health Board received :** • Received 718 Concerns • Closed 723 concerns • 80% closed within 30 working days (including Early Resolution) • 33 % closed under Early Resolution (within 2 days including day of receipt) • Received 238 Enquiries • Received 54 Compliments • We currently have 287 active concerns • Top 3 themes and trends • Concerns around appointments (waiting times/cancellations) • Communication • Clinical Treatment and Assessment	April and May 2024	80% Exceeding the 75% standard	% of concerns closed within 30 working days (including Early Resolution) 85, 80, 75, 70, 65, 60 May-23, Jun-23, Jul-23, Aug-23, Sep-23, Oct-23, Nov-23, Dec-23, Jan-24, Feb-24, Mar-24, Apr-24, May-24
Duty of Candour	• Since April 1st 2023, 29,259 incidents have been reported by staff across the Health Board • Approximately 33% incidents regraded with clinical input and feedback to the reporter • Approximately 65 incidents reviewed per day by the Patient Experience Team • We continue to support DOC awareness sessions across Primary and Secondary care • Since April 1st 2023, we have triggered the DOC on 145 occasions • We have internally audited the process and compliance	To end of May-24	n/a	Incident grading changed following review Wales Genomics Service Surgical Services Specialist Services Primary, Community and Intermediate Care Other Organisations Mental Health Services Medicine Services Executive and Corporate Services Clinical Diagnostics and Therapeutic Services Children and Women's Services Capital, Estates and Facilities 0, 1000, 2000, 3000, 4000, 5000, 6000, 7000 Yes, No

Chilcott, Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reporting Period	Performance against standard	Data
Patient Feedback – Civica	The system went live on Friday 28th October 2022 and we are currently surveying up to 1000 patients daily via text, 600 chosen randomly from general hospital activity, 200 from EU activity and 200 from Mental Health activity. **Over the past 12 months, we have sent over 170,000 texts** and are seeing a response of 17%. In May, we sent 15,140 texts and had 2421 completions (16% response). Of those respondents who were discharged during April/May and answered the rating question using the scale of 0-10 where 0 is bad and 10 is excellent, 86% were satisfied with our service. Currently, our response rate overall is 17% and whilst it's our understanding that this is higher than many organisations, we will be focussing on improving this over the next year.	Mar/Apr-24 (Random) Mar/Apr-24 (MH) Mar/Apr-24 (EU))		
Patient Safety	Cardiff and Vale reported 7 NRIs to NHS Executive in May 2024 (by incident date). 13 closure forms were submitted to NHS Executive leaving us with 103 open NRIs (92 open in April) and 46 overdue (45 in April). Children and Women have the highest number of open NRIs due to the MBRRACE NRI reporting requirement, followed by Medicine and Mental Health Clinical Boards see chart opposite). Medicine and Mental Health also have the highest number of overdue NRIs. See top chart opposite for a break down of overdue NRIs per Clinical Board. The chart below shows that on average, 50% of C&V NRIs closures are completed on time. The above shows how Cardiff is positioned against other Health Boards for length of time NRIs remain open (more than 90 working days)			

INC_EXEC_01A - Number of NRIs Open at End of Last Month (CrossTab(DB))

	No value	Total
Children and Women's Services	31	31
Clinical Diagnostics and Therapeutic Services	2	2
Executive and Corporate Services	3	3
Medicine Services	20	20
Mental Health Services	20	20
Primary, Community and Intermediate Care	1	1
Specialist Services	9	9
Surgical Services	17	17
Total	103	103

Chilcott, Rachel 21/08/2024 11:48:04

Priority	Performance Summary	Reporting Period	Performance against standard	Data
Tier 1 Mortality	Inpatient Mortality The Crude Inpatient Mortality chart demonstrates continued inpatient mortality in line with the five year average for the same reporting period. 100% of patients that die as an inpatient now receive independent scrutiny from the medical examiner and plans are in place to start to review community deaths. All Cause Mortality Excess deaths have been observed across Wales and UK since late 2022. Work undertaken by Public Health Wales demonstrates the relative excess mortality by disease, where there is any mention of the disease on the death certificate as opposed to being the underlying cause of death. 94 deaths were recorded for Cardiff and the vale in week 9 compared 46.8 for the five year average for the same reporting week. This increase above the five year average has been consistent since January 2023	Mar-20 to Mar-24		Crude Mortality: Weekly Deaths In Hospital 100 0 Number of in Hospital Deaths Sum of Death
Infection Control	• In April 24, there were 22 cases of **C. difficile**. The current rate is 52.94 **cases per 100,000 population** which is **139% higher than the equivalent period in 2023/24.** The reduction expectation (RE) rate is unknown currently but based on previous 25 cases per 100,000 population, the current CAV rate is **111.76% below the RE**. CAV is currently the 4th across the 6 UHBS. • There were 15 cases of **S. aureus bacteraemia**. The current rate is **36.1 cases per 100,000 population** which is **36% higher than the equivalent period in 2023/24.** The reduction expectation (RE) rate is unknown currently but based on previous 20 cases per 100,000 population, the CAV rate is **80.5% over the RE**. CAV is currently joint 1st across the 6 UHBS. • There were 29 cases of **E. coli bacteraemia**. The current rate is **69.79 cases per 100,000 population** which is 20.5**% higher than the equivalent period in 2023/24.** The reduction expectation (RE) rate is unknown currently but based on previous 67 cases per 100,000 population, the CAV rate is 4.16% over **the RE.** CAV is currently joint 3rd across the 6 UHBs. • There were 14 cases of ***Klebsiella spp* bacteraemia** which is 7.6**% lower than the equivalent period last in 2023/24**. The current maximum number is unknown but based on previous reduction expectation of 58 cases, thus **CAV is 75.86% under the RE**. CAV current has the highest rate across the 6 UHBs. • There were 2 cases of ***P. aeruginosa* bacteraemia which is higher than the equivalent period in 2024/25 with 0 cases.** The current maximum number is unknown but based on previous reduction expectation of 18 cases, thus **CAV is 88.9% under the RE**. CAV current has 3rd highest rate across the 6 UHBs.	Apr-24		

Chilcott,Rachel 21/08/2024 11:48:04

Priority	Performance Summary	Reporting Period	Performance against standard	Data
Deliver 2024/25 Draft Financial Plan	**Financial Plan Approved by Board and submitted to Welsh Government** • Brought forward underlying deficit of £60.9m • 2024/25 Demand and cost growth and unavoidable investments of £45.4m • Allocations and inflationary uplifts of £37.3m • Anticipated pass through funding on Long Term Agreements of £5.9m (3.67%) • A £47.2m Savings programme This results in a 2024-25 planning deficit of £15.9m. At month 2, the UHB is reporting an overspend of £8.821m. This is comprised of £1.557m operational overspend, a savings gap of £4.614m and the planned deficit of £2.650m (2 twelfths of the planned forecast year end deficit of £15.900m). The UHB expects to recover the month 2 operational & savings overspend to deliver the £15.900m planned deficit.	May-24	n/a	See table below
Achieve financial sustainability and recurrent financial balance by the end of 2025/26	The draft financial plan requires the UHB to meet its £47.2m Recurrent Savings target and deliver a balanced recurrent operational position to reduce the brought forward underlying deficit (ULD) from £60.9m to £15.9m at the end of 2024/25. At month 2, the UHB had identified £12.257m of recurrent green and amber savings and reported a £1.557m operational overspend. It is assumed that action to address the operational position will enable the UHB to report a balanced recurrent operational position at year end. In addition, it is assumed that 50% of the £5.134m of recurrent red schemes identified at month 2 will be delivered in year. Based on these assumptions, a further £32.376m of recurrent savings and a balanced operational position are required to enable the UHB to reduce its ULD to £15.9m at the end of March.	May-24	n/a	See chart below

	Month 2 Position £m	Forecast Year-End Position £m
Planned deficit	2.650	15.900
Savings Programme	4.614	0.000
Operational position (Surplus) / Deficit	1.557	0.000
Financial Position £m (Surplus) / Deficit £m	**8.821**	**15.900**

Progress in Reducing the Underlying Deficity (ULD) from 60.9m to £15.9m

Chilcott, Rachel
21/08/2024 11:48:04

Priority	Performance Summary	Reporting Period	Performance against standard	Data
Management of operational budget pressures	The UHB reported a £1.557m operational overspend at month 2, which is a deterioration of £1.060m from the £0.497m reported at month 1.	May-24	n/a	Planned Operational Position vs Month 1 Position (£m; Apr–Mar; Reported Operational Position, Planned Operational Position)
Delivery of recurrent £47.2m savings target	£20.989m Green and Amber schemes identified at month 2 of which £12.257m were recurrent.	May-24	n/a	Monthly Progress of Identification of Schemes (Month 1–Month 11; Green, Amber, Red, Unidentified)
Remain within cash limit	The UHB forecasts to remain within its 2024/25 cash limit, on the assumption that £15.900m of strategic cash support is provided for the forecast deficit.	May-24	n/a	Cumulative Cash drawn against Revenue and Capital Drawing Limit (Apr–Mar; Cumulative Cash Drawings, Revenue & Capital Drawing Limit for year @ May 2024)

Chilcott, Rachel
21/08/2024 11:48:04

No.	Performance Measure	Reported Period	Performance Standard	In Month Performance	Trend
40.	Percentage of episodes clinically coded within one reporting month post episode discharge end date	Apr-23	12 month improvement trend	**70%** Above standard	Jan-23: 59%; Feb-23: 56%; Mar-23: 44%; Apr-23: 70%
41.	Percentage of all classifications' coding errors corrected by the next monthly reporting submission following identification	Mar-24	90%	**0.7%** Below standard	Dec-23: 30.60%; Jan-24: 11.40%; Feb-24: 4.80%; Mar-24: 0.70%
42.	Percentage of calls ended following WAST telephone assessment (Hear and Treat)	Apr-24	17% or more	**16.1%** Below standard	Jan-24: 17.00%; Feb-24: 15.30%; Mar-24: 15.00%; Apr-24: 16.10%
43.	Number of Pathways of Care delayed discharges	May-24	12 month reduction trend	**179** Above standard	Feb-24: 238; Mar-24: 211; Apr-24: 183; May-24: 179
44.	Percentage of health board residents in receipt of secondary mental health services who have a valid care and treatment plan for people aged under 18 years	Apr-24	90%	**81.7%** Below standard	Jan-24: 85.3%; Feb-24: 88.0%; Mar-24: 83.6%; Apr-24: 81.7%
45.	Percentage of health board residents in receipt of secondary mental health services who have a valid care and treatment plan for adults 18 years and over	Apr-24	90%	**61.2%** Below standard	Jan-24: 54.4%; Feb-24: 54.0%; Mar-24: 55.2%; Apr-24: 61.2%
46.	Number of service user feedback experience responses completed and recorded on CIVICA	May-24	Month on month improvement	**4681**	In May 2,000 more sms texts were sent and we send over 15,000 per month

Chilcott, Rachel
21/08/2024 11:48:04

No.	Performance Measure	Reported Period	Performance Standard	In Month Performance	Trend
47.	Cumulative number of laboratory confirmed bacteraemia cases: *Klebsiella* sp and; *Pseudomonas aeruginosa*	Apr-24	*Klebsiella sp* - 100 *P. aeruginosa* – 31	**14** **2** Below standard	Not on trajectory to achieve the reduction expectation number On trajectory to achieve the reduction expectation number
48.	Cumulative rate of laboratory confirmed bacteraemia cases per 100,000 population: *E.coli* and; *S.aureus* (MRSA and MSSA)	Apr-24	*E. coli* – 67 cases per 100,000 population *S. aureus* – 20 cases per 100,000 population	**69.79 cases per 100,000 population** **36.1 cases per 100,000 population** Above standard	On trajectory to achieve the reduction expectation rate Not on trajectory to achieve the reduction expectation rate
49.	Cumulative rate of laboratory confirmed *C.difficile* cases per 100,000 population	Apr-24	25 cases per 100,000 population	**52.94 cases per 100,000 population** Above standard	On trajectory to achieve the reduction expectation rate
50.	Percentage of confirmed COVID-19 cases within hospital which had a definite hospital onset (>14 days after admission)	Apr-24	Reduction compared to the same month in the previous year	**30%** On standard	Ap-23: 30.90%; Apr-24: 30.00%
51.	Percentage of ophthalmology R1 appointments attended which were within their clinical target date or within 25% beyond their clinical target date	Feb-24	12 month improvement trend towards national target of 95%	**56.23%** Below standard	Nov-23: 55.21%; Dec-23: 55.50%; Feb-24: 56.26%; Feb-24: 56.23%
52	Number of ambulance patient handovers over one hour	May-24	0	**1705** Over standard	Feb-24: 1648; Mar-24: 1797; Apr-24: 1704; May-24: 1705
53.	Percentage of ambulance patient handovers within 15 minutes	May-24	Improvement compared to the same month in the previous year, towards the national target of 100% within 15 minutes	**16.25%** Below standard	Feb-24: 17.41%; Mar-24: 16.53%; Apr-24: 15.90%; May-24: 16.25%
54.	Number of National Reportable incidents that remain open 90 days or more	May-24	12 month reduction trend	**5,649**	Second month reporting a reduction in this figure (March figure was 5,869, April 5,695 – 4% reduction since March).

Chilcott,Rachel
21/08/2024 11:48:04

Appendix 1

Digital spend intentions from backlog allocation

Outlined below is the Digital Discretionary spend plan for Capital spend 2024/25

Allocation £500k		
1.	WiFi Installation	£50k
2.	WiFi Professional Services	£50k
3.	WiFi Cabling	£50k
4.	Data Storage	£150k
5.	Devices	£50k
6.	Networking	£100k
7.	Contingency	£50k

Digital will work with Procurement on a plan as follows:

- Planned spend quarter 2 – 25%
- Planned spend quarter 3 – 50%
- Planned spend quarter 4 – 25%

Chilcott,Rachel
21/08/2024 11:48:04

Capital Bids for Medical Equipment sorted by risk, year of planned spend and if replacement or additional

Current approvals to date = £127.2k

Total for lines >=12 risk rating £ 1,238,280.94

Year spend is planned	Replacement/ Additional	Title	Qty	Total Cost inc VAT	Risk rating 1-25	Created	Comments	Comments on Status	Clinical Board	Paperwork status	Signed off by Clinical Board?	Unit Cost inc VAT	Person submitting bid	Additional People to keep informed	LEAD TIME	Year of Submission	Column1
24/25	Replacement	B1 Philips central station replacement	1	£ 90,000.00	20	11/06/2024 18:03	Exsiting Central out support	Currently being discussed as will need expanding to cater for Cardiac return	Specialist		yes	£90,000.00	Edward Chapman (Cardiff and Vale UHB - Clinical Engineering)		10-12 weeks	2023/24	
24/25	Replacement	T4 Neuro HDU Philips central station replacement	1	£ 25,000.00	20	11/06/2024 18:08	Exsiting Central out support	Estimated costs	Specialist		yes	£25,000.00	Edward Chapman (Cardiff and Vale UHB - Clinical Engineering)		10-12 weeks	2023/24	
24/25	Replacement	Replacement 2 / 1 porous load sterilisers	1	£ 86,236.08	16	29/04/2024 11:05	Porous load sterilisers are used to sterilise reusable medical devices making them safe for patient use. The current machines are now 10 years old and are regularly breaking down and steriliser 2 has been decommissioned due to an unrepairable steam leak to the jacket, leaving the department with only three usable units. The sterilisers are governed by WHTM 01-01 and it is imperative that we ensure devices remain fit for purpose. As the largest SSD in Wales and with recent uplift in activity (COVID Recovery) it is important we have reliable consistent devices to effectively decontaminate resuable medical devices.	Plan to buy one now one in 25/26	Surgery		no	£ 86,236.08	Mark Campbell (Cardiff and Vale UH	mark.campbell@wales.nhs.uk		2023/24	
24/25	Replacement	Replacement RO System HSDU UHW	1	£ 168,220.18	16	30/04/2024 12:38	The current Ro system is in excess of 20 years old and is regularly failing with high levels of contaminate being held in the system, failing on both total viable count and high conductivity. In addition, the current system is not a duplex system, so if there is a failure on the system the department lose RO water and cannot reprocess devices that require RO water as per the manufacturers IFU's (davinci robotics is an example of equipment requiring RO water). The new system will be a duplex Ro system, which mean if there is a failure on one of the systems, there is a back-up system working alongside which the department can swap to. In addition, the current RO system is not a medical grade RO system, with many dead legs on the system and plastic piping in place instead of the recommended stainless-steel pipework.		Surgery		no	£168,220.18	Mark Campbell (Cardiff and Vale UH	clare.jacobs@wales.nhs.uk		2023/24	
24/25	Replacement	Replacement of Theatre Lights x 5	5	£ 115,000.00	16	05/06/2024 16:08	5 Lights are of an unknown age (>15y) are out of support and in poor condition. More detailed assessments are in progress, but these are priority replacements. SEE OTHER SHEETS	Costs are an estimate	Surgery		No	£23,000.00	Nikki Rabone (Cardiff and Vale UHB	nikki.rabone@wales.nhs.uk		2023/24	
24/25	Replacement	Defibrillators for the Emergency Unit	2	£ 42,326.40	15	23/05/2024 16:17	This expansion of equipment will allow the Resus area within Emergency Unit have a safe number of adequately functioning defibrillators to provide lifesaving interventions such as pacing in addition to supporting timely and safe critical transfers in unstable patients and ultimately maximising patient safety. National targets such as 'time to CT' in trauma (TARN data) can be affected due to lack of adequate equipment and associated delays.		Medicine		No	£21,163.20	Anthony Cusack (Cardiff and Vale U	Emma Keen		2023/24	
24/25	Replacement	Pelican Philips central station replacement	1	£ 17,000.00	15	11/06/2024 18:05	Exsiting Central out support	Estimated costs	Children and Women		yes	£17,000.00	Edward Chapman (Cardiff and Vale UHB - Clinical Engineering)		10-12 weeks	2023/24	
24/25	R5:10eplacemer	ECU UHL Philips central station replacement	1	£ 27,000.00	15	11/06/2024 18:05	Exsiting Central out support	Estimated costs	Specialist		yes	£27,000.00	Edward Chapman (Cardiff and Vale UHB - Clinical Engineering)		10-12 weeks	2023/24	
24/25	Replacement	Karl Storz Bugatti Shaver, one stop hysterscopy	1	£ 123,272.00	15	20/05/2024 00:00	Gynae OPD need this kit to support their one stop hysteroscopy service, they have been using loan kit up till now. This is a see and treat service that significantly reduces operating time, and hospital visits. It also reduces diagnostic burden. Currently the directorate is reporting 5 patients over 62 days, the lowest reported number over the last two years.		Childrens and Women		yes	£123,272.00	Rhodri John			2024/25	
24/25	Replacement	Small Power Tools	1	£ 236,281.27	12		Surgical Drills and tools that are old and need replacing, see other sheet	Currently going through trials	Surgery		no	Various	Nikki Rabone (Cardiff and Vale UHB - Peri Operative Care Directorate.)			2024/25	
24/25	Replacement	Dental treatment cart for treating patients for oral health care CLESTA CART	3	£ 35,652.00	12	28/11/2022 14:12	The Dental treatment cart is an essential piece of equipment required to carry out various dental procedures to the patients' needs. The current equipment is 20+ years old and is regularly failing, requiring repair and impacting on patient treatment. The E+E department regularly treat between 100-150 patients per week This bid supports the fundamental objectives of the organisation by improving the standard of work to a specialist level, improve patient outcomes including patient satisfaction and oral health.		Dental, UHW	CMG Form;#Quote;#DoI		£11,884.00	Paul Bayliss (Cardiff and Vale UHB -	Daniel Lewis		2022/23	
24/25	Replacement	Sonosite Ultrasound Equipment x2	2	£ 91,402.95	12	14/04/2024 18:11	Anaesthesia has evolved to encompass expansion of techniques to augment general anaesthesia. Often these strategies use ultrasound technology to accurately place local anaesthesia or catheters. The cohort of equipment we own at present simply is not enough to cover the varies demands of the service across both sites of the UHB. Hence, an expansion of our stock is required.	Additional units	Surgery		Yes	£45,701.47	Nikki Rabone (Cardiff and Vale UHB	richard.hughes3@wales.nhs.u k		2022/23	
24/25	Replacement	Water Unit for Metals	1	£ 13,681.00	12	25/04/2024 07:07	This bid is to replace the aging pure water supply - if it fails we would need to purchase high grade water at a significant cost		CD&T		Yes	£13,681.00	Nigel Roberts (Cardiff and Vale UHB - Medical Biochemistry)			2023/24	
24/25	Replacement	Mettler Toledo Balance XPR226DR	1	£ 58,500.00	12	25/04/2024 07:11	This bid will replace the ageing micro balance and give enhanced capability to weight tissue samples		CD&T		Yes	£58,500.00	Nigel Roberts (Cardiff and Vale UHB - Medical Biochemistry)			2023/24	
24/25	Replacement	Department Ducted Fume hood	1	£ 61,816.00	12	25/04/2024 07:37	The existing fume hoods are becoming difficult to obtain parts for and two are not currently operational which limits our back up		CD&T		Yes	£61,816.00	Nigel Roberts (Cardiff and Vale UHB - Medical Biochemistry)			2023/24	
24/25	Replacement	Ultrasound Machine for EU	1	£ 46,893.06	12	23/05/2024 16:24	The Emergency Unit currently requires a new ultrasound machine as we are using one which is over demand and results in the machine breaking due to over usage. This results in periods of time without access to an ultrasound machine, delaying diagnosis, and increasing length of stay in the Emergency Unit. This reduces our 4 hour completion rates and increases the risk to the patients.		Medicine		No	£46,893.06	Anthony Cusack (Cardiff and Vale U	carolyn.lewis4@wales.nhs.uk		2023/24	
24/25	Replacement	Rainbow Philips central station replacement	1	£ 15,000.00	10	11/06/2024 18:05	Exsiting Central out support	Estimated costs	Children and Women		yes	£15,000.00	Edward Chapman (Cardiff and Vale UHB - Clinical Engineering)		10-12 weeks	2023/24	
24/25	Replacement	Island Philips central station replacement	1	£ 15,000.00	10	11/06/2024 18:05	Exsiting Central out support	Estimated costs	Children and Women		yes	£15,000.00	Edward Chapman (Cardiff and Vale UHB - Clinical Engineering)		10-12 weeks	2023/24	

Chilcott, Rachel
21/08/2024 11:48:04

24/25	Replacement	Dental intra oral x-ray phosphor plate scanner	4	£	31,447.20	9	28/11/2022 14:17	Phosphor plate intra oral scanners are used for the processing of dental intra oral films and transferring these images to a dedicated PC for viewing at chair side by the clinician. The images are used for diagnosing a range of dental intra oral problems, like cavities, tooth decay, periodontal condition, endodontic treatment, dental implant, tooth morphology, root morphology, trauma, cysts, foreign body, tooth anomalies, supernumerary teeth, relationship of impacted teeth, dental diseases, preoperative assessment as well as postoperative assessment. The current equipment is 15 years old and has been well used and will soon be obsolete with no support from the manufacturers. The benefits to the new equipment will mean faster scan times and better image quality, better reliability meaning a better outcome for the patient.		Dental, UHW	CMG Form;#Quote;#DoI		£7,861.80	Paul Bayliss (Cardiff and Vale UHB - Dental Technical Services)			2022/23
24/25	Replacement	GE Venue R2 US machine for use on Critical Care	2	£	78,410.35	9	15/12/2023 11:05	Ultrasound is an essential diagnostic investigation performed on Critical Care. It is vital to have working machines to perform said investigations; be it U/S guided central line or lung drain insertion to detailed heart assessments. We have had to condemn 2 of our U/S machines due to being electrically unsafe. A QA assessment found that both machines were passing electricity into patients therefore posing an electrocution risk to both patient and operator As both of the affected machines are over 9 yrs old; probe/part replacement is not possible as they are not manufactured anymore. Therefore, the U/S machines need replacing to enable U/S investigations to continue safely on the unit. We have 4 working machines on the unit however 2 of these are on loan from another department and could be re-called at any time – if this happens it would leave 2 fully working machine on critical care which is not enough for the number of patients on the unit.		Specialist Services	CMG Form;#Quote;#	Yes	£39,205.18	Ian Sidney (Cardiff and Vale UHB - C	ian.sidney@wales.nhs.uk		2023/24
24/25	Replacement	Medical Biochemistry and Immunology - A3600 Centrifuge Buckets	1	£	14,199.60	9	25/04/2024 07:26	These bucket need replacing every 5 years		CD&T		Yes	£14,199.60	Nigel Roberts (Cardiff and Vale UHB - Medical Biochemistry)			2023/24
24/25	Replacement	Belmont Criticool Patient warmer	1	£	19,346.40	9	23/02/2024 14:41	Existing unit out of support and replacement needed to cool patients on PICU		Children and Women		Yes	£19,346.40	Ryan Thomas (Cardiff and Vale UHB	alison.oliver@wales.nhs.uk		2023/24
24/25	Replacement	Standalone Dental treatment chairs	3	£	27,543.00	8	06/02/2023 14:33	These Dental treatment chairs are used to position the patient for intra-oral radiographs, the chairs are height adjustable and are able to recline. They are over 20+ years old and the internal pipework is failing spilling hydraulic oil over the floor. The benefits would come through less down time of the equipment, improving patient treatment and the whole patient experience. Also, the new chairs are able to lift up to a weight of 30 stone rather that the 21 stone currently. The x-ray department see on average 80 to 100 patients per day		Dental, UHW	CMG Form;#Quote		£9,181.00	Paul Bayliss (Cardiff and Vale UHB - Dental Technical Services)			2022/23
24/25	Replacement	Owl/Gwdhiw Philips central station replacement	1	£	17,000.00	5	11/06/2024 18:05	Exsiting Central out support		Childrens and Women		yes	£17,000.00	Edward Chapman (Cardiff and Vale UHB - Clinical Engineering)		10-12 weeks	2023/24
24/25	Replacement	V-Beam Laser Dermatology	1	£	69,600.00		28/11/2022 14:01	Exisiting laser is out of support already, previous CMG bid did not make the cut last year		Medicine	Quote;#CMG Form		£69,600.00	Hannah Mastafa (Cardiff and Vale U	Rebecca David		2022/23
24/25	Replacement	Leica Stainer ST4020	1	£	5,500.00		28/11/2022 14:01	Hoping to be REV		Medicine/Dermatology			£5,500.00		Lydia Sexton		2022/23
24/25	Replacement	Ionic Radiofrequency Generator	1	£	34,200.00		28/11/2022 14:12	As well as replacing aged unit this offers some cost savings on Revenue. The new generator comes with a 2 year warranty and no longer needs to have a yearly service contract (£3,000) because the machine self-calibrates every time it's switched on. All consumables remain the same except for the grounding pads which are slightly cheaper than the ones we currently order.		Medicine			£34,200.00	Lauren Sivyour (La257588)	Lauren Sivyour		2022/23
24/25	Replacement	MPCE DXA Scanners	1	£	220,000.00		28/11/2022 14:17	Replacing exisiting old (2012, 2015) kit, previous CMG bid not make the cut last year		CD&T			£220,000.00		Rhys Morris		2022/23
24/25	Replacement	Epredia NX70 cryostar cryostat	1	£	35,622.00		28/11/2022 14:17	Current Cyrostat is over 10 years old		Medicine/Dermatolog	CMG Form		£35,622.00	Lydia Sexton (Cardiff and Vale UHB - Dermatology)			2022/23
24/25	Additional	Echocardiography machine for critical care	1	£	36,304.68	12	03/02/2023 08:15	Ultrasound is a vital diagnostic test used widely within critical care. It is non-invasive, relatively quick to perform and enables vital information to be conveyed accurately and efficiently when required, to aid the management of critically ill patients. To comply with national guidelines regarding Covid-19, some new cardiac ultrasound machines were purchased in the 2020/2021 financial year. The numbers purchased were reliant on our continued use of existing cardiac ultrasound machines, one of which now needs replacement. This machine needs replacement for the following reasons: 1.It is over 10 years old, and the BSE recommendations state machines should be replaced every 10 years (used to be 7 years). 2.In Feb 2022, the ultrasound probe failed its QA assessment from both an electrical safety and infection control basis. The machine was immediately withdrawn from clinical use. 3.At the end of 2022, the service support for this machine, from Philips, will end.		Specialist Services		Yes	£36,304.68	Kevin Nicholls (Cardiff and Vale UHE	Anne-Marie Morgan Chris Gough		2022/23
24/25	Additional	MUSE ECGs for Medicine	5	£	47,550.00	9	03/06/2024 18:11	Needed to support MCB footprint.		Medicine	CMG Form;#Quote	No	£9,510.00	Craig Davies (Cardiff and Vale UHB -	Babara Davies; Craig Davies		2023/24
24/25	Additional	Skull base Navigation equipment	1	£	92,294.94	9	04/01/2024 16:41	This is a specialist equipment for the skull base service, to ensure pin point accuracy during surgery.	Needs a risk score and is additionality evidence needed for spend on rentals	Surgery	CMG Form;#Quote	Yes	£92,294.94	Michelle Harding (Cardiff and Vale U	michelle.harding@wales.nhs.uk		2023/24
25/26	Replacement	Adult ITU Drager Ventilators phase 1	5	£	198,308.45	12	28/11/2022 14:12	Replacements for ICU ventilators that had their end of life date extended in COVID to 2025. This is a phased replacement, 11 needed in total.		Specialist Services	Quote		£39,661.69		Ed Chapman		2023/24

Chilcott, Rachel
21/08/2024 11:48:04

25/26	Additional	Echo US machine	1	£	135,319.77	16	23/10/2023 16:53	•The echo service demands are continually increasing. The number of in- and out-patient requests is increasing year-by-year and other services, such as the physiologist-led valve surveillance clinic, are also expanding. •With increasing demand, the only way we can try and meet RTT targets is to increase capacity. •Due to national staff shortages of physiologists trained in echocardiography, we have invested in fast track echo trainee posts, plus STP students, several of which are due to qualify in the upcoming months. To maximise the utility of additional staff, and therefore maximise capacity, it is important that we have a sufficient number of suitable echo machines. Without this, workflow will be less efficient, and as a result capacity will be lower than our potential. •Increased waiting times for echo can delay patient's diagnosis and/or assessment of complex heart disease and its treatment. •Additional echo machines will facilitate us in increasing our capacity and therefore reduce our reliance upon costly external locum staff which we are currently dependent upon in order to meet demand. •Without additional echo machines there will be a potential breach of cardiac diagnostic targets.	one of two	Specialist Services		yes	£135,319.77	Mike Henson (Cardiff and Vale UHB - Cardiac Physiology)		2023/24
26/27	Replacement	Adult ITU Drager Ventilators phase 2 for 24-25 FY	6	£	237,970.14	12	14/12/2023 09:16	Replacements for ICU ventilators that had their end of life date extended in COVID to 2025. This is a phased replacement, 11 needed in total.		Specialist Services	Quote		£39,661.69		Ed Chapman	2024/25
?	Replacement	Dental Units for Barry Hospital	1	£	443,879.00	9	12/03/2024 10:39	Complex bid under review	Attempting to get meeting with Planning and PCIC	Dental CDS	Quote;#CMG Form		£443,879.00	Emma Prosser (Cardiff and Vale UHI	emma prosser Karen Lewis	2022/23
?	Replacement	Dental Units St. Davids	1	£	297,592.00	9	12/03/2024 10:43	Complex bid under review	Attempting to get meeting with Planning and PCIC	Dental CDS	CMG Form;#DoI;#Quote		£297,592.00	Emma Prosser (Cardiff and Vale UHI	Emma Prosser Karen Lewis	2022/23
?	Additional	Hemosphere Advanced monitoring base unit	2	£	155,160.00	15	09/04/2024 15:57	Currently being considered for submission to IG via value in health team	HOLD for now	Specialist Services		no	£77,580.00	Ian Sidney (Cardiff and Vale UHB - C	Manish.Pandey@wales.nhs.uk	2023/24
?	Additional	GLOBAL A6 FLOORSTAND MICROSCOPE	1	£	27,508.00	9	28/11/2022 14:17	New/additional equipment;		Dental	CMG Form;#Quote;#DoI		£27,508.00	Paul Bayliss (Cardiff and Vale UHB -	Matthew Thomas thomasmb@cardiff.ac.uk	2022/23
?	Additional	Synthes TRS Saw	2	£	58,305.10	9	03/02/2023 08:15		Part of Small power tools, HOLD for now.	Surgery		Yes	£29,152.55	Nikki Rabone (Cardiff and Vale UHB	nikki.rabone@wales.nhs.uk	2022/23
?	Additional	Fibroscanning machine	1	£	16,000.00		28/11/2022 14:17	(blank)		Medicine/Endoscopy			£16,000.00	Shannon Bakan (Sh081641)		2022/23
?	Additional	Hepatology Bladder scanner	1	£	8,430.00		28/11/2022 14:17	New/additional equipment;Better patient outcomes;		Surgery			£8,430.00	Shannon Bakan (Sh081641)		2022/23
?	Additional	Da Vinci Robot Endoscopy sets	2	£	169,768.42		22/12/2023 13:54	To support additional cancer pathway activity in Q4.	Needs a business case	Surgery, Urology	Quote	no	£84,884.21	Krishna Narahari (Cardiff and Vale U	Matt Temby, Tina Bayliss, Richard Boswell	2023/24
				£	**3,745,539.98**											

Chilcott,Rachel
21/08/2024 11:48:04

Report Title:	TRAMS- Radiopharmaceutical Business Justification Case – NHS Wales Shared Services Partnership			Agenda Item no.	3.1.1	
Meeting:	Finance & Performance Committee	Public	X	Meeting Date:	17 July 2024	
		Private				
Status *(please tick one only)*:	Assurance	Approval	X	Information		
Lead Executive:	**CD&T Director of Operations/Executive Director of Finance**					
Report Author (Title):	**Deputy Director of Finance (Operational)**					

Main Report
Background and current situation:

Background

The Radio-pharmacy at UHW ceased operations in 2023. It was the main provider of radiopharmaceuticals to facilitate Gamma camera scans at UHW and UHL. Since its closure C&V UHB has procured limited supply from Swansea and Bristol. The reduced supply has impacted patient treatment capacity and throughput. NHS Wales Shared Services has developed a revenue and capital Business Justification Case (BJC) for submission to Welsh Government under the banner of its TRAMS (Transforming Access to Medicines) programme.

Shared Services Partnership (SSP) are seeking support from NHS Wales stakeholders for the business model underpinning their BJC.

Proposal

The impending obsolescence of equipment in the UHW Radio-pharmacy prompted the development of plans by C&V UHB for a capital bid to Welsh Government in 2020. At this time Welsh Government expressed its preference that a revised radiopharmaceutical service be developed under the strategic umbrella of the TRAMS programme being led by SSP. The C&V business case development was stood down.

The interim period has seen delays in the development of a revised service model, impacted by Covid. Consequently, the UHW service ceased operations before the re-establishment of a replacement in house NHS Wales service. During this period C&V UHB has been sourcing limited supply from Swansea and Bristol.

NHS Wales Shared Services Partnership has developed a Business Justification Case to submit to Welsh Government which seeks support from stakeholder NHS Wales organisations for its submission process. Working groups involving stakeholders have contributed to the attached BJC.

The proposed unit would be located within the IP5 (Imperial Park) facility in Newport, South Wales.

The BJC provides a realistic profile of likely costs and profiles the recharge of costs across customer organisations based on current regulations, specifications and recent, relative consumption patterns of products. The cost sharing profile broadly returns C&V to a financial position it would have been in before the cessation of the C&V service although the financial recharge to C&V UHB will vary in the future according to absolute and respective demand patterns.

Chilcott, Rachel
21/08/2024 11:48:04

There are also two financial risks associated with transition :-

- A number of C&V UHB staff who previously worked in the Radio-pharmacy may not transfer to the new service for a number of employment contractual and service reasons. Mitigation for this risk (estimated at circa £0.150m to £0.250m) would be alternative employment opportunities within vacancies that emerge within C&V UHB over the period.
- Velindre NHS Trust is a stakeholder organisation for Radio-pharmacy services and will see an increase in recharged costs arising from the BJC funding shares proposal. Velindre in turn will seek to recover the increase in cost from the health boards that commission oncology services from Velindre, including C&V UHB. This cost pressure presentation is anticipated from 2025-26 onwards and estimated at £0.040m

These are reasonable risks to manage within the overall proposed financial framework for the new service.

Governance Framework for support and approval by C&V UHB
The value of the commitment towards the BJC of £0.643m requires approval by the UHB governance assurance framework.

The profiled share of costs for C&V UHB within the BJC presents an increase in C&V costs of £0.354m. This BJC presentation of costs does not take into account the reduction in the costs of previous provision of the radio-pharmacy which were not fully recovered by C&V UHB from purchasing organisations. Taking these into account means that the proposed costs of the new service for C&V UHB broadly match the financial liability that was previously bourne.

The governance assurance pathway will be :-

- Investment Group – 3rd July 2024 - Approved
- Senior Leadership Board – 4th July 2024 - Approved
- Finance & Performance Committee – 17th July 2024
- Board Meeting consideration – 25th July 2024

If the case is approved through the C&V UHB governance assurance framework, confirmation of support will be given to NHS Wales Shared Services Partnership after the Board meeting on 25th July 2024.

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

Following the cessation of internal supply, future access to adequate and timely supply of Radiopharmaceutical products is a key service consideration for the UHB. The TRAMS model provides longer term stability of supply and, financially, broadly fits within the cost quantum prior to the cessation of the C&V UHB service.

Recommendation:

The Committee are requested to:

.

- **NOTE** the business model presented in the Business Justification Case prepared by Shared Services Partnership for the future provision of Radiopharmaceutical products to NHS Wales organisations including C&V UHB.
- **NOTE** the fair shares financial risk share principle that underpins the funding model
- **RECOMMEND** to the Board that it **APPROVES** support for the BJC

Chilcott, Rachel
21/08/2024 11:48:04

Link to Strategic Objectives of Shaping our Future Wellbeing: *Please tick as relevant*			
1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	X
2. Deliver outcomes that matter to people	x	7. Be a great place to work and learn.	
3. All take responsibility for improving our health and wellbeingrd K		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*									
Prevention		Long term	x	Integration		Collaboration	x	Involvement	

Impact Assessment: *Please state yes or no for each category. If yes please provide further details.*
Risk: Yes
Access to stable Radiopharmaceutical supply for patient services
Safety: Yes/No
Access to stable Radiopharmaceutical supply for patient services
Financial: Yes
As detailed in the report.
Workforce: Yes/No
No
Legal: Yes/No
No
Reputational: Yes/No
Yes, if forecast financial position is not delivered.
Socio Economic: Yes/No
No
Equality and Health: Yes/No
No
Decarbonisation: Yes/No
No

Approval/Scrutiny Route:	
Senior leadership Board	Date: 19th June 2024
Finance Committee	Date : 17th July 2024
Board	Date : 25th July 2024

Chilcott,Rachel
21/08/2024 10:48:04

Business Justification Case

South East Wales Radiopharmacy

Status	Issued for approvals
Version	2.2
Date	3 July 2024

Version	Date	Changes to content
1.0	17/11/23	First submission to Welsh Government
1.1	10/06/24	Re-drafted for second submission
1.2	11/06/24	Circulated for review, to become v2.0 once finalised
2.0	28/06/24	Updated explanatory text, and preferred funding option. Case now issued for approvals
2.1	01/07/24	Additions requested as per Programme Board minutes 1/7/24
2.2	03/07/24	Future year cost profile added as requested by Programme Board FD rep

Approvals	Version	Date	Decision
TrAMs SE Hub Project Board	1.0	17/11/23	Approved
TrAMs Programme Board (SRO)	1.0	17/11/23	Approved by SRO Action
Shared Services Partnership Committee	1.0	23/11/23	Approved
TrAMs SE Hub Project Board	2.0	27/06/24	Approved
TrAMs Programme Board	2.0	01/07/24	Planned
Shared Services Partnership Committee	2.0	18/07/24	Planned
TrAMs Programme Board	2.1	01/07/24	Approved

Chilcott,Rachel
21/08/2024 11:48:04

Contents

	Chapter	Page
	Executive Summary	3
1	Strategic Case	4
2	Economic Case	13
3	Commercial Case	27
4	Financial Case	29
5	Management Case	35
	Appendix – Estates Cost Forms for Preferred Option	
	Appendix – Drawings of the proposed facility	

Executive Summary

This Business Justification Case (BJC) seeks approval for capital investment in preparative Radiopharmacy facilities in the South East Wales region.

The case is prepared in the context of:

- The urgent clinical need resulting from the forced closure of the old legacy Radiopharmacy facility.
- The provision of a safe and regulatory compliant facility of sufficient size to meet the expected future demand.
- Meeting the overarching Transforming Access to Medicines Programme (TrAMs), requirements outlined in the current endorsed TrAMs Programme Business Case.

Due to the points above it has been agreed with Welsh Government to submit a BJC with costs to the maturity of a Full Business Case (FBC) rather than an Outline Business Case (OBC) followed by an FBC.

The case recommends a total capital investment of £9.2m to be made through the TrAMs Programme, under the governance of the Shared Services Partnership Committee. The preferred option site is Imperial Park Building No.5, Newport.

Of this sum, £2.3m has already been funded in the development of the BJC together with the purchase of the key equipment requirements which have significant lead in times, so the net capital funding commitment requested from Welsh Government **is circa £6.9m to complete the project**. No capital funding is being sought from Health Boards and Trusts.

Contracts are in place to support delivery of the project, so the remaining expenditure is expected to be incurred within 6 months of the Investment Decision. Therefore, if the decision is taken by 1 Sept 2024, then the whole remaining balance is expected to be committed during the financial year 2024/25.

The revenue commitment to operate the service is also set out in this case.

Shared Services Partnership Committee is invited to **Approve the Business Justification Case together with the expected revenue consequences of the new service model.**

Chilcott,Rachel
21/08/2024 11:48:04

1. Strategic Case

1.1 Strategic Context

Radiopharmacy is a service that prepares radioactive injectables for patients, mostly for diagnostic purposes in support of Gamma Camera scans, but also a small number of therapeutic injections. Within South East Wales the service is currently managed by Cardiff and Vale University Health Board (CAVUHB) Nuclear Medicine department, with professional oversight and Quality Assurance support from the Health Board's Pharmacy department

The short shelf life of the product means that the injections take place on the same day as the medicine is prepared, usually within 1 to 4 hours

A number of regulators are involved in overseeing the preparative service including:

- Medicines Health Regulatory Authority (MHRA)
- Natural Resources Wales (NRW)
- Health and Safety Executive (HSE)
- Office of Nuclear Regulation (ONR)

The service is also supported by a contracted Radiation Protection Advisor (RPA) and Radioactive Waste Advisor (RWA). These are required by legislation.

The Transforming Access to Medicines (TrAMs) Programme Business Case which was endorsed by the Minister for Health and Social Care in March 2021 determined that the future reprovision of Radiopharmacy services would be in an All-Wales service, hosted within NHS Wales Shared Services Partnership (NWSSP) and delivered through 3 regional hubs. As at June 2024, the Outline Business Case for the first of these hubs, in South East Wales, is in preparation. Outline design work has been undertaken to test the fit of this Radiopharmacy development alongside the larger Hub investment in the Imperial Park 5 (IP5) building in Newport, owned and operated by NWSSP. A good fit has been established and the two developments aligned and deconflicted. It has been established by outline concept design that there is sufficient power for both.

Open issues within the TrAMs SE Wales Hub Project which have not yet been completed include:

- Planning Permission
    - A Planning Pre-Engagement process has been carried out based on the design concepts for the IP5 site.
    - It is intended to submit a planning application covering both the Radiopharmacy and the Hub in July 2024.
- Equipment Procurement including isolators
    - Pre-tender engagement was carried out in Oct 2021.
    - A further round to update costings was carried out in Nov 2023.
    - The tender for 15 Hub isolators is expected to be offered in Autumn 2024, aligned with the detailed design phase of this project.
- An Organisational Change Process (OCP) will identify if staff at C&V are impacted by TUPE regulations, and where TUPE applies, then they will transfer to NWSSP.
    - Planning for this is underway within the TrAMS Programme, working in partnership with Staff Side representatives, Health Boards and Trusts.

Chilcott, Rachel
21/08/2024 11:48:04

1.2 Strategic Case for Change

Radiopharmacy services in South East Wales have, until October 2023, been provided on a regional basis by CAVUHB, supporting patients in Aneurin Bevan University Health Board (ABUHB), Cwm Taf Morgannwg University Health Board (CTMUHB), and Velindre University NHS Trust (VELUNHST). The legacy unit is located within the University Hospital Wales and daily deliveries are made to nuclear medicine departments at the following sites:

- University Hospital Wales
- University Hospital Llandough
- Royal Glamorgan Hospital
- Royal Gwent Hospital
- Nevill Hall Hospital
- Velindre Cancer Centre

Deliveries are time critical and two dedicated vans and specially trained drivers are used for deliveries. This transport service is proposed to transfer to provision by NWSSP Health Courier Service in the near future.

9,028 individual patient doses were produced for the SE region in this period from October 2022 to September 2023 was:

- 230 for lung indications
- 875 for renal indications
- 1468 for cardiac indications
- 2014 for bone indications
- 2279 for cancer indications
- 2162 for other indications

Organisationally the split of patient doses for this period is:

- 3350 for CAVUHB
- 3380 for ABUHB
- 1028 for CTMUHB
- 1270 for VELUNHST

Patient doses are first prepared in multi dose vials, before being drawn up into individual syringes. The total demand for 9,028 doses is supplied by 4,012 vials, so on average 2.25 doses per vial. This ratio varies considerably depending on how many patients are booked into each clinic, giving both an efficiency challenge, and an opportunity for the service.

The existing service was staffed by 19 individuals, 18.2 WTE, but with a number of split role posts undertaking both technical and clinical work. Disaggregating the split roles, the work content for the existing CAVUHB Radiopharmacy unit standing alone is estimated at 13.2 WTE.

The legacy unit has been known to be at the end of its life for some time. Following an MHRA inspection in 2019, CAVUHB produced a Business Case in 2020 for a replacement, but this investment was deferred in favour of the TrAMs Programme alternative.

Chilcott, Rachel
21/08/2024 11:48:04

In October 2023 a further MHRA inspection took place, which identified a significant number of defects in the service which required immediate action. Following this inspection CAVUHB made the decision to close the legacy unit and examine alternative options.

Time limited service continuity measures have been put in place involving supply from outside the region, including by Swansea Bay University Health Board (SBUHB), Birmingham and Bristol NHS Trusts. These arrangements are temporary in nature and are not currently meeting the whole clinical demand.

On 24 October 2023 Paul Bostock, Chief Operating Officer, wrote on behalf of CAVUHB to Welsh Government and NWSSP, stating that CAVUHB's preference was for NWSSP to expedite the replacement service by means of the TrAMs programme.

On 25 October 2023 the government's Chief Pharmaceutical Officer Andrew Evans requested NWSSP to formulate an Option Appraisal to support an immediate investment in Radiopharmacy facilities under the TrAMs programme.

1.2.1 Impacts during the interim Service since shutdown

Analysis of the current interim service from SBUHB operating from one isolator, in one cleanroom, covering the whole of South and West Wales (12 major hospitals and cancer centres) has shown that while at this point the most harmful impacts on patient care have been successfully mitigated, there is still significant adverse impact:

- The last period for which CAVUHB was able to offer full uninterrupted service was May and June 2023, during which there were patient numbers of 1,371 and 1,374 respectively. It is noteworthy that even at full capacity the demands across the South East Wales region are not met. This is noted in the ABUHB impact section below.
- Service pattern from July-December 2023 was very unstable, with a number of shutdowns in CAVUHB culminating in closure, heavy rescheduling of patients, and short-term service support from a variety of providers including SBUHB, Birmingham and Bristol Trusts.
- Months January, February and March 2024 are reflective of the total capacity from Swansea with a shortfall of capacity of approximately 300 patient treatments per month compared to full production months in May and June 2023. This shortfall is reflected in the considerable increases in patient waiting times and 8-week breaches at individual health board nuclear medicine sites in "site impacts" sections below.
- April 2024 is significantly impacted by the SBUHB Radiopharmacy "firebreak" where there were a number of significantly reduced capacity days from 22nd April to 3rd May. The reduction in capacity was considered essential to ensure that quality and capacity aspects of the service were maintained particularly related to the greater than 100% increase in throughput through the SBUHB Radiopharmacy unit.

	Swansea hospitals					Cardiff & Vale hospitals												
	SING	MTON	POW	NPTH	WBUSH	RGWENT		RGLAM		LLAN		UHW		VELINDRE		NEVH		
Month	Patients	Patients	Patients	Patients	Patients	UHW Pts	Swa Pts	UHW Pts	Swa Pts	UHW Pts	Swa Pts	UHW Pts	Swa Pts	UHW Pts	Swa Pts	UHW Pts	Swa Pts	Monthly Total
Apr-23	184	49	60	9	75	123	0	58	0	58	0	154	0	103	0	114	0	987
May-23	300	79	77	15	142	134	0	84	0	76	0	197	0	101	0	166	0	1371
Jun-23	311	77	66	24	139	135	0	66	0	66	0	218	0	147	0	125	0	1374
Jul-23	262	40	82	9	147	57	14	15	26	14	36	38	4	20	100	19	0	883
Aug-23	286	0	99	17	136	73	0	34	11	37	23	109	6	84	57	58	0	1030
Sep-23	294	0	75	12	159	134	0	97	0	73	0	183	0	101	0	110	0	1238
Oct-23	324	0	118	12	164	45	23	15	29	20	33	35	7	24	0	19	0	868
Nov-23	311	2	116	7	170	11	46	0	2	0	74	0	41	0	0	0	1	781
Dec-23	250	61	129	10	143	0	39	0	0	0	56	0	61	0	0	0	12	761
Jan-24	254	81	105	7	180	0	43	0	34	0	80	0	148	0	98	0	110	1140
Feb-24	241	86	55	6	176	0	63	0	41	0	88	0	135	0	117	0	87	1095
Mar-24	219	66	34	14	140	0	49	0	27	0	75	0	113	0	89	0	92	918
Apr-24	170	62	80	2	156	0	0	0	47	0	57	0	65	0	102	0	111	852

Chilcott, Rachel
21/08/2024 11:48:04

Table: patient doses achieved per clinical site in South and West Wales across the last 12 months, source: Health Board records.

1.2.2 Individual Nuclear Medicine site impacts

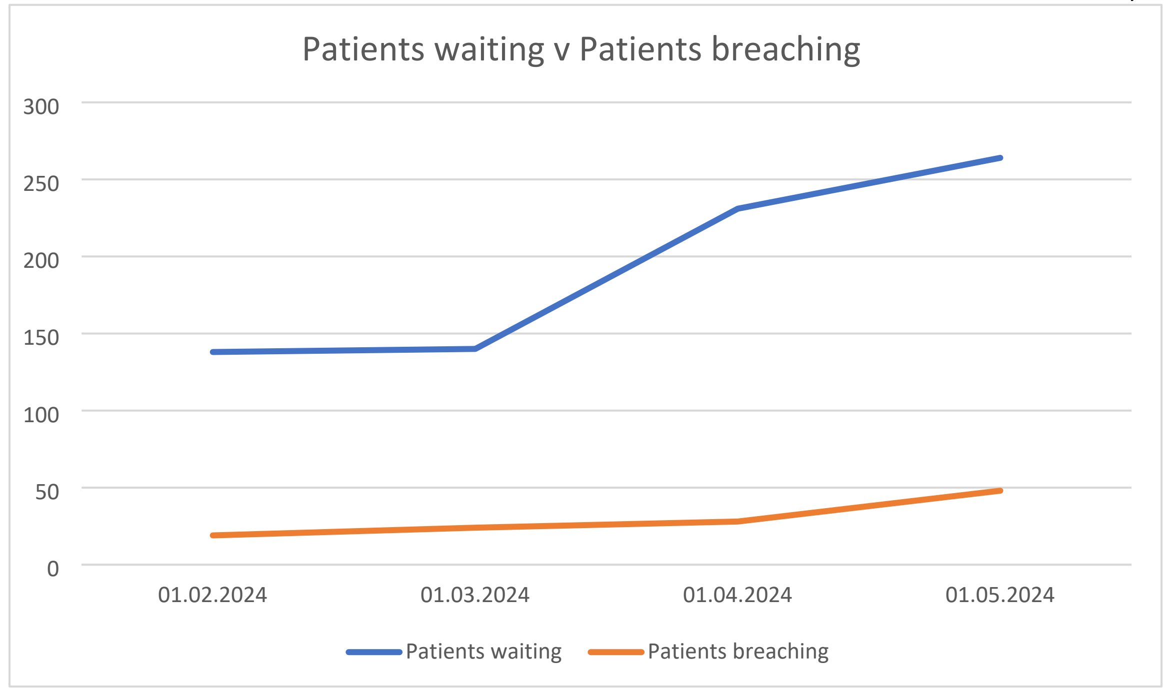
The following section has been prepared by the CAVUHB Head of Radiopharmacy, and TrAMs national lead for Radiopharmacy. The data in the tables have been assembled from Health Board Nuclear Medicine department records.

Cardiff and Vale UHB impact

CAVUHB University Hospital Wales is the largest hospital in Wales with numerous specialities as well as being a major trauma centre and centre for kidney transplantation. There is therefore a significant demand for Nuclear Medicine scans. Nuclear Medicine scanning is carried out at the Llandough (UHL) and University Hospital of Wales (UHW) sites with the UHW site having two gamma cameras compared to one at UHL. The scanning capacity at UHW has been significantly impacted since the CAVUHB radiopharmacy closure with previous patient capacity at around 75 patients per week reduced to 25 patients per week. This means the numbers of patients waiting for treatment has climbed rapidly since the radiopharmacy closure. There is a time lag for the numbers of patients breaching the 8 weeks cut off starting from a position of zero in January that has now climbed to 50 patients. The numbers of patients breaching and waiting times for CAVUHB is shown below. Furthermore, the current waiting times broken down into scan time indicate around 41 days of scanning time to clear the back log. CAVUHB prioritise urgent and cancer pathways but as a result see patients for other studies waiting much longer meaning routine scans become much more urgent the longer they are left.

Much of the impact on capacity is based on the impact of delivery times to the CAVUHB sites. Typically, UHW received all their radiopharmaceuticals before 9am from the CAVUHB radiopharmacy but now receive radiopharmaceuticals from SBUHB at around 12 noon each day. The ability to extend scanning days is limited by the short shelf life of radiopharmaceuticals and the skill mix of the radiographer team who have multiple responsibilities across CAVUHB radiology as well as Nuclear Medicine.

Chilcott,Rachel
21/08/2024 11:48:04



Senior clinicians at CAVUHB have indicated their concerns at the significant drop in morale within the Nuclear Medicine team with fears of losing radiographer staff to other modalities. One Consultant Radiologist indicated their concerns via an e-mail on 21/05/2024.

> *"We had requests for 4 urgent transplant renograms yesterday, normally expected on the day or next day depending on clinical severity. The earliest date we could find was 5th June without cancelling other patients already booked and been waiting months! It's a dreadful situation at the moment, the team are really stretched trying to accommodate these emergencies."*

Aneurin Bevan UHB impact

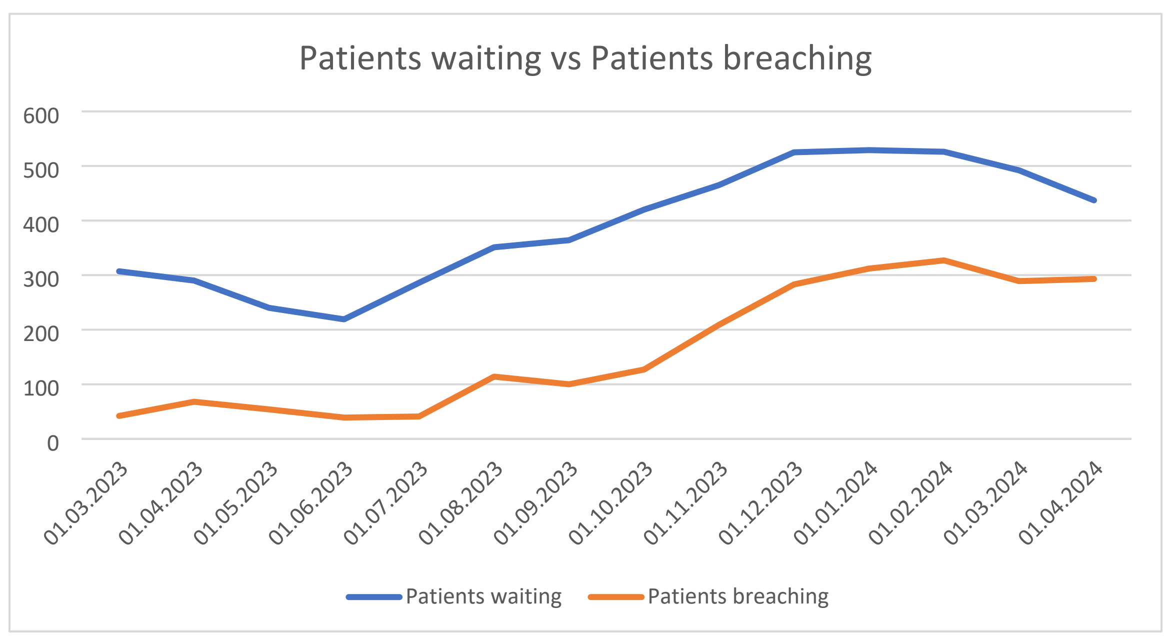
ABUHB has two sites that carry out Nuclear Medicine scanning at Royal Gwent and Nevill Hall hospitals with each having one gamma camera for scanning. The two graphical presentations below indicate a considerable increase in patients waiting and breaching at 8 weeks post the CAVUHB radiopharmacy closure in October 2023. It is noticeable that there is some reduction in waiting and breach times in April 2024 which is in part due to improvement around delivery and hours worked from 9am-5pm to 10am-6pm. It is not expected that the waiting lists/breach times will decrease much more significantly due to later delivery times and limited capacity of supply from SBUHB radiopharmacy. The activity graph shows a clear downward trend in activity post closure of CAVUHB radiopharmacy.

Prior to the closure there is evidence that full demand was not being met via supply directly from CAVUHB. This is for a number of reasons:

1. The closure of the CAVUHB facility due to environmental control issues in July/August 2023.
2. The limitations on capacity at CAVUHB due to the small physical size of the radiopharmacy facilities / equipment and ongoing environmental control issues due to the condition of the aging facilities e.g. consistently requests were received from ABUHB for cardiac scanning clinics for which capacity did not exist.

Chilcott,Rachel
21/08/2024 11:48:04

The new radiopharmacy facility at IP5 in Newport will have state of the art isolator and gassing technology which will meet future MHRA requirements as well as having increased efficiency and capacity to meet all of the South East Wales demand. Delivery times will also be considerably improved for ABUHB and all South East Wales sites.



An e-mail from a Consultant Radiologist at ABUHB raised particular concerns around the current limitations on their service and impact on patients and staff.

> *"Disruption to front line services is very significant and I've described it as feeling like a constant struggle at the moment. I'm changing requests for radionuclide studies to other modalities (against our previous practice) as much as possible. I have had to respond to a number of understandably concerned/disgruntled clinicians. Our staff have agreed to some changes to their working patterns to try to compensate for the later delivery times but staff are understandably opposed to some of the proposals which have included even more unfavourable hours of working. I'm concerned that we could lose good members of staff to other modalities. Morale is generally low."*

Hywel Dda UHB impact

Hywel Dda UHB has one Nuclear Medicine site based at Withybush General hospital. This is a comparatively small service and forms part of the Swansea Radiopharmacy's usual service delivery arrangements after the closure of the Withybush radiopharmacy in October 2022.

The Nuclear Medicine team indicated that there had been a significant impact on their services during the SBUHB "firebreak" period which ran 22nd April to 3rd May 2024. This was a period of significantly reduced volume of production to enable rectification of quality issues exacerbated by the significant increase in required capacity at a greater than 100% increase. The firebreak disruption resulted in 64 patients being rescheduled. Prior to the firebreak there were 3 occasions where an order was unable to be fulfilled or was reduced due to the Swansea Radiopharmacy exceeding capacity. The bone cancer scan waiting list has now exceeded 4 weeks post fire break.

Chilcott,Rachel
21/08/2024 11:48:04

There are also significantly more occasions where receipt of radiopharmaceuticals has exceeded being 1 hour late since the closure of CAVUHB radiopharmacy.

Cwm Taf Morgannwg UHB impact

Following the closure of the CAVUHB radiopharmacy UUnit all patients were moved to Princess of Wales (POW) hospital site which meant demand was not met with a focus on bone cancer scans and urgent scan patients. The Royal Glamorgan (RGH) has since re-opened and capacity is now split again between the two sites.

Bone cancer scan patients waiting times have increased to 4 weeks and urgent scans increased to 8 weeks. Routines scans were placed on hold and the current longest wait for a routine scan is 48 weeks. For RGH there are currently 43 patients waiting over 8 weeks and for POW 24 patients waiting over 8 weeks. The delivery times for POW have not been significantly impacted but RGH delivery times have been much more unpredictable significantly impacting scanning days.

Impact on Clinically Urgent/Cancer patients

Initially the time increased for USC referrals from 10 days to 4 weeks. Urgents increased to 8 weeks and routines were placed on hold, but the waiting lists have decreased apart from routine patients.

Velindre Cancer Centre impact

The throughput of diagnostic radiopharmaceuticals for Velindre Cancer Centre is stable and relatively low in comparison to some other centres. The closure of the CAVUHB radiopharmacy has disrupted start and finish times which has caused issues in the workforce for those with longstanding commitments such as childcare. Whilst Velindre do not currently have a waiting list, they are having to inform referrers of delays in imaging / GFRs. The GFRs are probably the most impacted as they now group them, to prevent single dose requests. This might mean that ideal ‘need by’ dates are missed for this patient group.

Conclusions

- The closure of the CAVUHB radiopharmacy has put significant pressure on the remaining SBUHB Radiopharmacy requiring significant increase in staffing whilst supplying all of South Wales Nuclear Medicine sites via one production cabinet as opposed to the previous three cabinets. This means there is no contingency support in case of failure of the remaining production cabinet.
- Due to increased throughput, there is greater risk of environmental failure within the production facility and has resulted in very strict capacity controls to ensure sterility assurance of final products and patient safety.
- Due to capacity restrictions, it is estimated that the numbers of patients scanned in South Wales has reduced by at least 30% which equates to around 300 patients per month. This has impacted different sites to varying degrees with for example University Hospital of Wales having capacity reduced most significantly even though it is the largest Nuclear Medicine site, with often the most urgent and complex patients due to its patient specialities. Since the CAVUHB closure throughput of patients has reduced in the region of 66%.
- Across South Wales the numbers of patients awaiting Nuclear Medicine scans has increased significantly with 8-week limits being breached increasingly after an initial lag as the time since closure of the CAVUHB radiopharmacy extends. This is significantly impacting patients but also

Chilcott,Rachel
21/08/2024 11:48:04

Nuclear Medicine staffing morale and longer-term departmental resilience as the times since CAVUHB radiopharmacy closure extends.

- To meet capacity and provide resilience for Nuclear Medicine across South Wales it is vitally important that a new Radiopharmacy service is built at Imperial Park Newport. The new site will ensure sufficient operational cabinet support for South Wales as well as providing contingency capacity in case of failure of the Swansea Radiopharmacy. It is notable that Radiopharmacy resilience across the UK is stretched with many older and failing facilities as well as services that have been impacted by MHRA inspections including reductions in capacity or even closure.

1.3 Service Model

A future service model has been agreed in line with the recommended best practice whereby the new regional Radiopharmacy units will manufacture the medicine in ready to use vial kits. These will be delivered to Nuclear Medicine departments where the patient injections will be drawn up from the vials. Typically, around two to three injections are drawn up from each vial. This is also the service model being used during the current Service Continuity arrangements within SBUHB, Birmingham and Bristol NHS Trusts.

This approach gives maximum flexibility to the Nuclear Medicine department to ensure that the right level of radioactivity is injected to each patient, from the level available in the vial immediately prior to the injection being given. It also maximises Radiopharmacy operator safety by limiting their time exposure to the radioactive product during manufacture. Nuclear Medicine departments that have not previously utilised this service model are being supported with training and equipment to ensure safe and effective drawing up.

The service model will be underpinned by new Service Level Agreements and Technical Agreements between the respective organisations.

The service will operate on the basis of a core staff and non-pay budget allocated to NWSSP at the time of service transfer. The variable costs of the medicine will be recharged on a wholesale basis, with an equitable charge to all users per unit of medicine supplied, inclusive of the medicine, consumables, and transport.

Overall financial and service governance will rest with the Health Boards and Trusts, exercised jointly through the mechanism of the Shared Services Partnership Committee. The financial impacts of this model are analysed in Chapter 4, the Financial Case.

Chilcott,Rachel
21/08/2024 11:48:04

2. Economic Case

The economic case in this document is focussed on site selection for the reinvested Radiopharmacy service. This chapter has been reviewed but is unchanged from version 1 of the case submitted in November 2023.

2.1 Success Criteria

Success Criteria for site selection for the new service are:

1. Strategic Criteria
    a. The site should be available for development now
    b. The site selection should if possible, align strategically with the TrAMs Programme
2. Meets the capacity demands for service to patients
    a. Within the South East Wales region [9,000 doses p/a]
    b. Also offers contingency to support South West Wales when required [6,000 doses p/a]
    c. Also offers contingency to support other UK sites such as Birmingham and Bristol, when that capacity is not being required within Wales.
3. Meets all current and envisaged regulatory requirements
    a. Layout including room segregations
    b. Room air handling and filtration
    c. Equipment including isolators with Hydrogen Peroxide based decontamination
4. Provides a pleasant and functional work environment including
    a. Production clean rooms
    b. Supporting office, laboratory, storage, and ancillary spaces
    c. Staff facilities including toilets and mess rooms
5. Is accessible to current and future staff
    a. Including access to public transport, walking, cycling, and
    b. Car parking options
6. Facilitates reliable delivery to all major hospitals within the region within 60 minutes of setting out
    a. Good access to the trunk road network
    b. Limited exposure to known traffic bottlenecks
    c. Alternative route options in the event of disruption

2.2 Investment options

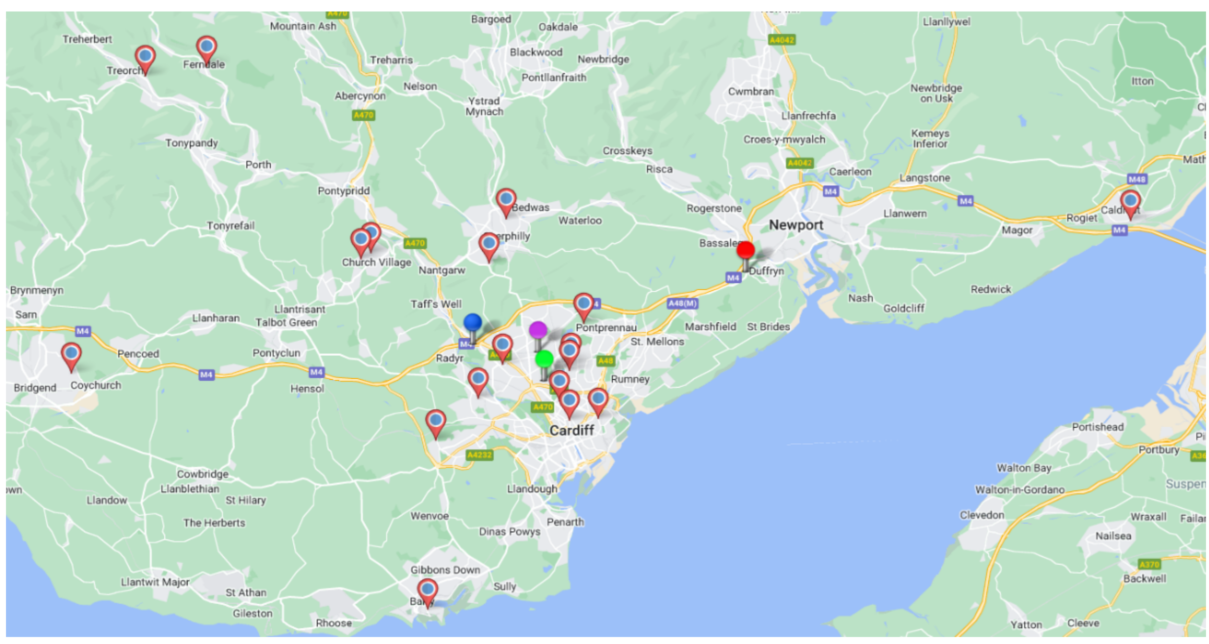
The following investment options have been identified:

1. Re-investment of the unit in its current location, within the Nuclear Medicine department of UHW
2. Replacement Unit elsewhere on the UHW campus
3. Replacement Unit within the site footprint of St Mary's Pharmaceutical Unit (SMPU). This was the preferred option of the 2020 Business Case
4. Replacement Unit within the footprint of Imperial Park building 5 (IP5), Newport
5. Replacement Unit as part of a deliberate investment in the TrAMs South East Wales Hub, at a site other than IP5. The other candidate site is in Coryton.
6. Augmentation of the existing SBUHB unit at Singleton to provide capacity to serve the whole of South Wales

Chilcott,Rachel
21/08/2024 ..:48:04

2.3 Staff Locations

Home addresses of the staff who work some or all of their duties within the existing legacy unit have been anonymised and mapped against the candidate site locations:



Option	Site	Postcode
1	UHW Nuclear Medicine	CF14 4XW
2	UHW Other	CF14 4XW
3	SMPU	CF14 7HY
4	IP5	NP10 8BE
5	Coryton	CF14 7HY
6	Singleton (Not shown on map)	SA2 8 QA

As expected, there is a concentration of staff within Cardiff, with a number also coming down the Taf and Rhondda Valleys, with outliers in Barry, Caldicot, and Bridgend.

If the existing unit at UHW is taken as being the reference point, and using google maps functionality the travel to work implications can be assessed as follows:

- Sites 1 and 2 – No change
- Sites 3 and 5 – Some increases and some decreases, neutral overall
- Site 4 – Net additional journey time of approx. 17 mins by car.
- Site 6 – Net additional journey time of approx. 67 mins by car.

These assessments are used to contribute to the scoring of question 5 in the next section.

2.4 Assessment of Options

All options are devised to provide a permanent solution, with a lifetime in excess of 20 years. Temporary build options were discussed but have been discounted because:

- In order to pass regulatory inspection, the unit has to be robust and finished to a high standard. Having scoped the unit on this basis, it will by default produce a solution able to last many years in service. The quality of the NWSSP Medicines Unit is an example of this.
- Where "temporary" units have been built in the past, they have ended up exceeding their design life anyway (e.g. the Aseptic Unit as UHL). Therefore, it makes sense to specify the build for a long life from the outset.
- TrAMs principles are intended to break the cycle of temporary, poor value, investment choices.

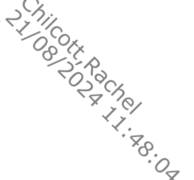
The options can be assessed against the success criteria as follows. All Items are scored out of 3, with 3 being the best score and 1 the lowest compliant score.

Scores of 0 can also be given and are red rated, as having the potential to be exclusionary for the option, if the factor is deemed sufficiently critical.

Option 1	**Existing CAVUHB Unit Refurbishment**	
Criteria	Narrative	Score out of 3
1.a Site Available Now	The site is available now. The site is however within a busy Medical Physics and Clinical Engineering (MPCE) department. Any development will therefore need to be carefully planned in collaboration with the Health Board to protect existing critical services.	2
1.b Alignment with TrAMs	This option for a regional preparative unit within a Clinical department is not aligned with the TrAMs Programme.	1
2.a Meets SE Wales Demand	The site has shown it can meet this level of demand based on past performance	3
2.b Contingency for SW Wales	Unclear the extent to which output could be increased, in combination with heavily revised layouts and processes	1
2.c Contingency for UK sites	Unclear the extent to which output could be increased, in combination with heavily revised layouts and processes	1
3.a Layout and Space	The square meterage available within the MPCE Department is not sufficient to achieve a compliant layout, ducted isolators, and air plant. This has been confirmed by external assessment. To create the floor space would require the decant of a number of other adjacent services.	0

Chilcott,Rachel
21/08/2024 11:48:04

3.b Room air handling	The height restriction within the building structure appears to preclude the installation of a compliant number of Fan Filter Units	0
3.c Gassing Isolators	The height restriction precludes the installation of ducted gassing isolators, as required to meet current regulatory needs	0
4.a Working Environment	Assessed as acceptable to the current staff	2
4.b Storage and Ancillary	Unlikely to be able to meet the full requirements within the available footprint	1
4.c Staff facilities	Staff facilities on the hospital site are generally assessed as good	3
5.a Accessibility Walk/Cycle/PT	The campus has good accessibility for current and future staff	3
5.b Car parking	Car parking on the site is difficult and likely to remain so	1
6.a Deliveries – Trunk Network	Traffic congestion when exiting the site can be a problem, with significant urban traffic to be negotiated before accessing the trunk network	2
6.b Congestion risk	Generally OK but delivery times not always achieved, particularly to Nevill Hall, being the furthest away of the daily deliveries	2
6.c Alternative Routes	Alternative routes out of Cardiff do exist, to Junctions 28, 30 and 32 of the M4	3
Total Score		**25**



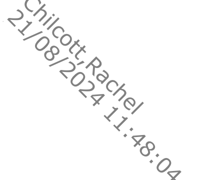
Option 2	New UHW site	
Criteria	Narrative	Score out of 3
1.a Site Available Now	No site has yet been identified on the UHW Campus that is available to develop now, and can be protected from future redevelopments on the site. CAVUHB Execs have excluded this option, and it is scored "0" in this analysis as a result.	0
1.b Alignment with TrAMs	This option to develop on a clinical campus is not aligned with TrAMs	1
2.a Meets SE Wales Demand	If a site could be identified, there is no reason to doubt that unit could be built to sufficient capacity.	3
2.b Contingency for SW Wales	If a site could be identified, there is no reason to doubt that unit could be built to sufficient capacity.	3
2.c Contingency for UK sites	If a site could be identified, there is no reason to doubt that unit could be built to sufficient capacity.	3
3.a Layout and Space	As a new build design, the unit would be expected to comply with all requirements	3
3.b Room air handling	As a new build design, the unit would be expected to comply with all requirements	3
3.c Gassing Isolators	As a new build design, the unit would be expected to comply with all requirements	3
4.a Working Environment	As a new build design, the unit would be expected to comply with all requirements	3
4.b Storage and Ancillary	As a new build design, the unit would be expected to comply with all requirements	3
4.c Staff facilities	Staff facilities on the hospital site are generally assessed as good	3
5.a Accessibility Walk/Cycle/PT	The campus has good accessibility for current and future staff	3
5.b Car parking	Car parking on the site is difficult and likely to remain so	1
6.a Deliveries – Trunk Network	Traffic congestion when exiting the site can be a problem, with significant urban traffic to be negotiated before accessing the trunk network	2
6.b Congestion risk	Generally OK but delivery times not always achieved, particularly to Nevill Hall, being the furthest away of the daily deliveries	2
6.c Alternative Routes	Alternative routes out of Cardiff do exist, to Junctions 28, 30 and 32 of the M4	3
Total Score		**39**

Chilcott,Rachel
21/08/2024 11:48:04

Option 3	**St Marys Pharmaceutical Unit**	
Criteria	Narrative	Score out of 3
1.a Site Available Now	Although the 2021 Business Case recommended this option, there are significant concerns about the impact of a major building project on the rest of SMPU, with the proposal being to build on stilts over the loading bay. This building delivers critical medical supplies to the region, and itself has identified risks and fragilities. As such the readiness of the site for development must be questioned. This option was costed at £12m in 2021, and costs have likely increased by around 30% since then. Planning permission will need to be sought.	1
1.b Alignment with TrAMs	By co-locating the service with an existing Technical Services facility this option follows TrAMs principles to some extent. SMPU is however itself in need of re-investment, and has not been shortlisted for the TrAMs Hub, so this option is unlikely to remain aligned in the medium term.	2
2.a Meets SE Wales Demand	If a site were deemed suitable, there is no reason to doubt that unit could be built to sufficient capacity.	3
2.b Contingency for SW Wales	If a site were deemed suitable, there is no reason to doubt that unit could be built to sufficient capacity.	3
2.c Contingency for UK sites	If a site were deemed suitable, there is no reason to doubt that unit could be built to sufficient capacity.	3
3.a Layout and Space	If a site were deemed suitable, there is no reason to doubt that unit could be built to sufficient capacity.	3
3.b Room air handling	If a site were deemed suitable, there is no reason to doubt that unit could be built to sufficient capacity.	3
3.c Gassing Isolators	If a site were deemed suitable, there is no reason to doubt that unit could be built to sufficient capacity.	3
4.a Working Environment	If a site were deemed suitable, there is no reason to doubt that unit could be built to sufficient capacity.	3
4.b Storage and Ancillary	If a site were deemed suitable, there is no reason to doubt that unit could be built to sufficient capacity.	3
4.c Staff facilities	Existing staff rooms at SMPU are at capacity, in particular there is a shortage of toilet	1

Chilcott, Rachel
21/08/2024 11:48:04

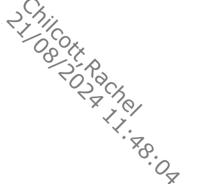
	facilities for the number of staff employed. It might be possible to mitigate this by negotiating access to the adjacent café and toilets in Woodlands House, but these might not be available at the time when the Radiopharmacy Staff begin their shifts.	
5.a Accessibility Walk/Cycle/PT	The site has fair accessibility for current and future staff	3
5.b Car parking	Additional car parking on an adjacent lot could potentially be sourced, but this would be subject to a commercial negotiation and cannot currently be guaranteed.	1
6.a Deliveries – Trunk Network	Traffic congestion when exiting the site can be a problem, with significant urban traffic to be negotiated before accessing the trunk network	2
6.b Congestion risk	Can be an issue at peak times	2
6.c Alternative Routes	Alternative routes out of Cardiff do exist, to Junctions 28, 30 and 32 of the M4	3
Total Score		**39**



Option 4	Imperial Park Building No 5 (IP5)	
Criteria	Narrative	Score out of 3
1.a Site Available Now	The long lease to the site is owned, and an area of the warehouse has been identified as potentially suitable. Existing stock will need to be decanted to clear the area for development. Planning permission for change of use and modifications to the exterior elevation will need to be sought.	2
1.b Alignment with TrAMs	This site is one of the shortlisted proposals for the TrAMs SE Hub. Even if IP5 is not selected for the main hub investment, certain national functions such as Pharmacy Directorate and National Quality Team will remain based at the site, and so be able to contribute to the management and control of the radiopharmacy service.	3
2.a Meets SE Wales Demand	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
2.b Contingency for SW Wales	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
2.c Contingency for UK sites	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
3.a Layout and Space	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
3.b Room air handling	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
3.c Gassing Isolators	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
4.a Working Environment	The provisional location includes exterior windows to allow natural light into the clean rooms	3
4.b Storage and Ancillary	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
4.c Staff facilities	Existing staff rooms and toilets allocated to CIVA@IP5 are large enough to absorb the expected increase of circa 10 staff. The opportunity would be taken to refurbish and upgrade the facility, as the finishes date from before NWSSP took possession of the building in 2019, and layouts could be improved with a view to further expansion in the future. There is currently no café for hot food on site.	2
5.a Accessibility Walk/Cycle/PT	The campus is accessible via bus and cycle routes along the A48. Depending on where	2

Chilcott,Rachel
21/08/2024 11:48:04

	staff currently live, this may be less accessible to them than the current site.	
5.b Car parking	Car parking at IP5 is good by comparison with hospital sites. Average journey time increase of 17 mins compared to UHW.	3
6.a Deliveries – Trunk Network	The site has good access to the trunk road network at junction 28 of the M4.	3
6.b Congestion risk	Congestion around the junction can be an issue at peak times	2
6.c Alternative Routes	Alternative routes do exist, via the A48 and A467.	3
Total Score		**44**



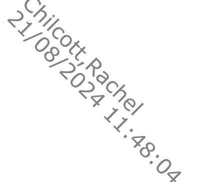
Option 5	**Coryton site**	
Criteria	Narrative	Score out of 3
1.a Site Available Now	The site is not yet in NHS Wales ownership, and a three cornered negotiation with a leaseholder and a freeholder will be needed to secure the site. On 15 Nov 2023 the Project Team was advised that the leaseholder was no longer offering their interest for sale.	0
1.b Alignment with TrAMs	This is one of the shortlisted sites for the TrAMs SE Hub. The investment in Radiopharmacy will only go ahead if the site is selected and purchased for the Hub. Alignment is therefore total.	3
2.a Meets SE Wales Demand	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
2.b Contingency for SW Wales	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
2.c Contingency for UK sites	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
3.a Layout and Space	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
3.b Room air handling	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
3.c Gassing Isolators	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
4.a Working Environment	The provisional location includes exterior windows to allow natural light into the clean rooms	3
4.b Storage and Ancillary	Sufficient space exists to allow a unit to be built to sufficient capacity.	3
4.c Staff facilities	Existing staff facilities are excellent	3
5.a Accessibility Walk/Cycle/PT	The campus is accessible via bus, cycle, and train routes.	3
5.b Car parking	Car parking is ample and segregated from the service yard.	3
6.a Deliveries – Trunk Network	The site has good access to the trunk road network at junction 32 of the M4.	3
6.b Congestion risk	Congestion around the junction can be an issue at peak times	2
6.c Alternative Routes	The site is on a cul-de-sac road accessed only from the Coryton gyratory. If that system is blocked then alternative access could be considered problematic. NWSSP HCS does have access in extremis to a blue light service in the event of threat to life.	2
Total Score		**43**

Chilcott,Rachel
21/08/2024 11:45:04

Option 6	**Singleton Hospital site**	
Criteria	Narrative	Score out of 3
1.a Site Available Now	The site is available now, and development work could in theory start immediately. The site is a working regional medicines distribution unit, currently providing planned services to three Health Boards (CTMUHB, SBUHB, and HDUHB) and contingency radiopharmacy support to CAVUHB, and is located on a busy hospital site. Any development will therefore need to be very carefully planned in collaboration with the Health Board to protect existing critical services.	2
1.b Alignment with TrAMs	As a regional Technical Services facility, investment here has some alignment with TrAMs principles. The site is however on a busy clinical campus, in a locality not shortlisted for the South West Hub, so this alignment is unlikely to persist in the medium term. If investment in this site precludes a radiopharmacy investment in the South East, then that is not in alignment with the Programme. If this investment is seen as part of service continuity mitigation while the South East investment is delivered, then there is strategic alignment. Scored “2” overall for this reason.	2
2.a Meets SE Wales Demand	The proposal is to convert the existing Blood Labelling room to prepare Technetium doses for South East Wales. Until this is scoped in detail, it is not possible to be certain that sufficient doses could be provided.	2
2.b Contingency for SW Wales	The unit cannot provide contingency for itself	0
2.c Contingency for UK sites	Probably too far away from Bristol or Birmingham to make any meaningful contribution	1
3.a Layout and Space	The “Blood suite” contains a layout dating from 2016, which is largely compliant, but would need careful planning to establish what the safe capacity for Technetium could be	2
3.b Room air handling	Designed for radioactive products and essentially compliant	3

Chilcott, Rachel
21/08/2024 11:48:04

3.c Gassing Isolators	Likely to be compliant, as a gassing isolator has been installed within the adjacent aseptic suite, of the same design	2
4.a Working Environment	No issues identified with the existing	3
4.b Storage and Ancillary	Potentially problematic as this would be shared with the other two existing suites, and has never been found fully sufficient by them since the site was developed	1
4.c Staff facilities	Fair for a hospital site, hot food canteen etc	3
5.a Accessibility Walk/Cycle/PT	The campus is accessible via bus, cycle routes, but is a long way away for existing Cardiff staff	1
5.b Car parking	Being a major regional hospital site, parking is problematic. Average staff journey time penalty of 67 mins compared to UHW.	1
6.a Deliveries – Trunk Network	Singleton hospital is on the wrong side of Swansea for access to the trunk network, and realistically will not be able to meet delivery times to the ABUHB hospitals. It is therefore a contingency for CTM, CAVUHB, and VELUNHST only.	1
6.b Congestion risk	Congestion on the waterfront road can be an issue at peak times	2
6.c Alternative Routes	It is possible to take alternative routes through Swansea if the waterfront road is blocked.	2
Total Score		**28**



Summary of Scores

	Site Investment Option					
Criterion	1 Existing	2 UHW	3 SPMU	4 IP5	5 Coryton	6 Singleton
1a	2	0	1	2	0	2
1b	1	1	2	3	3	2
2a	3	3	3	3	3	2
2b	1	3	3	3	3	0
2c	1	3	3	3	3	1
3a	0	3	3	3	3	2
3b	0	3	3	3	3	3
3c	0	3	3	3	3	2
4a	2	3	3	3	3	3
4b	1	3	3	3	3	1
4c	3	3	1	2	3	3
5a	3	3	3	2	3	1
5b	1	1	1	3	3	1
6a	2	2	2	3	3	1
6b	2	2	2	2	2	2
6c	3	3	3	3	2	2
Total	**25**	**39**	**39**	**44**	**43**	**28**

Evaluation of Preferred Way Forward

Options 1, 2, 5 and 6 are excluded as viable standalone investment options by having been scored "0" on key success factors.

Options 3 and 4 have been scored as viable, although some doubt remains about the practical viability of Option 3 for SMPU and the risk to the other services on the site of a major building project there. As the lower scoring of the compliant options, Option 3 is not taken forward in this case.

Option 5 scores higher than Option 3, and in the event that Option 5 were rescored as viable, the time risk of Coryton would need to be set against the Planning Permission risk of IP5. The investor needs to consider this also in the overall context of the TrAMs shortlist. If Coryton is not considered affordable as a Hub, then IP5 becomes the only investable option. If Coryton is affordable as the Hub, then it may still make sense to build the Radiopharmacy there too.

Option 6 in Swansea is not a viable long term option but could be considered as an interim contingency to boost supply while either Option 4 IP5 or Option 5 Coryton is built and commissioned. The staffing implication of this would need considerable further work, as only a small number of the existing staff may be able and willing to travel to Singleton, even on a temporary basis. Individual staff consultation would be needed to establish the viability of the option.

Chilcott,Rachel
21/08/2024 11:48:04

Preferred Way Forward

As of June 2024 the Coryton site is no longer being offered to the market.

The selected Preferred Way Forward based on the Economic Case is:

- Option 4 IP5

Chilcott,Rachel
21/08/2024 11:48:04

3. Commercial Case

3.1 Commercial Approach

The Commercial Case follows the procurement methodology developed to date for the TrAMs Programme. This can be summarised as follows:

- Utilise an existing building to minimise major construction works.
- Direct engagement of the **Clean Room contractor** by NWSSP, with the Clean Room contractor acting as Principal Contractor for their scope.
- Direct procurement of the major equipment (e.g. **Isolators**) by NWSSP capital teams, to avoid paying principal contractor's margin on these items.
- Any minor **building works** that are needed to be directly procured, segregated from the cleanroom works by either time or space, to maintain integrity of Construction Design and Management (CDM) and site management.
- Employer's side support to consist of
  - **Project Surveyor, Cost Advisor, and Principal Designer -** advisor to review contractor Risk Assessments and Method Statements, give advice, and maintain consistent approach to CDM.
  - **Specialist Validation** contractor to assist in drafting key pharmaceutical requirements documents and to support commissioning activity.
  - Specialist **Planning Advisor,** with supporting Transport Advisor and Environmental Advisor.
  - **Radiation Protection Advisor** and **Radioactive Waste Advisor.**
  - **Dangerous Goods Safety Advisor** to advise on delivery of the made product.
- Internal NWSSP support and resources not requiring to be contracted for consist of:
  - Project Management
  - Procurement Lead and resources
  - Finance Lead and resources
  - Legal Support if required during contract negotiations
  - Specialist Estates Services (SES) Surveyors and other resources including
    - Contract negotiations
    - Fire Advice
    - Specialist Mechanical & Electrical Advice
  - Health Courier Service for specialist transport of the medicines to hospital sites.

All contracts will be offered and awarded on a phased basis, giving contractual break points for 3 key project phases:

1. Outline Design Concepts to RIBA Stage 2
2. Detailed Design to RIBA Stage 4
3. Build, Validation, & Commissioning

The contracting authority will thus gain the benefit of having a warm supply chain ready to proceed, while not being committed to the delivery phase before funding is secured.

The contracts also include options for phases 4 and 5 related to the South East Hub Development, in the event that that case is funded.

Chilcott, Rachel
21/08/2024 11:48:04

3.2 Procurement Status

During the period December 2023 – February 2024 procurement processes were carried out with the support of NWSSP Capital Procurement team.

The fees to fund contract stages 1 and 2 were awarded in Dec 2023, so these contract phases have been committed to.

- Phase 1 for outline design to RIBA Stage 2 has now been completed.
- Phase 2 for detailed design to RIBA Stage 4 is in progress, forecast to complete in July 2024.
- Phase 3 for construction will not be committed to until the Investment Decision is made.

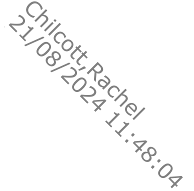
The only exception to this is the isolator supplier, who has been given early commitment to the full contract value, owing to the long lead time on these items. This decision was ratified by the Cabinet Secretary for Health and Social Care in May 2024.

The current commercial status of each major work package is:

Work Package	Contractor	Route to Market	Status
Project Surveyor	Cooke & Arkwright	SEWTAPS Framework	Mobilised and working on Phases 1 &2, ready to proceed with stage 3.
Cleanroom Contractor	Angstrom Technology	Open Tender	Mobilised and working on Phases 1 &2, ready to proceed with stage 3.
Isolator Supplier	Azbil Telstar	Open Tender	Early authorisation given to proceed with delivery due to long lead time.
Enabling building works	Tbc	SEWSCAP Framework	Currently in Procurement. Expected to be ready to proceed by Sept 2024
Validation Advisor	Scitech	Open Tender	Mobilised and working on Phases 1 &2, ready to proceed with stage 3.
RPA and RWA Advisor	RSK t/a Aurora	NOE Framework	Mobilised and working on Phases 1 &2, ready to proceed with stage 3.
Planning and Transport Advisor	Asbri Planning and Asbri Transport	Framework	Mobilised and working on Phases 1 & 2, ready to proceed with stage 3.

Out of the total Project Cost (excluding contingency), we estimate that by July 2024 75% of the Project costs will be secured by contract, rising to 85% by Sept 2024, once the enabling building works tender is awarded.

The remaining 15% represents movable fixtures and fittings, final utility connections, and modifications to the building security and fire alarms. These items will be contracted for during the remainder of the project. The price risk on these items is deemed low.



4. Financial Case

The financial case analyses the Preferred Option for an NWSSP operated service from a new unit in IP5, compared against Business As Usual scenarios based on a reinvestment of the legacy service model.

4.1 Capital Costs

The capital costs of the Preferred Option are as follows:

	Radiopharmacy		
	Phases 1 and 2 Design £'000	Phase 3 Build & Validate £'000	Phases 1 to 3 Total £'000
Works Costs	215	3,257	3,472
Fees	55	75	129
NHS Resource & Validation	234	889	1,123
Non-Works Costs	17	63	81
Equipment Costs	0	2,838	2,838
Contingency	78	1,548	1,626
VAT recovery	-54	-47	-101
Total costs	545	8,622	**9,168**
Less funding received :			
Fees phase 1 & 2 allocated	-500	0	-500
Equipment end of year monies 2023/24	0	-333	-333
Radiopharmacy isolators	0	-1,500	-1,500
BJC capital funding requirement	45	6,790	6,835

Note - all figures include VAT where relevant

Explanatory Notes

1. Works Cost

Design and build of the radiopharmacy cleanrooms and initial enabling works

2. Fees

Fees for cost advisor, building design and and validation supervisor

3. NHS Resource & validation

NHS salary costs for project management, validation and familiarisation. Also includes radiation protection advisor fees

4. Non-Works Costs

Local authority planning costs and carbon/environmental surveys

5. Equipment Costs

Radiopharmacy isolators (£1,504k) plus FMS and other radiopharmacy equipment

6. Contingency

Includes 15% contingency on costs plus provision for detailed design changes

7. VAT recovery

Expected VAT recovery on professional fees

Table 1 - Capital investment cost.

Chilcott,Rachel
21/08/2024 11:48:04

As a comparator, the proposed capital costs of CAVUHB's new Unit from their 2020 Outline Business Case were calculated at £12.8m.

The main differences are explained by the fact that the current preferred option is utilising an existing building that only requires minor renovations, and minimal external works, whereas the CAVUHB proposal included a whole new building shell and associated site development costs. It is also worth noting that the NWSSP proposal has been developed largely by an in-house team, with contractor input focussed on the technical design work and specialist advice only. Therefore, large fees for developing the supply chain and for external project management have been avoided. Significant NHS resources have been committed without additional charge in the areas of Procurement, Finance, and Project Management to develop the NWSSP case.

While the total project cost of £9.2m is shown, it is worth noting that investments of £2.3m have already been funded, therefore the remaining balance sought from Welsh Government to complete the project is only £6.9m. If committed by 1 Sept 2024, it is anticipated that the majority of these costs will be incurred in the financial year 2024/25, based on the supply chain already assembled by the project. If committed later than 1 September 2024, then elements of the spend will start to slip into the following financial year.

No capital funds are sought from the Health Boards and Trusts for this project. Any future significant capital for lifecycle requirements will be subject to further business cases from NWSSP to Welsh Government.

Chilcott,Rachel
21/08/2024 11:48:04

4.2 Revenue Commitments

The revenue costs of the new service, versus a baseline revenue costing provided by CAVUHB for the legacy service, are shown below:

Radiopharmacy operating costs

	CVUHB £'000	IP5 radio £'000	Increase on baseline £'000	IP5 post hub completion £'000	Increase on baseline post hub £'000
Pay	636	700	64	572	-64
Drugs	211	220	9	220	9
Generator Teckis 20 & consumables	141	141		141	
Transport in and out	97	143	47	86	-10
Equipment	13	116	103	116	103
Regulatory fees	10	36	27	36	27
PPE	31	35	3	35	3
IT	19	28	10	28	10
Site Costs	46	233	187	124	78
Cleaning	22	65	43	65	43
Refuse/waste disposal	3	8	5	8	5
Other	8	27	18	27	18
Total costs	**1,236**	**1,752**	**516**	**1,459**	**222**

Notes

CVUHB baseline costs based on 2022/23 final year of operation, adjusted for Datscan removal

Pay, CVUHB and IP5 radiopharmacy shown at 2023/24 rates

IP5 radiopharmacy staff costs will reduce by c. £128k post the Trams hub completion

Drugs cost based on raw material cost and future demand assessment following dialogue with all nuclear medicine sites in SE Wales

Teckis 20 generator costs unchanged as the process for preparing vials as opposed to syringes requires less consumables despite an increase in the number of patients treated

Transport costs include the costs associated with the receipt of raw materials inwards and the delivery of the final product to customers and HCS efficiency savings is expected with the hub opening

IP5 equipment includes isolator and general equipment maintenance and annual cleanroom validation costs

IP5 Regulatory fees includes Radiation Protection Advice & Support (RPAS)

IP5 site costs includes £173k energy costs, £26k for back up power generator hire and £17k for Environmental Monotoring system

Post Trams hub opening the energy costs will reduce by an estimated £83k as a result of a solar panel farm and the £26k power generator hire

IP5 cleaning includes specialist cleaning of the the units including the use of Steramist gassing

IP5 other includes staff training costs and office costs

No uplift for non pay inflation is included

Table 2 - Revenue cost of the new service

We have calculated two budgets for the future service. The initial budget of £1.752m is for a standalone Radiopharmacy service in IP5, which will be the position for at least the first 12-24 months of the new service. These costs are higher than the legacy CAVUHB cost because:

- Significant regulatory changes were made in the new “Annexe 1” from MHRA, this has significantly increased the costs of running a compliant service.

Chilcott,Rachel
21/08/2024 1.:48:04

- The new unit is significantly larger than the old one, to accommodate regulatory requirements on layout, separations, and adjacencies. Lack of space to optimise the layout of the old unit was one of the reasons why it had to close.
- Modern regulatory requirements for 100% fresh filtered and enviromentally controlled air supply drive a requirement for a large air handling unit. This will require much more planned preventative maintenance and servicing than the ventilation in the old unit. Lack of space to install the ducting for a modern air plant was also one of the reasons why the old unit could not be cost effectively refurbished.
- Active air supply is now required to all transfer hatches, significantly increasing both plant costs and the costs of validation
- Two stage changing in separated rooms is also now required in all new units, driving an increase in classified clean room space
- The new unit will use Ionized Hydrogen Peroxide gassing for decontamination of both isolators and rooms. Gas decontamination is now the regulatory requirement for all new units. Again this technology has an annual servicing and maintenance requirement, and a consumable cost in purchasing the gas, which the legacy service did not.
- The new isolators costing around £0.5m each, required to provide a compliant service, compared to around £6,000 each for the old open fronted cabinets, generate a significant revenue tail of electricity, consumables, maintenance, and servicing costs.
- An additional transport cost is incurred because the unit is no longer co-located with the UHW Radiology service.
- In aggregate: the new service is planned to be compliant, reliable and sustainable, and the costs are calculated on that basis.

As a further comparator it is also worth noting that the 2020 CAVUHB Business case included revenue costs totalling £1.59m p/a offset by expected income of £1.18m p/a. So CAVUHB also anticipated that a modern and sustainable service would both cost more to run and would require an increase in cost to be passed on to customers.

An estimate of the recurrent costs of £1.459m has also been included showing the cost efficiencies that can be achieved once the South East Hub opens on the same site. These efficiencies include:

- Staffing – sharing senior management, Quality Assurance support, and staff absence cover in general across the whole hub. This process will be managed through the TRAMs Organisational Change Project, as described in the management case.
- Transport – the opportunity to share the cost of delivery drivers and vans (specified and approved for Radiopharmacy use) on a second daily run delivering other products.
- Power – the opportunity to deploy a more efficient backup power solution for the whole hub, and the planned solar photovoltaic (PV) installation at IP5.

We aim to achieve this long term recurring revenue position for the service from year 3 of operation onwards. The difference between the interim and recurrent annual cost of the service is £294k. The funding model proposed assumes that NWSSP will non-recurrently provide funding for this additional £294k until the recurrent operating solution can be implemented with the opening of the SE Wales hub.

Chilcott, Rachel
21/08/2024 11:48:04

Comparison of our identified service costs to assess value for money is difficult as there are no commercial suppliers operating in this market to provide any comparative costs. Product shelf life means that only nearby units can facilitate any supply. Cost comparisons were sought from both Bristol and Birmingham NHS Trusts, who have offered small scale incremental supply of between 2 and 6 vials per day at marginal cost prices over the past 2 years. Neither Trust was willing to commit to an enduring, supply at a robust level of reliability, at the scale requested of circa 20 vials per day, or to provide a full cost comparator.

University Hospital Bristol NHS Foundation Trust: *"We would not be able to supply an additional 20+ vials every day for the next few years."*

University Hospitals Birmingham NHS Foundation Trust: *"I'm afraid we wouldn't be able to assist with that level of service requirement. We are able to provide Welsh Nuclear Medicine departments with urgent contingency supplies only, so committing to such a large workload over such a long timeframe is not going to be possible. "*

Chilcott,Rachel
21/08/2024 11:48:04

4.3 Funding Models

Discussions have been held with the 4 major customers in the South East Region: CAVUHB, ABUHB, CTMUHB, and VUNHST, and an equitable funding model identified:

Option 1a: Recover costs based on demand share only with NWSSP contribution

Costs to be recovered	1,752,249
NWSSP contribution	-294,000
Net costs to recover	1,458,249

	2022/23 Baseline charge £	Trams radio costs £	Increase £
ABUHB	226,273	503,004	276,731
CVUHB	289,386	643,304	353,918
CTMUHB	70,720	157,209	86,490
Velindre	69,605	154,732	85,127
Total	655,984	1,458,249	802,265

The NWSSP annual contribution of £294k is a non-recurrent investment in the new service to bridge the cost efficiency gap until the full South East Hub opens.

The net figure of £1,458,249 therefore represents the recurrent revenue commitment for the service based on today's prices, to be funded as shown above based on an apportionment using historic demand levels for the service. Any increased cost to Velindre should be included as part of the normal future commissioning process with the relevant health boards.

The advantage of the selected funding model is that products will be procured at the same price, following an established "fair shares" principle recognised by all the participating organisations.

Based on an indicative start date of 1st July 2025 the IP5 Radiopharmacy operating charges would be profiled as follows:

	2025/26 from 1st July £	2026/27 onwards £
ABUHB	377,253	503,004
CVUHB	482,478	643,304
CTMUHB	117,907	157,209
Velindre	116,049	154,732
Total	**1,093,687**	**1,458,249**

Chilcott,Rachel
21/08/2024 11:48:04

Note: This funding model is for the Radiopharmacy BJC only and recognises that the funding model for the rest of the TrAMs Service will be assessed at the time those Business Cases are developed. This particular model DOES NOT set a precedent for the rest of the TrAMs business cases.

This revenue funding model is **recommended to SSPC for approval for the recurrent service provision of radiopharmacy services in South East Wales.**

4.5 Charging mechanism

It is recommended that the annual funding contributions sought above, will be applied as a per product charge, invoiced (or in the case of VELNHST recharged) monthly on the basis of actual usage.

The per unit price will be set on the baseline of demand from the 2022/23 financial year. At the time of writing this is assessed as being 3,633 vials p/a, leading to an average unit cost of:

£1,458,249 / 3,633 = £401 per vial

This business case is based on the historic level of demand. The total number of vials required to be manufactured needs to be kept under regular review, as efforts to improve the efficiency of the number of doses achieved from each vial are still underway. While it is likely that currently suppressed demand will increase once the full capacity of the new unit comes online, this may also result in an increase in vial to dose efficiency, as more patients can be booked into existing clinics.

The demand forecast will therefore continue to be refined and a detailed pricing model for the various different kinds of vial kit will be created over the next 12 months. This will be submitted for approval as part of Service Business Plan v2.0 which is due in May 2025, prior to the new service opening. The pricing will be calculated to achieve the approved levels of annual contribution from this case.

The unit prices will be kept under regular review thereafter and will be varied in future in order that:

- Costs incurred from any rise or fall in demand continue to be met.
- Any efficiencies in production that reduce costs are passed on equitably.
- Any unexpected cost pressures are also met equitably.
- As a guiding principle the service will continue to break even and will aim to run neither a deficit nor a surplus.

The detailed price model will be open book and will be shared with all participating organisations, as will the overall financial performance of the service.

As a participating element of the NWSSP financial operating model, any deficit or surplus that arises from the service will be owned jointly by the members of SSPC and will be handled under established NWSSP risk sharing arrangements.

Chilcott, Rachel
21/08/2024 11:18:06

4.6 Financial Summary

Capital costs have now reached a level of maturity where they can be proposed with confidence. The key cost lines are now supported by contracts, and the design concepts to support them have

been reviewed by specialist advisors. Progress with detailed design is underway. While the costs are stable, the project has made a modest provision to cover any further cost growth that may arise during the remainder of detailed design. It is anticipated that detailed design will be completed by August 2024, so a final assurance on this point can be given to the Welsh Government before the Investment Decsision is made.

The proposed project cost is lower than that for the CAVUHB New Build option. This reflects a site that is already in NHS ownership and operational management, with an existing building shell, car parking, and support facilities that require only minor remediation works.

The proposed operating costs of the new service are higher than the costs of the legacy service for the reasons explained above. Ultimately this is the price for a compliant, reliable and sustainable service, which is what our patients need and expect from NHS Wales. The proposed funding and charging mechanism is equitable, robust, and flexible to meet future as well as currrent need.

Chilcott,Rachel
21/08/2024 11:48:04

5. Management Case

5.1 Project Management Arrangements

It is proposed to manage the investment as a project within the TrAMs Programme.

A single Project Board was established to manage the South East Wales Hub within the Programme in July 2021. This Project Board is now managing both the Radiopharmacy investment and the closely related SE Hub investment. The project board reports to the TrAMs Programme Board, under the overall governance of the Shared Services Partnership Committee.

Project Management support will be provided by NWSSP Project Management Office (PMO), mobilising other resources from within NWSSP as may be required.

Key resource will be provided by the TrAMs Programme Workforce and Organisational Change Project, which will support the transfer and mobilisation of staff for the service, working in partnership with the current employer, CAVUHB.

The project is working to a multi-phase Business Case approach:

- An initial draft BJC for Radiopharmacy was submitted in Nov 2023 which secured the fees to develop the case to maturity, and to test the fit of the Radiopharmacy and SE Hub on the IP5 site.
- This second iteration of the Radiopharmacy BJC will be submitted in July 2024 for an Investment Decision.
- The Hub OBC is being targeted for submission in Sept 2024 to secure fees for hub detailed design.
- The Hub FBC is targeted for submission in March 2025 to secure funds to develop the hub in the financial year 2025/26.

5.2 Radiopharmacy Project Timeline

Provided an investment decision for the Radiopharmacy is made in Summer 2024, then the following timeline is proposed:

- Purchase Orders issued and contractors notified to proceed Sept 2024.
- Cleanroom contractor ordering materials and preparation Oct-Dec 2024.
- Enabling building works on site Oct-Dec 2024:
  - Removal of racking
  - Rectification of partition to become a fire wall
  - Roof repairs
  - External drainage and surfacing works
- Cleanroom build on site Jan-March 2025.
- Testing, commissioning, and seeking regulatory licenses April-June 2025.
- Service Go Live end of June 2025.

Chilcott, Rachel
21/08/2024 11:55:04

Throughout this process there will be a parallel development of documented processes, procedures, and documentation, all of which will support the final regulatory approvals and give assurance to the

accountable directors that the site is both safe to operate for staff and safe to supply medicine to patients.

Supporting digital infrastructure will need to be selected and deployed. It has been determined that the Radiopharmacy can be opened making selective use of existing digital systems, with any significant investment in new systems aligned with the main TrAMs Digital Project at a later date.

5.3 Staff Transfer

The staff from the legacy service have currently been seconded into a variety of roles supporting service delivery in CAVUHB, SBUHB, and NWSSP. They remain substantively employed by CAVUHB in the Nuclear Medicine department at University Hospital Wales. An Organisational Change Process (OCP) will identify if staff at C&V are impacted by TUPE regulations, and where TUPE applies, then they will transfer to NWSSP.

Once the revenue and capital funding arrangements are both confirmed by approval of this case, it is proposed that CAVUHB will consult the members of staff impacted by the change of location and employer. It is anticipated that where TUPE applies, they will transfer into directly comparable roles in the new service in NWSSP based at IP5. Any roles at IP5 not filled by this process will then be advertised and recruited by NWSSP on a timeline matched to completion of the build, to ensure sufficient staff are in place to validate and open the new service.

It is expected that all staff will remain with their substantive employer or take up a role within NWSSP, no financial provision for redundancy has been made. Given current vacancy rates, no cost pressure from displacement is anticipated and again no provision has been made.

When the TRAMs South East Hub investment decision has been made, a wider Organisational Change Project 2 will take place to fill the new hub structure.

Depending on the time between the two investment decisions, this may lead to a small number of the Radiopharmacy staff changing role twice in quick succession. This is an unavoidable consequence of splitting the business cases to meet the most urgent service need first. Relevant staff side representatives in both organisations are sighted on the process and staff will be supported throughout this change.

Chilcott,Rachel
21/08/2024 11:48:04

5.4 Risk Management

The Project will adopt the Risk Management Approach of the TrAMs Programme, this being directly applicable to the proposed investment and transfer of service.

Key risks and mitigations identified to date are:

Risk	Impact	Mitigation	Comment
Planning Permission at IP5	If not granted, would result in failure to bring the facility into use	Pre engagement letter with outline drawings and project description has been submitted (23 May 2024). Planning application will be submitted in July 2024, prior to the investment decision being sought. The project will submit timely updates to the investor on progress with Planning Permission.	Investment on the site should not be approved until a positive initial engagement with the Planning Authority has been conducted (due late June 2024). In the best case scenario, a positive response to the planning application will also have been received before Notice to Proceed with construction is given in Sept 2024.
Definition of costs at IP5	Detail design work is still ongoing, concurrent with the Business Case entering approvals.	The project will submit timely updates to the Investor on progress with detailed design, to give comfort that the project remains on track with the costings submitted in the case.	Costs are expected to be at full maturity before the Investment Decision is made.
Power at IP5	Concept design work has indicated that sufficient power is available at IP5. Work is still ongoing to confirm this by detailed design, and to determine the power resilience needs.	The project will hire a small temporary backup generator for the Radiopharmacy unit. A comprehensive backup power proposal will be submitted in the SE Hub Business Case.	We are now confident that there is sufficient power, it is just a question of managing the resilience aspect in partnership with other investments at IP5 e.g. Solar PV.
Service Risk at Singleton	Investments in Radiopharmacy compromise the viability of the existing	Proceed cautiously and with close engagement with the accountable	Singleton can only ever be a temporary contingency for South East Wales, and any

Chilcott,Rachel
21/08/2024 11:48:04

	Pharmacy Technical Services delivered on the site.	management of SBUHB, in particular the Clinical Director for Medicine and the Nuclear Medicine Lead.	investment must be evaluated in that context.
Delivery time for key equipment	Isolator delivery times being quoted at 8 – 12 months.	Isolator Award Letter was issued on 20th June 2024. Delivery on site expected March 2025.	Manageable risk, but needs careful handling to ensure the isolators arrive in the right place at the right time.
Staffing transfer	Any change of location and employer generates a staffing risk, that the existing staff may either decline the transfer for leave to seek other employment.	Engage actively with Workforce and Trades Unions to support the transfer process. Be prepared to go to open recruitment for unfilled roles.	Probably the biggest time risk on the project is having a workforce of the correct skills mobilised and ready to bring the new unit into use, wherever it is built, and however quickly.
Clinical Engagement	Nuclear Medicine departments may not have the skills to utilise multi dose vials to best effect.	Ensure clinicians understand and accept the proposed service model, and the right facilities and skills are in place within Nuclear Medicine departments to maximise utilisation of multi-dose vials.	Ongoing requirement for structured clinical liaison by the preparative service.

Estates Appendices will be added in Sept 2024, prior to the final Investment Decision by Welsh Government.

Chilcott,Rachel
21/08/2024 11:48:04

Report Title:	Pentyrch Branch Surgery - Submission of Business Justification Case			Agenda Item no.		
Meeting:	Finance & Performance Committee	Public	✓	Meeting Date:	17th July 2024	
		Private				
Status *(please tick one only)*:	Assurance	Approval	✓	Information		
Lead Executive Title:	Executive Director of Finance					
Report Author (Title):	Director of Capital Estates and Facilities					

Main Report
Background and current situation:

The purpose of this report is to request that Finance and Performance Committee support the submission of the Pentyrch Branch Surgery Business Justification Case and submit a recommendation to the UHB Board for approval to submit to Welsh Government to seek £5.3m of All Wales Capital Investment.

The attached document, Executive Summary, describes the rationale for constructing a new build facility at Rhydlafar Drive, Rhydlafar.

The development of a replacement Pentyrch Branch Surgery has been a priority for a significant period of time and is a key component in supporting the primary care agenda of enhancing community infrastructure and the Health Board's overarching *Shaping our Future Wellbeing Strategy to 2035* which aims to provide high quality primary care in fit-for-purpose accommodation.

For the past 10 years, General Medical Services in Pentyrch have been provided, by the Practice, out of a temporary portacabin which provides only two clinical rooms with limited ancillary provision. This is unsuitable and unsustainable for the delivery of healthcare services and is not compliant with minimum standards for GP premises.

The aim of the business justification case is to seek investment in future proofing the GP services within the area, along with the ability:

- To deliver a permanent solution for the delivery of General Medical Services to the residents of Pentyrch and surrounding areas and support the transformation agenda for primary care;
- To provide for increased General Medical Services capacity locally therefore addressing the need for additional space to respond to existing needs as well some of the significant increase in the population planned under Cardiff Council's Local Development Plan (LDP);
- To increase the scope and range of services provided in primary care e.g. minor surgery and increased sexual health service provision e.g. Nexplanon and possibly an extended sexual health clinic for neighbouring practices, in line with national direction and refocusing services to be provided in the community;
- To provide modern purpose-built facilities to allow services to be provided appropriately in a modern, well designed physical environment suitable for the delivery of 21st Century healthcare;

Strategic Alignment

This business case contributes to delivering a key number of Welsh Government national strategies and policies through:

Chilcott,Rachel
21/08/2024 11:48:04

- Refocusing services to be provided locally / in the community;
- Increasing the range of service delivery in general practice / primary care;
- Providing clinical care in facilities which are fit for purpose in the 21st century, whilst being as adaptable as possible for further future change as demand grows;
- Utilising new technology and systems to advance the way services are delivered and improve access to care;
- Provision of more integrated working across professions leading to more seamless co-ordination;
- Improvements in patient safety to reduce avoidable harm;

- Modern ways of working through new approaches to delivery of care, including enhancing and delivering clinical roles, supporting staff to work to the top of their skill set;
- Ensuring the local community are involved in any development of proposals and the needs, aspirations, health and wellbeing of all people are considered at the outset;
- Providing sustainable buildings and infrastructure;

This business case contributes to delivering a key number of Local strategies and policies through:

- Eradicating poor infrastructure that is no longer suitable for current and future use and is not conducive to the best patient outcomes and experience, nor staff wellbeing
- Contributing to the future sustainability of General Medical Services (GMS)
- Working with local communities and primary care networks to reduce health inequalities and provide improved support in relation to preventative action/ self-care
- To increase multi-disciplinary working and service integration in line with cluster priorities
- Providing sessional use of multi-functional, generic room types rather than service specific areas that will create a flexible approach that will also create efficiencies in utilisation across assets
- Assistance in meeting the themes set out in the Workforce Strategy for Health and Social Care in relation to the CVUHB People and Culture Plan by improving the experience of staff working across services as well as supporting further education and training where possible to attract, recruit and retain the right staff with the right skills
- Providing a means to reduce the Health Boards carbon footprint by providing sustainable healthcare
- Providing settings that enable engaged, motivated and a healthy workforce - to have a workforce that feels valued and supported wherever they work.

Benefits Criteria

The Business Justification Case has outlined the following main benefits:

- Improve the Sustainability of General Medical Services
- Increase Capacity to support Future Demand
- Increase Access to a Range of Locally Delivered Services
- Provide a High Quality and Compliant Environment
- to provide a conducive working environment for staff and support training opportunities and collaborative communication links

Options Appraisal

As part of the development of the business justification case, after consultation with key stakeholders, the following list of options were identified and assessed:

- Option 1 - Business as usual (for comparative purposes)
- Option 2 - Do Minimum (Core Scope/ Refurbish Existing Building)
  Retain temporary accommodation with internal modifications to create a facility for Pentyrch and the surrounding areas that meets minimum statutory requirements
- Option 3 - Do Intermediate (Desirable Scope / Extend Existing Building)
  Provide a facility for Pentyrch and the surrounding areas that meets minimum statutory requirements, supports GMS sustainability, best practice models and addresses known current capacity issues whilst providing an opportunity for expansion to support LDP growth and include other health care services at a future date
- Option 4 - Do Intermediate Plus (Desirable Scope / New Build Solution)
  Provide a facility for Pentyrch and the surrounding areas that meets minimum statutory requirements, supports GMS sustainability, best practice models and addresses known current capacity issues whilst providing an opportunity for expansion to support LDP growth and include other health care services at a future date.
- Option 5 - Do Maximum (Optional Scope / New Build Solution)
  A facility for Pentyrch and the surrounding areas that meets minimum statutory requirements, supports GMS sustainability, best practice models and addresses known capacity issues whilst providing accommodation to support future long term LDP growth and include other health care services at a future date.

An economic analysis was undertaken along with a detailed assessment of benefits, the outputs confirmed;

Chilcott,Rachel
21/08/2024 11:48:04

- Option 4 – was the preferred option.

Having identified the requirement of a new purpose-built development, was the preferred option, with the other options being deemed unviable, it was therefore necessary to identify a suitable site for the development.

Twenty-five sites were originally identified, these were reduced to six, these were;

- Land between Bronllwy & Heol-Y-Bryn Roads
- Land between A4119 & Rhydlafar Drive
- Land off Fairmeadow
- 'Commercially sensitive site'
- Rugby Club
- Squash Courts

The six were then subject to further assessment, this assessment was undertaken by the then Pentyrch Project Team against standard criteria which has been applied previously to other primary care schemes locally, the criteria being;

- Size
- Accessibility
- Affordability
- Deliverability
- Acceptability

Based on the above conclusion of the assessment, the land between A4119 & Rhydlafar Drive was the chosen site.

The land sale has since been discussed with Cardiff Council. The Council has advertised the land as pending sale, in relation to its current open space categorisation. Heads of Terms have been agreed in principle between the UHB and the Council for its purchase in conjunction with colleagues from NWSSP Shared Services, Legal and Risk.

Preferred Way Forward

The preferred way forward has been identified as a new purpose built development on the Council-owned Land between A4119 & Rhydlafar Drive which will provide a 21st century healthcare solution for the current patients of the Pentyrch Branch Surgery, support a medium term solution in relation to uplifting capacity and providing continued sustainable delivery of General Medical Services to the residents of Pentyrch and local surrounding areas whilst also offering an opportunity to expand service delivery in the longer term future to meet further capacity requirements as the population increases in the wider locality due to the planned Cardiff Council Local Development Plan.

Procurement Route

Previously submitted reports have confirmed that the Health Board were previously procuring the new Pentyrch facility via a third-party developer. This, however failed, due to the inability to reach an acceptable deal with the third-party developer, which could be supported by the District Valuer and Welsh Government.

The decision was made in consultation with the Welsh Government, to procure this scheme via Welsh Government funded capital.

Curcic, Rachel
11/09/2024 11:48:04

To maintain the intellectual property rights of the design and thus the already approved planning permission, the Health Board, in complete consultation with colleagues from shared services, Legal and Risk and Specialist Estates Services, appointed the original design team under a direct award, in conjunction with procurement services. This award was via the NHS SBS Framework for Healthcare Planner, Construction Consultancy, and Ancillary Services (HPCCAS). The Design team was led by Corstorphine & Wright.

Upon completion of the design, the scheme was tendered through the Cardiff and Vale UHB Building Framework Lot 2, under the contract terms and conditions, NEC 4 option B. The procurement was issued and administered via procurement services.

The tenders received were competitive with the two lowest tenders very close. Tender analysis was completed by the Design team and the most economically viable tender cost was used in the costings within the Business Justification Case.

Capital Costs

A summary of the capital costs for the preferred way forward are as follows:

Capital Costs	Option 4 £m
Works Cost	3.908
Fees	0.826
Non-Works	0.410
Equipment	0.036
Planning contingency	0.270
VAT Recovery	(0.107)
Total Capital Cost/ Cost Forms	**5.344**

Affordability

It is assumed that the impairment and recurrent charges for depreciation will be funded by the Welsh Government.

Revenue Implications

This cost assessment relates to the service wholly provided by the Practice and excludes any further services that may be delivered by the Health Board or other partners in the future.
The summary of revenue costs is as follows:

Costs	Current UHB Expenditure £'000	Estimated UHB Expenditure £'000
Rent (Portacabins)	21	0
Rent (Site)	2	0
Rates	1	21
Office Equipment (incl. IT equipment)	0	29
Electricity/Gas	0	0
Cleaning	0	0
Security	0	0
Water	0	2
Decommissioning of Existing Site	0	19
Legal Fees	0	5
Waste	1	2
Maintenance	0	0
Service Charge	0	0
Total	**25**	**78**

Chilcott,Rachel
21/08/2024 11:48:04

A breakdown of the estimated Health Board expenditure split by recurrent/non-recurrent is provided below:

Costs	Recurrent £'000	Non- Recurrent £'000
Rates	21	0
Office Equipment (incl. IT equipment)	0	29
Water	2	0
Decommissioning of Existing Site	0	19
Legal Fees	0	5
Waste	2	0
Total	**25**	**53**

The following assumptions have been made in respect of the revenue case:

- The lease is assumed to be for 20 years

Outline Project Programme

The dates detailed below highlight the proposed key milestones of the project:

BJC Submission to CMG	June 2024
Submission of BJC to the Welsh Government	July 2024
Commence construction	September 2024
Construction completion	September 2025
Facility operational	4Q 2025

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

- The cost for the preferred way forward has a capital requirement of £5.344m inclusive of VAT
- Welsh Government have agreed to the submission of a Business Justification Case which was initially being progressed via a third-party developer.
- The Investment Group approved the revenue consequences at their meeting held on the 3rd July 2024

Recommendation:

The Committee is requested to:

1. **SUPPORT:** the Pentyrch Branch Surgery Development - Business Justification Case

2. **RECOMMEND to the BOARD;**

a) **APPROVE** the submission of the Pentyrch Branch Surgery Development – Business Justification Case to Welsh Government for capital funding support
b) **APPROVE** the awarding of the construction contract, subject to Welsh Government approval of the BJC, at the cost of £3.908m (inclusive of VAT) under the terms and conditions of the NEC 4, Option B contract
c) **NOTE** the appointment of the Health Board's Project Manager and Cost Advisor will be undertaken at a later date and that there is a fee allowance in the overall Business Case

Chiles,Rachel
21/08/2024 11:48:54

Link to Strategic Objectives of Shaping our Future Wellbeing:

Please tick as relevant.

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 place an "**X**" in the below boxes as relevant*

Prevention		Long term	✓	Integration	✓	Collaboration	✓	Involvement	✓

Impact Assessment:
*Please state **yes** or **no** for each category. **If yes please provide further details.***

Risk: No
Safety: Yes
The capital design incorporates statutory health and safety requirements.
Financial: Yes
Capital funding for this project is anticipated to come from the All Wales Capital Programme. The BJC sets out the rationale and capital costs along with the recurring revenue consequences.
Workforce: No
Legal: No
Reputational: No
Socio Economic: No
Equality and Health: No
Decarbonisation: Yes
The capital design incorporates required elements of decarbonisation measures.

Approval/Scrutiny Route *(please note anywhere else this paper has been before):*

Capital Management Group	Date: 17th June 2024
Investment Group	Date: 3rd July 2024
Senior Leadership Board	Date: 4th July 2024

Chilcott,Rachel
21/08/2024 11:48:04

Pentyrch Branch Surgery

Business Justification Case (Document 2)

June 2024 – Final v6.2

Document Information

Status	Final
Date	19th June 2024
Authors	Adcuris/CVUHB
Circulation	CVUHB Project Team/ CMG/ Investment Group/ Board

Version	Date Issued	Summary of Change
Draft v1	23rd January 2024	Initial draft - strategic context and case for change updates discussed with core team members
Draft v2	13th February 2024	Updates provided for strategic context, case for change, benefits mtg held, available options section drafted
Draft v3	21st March 2024	Updates provided for procurement route and management arrangements. Available options section confirmed. Preferred option section drafted
Draft v4	23rd April 2024	Updates to benefits and risks, communication and engagement, governance, contingencies/recommendation
Draft v5	3rd June 2024	Procurement route section and management arrangements finalised
Final Draft v6	12th June 2024	Economic appraisal undertaken, Funding and affordability section drafted and finalised
Final v6.1	13th June 2024	Project Team comments received and signed off
Final v6.2	19th June 2024	Revenue narrative updated and prepared for Investment Group sign off

Chilcott,Rachel
21/08/2024 11:48:04

1.0 INTRODUCTION 8
1.1 Overview and Introduction 8
2.0 STRATEGIC CONTEXT 10
2.1 Introduction 10
2.2 Organisational Overview 10
2.3 Business Strategies 14
3.0 CASE FOR CHANGE 19
3.1 Spending Objectives 19
3.2 Existing Arrangements 22
3.3 Business Need 29
3.4 Potential Scope and Services 35
3.5 Main Benefits 35
3.6 Main Risks 38
3.7 Constraints 39
3.8 Dependencies 39
4.0 AVAILABLE OPTIONS 41
4.1 Critical Success Factors 41
4.2 Development of Options 42
4.3 Conclusion 46
4.4 Economic Appraisal 47
5.0 PREFERRED OPTION 51
5.1 Identifying the Preferred Option 51
5.2 Description of the Preferred Option 51
6.0 PROCUREMENT ROUTE 54
6.1 Required Services 54
6.2 Procurement Strategy 54
6.3 Agreed Risk Transfer 55
6.4 Agreed Charging Mechanisms 55
6.5 Agreed Contract Length 56
6.6 Key Contractual Arrangements 56
6.7 Accountancy Treatment 56
6.8 Community Benefits and Procurement 56
7.0 FUNDING AND AFFORDABILITY 58
7.1 Capital Charges and Depreciation 58
7.2 Revenue Costs 59
7.3 Impact On The Income And Expenditure Account 61
7.4 Overall Affordability 61
7.5 Project Bank Account 62
8.0 MANAGEMENT ARRANGEMENTS 64

Chilcott,Rachel
21/08/2024 11:48:04

8.1 Introduction....64
8.2 Programme Management Arrangements....64
8.3 Project Management Arrangements....65
8.4 Project Plan....69
8.5 Use of Special Advisors....69
8.6 Communication and Engagement....69
8.7 Arrangements for Change Management....71
8.8 Benefits Realisation Monitoring....72
8.9 Risk Management....73
8.10 Gateway Review Arrangements....74
8.11 Post Project Evaluation....74
8.12 Audit and Assurance....75
8.13 Contingency Plans / Recommendation....75

Chilcott,Rachel
21/08/2024 11:48:04

TABLE OF TABLES

TABLE 1: SPENDING OBJECTIVES 22
TABLE 2: CARDIFF AND VALE UHB LOCALITY AND CLUSTER'S 23
TABLE 3: OTHER GP PRACTICES IN THE LOCALITY AND THEIR DEVELOPMENT PLANS 25
TABLE 4: CHALLENGES CURRENTLY FACING THE PRACTICE 31
TABLE 5: PROPOSED STAFFING ARRANGEMENTS 33
TABLE 6: POTENTIAL SCOPE 35
TABLE 7: MAIN BENEFITS 37
TABLE 8: MAIN RISKS 38
TABLE 9: CRITICAL SUCCESS FACTORS 41
TABLE 10: DEVELOPMENT OF OPTIONS 44
TABLE 11: CRITERIA WEIGHTINGS 45
TABLE 12: SITE OPTION EVALUATION / SCORING 46
TABLE 13: CAPITAL COSTING SUMMARY AT TENDER PROPOSAL – (£'000) 48
TABLE 14: SUMMARY OF BENEFIT COST RATIO – (£'000) 48
TABLE 15: SUMMARY OF ECONOMIC APPRAISAL OUTPUT – (£'000) 49
TABLE 16: SENSITIVITY ANALYSIS ON OPTION 1 – (£'000) 49
TABLE 17: RISK TRANSFER 55
TABLE 18: CAPITAL COSTS FOR THE PREFERRED OPTION – (£'000) 58
TABLE 19: SUMMARY OF IMPAIRMENT AND DEPRECIATION – (£'000) 58
TABLE 20: SUMMARY OF TOTAL IMPACT OF IMPAIRMENT / DEPRECIATION YEAR ON YEAR – (£'000) 59
TABLE 21: SUMMARY OF REVENUE COSTS – (£'000) 59
TABLE 22: BREAKDOWN OF RECURRENT/ NON-RECURRENT COSTS – (£'000) 60
TABLE 23: IMPACT ON INCOME, EXPENDITURE ACCOUNT AND BALANCE SHEET – (£'000) 61
TABLE 24: PROJECT TEAM MEMBERSHIP 68
TABLE 25: PROJECT PLAN 69
TABLE 26: SPECIALIST ADVISORS 69

TABLE OF FIGURES

FIGURE 1: MAP SHOWING AREA COVERED BY CARDIFF AND VALE UHB 11
FIGURE 2: OVERARCHING NATIONAL POLICIES CONSIDERED WITHIN THIS BJC 14
FIGURE 3: KEY LOCAL / CVUHB STRATEGIES 16
FIGURE 4: CARDIFF AND VALE LOCALITY / CLUSTER STRUCTURE 23
FIGURE 5: EXISTING PENTYRCH BRANCH SURGERY PREMISES IMAGES 26
FIGURE 6: SOFW PROGRAMME GOVERNANCE 64
FIGURE 7: PROJECT REPORTING STRUCTURE 66

APPENDICES

Appendix 1 – National Context	Appendix 8 – GP Letter of Support
Appendix 2 – Local Context	Appendix 9 – Project Board Terms of Reference
Appendix 3 – Site Search	Appendix 10 – Project Team Terms of Reference
Appendix 4 – Project Cost Forms	Appendix 11 – Communication / Engagement Report
Appendix 5 – Economic Appraisal	Appendix 12 – Benefits Realisation Plan
Appendix 6 – Preferred Option Schedule of Accommodation	Appendix 13 – Project Risk Register
Appendix 7 – AEDET	Appendix 14 – Risk Potential Assessment (RPA) Form
Appendix 15 – Integrated Assurance and Approvals Plan (IAAP)	

Chilcott,Rachel
21/08/2024 11:48:04

STRUCTURE AND CONTENT OF THE DOCUMENT

This document describes the Business Justification Case (BJC) for this investment. It has been developed to reflect the guidance set out in HM Treasury's Green Book (a Guide to Investment Appraisal in the Public Sector) and the Infrastructure Investment Guidance for the NHS in Wales.

The approved format follows the Five Case Model with this Business Justification Case involving three volumes:

- Volume (Document) 1 – Executive Summary
- Volume (Document) 2 – The BJC comprising the following sections:
  - Strategic context (Section 2) which provides an overview of the context (both national and local) in which the investment will be made
  - Case for change (Section 3) which sets out the existing situation, the problems with the status quo, the key spending objectives and the benefits and risks of the planned investment
  - Available options (Section 4) which summarises the options that have been considered and how these have been appraised
  - Preferred option (Section 5) which describes in greater detail the option that is proposed and how this option optimises value for money
  - Procurement route (Section 6) which explains how the investment will be procured;
  - Funding and affordability (Section 7) which sets out the effect of the investment on the local health community
  - Management arrangements (Section 8) which explains how the implementation of the investment will be managed.
- Volume (Document) 3 - Appendices

-

Chilcott,Rachel
21/08/2024 11:48:04

Purpose

Chilcott,Rachel
21/08/2024 11:48:04

1.0 INTRODUCTION

1.1 Overview and Introduction

This business case seeks the approval for a capital investment of £5.3m (inclusive of VAT) to enable the Health Board to develop sustainable and fit for purpose facilities for the Pentyrch Branch Surgery.

To secure a viable solution and the continued delivery of General Medical Services (GMS) to the residents of Pentyrch and surrounding areas provided by the Llandaff Practice as a branch surgery, a replacement of the current temporary accommodation is required.

For the past 10 years, General Medical Services in Pentyrch have been provided by the Practice out of a temporary portacabin which provides only two clinical rooms with limited ancillary provision. This is unsuitable and unsustainable for the delivery of healthcare services and is not compliant with minimum standards for GP premises.

The development of a replacement Pentyrch Branch Surgery has been a priority for a significant period of time and is a key component in supporting the primary care agenda of enhancing community infrastructure and the Health Boards overarching *Shaping our Future Wellbeing Strategy 2023- 2035: Living Well, Caring Well, Working Together* which aims to help improve lives so that by 2035 people are healthier and unfair differences in health outcomes are reduced.

1.1.1 Progress to Date

Progress on the completion of the project within original timescales stalled as a result of extended patient engagement and a referral in January 2022 to the Minister for Health by the then Community Health Council (CHC, now Llais), on what it believed to be key aspects of the engagement process not undertaken by the Health Board. However, in June 2022, the Minister did not uphold the referral as they were satisfied that the consultation by the Health Board with the CHC has been adequate.

The decision of the Health Minister to reject the referral meant the scheme has been able to progress; however, a Third-Party Developer, originally appointed in 2019, then reported that supply chain and inflationary market factors which had increased during the pause in progress, called into question its viability. Regretfully, an agreement on an uplift to rental values could not be achieved between the Health Board and the Third-Party Developer, which consequently meant that they withdrew from the scheme in July 2023 however the Health Board is still fully committed to delivering this scheme and this business case along with the corresponding development proposals will ensure an appropriate solution is created to support the needs of the Pentyrch Branch Surgery and crucially its patients in relation to accessing vital healthcare services locally.

Chilcott,Rachel
21/08/2024 11:48:04

Strategic Context

Chilcott,Rachel
21/08/2024 11:48:04

2.0 STRATEGIC CONTEXT

2.1 Introduction

This section provides an overview of the context within which the investment will be made. It sets out:

- An overview of the organisation – the size and role of Cardiff and Vale University Health Board and the scale and nature of the demand in the area that it serves
- The national, regional and local strategies that underpin this investment.

2.2 Organisational Overview

2.2.1 Profile of Cardiff and Vale University Health Board

Cardiff and Vale University Health Board (CVUHB) was established in October 2009 as part of a restructuring of NHS Wales and is one of the largest NHS organisations in the UK. It brings together the former Cardiff and Vale NHS Trust and two former Local Health Boards – Cardiff and the Vale of Glamorgan – with the core purpose of improving health and delivering integrated health services.

Since its establishment, Cardiff and Vale UHB's priority has been to provide safe, high quality and sustainable services that compare well with the best in the world, with a focus on developing centres of excellence that support the actions needed to progress and deliver the vision '*that a person's chance of leading a healthy life should be the same wherever they live and whoever they are'.*

Cardiff and Vale University Health Board is responsible for planning and delivering health services for people in Cardiff and the Vale of Glamorgan, a population of around 500,000 and is the main provider of specialist services for the people of South Wales – and for some services, the whole of Wales and the wider UK. This includes health promotion and public health functions as well as the provision of local primary care services (GP practices, dentists, optometrists and community pharmacies) and the running of hospitals, health centres, community health teams and mental health services. The Health Board employs approximately 17,000 staff and has an annual budget of £1.6 billion.

As a major teaching and research organisation, there are very close links to Cardiff University playing a significant role in the Welsh economy. This is alongside other academic links with Cardiff Metropolitan University and the University of South Wales. Training the next generation of clinical and non-clinical professionals, in order to develop expertise and improve clinical outcomes, is a key priority for the Health Board.

Chilcott,Rachel
21/08/2024 11:48:04

Figure 1: Map showing area covered by Cardiff and Vale UHB

The Health Boards hospital-based services are currently provided from the following hospital sites:

- University Hospital of Wales (UHW), which incorporates:
  - University Dental Hospital
  - Noah's Ark Children's Hospital for Wales.
  - (UHW provides unselected emergency care, full A&E, Major Trauma Centre, critical care, specialised services and emergency and complex, elective surgery)
- University Hospital Llandough (UHL) – UHL provides selected emergency care, a Mental Health Facility, Rehabilitation services and routine, elective surgery
- Barry Hospital – providing a range of community services
- Cardiff Royal Infirmary (CRI) – providing a range of community services
- St. David's Hospital – providing a range of community services.

Community health services are delivered from 28 health centres and clinics and a range of other community-based facilities including people's homes, GP practices and medical centres, schools, nursing homes and leisure centres etc.

Chilcott,Rachel
21/08/2024 11:48:04

Primary Care is delivered to residents in Cardiff and the Vale of Glamorgan through:

- 55 GP Practices
- 65 Dental Practices
- 101 Community Pharmacies
- 59 Optometric Practices

2.2.1.1 The Area Served and its Needs

The population served by the Health Board is:

- Growing rapidly in size, with the latest Welsh Government projections estimating an increase from 502,000 in 2021 to 521,000 in 2031, around 4%. In contrast to the previous projections published 4 years ago, the rate of growth in the Vale is predicted to exceed that of Cardiff, with growth in the Vale of 5.3% over 10 years compared with 3.4% in Cardiff. Actual population growth, particularly in Cardiff, will be highly dependent on progress with large housing developments
- Relatively young in Cardiff compared with the rest of Wales. The proportion of infants (0-4 yrs) and the young working age population (20-39 yrs) is higher than the Wales average; this reflects in part, a significant number of students who study in Cardiff
- Ageing - The average age of people in both Cardiff and the Vale is increasing steadily, with a projected increase in people aged 85 and over in the Vale of 33% over the next 10 years, and 9% in Cardiff, and
- Ethnically very diverse, particularly compared with much of the rest of Wales, with a wide range of cultural backgrounds and languages spoken. Arabic, Polish, Chinese and Bengali are the four most common languages spoken after English and Welsh. Cardiff is an initial accommodation and dispersal centre for asylum seekers

2.2.2 Health Equity and Inequalities

Health inequalities is a term used to describe the difference in health between two or more different groups of people. Inequalities in health arise because of inequalities in society – in the conditions in which people are born, grow, live, work, and age. These differences are important because they result in a significant gap between the health experienced by people in the most deprived communities, and those in the least deprived.

There is considerable variation in healthy behaviours and health outcomes in the Health Board area, with variation in smoking rates, physical activity, diet and rates of overweight and obesity. Uptake of childhood vaccinations is also lower in more disadvantaged areas, and people are more likely to experience poor air quality. Life expectancy is around ten years lower in the most deprived areas compared with the least deprived, and for healthy life expectancy the gap is more than double this.

Deprivation is higher in neighbourhoods in South Cardiff, and in the Central Vale.

The COVID-19 pandemic exposed these deep-seated inequalities, with impacts seen more heavily in the more deprived areas, and amongst Black, Asian and minority ethnic communities.

Chilcott, Rachel
21/08/2024 11:48:04

There are also an increasing number of people across the Health Boards catchment area with diabetes, as well as more people with severe dementia as the population ages. The number of people with more than one long-term illness is also increasing.

The Health Board does not yet know the long-term health impact of the COVID pandemic on the population's health but expect there to be adverse impacts on mental well-being which could last for many years; as well as impacts from "long COVID". The Health Board also anticipate significant negative impacts on the wider determinants of health, for example levels employment and educational attainment; however, there may also be positive changes seen, for example in community cohesion and levels of walking and cycling.

A revised Cardiff and the Vale of Glamorgan Population Needs Assessment including an Equality & Health Inequalities Impact Assessment (EHIA) has been published which contains an assessment of the needs for care and support amongst the residents of Cardiff and the Vale of Glamorgan, and the range and level of services required to meet that need.

The following themes have been addressed:

- Children and young people
- Older people
- Health / physical disabilities
- Learning disability / autism
- Mental health
- Sensory impairment
- Carers who need support
- Violence against women, domestic abuse and sexual violence
- Secure estate

Three additional themes have also been included as they are of particular relevance for the population of Cardiff and the Vale of Glamorgan:

- Asylum seekers and refugees
- Substance misuse
- Armed Forces Service Leavers (Veterans)

https://cvihsc.co.uk/wp-content/uploads/2022/03/EHIA-English.pdf

https://www.cardiffpartnership.co.uk/wp-content/uploads/2022/04/Exec-Summary-English-Final.pdf

https://cavuhb.nhs.wales/files/board-and-committees/board-2021-22/7-2a-cardiff-and-the-vale-of-glamorgan-population-needs-assessment-2022-v2-pdf/

Cardiff's revised Local Well-being Plan (2023) should also be referenced:

https://www.cardiffpartnership.co.uk/wp-content/uploads/2023/04/Local-Well-being-Plan-2023-28-FINAL-ENG.pdf

With the above factors in mind, the Health Board has further developed a number of clinical and wellbeing strategies with the ambition to progress the integrated health and social care

Chilcott, Rachel
21/08/2024 11:48:04

programme to achieve joined up care based on home first, avoiding harm, waste and variation, empowering people and delivering outcomes that matter to them.

2.3 Business Strategies

This section summarises the business strategies for the Cardiff and Vale University Health Board and related national, regional / other local strategies.

2.3.1 National Strategies

Some of the key Welsh Government policies that have shaped this BJC are:

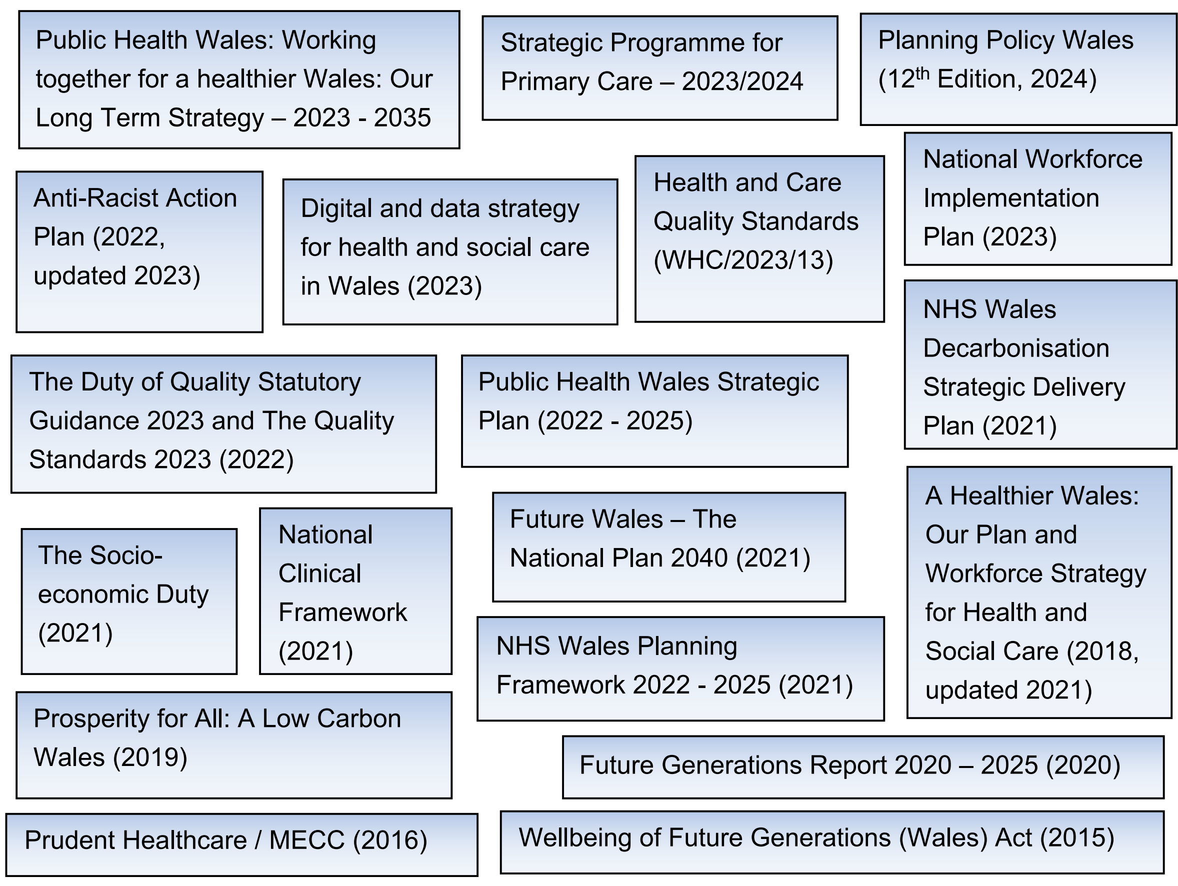


Figure 2: Overarching National Policies considered within this BJC

The national publications outlined above confirm and strengthen the future direction for health and social services in Wales and have a number of common themes for action to take account of the transformation agenda for primary care and general practice.

The local and national agenda is for primary care to develop service provision and the desired model of service will see an on-going shift of services from secondary to primary care. Primary care is perfectly positioned to provide more services at a lower cost than secondary care and with much greater ease of access for patients.

Chilcott,Rachel
21/08/2024 11:48:04

This business case will support these drivers and national policies by aiming to deliver the following:

- Refocusing services to be provided locally / in the community
- Increasing the range of service delivery in general practice / primary care
- Providing clinical care in facilities which are fit for purpose in the 21st century, whilst being as adaptable as possible for further future change as demand grows
- Utilising new technology and systems to advance the way services are delivered and improve access to care
- Provision of more integrated working across professions leading to more seamless co-ordination
- Improvements in patient safety to reduce avoidable harm
- Modern ways of working through new approaches to delivery of care, including enhancing and delivering clinical roles, supporting staff to work to the top of their skill set
- Ensuring the local community are involved in any development of proposals and the needs, aspirations, health and wellbeing of all people are considered at the outset
- Providing sustainable buildings and infrastructure

Summaries of some of the more recent key national policies that support this project can be found at Appendix 1.

2.3.2 Regional Collaboration

2.3.2.1 Partnership Strategies and Priorities

Cardiff and Vale Regional Partnership Board

The Cardiff and Vale Regional Partnership Board (CAVRPB) is made up of Cardiff Council, Vale of Glamorgan Council, Cardiff and Vale University Health Board, Welsh Ambulance Services NHS Trust, housing, third & independent sectors and carer representatives.

The aim is to improve the health and well-being of the population and improve how health and care services are delivered by making sure people get the right support, at the right time, in the right place.

Cardiff and Vale of Glamorgan Integrated Health & Social Care Partnership

The Cardiff and Vale of Glamorgan Integrated Health & Social Care Partnership was established under the direction of the Regional Partnership Board as part of the requirements of the *Social Services and Wellbeing (Wales) Act 2014*. The purpose is to manage and develop services to secure better joint working between local health boards, local authorities and the third sector; and to ensure effective services, care and support that best meet the needs of the population.

This business case demonstrates alignment with the priorities and strategic direction as set out by the *CAVRPB Joint Area Plan (2023 – 2028)* by increasing access to a range of locally delivered services to ensure people do not have to wait too long for the services they need

Chilcott, Rachel
21/08/2024 11:48:04

whilst ensuring promotion of health and wellbeing services is clear so that people know and understand what care, support and opportunities are available to them.

2.3.3 Local Strategies

Some of the key local Health Board strategies and policies that shape this BJC include:

- CVUHB GMS Estate Strategy (2023/2024)
- Integrated Annual Plan (2023/2024)
- Cardiff and Vale People and Culture Plan (2023 – 2026)
- Shaping Our Future Wellbeing (SOFW) Strategy: CVUHB Strategy to 2035 (2023)
- Shaping Our Future Clinical Services Plan 2019 - 2029
- SOFW – Future Hospitals Programme Business Case (2021)
- Cardiff and Vale UHB Delivering Digital: a Five Year Strategy – Building a learning health and care system (2020 - 2025)
- Cardiff and Vale UHB: Estates Strategy (2018 – 2028)

Figure 3: Key Local / CVUHB Strategies

At the heart of the Health Boards vision for primary care and community services is the *Shaping our Future Wellbeing Strategy*. This strategy was first developed in 2013 and much has changed since then, across the healthcare sector, including that health inequalities have deepened, there are increasing visible impacts of climate change and service delivery has changed after learning from lessons from the COVID19 pandemic. The Health Board remain truly committed to taking the actions necessary to respond to these challenges as well as to adapt quickly and take new opportunities to improve the wellbeing of generations to come and therefore a refreshed strategy has been developed during 2023 which sets out the Health Boards continued vision for improving the health and wellbeing of the population it serves by 2035 through its ethos '*Living Well, Caring Well, Working Together*' and its strategic key objectives of:

- Putting people first
- Providing outstanding quality
- Delivering in the right places
- Acting for the future.

A summary of the above local strategies can be found at Appendix 2, however this project supports and strengthens the crucial future vision of these Health Board strategies and culture through:

- Irradicating poor infrastructure that is no longer suitable for current and future use and is not conducive to the best patient outcomes and experience, nor staff wellbeing
- Contributing to the future sustainability of General Medical Services (GMS)
- Working with local communities and primary care networks to reduce health inequalities and provide improved support in relation to preventative action/ self-care
- To increase multi-disciplinary working and service integration in line with cluster priorities

Chilcott,Rachel
21/08/2024 11:48:04

- Providing sessional use of multi-functional, generic room types rather than service specific areas that will create a flexible approach that will also create efficiencies in utilisation across assets
- Assistance in meeting the themes set out in the Workforce Strategy for Health and Social Care in relation to the CVUHB *People and Culture Plan* by improving the experience of staff working across services as well as supporting further education and training where possible to attract, recruit and retain the right staff with the right skills
- Providing a means to reduce the Health Boards carbon footprint by providing sustainable healthcare
- Providing settings that enable engaged, motivated and a healthy workforce - to have a workforce that feels valued and supported wherever they work.

The key qualities for improving the health and wellbeing of the local population have been considered in the Pentyrch Surgery development proposals and align completely with the principles of the *CVUHB Strategy to 2035* and the *CVUHB Primary Care Estate Strategy.*

2.3.4 Other Context

2.3.4.1 Urgent Primary Care Centre Programme

As outlined in national strategies section above and described further in Appendix 1, a major transformational programme for primary care is underway (*Strategic Programme for Primary Care – SPPC*). A key element of this programme is the strategic priority of developing urgent primary care and as part of a 24/7 workstream an *All-Wales National Urgent Primary Care Centre Programme (UPCC)* has been developed.

The Programme seeks to design and deliver a new model of urgent primary care for the population of Wales. The aim is to provide seamless urgent primary care, delivered at a local level, regardless of organisational boundaries, for people within 8 hours of contacting their local service and which will provide additional support to general practices.

From the learning to date, there is no one specific national fully integrated model for urgent primary care that could be universally applied and the right approach varies according to local context, workforce and services currently in place. Transforming 24/7 urgent primary care services will continue to be iterative to ensure that the right mix of services are available in the right place at the right time, supported by an appropriately skilled workforce.

Chilcott,Rachel
21/08/2024 11:48:04

Case For Change

3.0 CASE FOR CHANGE

This section sets out the case for change from a service and estates perspective whilst setting out the spending objectives; the drivers for change and the current issues impacting on the Surgery. It also highlights the benefits and risks associated with the project.

3.1 Spending Objectives

The specific spending objectives for this business case have been developed by the Project Team and relate directly to the needs of the Pentyrch Branch Surgery. They can be evidenced as SMART (specific, measurable, achievable, relevant and time bound) and include:

Spending Objective 1: Improve the Sustainability of General Medical Services	
Specific	To deliver a permanent solution for the delivery of General Medical Services to the residents of Pentyrch and surrounding areas and support the transformation agenda for primary care
Measurable	Evidenced by: ▪ Provision of General Medical Services through a multi-professional approach ▪ The UHB's commitment to training and development within primary care by providing a learning environment, enhancing multi-disciplinary working and service integration
Achievable	Provision of functionally suitable facilities that support safe, sustainable care that is adaptable to change as healthcare demands change
Relevant	The objective is aligned to the Wellbeing of Future Generations goals and ways of working. Specifically: ▪ Long term ▪ Prevention ▪ Integration (prosperity, health, culture) ▪ Collaboration ▪ Involvement The objective is aligned with the NHS Wales Infrastructure Investment Guidance objectives and criteria. In particular: ▪ Supporting the delivery of safe, sustainable and accessible services, and facilitating high standards of patient care ▪ Support changes to streamlining and transforming healthcare provision, with a focus on prevention and supported self-management, the provision of care closer to home, and the integration and coordination of service delivery with partners ▪ Health gain, equity and clinical/ skills sustainability criteria. The objective promotes the SOFW Strategy principles of 'providing outstanding quality', 'delivering in the right places' and 'acting for the future'.
Time-bound	This objective will be fully realised within 1 to 2 years of the facility being operational

Chilcott, Rachel
21/08/2024 11:48:04

Spending Objective 2: Increase Capacity to support Future Demand	
Specific	To provide for increased General Medical Services capacity locally therefore addressing the need for additional space to respond to existing needs as well some of the significant increase in the population planned under Cardiff Council's Local Development Plan (LDP)
Measurable	Evidenced by: ▪ Sufficient capacity to accommodate the increase in patient list size ▪ Reduced waiting times ▪ Number of flexible multi-use facilities available on site
Achievable	The delivery of an increased number and range of flexible, multi-use facilities will be integrated into, and evidenced through, the operational procedures at the Surgery
Relevant	The objective is aligned to the Wellbeing of Future Generations goals and ways of working. Specifically: ▪ Long term ▪ Integration (health) The objective is aligned with the NHS Wales Infrastructure Investment Guidance objectives and criteria. In particular: ▪ Supporting delivery of safe, sustainable and accessible services and facilitate high standards of patient care ▪ Promote the maximum efficient utilisation of assets and improve asset condition and performance ▪ Health gain, clinical and skills sustainability, affordability and value for money criteria The objective promotes the SOFW Strategy principles of 'providing outstanding quality', 'delivering in the right places' and 'acting for the future'.
Time-bound	This objective will be fully realised upon the facility being operational
Spending Objective 3: Increase Access to a Range of Locally Delivered Services	
Specific	To increase the scope and range of services provided in primary care e.g. minor surgery and increased sexual health service provision e.g. Nexplanon and possibly an extended sexual health clinic for neighbouring practices, in line with national direction and refocusing services to be provided in the community
Measurable	Evidenced by: ▪ Number and range of practice and cluster services provided from the site
Achievable	The delivery of an increased number and range of flexible, multi-use facilities will be integrated into, and evidenced through, the operational procedures at the Surgery

Chilcott,Rachel
21/08/2024 11:48:04

Relevant	The objective is aligned to the Wellbeing of Future Generations goals and ways of working. Specifically: ▪ Long term ▪ Prevention ▪ Integration (prosperity, health, culture) ▪ Collaboration ▪ Involvement The objective is aligned with the NHS Wales Infrastructure Investment Guidance objectives and criteria. In particular: ▪ Supporting delivery of safe, sustainable and accessible services and facilitate high standards of patient care ▪ Support changes to streamlining and transforming healthcare provision, with a. focus on prevention and supported self-management, the provision of care closer to home, and the integration and coordination of service delivery with partners ▪ Promote the maximum efficient utilisation of assets and improve asset condition and performance ▪ Health gain, equity, clinical and skills sustainability and value for money criteria The objective promotes the SOFW Strategy principles of 'providing outstanding quality', 'delivering in the right places' and 'acting for the future'.
Time-bound	This objective will be fully realised within 12-18 months of the facility being operational
Spending Objective 4: Provide a High Quality and Compliant Environment	
Specific	To provide modern purpose-built facilities to allow services to be provided appropriately in a modern, well designed physical environment suitable for the delivery of 21st Century healthcare
Measurable	Evidenced by: ▪ Environment offers appropriate facilities for delivery of services, which conform to appropriate WHBNs and WHTMs, and appropriate IP&C measures ▪ Providing sustainable accommodation to meet future environmental and net zero targets where appropriate
Achievable	Providing functionally suitable facilities with better designed and equipped space, appropriately sized to meet patient and staff expectations.

Chilcott,Rachel
21/08/2024 11:48:04

Relevant	The objective is aligned to the Wellbeing of Future Generations goals and ways of working. Specifically: ▪ Long term ▪ Prevention ▪ Integration (prosperity, health, culture) ▪ Collaboration ▪ Involvement The objective is aligned with the NHS Wales Infrastructure Investment Guidance objectives and criteria. In particular: ▪ Supporting the delivery of safe, sustainable and accessible services, and facilitating high standards of patient care ▪ Promoting the maximum efficient utilisation of assets and improving asset condition and performance ▪ Promote the use of innovation to improve the quality of care, to reduce costs and to deliver the necessary service change ▪ Health gain, equity, clinical/ skills sustainability and value for money criteria. The objective promotes the SOFW Strategy principles of 'providing outstanding quality', 'delivering in the right places' and 'acting for the future'.
Time-bound	Delivery of the appropriate infrastructure to support delivery of local services will be realised once the facility becomes operational.

Table 1: Spending Objectives

As well as demonstrating where these objectives align with the NHS Infrastructure Investment objectives and criteria along with the revised SOFW strategic principles, the team has also identified measurable benefits specific to the project. These are linked to the key main benefits as set out in section 3.5 below.

3.2 Existing Arrangements

Primary and Community based healthcare in Cardiff and the Vale of Glamorgan is managed and delivered across 3 localities:

- Cardiff South and East Locality
- Cardiff North and West Locality
- Vale of Glamorgan Locality.

Within each locality, services are planned through a series of Primary Care clusters, which are collaborative groupings of GP practices, general dental practices, optometry services and community pharmacies.

Chilcott,Rachel
21/08/2024 11:48:04

Figure 4: Cardiff and Vale Locality / Cluster Structure

Locality	Cluster
Cardiff South and East	Cardiff East
	Cardiff South East
	City and Cardiff South
Cardiff North and West	Cardiff North
	Cardiff West
	Cardiff South West
Vale of Glamorgan	Eastern Vale
	Central Vale
	Western Vale

Table 2: Cardiff and Vale UHB Locality and Cluster's

Each cluster has the responsibility to identify the key health needs within its area; provide information in respect of referral and activity levels; have a knowledge of current service provision and ascertain any gaps within the area.

Chilcott,Rachel
21/08/2024 11:48:04

3.2.1 Cardiff West Cluster

This focus of this business case is the future sustainability of the Pentyrch Branch Surgery which is located within the Cardiff West Cluster as part of the Llandaff Surgery.

The Cardiff West Neighbourhood consists of 7 electoral divisions: Fairwater, Creigiau & St Fagan's, Pentyrch, Radyr & Morganstown, Whitchurch & Tongwynlais, Llandaff North & Llandaff. The cluster contains a total population of 62,850[1] and has an ageing population (2nd highest over 65 population in the Health Board at 17%).

There are higher levels of deprivation in areas of Fairwater and Llandaff North. The area in the West Neighbourhood that most often displays significantly higher rates and severity of deprivation is Fairwater. These areas are known to experience lower life expectancy and higher rates of premature mortality caused by cancer, coronary heart disease, cardiovascular disease and respiratory disease.

The cluster has 7 GMS Practices with circa 57,000 registered patients in total, 8 Dental Practices, 7 optometrists and 13 community pharmacies.

The Llandaff Surgery practice boundary covers all 7 West Cardiff electoral divisions either through its main or branch surgery at Pentyrch. The Practice has the fifth highest patient list out of the GP practices serving the Cardiff West Cluster.

The remaining cluster GP Premises arrangements together with their development plans are detailed below:

GP Practice	Partnership Arrangement	Practice Premises	Development Plans	Distance from Pentyrch Surgery	Locality
Bishops Road Medical Centre	Multiple partner	2 Premises: Bishops Rd – Purpose built Tongwynlais Medical Centre – purpose built	No plans for new premises development	5.2 miles (main) 2.9 miles (branch)	NW
Danescourt Surgery	Multiple partner (operating as a main site under Tarian Group)	Purpose built leased from Danescourt Partnership	No plans for premises development	4.4 miles	NW
Fairwater Health Centre	Multiple partner	1 Purpose built premise	No plans for new premises development	5 miles	NW
Llandaff North	Multiple partner	3rd Party Developer purpose built premises.	No current development plans	5.9 miles	NW

[1] Office of National Statistics/ C&VoG Population Needs Assessment 2022 - 2027

Chilcott, Rachel
21/08/2024 11:48:04

GP Practice	Partnership Arrangement	Practice Premises	Development Plans	Distance from Pentyrch Surgery	Locality
Medical Centre		Modifications completed 2016 to provide additional capacity			
Whitchurch Medical Practice	Multiple partner	Converted detached property with temporary accommodation Enlarged temporary accommodation implemented 2020	Plans for new premises development as part of SOFW Health and Well-being Centre on Whitchurch Hospital site	4.5 miles	NW
Radyr Medical Centre	Multiple partner	Purpose built leased premises from 3PD completed in 2009	No current development plans	3.9 miles	NW

Table 3: Other GP Practices in the Locality and their development plans

3.2.2 Llandaff Surgery and Pentyrch Branch Surgery

The Llandaff and Pentyrch Surgeries are a practice teaching 1st, 2nd and 3rd year medical students from Cardiff School of Medicine and 5th year medical students from schools of medicine around the UK. The practice (Dr Simpkins and Partner) holds a GMS contract to provide general medical services to the practice population.

The practice operates from 2 sites; the main site at Llandaff and the branch surgery at Pentyrch. The current list size is made up of c. 7,400 patients (c.1000 residing in Pentyrch; c.600 from St Fagans; c.300 from Radyr, Taffs Well and areas North; and c.5500 from Llandaff and wider boundary areas).

Pentyrch Branch Surgery currently operates out of a portacabin following historical issues with the former GP contractor and owner of the premises who refused the Health Board use of the practice building for ongoing general medical services. This portacabin is situated in the village hall grounds with planning granted on the basis of it being a temporary arrangement.

Despite the initial agreement for the portacabin being based on a 3 year period, the practice has operated from this location well in excess of that (for almost 11 years) and has already gone through 4 planning applications and approvals. There is no infinite agreement for the current arrangement to continue and as such there is a risk that planning approval can be refused at any stage particularly if there is no evidence of progress on a permanent solution.

Chilcott,Rachel
21/08/2024 11:48:04

The practice is currently storing its clinical waste within the portacabin in the kitchen area due to space constraints

Figure 5: Existing Pentyrch Branch Surgery Premises Images

The current building includes a total of 90sqm with the following facilities:

- 1 consulting room
- 1 treatment room
- 1 administration room
- 1 reception/waiting room

Cardiff Council has indicated that further planning permission for the Portacabin will not be granted unless there is evidence of progress of a permanent solution and the current owners of the land have confirmed that the surgery cannot remain on the site indefinitely. Furthermore, due to large anticipated local development plan (LDP) growth in this area and the portacabin not being fit for purpose for the long-term provision of quality healthcare to patients, it is critical that a permanent solution is found.

The practice has stated that without relocation and required increase in patient list size, the surgery would be financially unsustainable and the practice would have no alternative than to close the Pentyrch branch. Consequently, patients will need to travel further to access general medical services, with the main site at Llandaff being 5 miles away. This in itself

Chilcott,Rachel
21/08/2023 11:48:04

presents a risk as the Llandaff practice site does not have the ability to provide for a growth in patients therefore creating greater capacity issues across the practice but also impacting on other practices in the wider cluster.

3.2.2.1 Existing Service Provision

Llandaff and Pentyrch Surgeries are commissioned by Cardiff and Vale UHB to provide a comprehensive range of general medical services. These are designated as Unified and Supplementary Services:

Unified Services

These services involve the management of registered patients and temporary residents who are ill or believe themselves to be ill, with conditions from which recovery is generally expected, terminally ill or suffering from chronic disease delivered in a manner determined by the Practice after consideration of relevant nationally agreed clinical guidance or pathways and in discussion with the patient.

Unified services provided by Llandaff and Pentyrch Surgery to both permanently registered patients and temporarily registered patients involve:

- Offering consultation and where appropriate physical examination for the purpose of identifying the need, if any for treatment of further investigation
- The making available of such treatment or further investigation as necessary and appropriate , including the referral of the patient for other services and liaison with other health care professionals involved in the patient's treatment and care
- Advice in connection with the patient's health and relevant health promotion advice

Together with the provision of:

- Cervical screening services
- Child Health Surveillance services
- Childhood vaccination and immunisation services
- Contraceptive services
- Maternity medical services
- Minor surgery services (curettage, cautery, cryocautery)
- Vaccination and immunisations services

Supplementary Services

These services are optional and the practice is required to hold accreditation to join the service list. Service provision, together with having the necessary facilities and equipment required to perform them is available to both permanently registered patients and temporarily registered patients (DSS – Directed Supplementary Service, NSS – National Supplementary Service, LSS – Local Supplementary Service).

Chilcott,Rachel
21/08/2024 11:48:04

Llandaff and Pentyrch Branch Surgery delivers the following extensive range of supplementary services:

- Influenza (DSS)
- Care homes (DSS)
- Anticoagulation with Warfarin (DSS)
- Diabetes Gateway Module (DSS)
- Pertussis (DSS)
- Shingles (NSS)
- Childhood seasonal influenza (2, 3 & 4 years if not in school) (NSS)
- Non Routine Immunisations for Adults & Children At Risk (NSS)
- Unscheduled vaccination of children and young people who have outstanding routine immunisations (NSS)
- Polio - Catch Up Programme Vaccination Of Children Who Have Outstanding Immunisations (NSS)
- Diabetes Module 3 Monitoring of Insulin (NSS)
- Drug Misuse (Monitoring) (LSS)
- Buvidal (LSS)
- Long Acting Reversible Contraception - Depoprovera (LSS)
- Long Acting Reversible Contraception - IUD Fitting & Removal (LSS)
- Long Acting Reversible Contraception - Nexplanon (LSS)
- Long Acting Reversible Contraception - Sayana Press (LSS)
- Learning Disability (LSS)
- Administration of Gonadorelins (LSS)
- Near Patient Testing Level 2 (LSS)
- Near Patient Testing Level 3 (LSS)
- Minor Surgery (LSS)
- DOAC (LSS)
- Influenza at risk groups (LSS)
- Asylum Seekers And Refugees (LSS)
- Administration of Enoxaparin MHV Patients with Subtherapeutic INR (LSS)

Educational Services

The practice currently teaches undergraduate medical students with Dr Howell Simpkins and Dr Rachel Jefferies both approved trainers. Llandaff & Pentyrch Surgery is not accredited by the Deanery to provide post graduate training and has recently applied to become a training practice but was unsuccessful due to a lack of space which is required to host the registrar. The main surgery in Llandaff hosting services for Pentyrch due to the unsatisfactory branch premise therefore has no available space, which is required for teaching.

Chilcott,Rachel
21/08/2024 11:48:04

Private Services

In common with other GP practices as independent contractors the practice undertakes some private work at the premises. The amount of this work is subject to specific regulations, both in relation to registration of patients and overall income. The practice's annual declaration to the Health Board via the NHS Wales Shared Services Partnership, in accordance with the regulations, confirms that the income from private service provision is less than 10% of gross practice income in both cases.

Private services include:

- Travel Immunisation and medication (e.g. malarial medication)
- Insurance examinations and reports (e.g. life cover / mortgage applications)
- Occupational examinations and reports (e.g. Hep B HGV driving examination / occupational health examinations

3.3 Business Need

3.3.1 Challenges

The challenges of the existing branch premises at Pentyrch are outlined below:

Issue	Description of Issue
Access to the Premises	Limited parking at the site. The portacabin currently shares the car park with the village hall. The premises are accessed via the only entrance situated at the front of the building with no separate access for staff and patients. No disability entrance. Surgery closing has been brought forward from 6pm to 5pm due to being situated in a secluded part of the car park.
Patient Confidentiality	No facilities for receptionist to hold confidential discussions therefore all conversations between reception staff and patients can be overheard by waiting patients. Sub waiting areas outside GP and nurse consulting rooms also mean that conversations can be overheard
Staff and patients	Reception area for staff to deal with patients is very small in terms of patients having to wait a long time as there is only room for one receptionist at the hatch. This sometimes means patients could be standing in a queue waiting to be seen. Lack of space for meetings, training and other important activities, has become a routine frustration of the working day for both doctors and staff at the practice. The security of staff is a concern especially as the building can only accommodate one receptionist who is left alone in the building outside of morning and afternoon clinics to ensure patients are able to collect and drop off prescriptions and deal with patient queries.

Chilcott,Rachel
21/08/2024 11:48:04

Issue	Description of Issue
Administration/ Reception	There is no administration office and limited filing space which is in the reception office. The Practice is only able to have 1 receptionist/admin member of staff as there is not enough accommodation for a second person. All correspondence needs to be transferred to Llandaff, therefore there is a delay in input of clinical data from outside agencies leading to a delay in commencing new or changes in treatment plans. Infrastructure / cables covering I.T and tele-communications have been cut on several occasions leaving the practice without telephones and the clinical computer system.
Clinical Space	Practitioners are currently sharing rooms due to space restrictions. The health visitor has to share with the practice nurse during baby clinic and therefore is unable to conduct child health surveillance checks, these are now carried out in Llandaff. There is nowhere private that the health visitor can speak with parents who are looking for advice and support. The Practice is also no longer able to provide an ante-natal clinic due to lack of space. The practice can only hold a short phlebotomy clinic. Injections, dressings, phlebotomy and all other investigations are mostly carried out in Llandaff due to the lack of space in the Pentyrch Branch, this has resulted in 2 days where Llandaff houses 2 hca/phlebotomy clinics on the same day to help meet the demand. At present the practice cannot increase their services to patients as they cannot expand their premises. Room availability limits the ability to develop the range of services provided At present there is one treatment room, this limits what services are provided. The practice would like to replicate services available in Llandaff such as: ▪ Coil/sexual health ▪ Joint injections/minor surgery ▪ Physiotherapy ▪ Mental health support ▪ Ante-natal ▪ Daily nurse appointments ▪ Daily phlebotomy appointments Currently patients from Pentyrch are required to attend Llandaff for the above services, but due to a lack of space now in both surgeries there is now a lengthy waiting list.
Covid Impact	During the covid-19 Pandemic, it quickly became apparent that it was unsafe to work from the Portacabin. The building failed all infection control measures, and therefore was closed during the height of the pandemic. Patients were required to access treatment from Llandaff.

Chilcott,Rachel
21/08/2024 11:48:04

Issue	Description of Issue
Financial impact	The practice is currently required to go through planning applications and the drawing up of tenancy agreements every 3 years which comes at a cost to the surgery, the practice has to bear these costs and have stressed that they cannot go through another planning application (current arrangement expires March 2025). The portacabin can only be heated by electric heaters which has a high impact on the surgery's utility expenses. The practice has only recently had to replace 3 of these electric heaters and with the building so cold in the winter, the heating has to remain on a low setting during the night. Likewise in the summer, the building is unbearably hot and the practice had to closed twice in the summer of 2023 due to the excessive heat. Tele-communications are sub-standard in Pentyrch due to being restricted to the one line made available, the practice has been the target of frequent vandalism attempts where the phone line has been ripped from the building resulting in the loss of the line on many occasions and the cost to the practice in the repair of this. The practice has now tried to align the telephone system to Llandaff, at great expense to ensure call recording and more available lines, but due to the poor broadband infrastructure within the portacabin this has not been a total success. The number of patients attending could not financially support a full time doctor and nurse, the practice has reduced the number of clinical sessions it can offer due to financial impact. Without a relocation and planned increase in patient list size, the surgery would be financially unsustainable and the practice would have no alternative than to close the Pentyrch branch. Pentyrch patients would need to re-register with neighbouring surgeries, which are also expecting to register patients from any new development and therefore would reach their maximum list size without Pentyrch supporting the new registrations or travel to Llandaff surgery, and the consequent impact on space and ability to provide services from that premise.

Table 4: Challenges currently facing the Practice

Due to the existing spatial / accommodation constraints and sustainability issues outlined above, the Pentyrch Branch Surgery features remains a priority scheme for the Health Board. The temporary portacabin which provides only two clinical rooms and limited ancillary provision is unsuitable for the delivery of healthcare services to the population of Pentyrch and the surrounding areas with limiting the expansion and development of these services not compliant with the Equality Act or minimum standards for premises providing general medical services.

Chilcott,Rachel
21/08/2024 11:48:04

Therefore there is a pressing need for change; the local and national agenda is for primary care to develop service provision and the desired model of service will see an on-going shift of services from secondary to primary care. Primary care is perfectly positioned to provide more services at a lower cost than secondary care and with much greater ease of access for patients however the current facility does not support the effective delivery of the GMS contract and space is at a premium with opportunities to increase the range of services delivered locally to the residents of Pentyrch and surrounding areas, and across the Practice as a whole being severely restricted due the constraints of the current buildings at both Pentyrch and Llandaff. The limited number of patients that have access to services at Pentyrch currently also impacts on the viability of providing a fuller range of services from this location.

3.3.2 LDP Issues

The area covered by the Practice is affected by significant growth under Cardiff Council's Local Development Plan (2023/ 2024). 7,147 homes/ 16,438 people are planned for the Plasdwr and surrounding developments, 2,751 units are planned for the North of Junction 33/ South of Creigiau – (2,101 homes /4832 people at Junction 33 + 650 homes /1,495 people South of Creigiau), with other developments planned to include 364 homes/837 people on the BBC studios site (work is being established to identify what the growth means for the practice as a whole but a further housing study produced in January 2024 indicates that circa 9,375 units will be required).

Based on the projected population growth indicated in the local development plans and the realisation that there is not enough capacity in the existing primary care infrastructure in this area already, together with an already unfit for purpose premises in temporary accommodation that hampers effective clinical delivery enforces a permanent premises solution is needed that ensures the long-term sustainability of the Practice but also it could help to alleviate the fragility of primary care and GMS provision in the area.

3.3.3 Activity / Staffing

Currently there are c2,000 patients attending Pentyrch Branch Surgery and demand is forecast to increase to 5,600 initially, with the requirement for any new site to allow for the potential expansion to accommodate 10,400 patients to fit with the scale and pace of the LDP developments. This business justification case focus' on the 'medium term' list size however in light of the future increased list size of patients attending the replacement surgery to 10,400 patients with envisaged future additional services and clinics being provided, the Practice recognises that more staff will need to be employed and additional clinical and administrative space provided to accommodate a patient increase.

Chilcott,Rachel
21/08/2024 11:48:04

	Current		Proposed		Change	
	No	WTE	No	WTE	No	WTE
Clinical Staff						
GP (inclusive of Trainer)	3	0.75	3	0.75	0	0
GP Retainers	0	0	0	0	0	0
GP Registrars	0	0	0	0	0	0
Practice Nurses	1	0.125	1	0.5	0	0.375
Health Care Assistants/phlebotomy	1	0.375	2	0.625	1	0.25
Non-Clinical Staff						
Practice Manager	1	0.125	1	0.5	0	0.375
Assistant Practice Manager	0	0	1	0.25	1	0.25
Reception / Administrative Support Personnel	1	0.75	4	2.25	3	1.5
Cluster Staff (Pharmacist & Primary Care Nurse for Older People, MSK, Mental Health) Maternity booking, Counselling	**0**	**0**	**5**	**3**	**5**	**3**
Attached Non-GMS Staff Midwife, Health Visitor	**0**	**0**	**2**	**0.5**	**2**	**0.5**
Total	**7**	**2.125**	**19**	**8.75**	**12**	**6.25**

Note: The above apples from day 1 of opening.

Table 5: Proposed Staffing Arrangements

The Practice is supported by a team of dedicated employees who are committed to providing health services that safely and effectively respond to the needs of the community. The team has worked hard to overcome the current premises inadequacies in providing the services, however, the existing building presents significant challenges from a service delivery perspective.

The Practice intends to continue to open 3 days a week initially for existing patients, increasing to 4 days within 12 months of opening and will accommodate initially the GPs, Practice Nurse, HCA/Phlebotomist, health visitor/midwife and cluster pharmacist however this will increase as future demand materialises. Two of the GP's who currently work in Pentyrch have specialist interests in minor surgery/steroid injections & coil/ implant fittings, with the practice planning to set up clinics as soon as possible in order to reduce the waiting list for these services.

Llandaff currently has no administration space and all admin tasks are undertaken in the reception office on the ground floor. Any revised premises provision at Pentyrch will allow space to develop the administration/ reception team and provide crucial flexibility to the practice team and release much needed space that can be utilised for future patient care.

Going forward the practice will continue to review its capitation figures and increase staffing levels and services in accordance with practice viability and patient need.

Chilcott, Rachel
21/08/2024 11:48:04

3.3.4 Service Vision

The main areas for development of the Practice over the coming five years will support the Health Board's vision and respond to local health need and forecasted demographic growth.

Specific service objectives include:

- To develop, expand and improve the range of services the Practice offers locally to the residents of Pentyrch and surrounding areas
- To implement services in line with GMS contract requirements as well as provide for extended healthcare service (such as Health Visiting and midwifery) which patients currently have to attend the main surgery in Llandaff to access
- To deliver more illness prevention and health promotion activities that focus on the community taking greater personal and allow the practice to take an active role in supporting the ethos of the West cluster as a well-being cluster
- To develop minor surgery services
- To enhance the role of nurses, particularly in relation to chronic disease clinics which will have a significant impact on patient quality of life and in turn, reduce demand on secondary care services. Further potential initiatives include setting up a weekly wound care/lymphedema clinic with the district nurse in attendance - this would also provide services to local surgeries and save district nursing resources by seeing patients in one place rather than home visits
- To continue and develop as an undergraduate training Practice
- To implement the role of a Health Care Assistant to support the provision of enhanced new patient checks, increased phlebotomy activity, B/P checks, health promotion, chaperoning and patient recall.

Areas of development to support these objectives include:

- More extensive minor surgery - The Practice conducts all aspects of minor surgery and has 2 GP's with specialist interests in this area. They have both been working alongside the dermatology department at the University Hospital of Wales (UHW) and now able to offer more complex surgery
- Development of Sexual Health Services - IUCD and Nexplanon is currently only available at the main Llandaff site but the future vision would be to extend these services to be provided from the replacement surgery. The Practice would also like to develop a sexual health clinic for neighbouring practices given the limited service available in Cardiff West; this would look to extend and develop the work taking place currently with the department of sexual health to provide services for its own practice and neighbouring practices to bring the waiting list down
- Increased multi-disciplinary working and service integration in line with cluster priorities taking forward the transformation agenda – this is currently extremely limited due to room availability however the practice is hoping to take on more cluster based work and in turn be able to offer more services to its patients in the future.

Chilcott,Rachel
21/08/2024 11:48:04

3.4 Potential Scope and Services

This section describes the potential scope for the project in relation to the spending objectives and business needs.

In line with Welsh Government guidance, the scope has been assessed against a continuum of need ranging from:

- A minimum – essential or core requirements/outcomes
- An intermediate – essential and desirable requirements/outcomes
- A maximum – essential, desirable and optional requirements/outcomes.

	Core	Desirable	Optional
Potential Scope	A facility for Pentyrch and the surrounding areas that meets minimum statutory requirements	A facility for Pentyrch and the surrounding areas that meets minimum statutory requirements, supports GMS sustainability, best practice models and addresses current known capacity issues whilst providing an opportunity for expansion to support LDP growth and include other health care services at a future date	A facility for Pentyrch and the surrounding areas that meets minimum statutory requirements, supports GMS sustainability, best practice models and addresses known capacity issues whilst providing accommodation to support the future LDP growth and include other health care services at a future date
Key Service Requirements	Sized to meet current demand	Sized to meet current and projected future demand in the medium term	Sized to meet current and projected future demand in the long term

Table 6: Potential Scope

This business case will aim to take forward the desirable scope to provide the practice with accommodation to support the medium term list size however any premises must consider and accommodate the opportunity to support future expansion for the longer term growth.

3.5 Main Benefits

This section describes the main outcomes and benefits associated with the implementation of the investment of the identified scope in relation to the identified business needs. Benefits criteria will be used to assess the options within the 'available options' section of this BJC.

Benefits are expressed in relation to the developed appraisal criteria that were derived from the spending objectives as follows:

- **CRB** – cash releasing benefits (e.g. avoided costs);
- **Non CRB** – non cash releasing benefits (e.g. staff time saved);
- **QB** – quantifiable benefits (e.g. achievement of targets);
- **Non QB** – non-quantifiable or qualitative benefits (e.g. improvement in staff morale).

Chilcott, Rachel
21/08/2024 11:48:04

Spending Objective	Stakeholder Group	Main Benefits
Spending Objective 1: Improve the Sustainability of General Medical Services	Patients	QB – Services continue to be provided to meet patients' needs including medication review / immunisations Non QB – Increased delivery of health promotion to keep the community healthy and support independent management of conditions
	Staff	Non QB – Enhanced commitment to training and development within primary care by providing a learning environment and enhancing multi-disciplinary working
	Health Community	Non QB - Supporting the transformation agenda for primary care services in the community/ cluster Non QB – Supporting sustainable care and facilities that are adaptable to change as healthcare demands change
Spending Objective 2: Increase Capacity to support Future Demand	Patients	Non CRB – Provision of access to increased number of flexible multi-use facilities available on site leading to greater utilisation QB – Reduction in waiting times
	Staff	QB – Support the development of nurse led chronic disease management clinics Non CRB - Improved facilities for staff meetings, therefore promoting team working
	Health Community	QB – Facilitate expansion of primary care training
Spending Objective 3: Increase Access to a Range of Locally Delivered Services	Patients	QB – Provide access to increased range of services for the local population such as midwifery, and child health clinics
	Staff	Non CRB - Collaboration opportunities with visiting health professionals
	Health Community	CRB - Provision of selected secondary care services in primary care that can be provided more cost effectively than current secondary tariffs without compromising clinical standards or patient outcomes and satisfaction Non CRB - Early intervention and timely treatment reduces inpatient admissions to acute hospital
Spending Objective 4: Provide a High Quality and Compliant Environment	Patients	Non QB – Provide safe and appropriate environments of care for patients and improving the patient experience QB – Maintaining appropriate privacy and dignity
	Staff	QB – Provide a sustainable, safe and appropriate environment for staff and be a better place to work QB – Improved morale gained from improved access to modern equipment, technologies and facilities

Chilcott, Rachel
21/08/2024 11:48:04

Spending Objective	Stakeholder Group	Main Benefits
		QB – Staff recruitment and retention will improve as investment in new facilities will help attract and retain high quality professional staff including partner opportunities Non CRB – Better opportunities for administrative data and quality capture through improved IT QB – Improved security arrangements
	Health Community	Non QB – High quality care given to all patients in modern purpose built accommodation QB – Compliance with statutory standards QB – Compliance with NHS guidance/best practice Non QB - Providing sustainable and energy efficient accommodation to meet future environmental and net zero targets where appropriate

Table 7: Main Benefits

In aiming to deliver these main benefits, any development or reinstated provision within the area would provide modern, sustainable, accessible and integrated healthcare services for the residents of Pentyrch and surrounding areas. The aims and priorities of the Cardiff West Cluster would be supported in that service delivery would be transformed and rebalanced across the community where possible, supporting further sustainability.

The project will also look to provide a conducive working environment for staff and support training opportunities and collaborative communication links.

The arrangements for the realisation of benefits is detailed within the Management Arrangements section of this business case with any community benefits through the construction phase referenced within the procurement section.

Chilcott,Rachel
21/08/2024 11:48:04

3.6 Main Risks

The table below provides a summary of the key business and service risks that might affect any option for the delivery of the project:

Risk Description	Counter Measure	Design Development	Implementation	Operational
Business Risks				
Reputational risk associated with delivering the scheme/ stakeholder expectations and GMS contract requirements	Primary Care Team maintains frequent contact with the practice to ensure and maintain a positive relationship including managing on-going commitment to the scheme	✓	✓	✓
Capital funding is not available to implement the development	Ongoing discussions with Welsh Government to secure the funding stream		✓	
Delayed approval by WG	Project Team oversight to ensure timely specification / business case development and robust processes are place to further mitigate accommodation/ capacity issues	✓	✓	
Service Risks				
Underestimated growth in demand for services/ sustainability	Team to ensure scheme specification is in line with projected population growth/ projected additional patient registrations and therefore truly viable	✓	✓	✓
Design doesn't fully meet the operational requirements	Managed brief and design to be signed off by the Clinical Board prior to any development			✓
Revenue cost assumptions underestimated	Robust development and 'sign off' of revenue models to support service change including any site management issues		✓	✓
Inability to negotiate appropriate terms for development	Maintain full engagement and consultation with Local Authority/ GP Partners	✓	✓	✓
Failure to secure appropriate planning permissions	Maintain full engagement and consultation with Planning Authorities during development process	✓		
External Risks				
Failure to proceed – Contractor / developer bankruptcy whereby development stalls	Appointment of established Contractor / Developer via approved procurement route	✓	✓	

Table 8: Main Risks

Chilcott,Rachel
21/08/2024 11:48:04

There are many other risks in relation to programme and construction however the Health Boards approach to the management of risk for the preferred option, is described later within this document along with details regarding the project risk register that includes further mitigation against the above risks.

3.7 Constraints

The project is subject to the following constraints:

- Availability of space on a suitable site to enable the location of the required services
- Plans must contribute to the Health Board's pursuit of a more sustainable future for services
- Redesigned service models to be delivered within available revenue resources

3.8 Dependencies

The project is subject to the following dependencies that will be carefully monitored and managed throughout the lifespan of the scheme:

- Capital funds from WG to provide appropriate accommodation
- The scheme must allow full compliance with relevant statutory/mandatory standards and meet the requirements of the relevant clinical service pathways
- Receiving the appropriate agreements from the Local Authority in relation to land transactions, planning permission and development where required

Chilcott,Rachel
21/08/2024 11:48:04

Available Options

Chilcott,Rachel
21/08/2024 11:48:04

4.0 AVAILABLE OPTIONS

This section describes the options considered by the Health Board and the assessment of the benefits and costs of those that were shortlisted.

4.1 Critical Success Factors

The Critical Success Factors (CSFs) for this project were taken from the Welsh Government (WG) guidance and endorsed by the Project Team as follows:

CSF	Description
CSF 1 – Strategic Fit and Business Needs	How well the option: ▪ meets the agreed spending objectives, related business needs and service requirements, and ▪ provides holistic fit and synergy with other strategies, programmes and projects.
CSF 2 - Optimisation of Cost and Benefits (VFM)	How well the option: ▪ optimises public value (social, economic and environmental), in terms of the potential costs, benefits and risks.
CSF 3 – Supplier Capacity and Capability	How well the option: ▪ matches the ability of potential suppliers to deliver the required services, and ▪ is likely to be attractive to the supply side.
CSF 4 – Potential Affordability	How well the option: ▪ can be funded from available sources of finance, and ▪ aligns with sourcing constraints.
CSF 5 – Potential Achievability	How well the option: ▪ is likely to be delivered given the organisation's ability to respond to the changes required, and ▪ matches the level of available skills required for successful delivery.

Table 9: Critical Success Factors

These CSFs have been used alongside the spending objectives for the project to evaluate the list of possible options described in the following section.

Chilcott,Rachel
21/08/2024 11:48:04

4.2 Development of Options

In consultation with key stakeholders including GP clinical and managerial staff, staff from capital and estates, and Health Board primary care leads the following list of options were identified and assessed:

Development of Options		
Option Number / Name		**Description**
Option 1	Business As Usual (BAU)	This option would involve on-going service provision from the temporary accommodation
Advantages		▪ No capital outlay required ▪ Current site is familiar to existing patients
Disadvantages		▪ Temporary building is not fit for purpose to deliver high quality patient healthcare ▪ Current owners of the land have confirmed that the surgery cannot remain on the site indefinitely ▪ Does not support strategic direction of primary care services ▪ Doesn't meet current or future demand
Conclusion		This option has been discounted as it doesn't meet any of the project spending objectives or CSFs and is unsustainable due to the need to vacate the current site. However it will be retained for comparative purposes within the economic appraisal.
Option 2	Do Minimum (Core Scope/ Refurbish Existing Building)	Retain temporary accommodation with internal modifications to create a facility for Pentyrch and the surrounding areas that meets minimum statutory requirements
Advantages		▪ Limited capital outlay required ▪ Would partially provide a higher quality environment for patient care ▪ Current site is familiar to existing patients
Disadvantages		▪ Only sized to meet current demand and therefore doesn't create opportunities to meet anticipated demand ▪ Further planning permission on current site is not supported due to a longer term solution required ▪ Current owners of the land have confirmed that the surgery cannot remain on the site indefinitely ▪ Does not support strategic direction of primary care services ▪ Refurbishing the existing building would lead to disruption of services to patients during the works and may also incur additional costs for temporary accommodation / relocating services ▪ Ongoing commitment from the practice cannot be guaranteed and who have previously stated that they will have no option other than to close the branch surgery should a replacement surgery not come to fruition
Conclusion		This option has been discounted as it doesn't genuinely meet any of the project spending objectives or CSFs and a longer term premises solution is required for the surgery

Chilcott,Rachel
21/08/2024 11:48:04

Development of Options		
Option Number / Name		**Description**
Option 3	Do Intermediate (Desirable Scope / Extend Existing Building)	Provide a facility for Pentyrch and the surrounding areas that meets minimum statutory requirements, supports GMS sustainability, best practice models and addresses known current capacity issues whilst providing an opportunity for expansion to support LDP growth and include other health care services at a future date
Advantages		▪ Will provide sufficient capacity to meet the medium term demand in growth ▪ Would provide a higher quality environment for patient care ▪ Current site is familiar to existing patients
Disadvantages		▪ Further planning permission on current site is not supported due to a longer term solution required ▪ Current owners of the land have confirmed that the surgery cannot remain on the site indefinitely ▪ Limited opportunity to support strategic direction of primary care services ▪ Extending and refurbishing the existing building would lead to disruption of services to patients during the works and may also incur additional costs for temporary accommodation / relocating services ▪ Provides limited opportunity to support LDP growth on existing site
Conclusion		This option has been discounted as it doesn't genuinely meet any of the project spending objectives or CSFs and a longer term premises solution is required for the surgery.
Option 4	Do Intermediate Plus (Desirable Scope / New Build Solution)	Provide a facility for Pentyrch and the surrounding areas that meets minimum statutory requirements, supports GMS sustainability, best practice models and addresses known current capacity issues whilst providing an opportunity for expansion to support LDP growth and include other health care services at a future date. For the purposes of the option development and appraisal, this option assumes that the new build would be located on a new site due to the fact that the existing site is not available in the medium / longer term.

Advantages		▪ Sized to meet medium term demand for growth and may have the potential to provide expansion
		▪ Would provide a high quality environment for patient care
		▪ A newly purpose developed premises could offer:
		  o The standards required by the practice in relation to its model of care
		  o Maximum flexibility in relation to utilisation/ adaptability
		  o Enhanced building performance, sustainability and environmental aspects
		▪ Provides the opportunity to support strategic direction of primary care services

Chilcott,Rachel
21/08/2024 11:48:04

Development of Options		
Option Number / Name		**Description**
		▪ New premises would provide less service disruption to existing patient services ▪ Ensures sustainability of general medical services in the area, and ongoing viability of the Llandaff Practice
Disadvantages		▪ Availability of a site in local area / community that can offer opportunities for the required accommodation ▪ Location of any new site may be unfamiliar with patients ▪ Greater capital outlay
Conclusion		This option is considered the preferred option as it fully meets the project spending objectives and CSFs whilst providing an affordable solution that delivers the required medium term capacity and the opportunity to support future expansion
Option 5	Do Maximum (Optional Scope / New Build Solution)	A facility for Pentyrch and the surrounding areas that meets minimum statutory requirements, supports GMS sustainability, best practice models and addresses known capacity issues whilst providing accommodation to support future long term LDP growth and include other health care services at a future date.

Advantages		▪ Sized to meet long term demand for growth
		▪ Would provide a high quality environment for patient care
		▪ A newly purpose developed premises could offer:
		  ○ The standards required by the practice in relation to its model of care
		  ○ Maximum flexibility in relation to utilisation/ adaptability
		  ○ Enhanced building performance, sustainability and environmental aspects
		▪ Provides the opportunity to support strategic direction of primary care services
		▪ New premises would provide less service disruption to existing patient services
		▪ Ensures sustainability of genial medical services in the area, and ongoing viability of the Llandaff Practice

Disadvantages		▪ Availability of a site in local area / community that can offer opportunities for the required accommodation ▪ Location of any new site may be unfamiliar with patients ▪ Maximum capital outlay, including incurring a significant amount of capital based on longer term projections that may change thereby not providing maximum value for money
Conclusion		This option has been discounted as whilst it meets the project spending objectives and CSFs and provides a longer term solution, it could potentially make the project unaffordable and lead to investment in premises for future requirements that may change as predicted growth and local developments change

Table 10: Development of Options

Chilcott,Rachel
21/08/2024 11:48:04

Having identified the requirement of a new purpose built development was the preferred option with the other options being deemed unviable, it was therefore necessary to identify a suitable site for development. In February 2019, a Third-Party Developer (Assura PLC) undertook a site search to deliver a new facility for Pentyrch Branch Surgery with the requirement for a site which could accommodate the medium capacity whilst ensuring the ability to expand to accommodate the longer term requirements. This included a review of other GP and community premises within the cluster. The approach taken involved the following:

- Appoint Local Agent - Cooke & Arkwright
- Drawing on local knowledge/previous sites identified in the area
- Discussions and meetings with Cardiff Council
- Meetings held with local land owners
- Tour of the Area

Through this work, 25 potential sites were identified with the long list of sites identified in Appendix 3. 19 of these sites were ruled out at an early stage due to not being viable. Reasons for which are also included.

A shortlist of six sites was then identified for further assessment, this was undertaken by the Pentyrch Project Team against standard criteria which has been applied previously to other primary care schemes locally. The criteria were:

- Size
- Accessibility
- Affordability
- Deliverability
- Acceptability

Weightings were applied to each of these criteria taking account of importance. The table below shows the weightings for each of the criteria:

Criteria	Weighting
Size	5
Accessibility	3
Affordability	5
Deliverability	4
Acceptability	3

Table 11: Criteria Weightings

Chilcott,Rachel
21/08/2024 11:48:04

Using the agreed criteria and weighting led to the following scores for each of the six site options that were evaluated:

Site Name	Size	Accessibility	Affordability	Deliverability	Acceptability	Total (incl Weighting)
Land between Bronllwy & Heol-Y-Bryn Roads	5	3	3	2	2	63
Land between A4119 & Rhydlafar Drive	5	4	4	3	3	78
Land off Fairmeadow	5	3	1	1	2	49
'Commercially sensitive site'	5	2	3	2	1	57
Rugby Club	1	3	4	2	4	54
Squash Courts	1	3	4	2	4	54

Table 12: Site Option Evaluation / Scoring

4.3 Conclusion

Based upon the analysis above, a new purpose built development on a new site was deemed to be the only viable option. Having undertaken an extensive site search and appraisal, the Council-owned Land between A4119 & Rhydlafar Drive emerged as the option scoring highest against the criteria with a score of 78. The Business As Usual option however will be taken forward to the economic appraisal for comparative purposes.

Chilcott,Rachel
21/08/2024 11:48:04

4.4 Economic Appraisal

4.4.1 Methodology and Assumptions

The economic appraisal has been conducted in accordance with the following guidance:

- The Green Book – Appraisal and Evaluation in Central Government plus supplementary guidance published by HM Treasury
- 5 Case Model guidance for SOCs, OBCs and FBCs (WG) and WG/IPAG FBC Template.

The principles and assumptions used in this BJC are:

- The model has been run for 60 years from opening and 62 years in total
- Capital costs are based on a fully tendered proposal and therefore contingency has been added but optimism bias has been excluded
- Discounts rates have been applied for 3.5% at 30 years and 3.0% thereafter
- Income for the GP Practice and therefore cost to the NHS has been set at £155 per patient based on a local average
- Additional Health Board funded costs of £25k per annum have been added across all years
- A risk of £187k per annum has been built into the do nothing based on an anticipated premium the Health Board would have to invest over and above normal funding rates to make the practice sustainable
- A risk of £2.5m has been built into do nothing between 5-7 years to reflect the risk of having to extend other practices in the area should the branch surgery close. This assumes a capital cost equivalent to the spend on this GP practice
- A benefit of 20% of additional growth income has been built into Option 0 for years 4 to 9 and beyond to allow of the ability to expand the list size to the medium-term requirements
- A further benefit of 5% of income has been built into from year 10 onwards built up over 5 years to allow for the potential site benefit only of increasing further the list size to 10,400. Further building would be required to support this but this allows for the flexibility of the new site to cope with this.

4.4.2 Capital Costs

These are summarised below:

Capital Costs	Option 0 (BAU) £'000	Option 1 £'000
Works Cost	0	3,257,000
Fees	0	689,000
Non-Works	0	342,000
Land Acquisition	0	
Land Sale	0	
Equipment	0	30,000

Chilcott, Rachel
21/08/2024 11:48:04

Capital Costs	Option 0 (BAU) £’000	Option 1 £’000
Planning contingency	0	225,000
Total Initial capital	**0**	**4,542,000**
Optimism Bias	0	0
Total Capital excluding VAT	**0**	**4,542,000**
TOTAL PROJECT OUTTURN COST	**0**	**5,344,000**

Table 13: Capital Costing Summary at Tender Proposal – (£’000)

Supporting analysis is provided through the BJC forms, which are attached in Appendix 4.

4.4.3 Economic Appraisal Outputs

Details of the economic appraisal are attached at Appendix 5 and summarised in the tables that follow:

	Option 0 £’000	Option 1 £’000
Incremental costs - total	0	(5,138)
Incremental benefits - total	0	11,629
Risk-adjusted Net Present Social Value (NPSV)	0	6,491
Benefit-cost ratio		**2.26**

Table 14: Summary of Benefit Cost Ratio – (£’000)

This demonstrates that based on the assumptions identified in section 4.4.1 that Option 1 has a benefits cost ratio of 2.26 and therefore provides an overall economic benefit over and above option 0.

The table below shows the breakdown of the calculation showing the impact:

- Capital costs and lifecycle costs on option 1 and planning risk
- Additional revenue costs on do nothing
- Additional capital risks of option 0 over the life of the project
- Future economic benefits of option 1

	Option 0 £’000	Option 1 £’000
Opportunity Costs	0	0
Capital Expenditure	0	(5,138)
Revenue Expenditure	(35,885)	(31,315)
Present Cost	**(35,885)**	**(36,453)**
Planning Risks	0	(206)
Additional Risks	(4,069)	0
Total Risk	**(4,069)**	**(206)**
Un-monetised Risk Score	0	0
Risk-adjusted Present Cost	**(39,954)**	**(36,660)**

Chilcott,Rachel
21/08/2024 11:48:04

	Option 0 £'000	Option 1 £'000
Cash Releasing Benefits	0	0
Non-Cash Releasing Benefits	0	3,197
Societal Benefits	0	0
Total Benefits	**0**	**3,197**

Table 15: Summary of Economic Appraisal Output – (£'000)

On the basis of the economic appraisal undertaken:

- Option 1 is the preferred option over the do-nothing scenario. No other options have been modelled in line with the BJC
- As there is only one option being developed a sensitivity test has been undertaken to demonstrate what would be required to make option 1 generate a benefit cost ratio of 1.0
- This demonstrates the change in cost increases in capital and the changes in decreases of benefits that would be required for option 1 to be level with Option 0. In both cases the percentages are significant at in excess of 100%.

	Base Factor Incremental Change Needed (Positive = Higher Costs. Negative = Lower Costs)
Base Incremental Costs:	
Incremental cost increase - capital (inc. optimism)	126.3%
Incremental cost increase - revenue	0.0%
Incremental cost increase - risks	0.0%
Total Incremental Cost Change needed	**(6,490)**
Base Incremental Benefits:	
Incremental cost reduction - net contribution	0.0%
Incremental benefit - cash releasing	0.0%
Incremental benefit - non-cash releasing	(203.0%)
Incremental benefit - societal	0.0%
Total Incremental Benefit change needed	**(6,491)**

Table 16: Sensitivity Analysis on Option 1 – (£'000)

This demonstrates that Option 1 is economically preferable to Option 0 and a significant change would be required to the assumptions to make it less beneficial than do nothing.

Chilcott,Rachel
21/08/2024 11:48:04

Preferred Option

Chilcott,Rachel
21/08/2024 11:48:04

5.0 PREFERRED OPTION

5.1 Identifying the Preferred Option

The preferred way forward has been identified as a new purpose built development on the Council-owned Land between A4119 & Rhydlafar Drive which will provide a 21st century healthcare solution for the current patients of the Pentyrch Branch Surgery, support a medium term solution in relation to uplifting capacity and providing continued sustainable delivery of General Medical Services to the residents of Pentyrch and local surrounding areas whilst also offering an opportunity to expand service delivery in the longer term future to meet further capacity requirements as the population increases in the wider locality due to the planned Cardiff Council Local Development Plan.

The option will support the Practice and Health Board's commitment to training and development within primary care by providing a learning environment whilst enhancing multi-disciplinary working and service integration thus ensuring the sustainability of GMS services in the community.

5.2 Description of the Preferred Option

The work undertaken reflects the current strategic direction for primary care, including the Welsh Government premises guidance, as well as the Practice's medium to long term plans for development. The design has also been reviewed in the context of the necessary infection and prevention control requirements.

The new building is to be constructed on an unused grassed area between Rhydlafar Drive and Llantrisant Road. The main vehicular and public access will be off Rhydlafar Drive to the North of the site.

The new building will be constructed over two floors. The plans describe ground floor accommodation consisting of the public area comprising GMS accommodation such as consulting rooms, treatment rooms, ancillary rooms plus public spaces such as waiting rooms, etc. On the first floor, the staff areas will provide administration space and welfare facilities.

Internally, the building will offer a clear and legible solution which will enable an easy way of navigation around the clinical areas with specific consideration being given to room adjacencies, positioning and the relationships of rooms, together with clear vision and control from a centrally positioned reception desk.

A clear main entrance has been provided with level access from Rhydlafar Drive, promoting clear and legible use upon entering the site.

Externally, 28 parking spaces are provided, including 3 no. disabled.

Chilcott,Rachel
21/08/2024 11:48:04

5.2.1 Land Acquisition/ Planning Permission

Discussions regarding the transfer / acquisition of land required for the development are now agreed with Cardiff & Vale University Health Board and Cardiff Council and Heads of Terms signed. The Council has also granted full planning permission on the condition that the development is started by May 2026.

5.2.2 Schedule of Accommodation

The schedule of accommodation has evolved during the design development process but fully reflects the agreed brief for the project and has been endorsed by the Practice after multiple engagement activities. It is compliant with Welsh Health Building Note 36 and has been designed to meet the needs of the growth in patient numbers for the medium term, respond to and support the practice's plans for service development and provide a general medical facility that supports the Health Board and primary care transformation agenda's aim of refocusing services to be provided in the community.

The new building will provide vastly improved treatment rooms, with infection control at the forefront to ensure the facility meets appropriate standards. The building has also been designed to give flexibility in use, this will ensure the building can be adapted to changing needs in the future.

A copy of the schedule of accommodation for the facility can be found at Appendix 6.

5.2.3 Achieving Excellence Design Evaluation Toolkit (AEDET)

As a specified requirement within the business case process, an AEDET for the Pentyrch Branch Surgery development has been completed.

The report on the AEDET results are attached as Appendix 7 and a number of agreed actions were identified for further consideration which have been further addressed by the Project Team and during the ongoing design development.

5.2.4 Building Research Establishment Environmental Assessment Methodology (BREEAM)

In line with the NHS Wales Net Zero Building Standard Alignment suite of documents, the team have undertaken a BREEAM report for the scheme. This provides a method of assessing, rating, and certifying the sustainability of buildings. It focuses on: Energy, Land use and ecology, Water, Health and wellbeing, Pollution, Transport, Materials, Waste and Management. The current BREEAM Pre-Assessment report outlines the target of 'very good' for the preferred option.

Chilcott,Rachel
21/08/2024 11:48:04

Procurement Route

Chilcott,Rachel
21/08/2024 11:48:04

6.0 PROCUREMENT ROUTE

This section details the negotiated procurement method in relation to the preferred option.

6.1 Required Services

The required scope of works within this BJC is for the project management, cost advice and the design and construction of a new Pentyrch Branch Surgery.

The proposals for the scheme have been developed through an agreed project structure led by Cardiff and Vale University Health Board working with Llandaff and Pentyrch Surgery, NHS Wales Specialist Estates Services and Assura PLC (third-party developer) as key stakeholders.

However, since this time, an agreement on an uplift to rental values could not be achieved between the Health Board and the Third-Party Developer, which led to them withdrawing from the scheme. Following discussions with WG it was agreed that the Health Board would seek central capital funding to support the delivery of the facility and would purchase the intellectual property rights for the works completed to date.

6.1.1 Confirmation of Stakeholder Support

Clear engagement with partners, collaboration and integration are key enablers for the scheme and there are a wide range of key stakeholders involved in the project including those from the Practice, local citizens, patients and locality cluster representatives. Excellent communication links have been established, and engagement for the project with these stakeholders has been extensive over many years with ongoing proposals for the scheme agreed.

Therefore to demonstrate this, a letter of support for the project has been received from the GPs at the Practice and is included at Appendix 8.

6.2 Procurement Strategy

6.2.1 Design Team

Following the purchase of the intellectual property rights for the works completed to date and given the project specific nature of the tasks, the decision has been made to avoid further delays and direct award a contract to Corstorphine & Wright off the NHS SBS Framework for Healthcare Planner, Construction Consultancy, and Ancillary Services (HPCCAS) SBS10190 Lot 1.

6.2.2 Contractor

The successful contractor for the project is BECT Building Contractors. The tender was successfully appointed through the CAVUHB building framework under Lot 2. Procurement was run through the Health Board procurement services.

Chilcott,Rachel
21/08/2024 11:48:04

6.3 Agreed Risk Transfer

This section provides an assessment of how the associated risks have been apportioned between the Health Board and the development Partner and in some instances shared between the nominated organisations. The general principle is to ensure that risks should be passed to 'the party best able to manage them', subject to value for money (VFM). The table below outlines the probable allocation of risk however this will be appraised and reviewed at subsequent stages to ensure there is an appropriate allocation of risk:

Risk Category	Risk Allocation		
	Public	Development Partner	Shared
Design Risk			✓
Construction & Development Risk			✓
Transition & Implementation Risk			✓
Availability and Performance Risk			✓
Operating risk	✓		
Variability of Revenue Risks	✓		
Termination Risks	✓		
Technology & Obsolescence Risks			✓
Control Risks	✓		
Residual Value Risks	✓		
Financing Risks	✓		
Legislative Risks			✓
Other Project Risks			✓

Table 17: Risk Transfer

The ongoing future management of risks during the life of the scheme, will generally follow the process described in the management arrangements section: Risk Management.

6.4 Agreed Charging Mechanisms

6.4.1 Lease Arrangements

Recipients of the services associated with the project will be local residents and as such services will be commissioned by the Health Board with the majority of services delivered by the GP Practice. Lease arrangements have been agreed with all parties regarding the operational management of the facilities and Heads of Terms regarding the arrangements have been agreed with Llandaff and Pentyrch Surgeries.

6.4.2 Contract Arrangements

The Health Board intends to make payments in respect of the proposed products and services as follows:

- Charging will be completed under the Cardiff and Vale Building Framework

Chilcott,Rachel
21/08/2024 11:48:04

- The contract will be managed by Cardiff and Vale University Health Board under the NEC4 Option B Priced Contract with Bill of Quantities

6.5 Agreed Contract Length

It is anticipated that the construction duration will run for 54 weeks although the start date for this is dependent on the approvals process. The likely timescales are summarised within the Management Arrangements section later within this BJC.

6.6 Key Contractual Arrangements

Contractual arrangements have been entered into with all parties for this BJC.

The contract for the design team will run in line with the RIBA “Standard Agreement” and the relevant stage 4 under a traditional form of contract. Architectural, Services and Structural information will be fully designed and specified for tender purposes.

The contract for the construction company utilises the NEC contract as prescribed under the NHS SBS Framework.

Payments to the externally appointed construction team will be as prescribed in the individual NEC contracts and in line with the framework practices and procedures. There are no key contractual clauses over and above the standard framework clauses.

6.7 Accountancy Treatment

It is envisaged that the assets developed through this BJC will be on the balance sheet of the Health Board. Any assets sold would then be removed from the Health Boards balance sheet.

6.8 Community Benefits and Procurement

The Welsh Government actively seeks to derive benefits for the local community from procurement activity through the application of the Community Benefits policy approach.

This approach ensures delivery of social, economic and environmental benefits through effective application of the policy and is integral to any consideration in procurement.

The Health Board will therefore work with the Construction Partner as part of the Considerate Construction Strategy to measure the identified benefits extended from this scheme.

Chilcott,Rachel
21/08/2024 11:48:04

Funding and Affordability

Chilcott,Rachel
21/08/2024 11:48:04

7.0 FUNDING AND AFFORDABILITY

This section of the business case considers the financial implications of the preferred option and contracted solution.

7.1 Capital Charges and Depreciation

A summary of the capital costs and depreciation for the scheme is provided below:

Capital Costs	£'000
Works Cost (BJC2)	3,907,878
Fees (BJC3)	826,249
Non-works Costs (BJC3)	410,400
Equipment Costs (BJC2)	36,000
Risk Register	270,000
Forecast Project Out-turn Cost (Pre VAT Recovery)	**5,450,527**
Recoverable VAT (BJC5)	(106,882)
FORECAST PROJECT OUT-TURN COST	**5,343,645**

Table 18: Capital Costs for the Preferred Option – (£'000)

The full BJC forms to support the breakdown of the capital costs and recovery of VAT are included within Appendix 4 as outlined earlier in the document.

	£'000
Impairment	2,503
Depreciation – Building / Engineering	0,055
Depreciation – Equipment	0
Total Capital Charges / Depreciation	**2,556**

Table 19: Summary of Impairment and Depreciation – (£'000)

Impairment is calculated based on advice from the District Valuer. The asset value post impairment has been depreciated over the estimates useful economic life provided by the District Valuer.

The following is a summary of the total impact of impairment and depreciation by year until the planned opening of the new facility:

Chilcott,Rachel
21/08/2024 11:48:04

	2025/26 £'000	2026/27 £'000	2027/28 £'000
DEL Impairment	0	0	0
AME Impairment	2,503	0	0
Total Impairment			
Depreciation – Build	0,014	0,055	0,055
Depreciation - Equipment	0	0	0
Total Depreciation	**0,014**	**0,055**	**0,055**

Table 20: Summary of Total Impact of Impairment / Depreciation Year on Year – (£'000)

This BJC assumes all capital charges and depreciation will be funded by Welsh Government in each of the years provided in the table above.

7.2 Revenue Costs

As detailed throughout this BJC, this scheme will provide new facilities for Pentyrch Branch Surgery and will transfer existing services from the current unsustainable portacabin. The development will also support the Practice over the coming years to respond to local health need and forecasted demographic growth.

This cost assessment relates to the service wholly provided by the Practice and excludes any further services that may be delivered by the Health Board or other partners in the future.

The summary of revenue costs is as follows:

Costs	Current UHB Expenditure £'000	Estimated UHB Expenditure £'000
Rent (Portacabins)	21	0
Rent (Site)	2	0
Rates	1	21
Office Equipment (incl. IT equipment)	0	29
Electricity/Gas	0	0
Cleaning	0	0
Security	0	0
Water	0	2
Decommissioning of Existing Site	0	19
Legal Fees	0	5
Waste	1	2
Maintenance	0	0
Service Charge	0	0
Total	**25**	**78**

Table 21: Summary of Revenue Costs – (£'000)

Chilcott, Rachel
21/08/2024 11:48:04

A breakdown of the estimated Health Board expenditure split by recurrent/non-recurrent is provided below:

Costs	Recurrent £'000	Non- Recurrent £'000
Rates	21	0
Office Equipment (incl. IT equipment)	0	29
Water	2	0
Decommissioning of Existing Site	0	19
Legal Fees	0	5
Waste	2	0
Total	**25**	**53**

Table 22: Breakdown of Recurrent/ Non-Recurrent Costs – (£'000)

The following assumptions have been made in respect of the revenue case:

- The lease is assumed to be for 20 years
- Rent of the Portacabins and existing site would cease once the GP Practice is established within the new premises
- Rates of £16k will be charged against the GMS Revenue Allocation and £5k will be charged against UHB Rates Allocation (would represent a cost pressure if no additional funding is received)
- IT Equipment including computers and printers have been included in the above. This would be a non-recurrent expenditure and will represent a cost pressure if no additional funding is received.
- Other costs associated with room requirements, network connections, office furniture etc are assumed to be built into the capital costs, being transferred from existing premises or to be covered by the GP Practice
- The Health Board will charge electricity charges to the GP Practice based on tenanted area of 612m^2. The remaining area of 84m^2 (which is outlined for future healthcare use as deemed necessary by the locality) will only incur standing charges whilst vacant and will be funded via the Health Board. These are expected to be minor so have not been included above (£/m^2 estimate of £60.99 for an all-electric building)
- Cleaning and security will be the responsibility of the GP Practice and therefore nil impact on Health Board revenue costs (estimate of £27k per annum)
- Water charges would see a minor increase and would be funded via the GMS Revenue Allocation as per the GMS Contract
- There is an expected cost of £19k associated with decommissioning the existing site. This will be non-recurrent and will represent a cost pressure if no additional funding is received
- Legal fees associated with agreeing lease arrangements for the GP practice. This will be non-recurrent and will represent a cost pressure if no additional allocation is required
- Excludes professional fees that are assumed to be covered within the capital costs

Chilcott,Rachel
21/08/2024 11:48:04

- Excludes any additional costs associated with the move as assumed covered by the GP practice
- Excludes any additional costs associated with medical records storage
- Waste will see a minor increase which will be funded through the GMS Revenue Allocation as per the GMS Contract
- Excludes any ad hoc costs associated with maintenance
- There will be a £19k service charge invoiced to the GP Practice to cover reactive and statutory compliance costs which is assumed to have nil impact on the Health Board revenue expenditure. There may be small additional costs associated with the vacant area of 84m^2 which subject to the space being formally filled with a future service provision, then all revenue implications would be re-assessed.

7.3 Impact On The Income And Expenditure Account

The anticipated capital spend, capital charges and depreciation profile for the extent of the project is as follows:

	2023/24 £'000	2024/25 £'000	2025/26 £'000	2026/27 £'000	2027/28 £'000
Capital (Ex VAT) - DEL	0,305	2,057	2,180	0	0
Depreciation	0,000	0	0,014	0,055	0,055
Total	**0,305**	**2,057**	**2,194**	**0,055**	**0,055**

Table 23: Impact on Income, Expenditure Account and Balance Sheet – (£'000)

All assets will be shown on the Health Boards balance sheet. The asset will be valued on completion and recorded on the balance sheet at that value. Subsequently it will be treated as per the Health Boards capital accounting policy.

A capital resource limit (CRL) allocation of £0.408m was drawn down in 23/24 to allow the design work to begin, £0.335m was spent against this allocation and the unspent allocation will be repaid from discretionary capital funds in 25/26.

7.4 Overall Affordability

As highlighted above, it is assumed the impairment and recurrent charges for depreciation will be funded by WG.

A review of costs has been provided by working with the Practice on the known services to be delivered from the new facility as it becomes operational. It must however be recognised that some service models are yet to be fully developed and agreed, with work to transform service delivery at the Branch Surgery in line with its service vision set to continue to offer improvements in the range of services the Practice offers locally to the core residents of Pentyrch and surrounding areas.

Chilcott, Rachel
21/08/2024 11:48:04

7.5 Project Bank Account

The Health Board is familiar with ‘WPPN 03/21: Project bank accounts policy’ and can confirm that a Project Bank Account (PBA) will be prepared as the project exceeds the Welsh Government value threshold for the mandatory use of Project Bank Accounts

Chilcott,Rachel
21/08/2024 11:48:04

Management Arrangements

8.0 MANAGEMENT ARRANGEMENTS

8.1 Introduction

This section of the BJC addresses the "achievability" of the scheme and identifies how the project will be delivered and managed from its initiation to completion. Its purpose is to describe the arrangements that will be required to effectively govern and successfully manage the project and deliver it in accordance with best practice.

This section has been drafted based upon the lessons learnt from previous projects, incorporating proven arrangements, structures and processes to ensure the successful delivery of the project.

8.2 Programme Management Arrangements

This project is an integral part of the Health Boards portfolio of projects for the delivery of the 'Shaping Our Future Wellbeing: In Our Community' strategy.

The following diagram demonstrates the way the programme and various project management structures interlink:

Shaping Our Future Wellbeing : In Our Community
Programme and Project Structure
October 2022
Programme approval/ monitoring; Collaborative Service Delivery
Business Case Approval Group (Revenue)
Capital Management Group
Capital Development
Governance Reporting
PCIC Locality Led Service Development supported by other Clinical Boards/Partner Organisations
Shaping Our Future
- … Hospital Services
- … Clinical Services
- … Population health
GP Sustainability/ LDP Planning Work
Project Team Chair - GW
Tranche 2 H&WC@Barry
Tranche 2 Barry Gateway
Tranche 3 WH@Western Vale
Tranche 2 H&WC@Whitchurch
Tranche 2 WH@Plas Dwr
Project Team Chair – GW
Michaelston Children's services hub (feasibility)
Tranche 2 WH – Lisvane
Michaelston Children's Respite House
Pentyrch GP 3PD
Tranche 3 Potential other community developments.
Capital funding in place
Service/Revenue funding in place
Established Capital Project Teams
Service planning preparation work
Resource not currently available

Figure 6: SOFW Programme Governance

The SOFW:IOC programme structure strengthens the role of the Primary, Community and intermediate Care (PCIC) Clinical Board and the Localities in setting the direction for community delivered services and infrastructure for their resident populations, while maintaining the required governance for WG funded capital projects. The Programme Board works closely with the recently formed Regional Programme Board (RPB) Capital Steering

Chilcott, Rachel
21/08/2024 11:48:04

Group, monitoring applications and progress on joint and/or integrated infrastructure projects funded by the RPB.

8.3 Project Management Arrangements

Robust project management arrangements are vital to ensure the implementation of the overall project and that effective control is maintained over the capital scheme.

For the Health Board to successfully deliver this project, it is vital that the following overall approach is taken for the organisation and management of the project:

- The Health Board will adopt the general principles of PRINCE 2 methodology in managing the activities and outputs of the project and will meet the requirements of the WHC (2018): 012; Infrastructure Investment Guidance; and subsequent guidance which may be issued during the projects' lifespan
- The project will use NHS Wales standard documentation and products where these are available, and will seek to benefit from experience and best practice from other NHS Wales projects
- Specialist professional and technical advisers will be employed for those activities where the necessary skills and experience are not otherwise available to the project team. The transfer of skills and knowledge from specialist advisers to the project team will be achieved wherever possible and appropriate.

In managing the project the Health Board aims to:

- Deliver the project on time and to budget
- Ensure effective and proactive lines of accountability and responsibility for the project deliverables, and
- Establish user involvement at all stages of the project.

Chilcott,Rachel
21/08/2024 11:48:04

8.3.1 Project Reporting Structure

The reporting organisation and the reporting structure for the whole of the project is shown as follows:

Figure 7: Project Reporting Structure

The Project Team is responsible for the preparation of the business case for the project, which sets out the case for the proposed service and the capital implications, providing supporting justification in the form of the relevant strategic, economic, commercial, financial and management information required to produce the BJC.

The Project Team will deliver the Business Justification Case on behalf of the Shaping our Future Wellbeing in the Community Programme Board which will act as the Project Board for the scheme.

8.3.2 Project Roles and Responsibilities

The project roles and responsibilities are as follows:

8.3.2.1 Investment Decision Maker

In line with the NHS Wales Infrastructure Investment Guidance, it is recognised that there must be clarity on decision making authority and management arrangements.

The Investment Decision Maker is the Cardiff and Vale UHB Board. Their role is to:

- Ensure a viable and affordable business case exists and remains valid during the planning process
- Ensures that the appropriate level of business case is developed for submission to Welsh Government

Chilcott,Rachel
21/08/2024 11:48:04

- Maintain commitment to the project
- Authorise allocation of funds to the project
- Oversee project performance
- Ensure resolution of issues.

8.3.2.2 Senior Responsible Owner

The Senior Responsible Owner (SRO) of this project is the Interim Director of Operations, Primary Care – Clare Evans. The SRO will monitor the development and progress of the project at Executive Board level and will exercise executive responsibility for the capital aspects of the scheme including compliance with Financial Instructions and Standing Orders; will be responsible for responding to internal and external audit scrutiny and ensuring the appropriate interim reports are made to the Capital and Estates Division of Welsh Government in line with existing directives.

8.3.2.3 Project Director

The Director of Capital, Estates & Facilities, Geoff Walsh, will fulfil the role of Project Director and Programme Lead for the project. The Project Director will have ultimate responsibility for the project and will ensure the project is focused, throughout its lifecycle on achieving the objectives and delivering the projected benefits. The Project Director will ensure that the project provides value for money and will act as the point of contact in all dealings with contractors, consultants and outside organisations involved in the construction process.

8.3.2.4 Project Board

The Shaping our Future Wellbeing in the Community Programme Board acts as the Project Board for this project. The Terms of Reference are included within Appendix 9.

The Project Board will support the delivery of the project through:

- Ensuring that the project scope remains consistent with the strategic programme and provide direction where required
- Providing formal approval at key stages to the project both in terms of business case development and formal submission to Welsh Government
- Providing the formal authority for committing resources to the project
- Ensuring that the scheme delivers appropriate value for money.

8.3.2.5 Project Team

The Terms of Reference for the Project Team are included within Appendix 10.

The Project Team will support the delivery of the project through:

- Taking actions to ensure all stages of the project are achieved within the identified timescales, reviewing progress on a regular basis

Chilcott,Rachel
21/08/2024 11:48:04

- Ensuring plans being developed fit within both the capital programme of the Health Board and the wider strategic service planning framework
- Developing and regularly reviewing the project risk register and ensuring appropriate mitigation plans are developed
- Developing, agreeing and monitoring budgeting arrangements for project delivery
- Identifying and developing appropriate capital and revenue financing arrangements for the project ensuring both affordability and sustainability
- Every team member will have equal responsibility for identifying, at the earliest opportunity any major factors, risks or variances arising during the course of the project that may impact upon project delivery.

The table below shows the membership of the Project Team:

Name	Position	Organisation	Role
Geoff Walsh	Director of Capital, Estates and Facilities	CVUHB	Chair
Stephen Gardiner	Head of Capital Planning	CVUHB	Vice Chair
Clare Evans	Interim Director of Operations, Primary Care	CVUHB	Member
Sarah Griffiths	Interim Assistant Director Primary Care	CVUHB	Member
Sian Powell	Primary Care Contract and Development Manager	CVUHB	Member
Rachael Broome	Assistant Finance Business Partner - Primary, Community and Intermediate Care	CVUHB	Member
Rhys Davies	Locality Manager – North & West	CVUHB	Member
Alex Hawkins	Capital Construction Project Officer	CVUHB	Member
Tracey Enright	Practice Manager	Llandaff and Pentyrch Surgery	Member
Lisa Feist	Associate Healthcare Planner	Adcuris Consulting	Member

Table 24: Project Team Membership

8.3.2.6 Other Roles

The development of this project will be supported by a range of corporate departments from within the Health Board including:

- Capital Planning
- Finance
- Strategic Clinical Engagement
- Workforce
- IM&T.

Chilcott,Rachel
21/08/2024 11:48:04

8.4 Project Plan

The dates detailed below highlight the proposed key milestones of the project:

Milestone Activity	Date
BJC submission to WG	July 2024
Design completion and commence construction	September 2024
Construction completion	September 2025

Table 25: Project Plan

8.5 Use of Special Advisors

Specialist advisors have been used in a timely and cost-effective manner in accordance with the Treasury Guidance: Use of Special Advisors:

Specialist Area	Adviser
Contractor	BECT Building Contractors
Project Manager	Carl Dean Associates
Architects / lead consultant	Corstorphine & Wright Ltd
Business Case Development	Adcuris Consulting Ltd
Cost Consultancy (quantity surveyor)	Carl Dean Associates
Mechanical and Electrical	Environmental Design Services
Structural	ARP Associated

Table 26: Specialist Advisors

8.6 Communication and Engagement

Effective communications, consultation and engagement is central and critical to the successful delivery of the project. The Health Board has a duty to involve people in the planning and delivery of health services and significant service developments.

The Health Boards philosophy around communication is simplicity, quality and consistency. All messages should be clear and easy to understand – tailored for their specific audiences; compliant with corporate guidelines; and in keeping with the Health Boards strategic aims.

The objectives of the Health Board's communication strategy are:

- Effectively communicate the rationale for the redevelopment through a range of tested channels to inform internal and external stakeholders, keep them up to date with progress and gain their views
- Foster ongoing good relationships with the local communities around the surgery and with the media, promoting positive media coverage
- Manage all publicity regarding the redevelopment project and ensure that accurate information is consistently available
- Engage staff positively in the changes so that new ways of working are endorsed and staff understand and support the redevelopment

Chilcott,Rachel
21/08/2024 11:48:04

- Evaluate the effectiveness of internal and external communications and engagement to ensure messages are understood and acted upon and engagement is positive.

8.6.1 Public Engagement

The public engagement process was completed in June 2021. As part of the engagement process for primary care developments, a meeting with patients would usually be held, to ensure that those affected by the proposals were able to share their views in relation to the plans and proposals however due to the national restrictions imposed by the Covid-19 pandemic during the main development process of the project, a face-to-face engagement event could not be held at the required time.

As a result, the approach that was agreed and supported by the Community Health Council (CHC), now Llais, was primarily based on a microsite hosted by Assura PLC which provided information on the development, as well as a mechanism for people to feedback their views. On the advice of the CHC that an 8 week engagement period should apply, the microsite survey ran from 8th October to 3rd December 2020.

The microsite was supplemented by other contact mechanisms which included:

- An article for Community Link Newsletter distributed to Pentyrch residents by Pentyrch Community Council
- Text messaging, advising of the launch of the engagement process to all patients who attend Pentyrch and those that the practice had mobile numbers for
- An initial letter to all Pentyrch patients notifying of the engagement process. Included in this letter were details of alternative ways to voice any issues with a follow up letter being issued two weeks into the process addressing concerns being raised and those requiring further communication/ clarification
- Details of South Glamorgan Community Health Council provided with the option of patients/the public contacting them direct
- Social media channels of all key partners to promote and raise awareness of the engagement process
- Enlisting the support of the Pentyrch Community Council to disseminate information regarding the development and seek feedback from patients/interested parties
- Other contact mechanisms such as displaying posters in the local area including the pharmacy, current practice building and community facilities throughout Pentyrch, plus public display boards in the village
- An update on the results of the engagement and how the feedback was being acted on at the microsite. A link to this was also shared through the Cardiff and Vale University Health Board Facebook and Twitter accounts. Recognising that the microsite/social media may not be accessible to everyone, a further article was provided in the Community Link Newsletter, with the offer of a hard copy being available from the Practice.

Chilcott,Rachel
21/08/2024 11:48:04

In addition, the Practice attended a number of digital meetings as part of the engagement process which included meeting with Pentyrch Community Council, Councillor for Pentyrch and Pentyrch Women's Institute.

Overall there was a high level of interest in the proposals resulting in a significant number of comments provided during the 8-week engagement process and since, through the following sources:

i) Microsite

ii) Zoom meeting with St Fagan's Community Council on 16 November 2020

iii) Direct Correspondence to the Health Board (and follow up meetings in some cases)

iv) Collated themes via direct feedback to CHC (3 responses received through this route)

v) Freedom of Information requests (x4)

vi) Zoom Online Public meeting at the UHB's request and hosted by the CHC on June 30th, 2021, inviting all citizens affected by the proposal, with the potential for individuals to submit further correspondence to the CHC up to 7 working days after the event has been undertaken. 249 members of the public registered for the event; and 142 attended. 51 email/letter responses were reviewed following the online public meeting.

The report included at Appendix 11 collates the feedback provided through the engagement process together with the key themes and the action taken to address the areas of concern identified during the depths of the development process.

As a result of an issue being raised during the engagement process and concern with being able to access the replacement surgery, patients and local citizens are also involved in a task and finish group to consider options for transport. The output of this group will oversee the development and distribution of a survey sent to patients and the local area to inform the need for transport and the collation of options to be presented to the UHB Board.

More information with regards to the role of the Transport Task & Finish Group can be found included within Appendix 11.

8.7 Arrangements for Change Management

The reconfiguration will be implemented in a systematic way that causes the least disruption to services and users of the Branch Surgery. The project structure has been established to implement the necessary changes and ensure clinical leadership remains central to this.

To take this process forward working sub groups will be established during the development stage and will be led by delegated leads. These groups will lead the change management

Chilcott, Rachel
21/08/2024 11:48:04

processes required to plan and manage the organisational development implications of the transition which will include the following tasks:

- Recognise the need to maximise the benefits of the change for the users of the facility
- To agree any revised staffing establishments consistent with any revised clinical models and within the available financial envelope
- To plan and implement a transition plan to manage the transfer of existing staff into the new arrangements, ensuring this is consistent with good human resources (HR) practice
- To ensure that the timing of the planned changes is consistent with the smooth continuation of any other services affected by the change
- To assess professional and other training needs arising out of the service changes, and to plan and implement a training programme as appropriate.

The change agenda will also be supported by the wider transformation change programme of the Health Board, ensuring a robust framework for change is adopted across the scope of the scheme in line with the Health Boards other areas ensuring service change, development and interdependencies are fully explored and aligned.

8.8 Benefits Realisation Monitoring

Benefits are anticipated when a change is conceived and there are measurable improvements that result from the outcome which is perceived as an advantage by the organisation and/or stakeholders. Benefit management and realisation therefore aims to identify, define, track, realise and optimise benefits within and beyond the programme. A benefits realisation plan has been established that provides a framework for this aim and is overseen by the Project Board.

The plan outlines the key objectives, benefits and measures, which will be used to evaluate the project, it also shows who has the accountability for its realisation. This is in order that a meaningful assessment can be made of the benefits yielded by the project and to benchmark the assessment criteria themselves so that lessons learned can be fed back into future projects. It ensures that the project is designed and managed in the right way to deliver quality and value benefits to patients, staff and local communities. Timescales for the achievement of these benefits have been identified and included in the plan.

A copy of the Project Benefits Realisation Plan is attached at Appendix 12.

Chilcott,Rachel
21/08/2024 11:48:04

8.8.1 Key Outcomes

The proposed development clearly progresses the strategic vision of the Health Board and supports the aims of the Cardiff West Cluster by delivering high quality primary care in fit for purpose accommodation promoting GP sustainability. The key outcomes of the proposed development will be:

- The Branch will be accommodated in fit for purpose built accommodation
- The new building will be fully accessible and compliant with and Equality Act 2010
- Improved staff and patient morale, supporting the recruitment and retention of staff and an enhanced patient experience
- Increased opportunities for more integrated primary care services to the community
- Opportunities to facilitate the expansion of locally delivered services
- Supports delivery of the NHS Wales primary care model
- Offers opportunities to facilitate multi-disciplinary working
- Improved parking facilities for patients
- Improved facilities for staff meetings, therefore promoting team working
- Offers opportunities for the Practice to develop staff training
- Potential to expand the practice with increased clinical staff
- Offers improvements to GP capacity in a cluster of significant LDP growth therefore supporting access.

8.9 Risk Management

8.9.1 Risk Register

A structured risk management process will be adopted. It has four main stages:

- Identification - to determine what could go wrong in order to identify the risks
- Classification - to determine the likelihood of occurrence of the risk and impact on the project
- Assessment - to understand and possibly quantify the impact on the project
- Action - to identify countermeasures for dealing with unacceptable risk levels and institute monitoring and control mechanisms, identifying means of avoiding, containing, reducing and transferring risk.

The risk management strategy has been integrated into the project management procedures, with responsibility for implementation of the strategy resting with the Project Director. The current risk register for the preferred option is attached at Appendix 13 and will be kept under review at the monthly project team meetings as the project is taken forward through to the delivery stages.

Chilcott,Rachel
21/08/2024 11:48:04

8.10 Gateway Review Arrangements

Gateway Reviews undertaken across the health service have identified a range of common deficiencies within projects. These key areas have been reviewed under this project to ensure they were being managed as follows:

- Risk – A clearly structured risk management process has been put in place with regular review of the project risk register
- Roles and Responsibilities – A clear project structure exists for the management of this project with the Senior Responsible Officer and Project Director identified
- Skills and Resource – The Health Board is experienced and well-resourced and is supported by legal, financial and technical specialists
- Business Case - The need for a robust Business Case was identified at an early stage and has in part driven the project development
- Planning – A programme was developed early in the scheme development and has been a strong management tool in moving the project forward
- Stakeholder Issues – Stakeholder management has been a key focus in the projects development as it integrates various organisations
- Benefits – A clear benefits realisation plan has been developed and is embedded in the project processes
- Financial Issues – Finances have been robustly managed as the project has developed to ensure the project is affordable and value for money.

A risk assessment has been completed for the Pentyrch Surgery development using the agreed risk assessment framework for Cardiff and Vale University Health Board (risk potential assessment (RPA) model). This assesses the risk on a high, medium and low basis taking account of the consequence and likelihood of the risk.

A copy of the Programme RPA form is attached as Appendix 14.

8.11 Post Project Evaluation

The Health Board is committed to ensuring that a thorough and robust post-project evaluation (PPE) is undertaken at key stages in the process to ensure that positive lessons can be learnt from the project. The lessons learnt will be of benefit to:

- Cardiff and Vale University Health Board – in using this knowledge for future projects including capital schemes
- Other key local stakeholders – to inform their approaches to future major projects
- The NHS more widely – to test whether the policies and procedures which have been used in this procurement are effective.

Chilcott,Rachel
21/08/2024 11:48:04

Post Project Evaluation (PPE) is a part of the total quality process and the Health Board acknowledges its contribution towards a successful outcome in terms of:

- Greater assurance of total performance in terms of cost, time and quality
- Clearer definitions of responsibilities
- Reduced exposure to risk, and
- Improved value for money.

The Health Board has identified a robust plan for undertaking PPE in line with current guidance, which is fully embedded in the project management arrangements of the project. All processes will be managed by the project team and endorsed by the appropriate boards.

The outline arrangements for post implementation review and project evaluation review have been established in accordance with best practice and are as follows:

8.11.1 Post Implementation Review (PIR)

An evaluation covering a wider range of project evaluation criteria and benefits will be undertaken after a suitable bedding-in period after the construction phase has been completed. It is anticipated that this will take place circa 6 to 12 months following completion of construction works.

8.11.2 Project Evaluation Reviews (PERs)

Further post project evaluations will take place at a later stage, to assess the longer-term outcomes of the project, when the full effects have arisen.

8.12 Audit and Assurance

Infrastructure Investment Guidance (2018) requires that all business cases include an Integrated Assurance and Approval Plan (IAAP). This plan includes clarity on the role of the Audit & Assurance Team in this project. A copy of the audit and assurance plan is included at Appendix 15 to this document.

8.13 Contingency Plans / Recommendation

The development of a new premises housing the branch surgery of Llandaff and Pentyrch Surgeries provides a unique opportunity to provide a real improvement in both the quality and range of services available to the local community plus improve the sustainability of GMS for current residents of the Cardiff West Cluster and those new residents via increases in population due to the local development plans.

A new purpose built surgery, via relocation to a new site has the ability to increase the patient list size and provide expansion opportunities which not only secures the future financial sustainability of the practice but also encourages the recruitment of new clinicians, develops new roles for much needed services and provides the required crucial primary care infrastructure for the area. It also provides opportunities to co-locate cluster and community services, increasing access for patients in the local area.

Chilcott, Rachel
21/08/2024 11:48:04

The practice has stated that without the development, they would have no alternative than to close the Pentyrch branch leaving patients having to travel to the main surgery at Llandaff, which itself does not have the premises infrastructure to cater for the increased demand or register with other surgeries within the cluster (some already at full capacity themselves and reporting sustainability issues).

The practice has also indicated that if the Pentyrch development did not come to fruition, significant investment would be required in the near future to expand the premises where possible or look at options to acquire new premises for services that run out of Llandaff Surgery in order to provide patients with fundamental access to healthcare services within the local community.

It is therefore recommended that **approval** of this Business Justification Case be given for the Cardiff and Vale University Health Board to develop the preferred option and commence the project through to delivery stage in order to secure the sustainability of general medical services for the local population and future proof access to primary care where there is an expected growth in population.

Chilcott,Rachel
21/08/2024 11:48:04

Report Title:	Business Justification Case for Digital Cellular Pathology Programme Phase 3 – National Scale Up				Agenda Item no.	3.1.3
Meeting:	Finance & Performance		Public	X	Meeting Date:	17.07.2024
			Private			
Status *(please tick one only)*:	Assurance		Approval	X	Information	
Lead Executive Title:	Chief Executive Officer					
Report Author (Title):	Clinical Board Director, CD&T					

Main Report

Background and current situation:

The last four years have created significant challenges to the NHS and the Cellular Pathology service generally. In particular, it is becoming increasingly difficult to attract and retain suitably skilled professionals and demand is growing, both in terms of volume and the complexity of cases. The impact of the pandemic resulted in a backlog of activity, which, even though progress has been made locally to reduce this, will continue to be a factor as other services continue to expand to meet the needs of the population. These factors combined have created a capacity gap and the service urgently needs mitigations to address this and to ensure it is fit for the future.

This business case outlines the justification for investment into the digital solution. Health Boards have identified a range of productivity gains as a result of a more streamlined workflow which will reduce the time currently spent on existing manual processes. A prudent assessment of the total number of hours saved across Wales equates to around £750k of staff time saved each year which can be re-directed to deal with growing demand and provide different, regional solutions as an alternative to outsourcing to external providers. Using the apportionment in the business case, it would equate to around £170k for CAVUHB, around 3% of the spend. Although it might not eradicate the need for outsourcing entirely, a regional approach with robust SLA in place would enable much of the funding to remain within NHS organisations rather than seep out to private outsourcing companies.

Some of the benefits of adopting digitised pathology include:

- Provision of a modern and sustainable service in line with the rest of the UK, ensuring Wales remains an attractive location for current and future Pathologists
- Having an all Wales integrated system with LIMS and scanner connectivity, which enables any Consultant to report on and review any case from any location, using any device
- Quicker turnaround times enabled by Voice Recognition software and reduction in the amount of secretarial support required
- The use of AI applications for some routine reporting would free up Consultant time for more specialist reporting
- Less laboratory time needed to retrieve and store slides
- Reduction in time taken for preparing slides for MDT review so that Pathology administration staff could be redeployed
- Reduction in risk of misfiling or losing slides
- Ability to mark images/cells for review to support genomic testing or research projects
- Ability to build an annotated image library for teaching/training which will enable opportunities for a virtual training school to be set up with multiple trainees both pathologists and BMS staff can participate from all over Wales
- Future direction of FRCPath is to transition to a digital platform - this will require a digital pathology service to be able to deliver a digital training programme.
- Enables integration with genomics in one location for the provision of precision medicine.

Chilcott, Rachel
21/08/2024 11:48:04

The digitisation of Cellular Pathology and Genomics Programmes supports a concurrent business case to develop a Centre of Excellence for Precision Medicine (CoEPM) at Cardiff Edge Science Park, which received agreement of its scope and business case development in Q2 2021. Cellular Pathology is a key component service of the proposal and without digitisation, it would not be feasible. Regardless, even without the CoEPM development, digitisation of Cellular Pathology is a required development for Cellular Pathology services that is aligned to a number of national healthcare strategies, including but not limited to:

- Diagnostics Recovery and Transformation Strategy for Wales 2023 to 2025 https://www.gov.wales/sites/default/files/publications/2023-04/diagnostics-recovery-and-transformation-strategy-for-wales-2023-to-2025_0.pdf

- Pathology Statement of Intent 2019: 190409 - VG - Pathology Statement of Intent March 2019 - English.pdf (gov.wales)

- Review of Histopathology Services in Wales, 2010

As with many national initiatives, funding for this proposal is sought partly from Welsh Government and partly from Health Boards. The table below details the cost and proposed sources of funding.

		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	
	Apportionment	2025/26 £'000	2026/27 £'000	2027/28 £'000	2028/29 £'000	2029/30 £'000	2030/31 £'000	2031/32 £'000	2032/33 £'000	2033/34 £'000	2034/35 £'000	Total £'000
ABUHB	16.32%	72	656	618	623	636	650	664	676	518	518	5,631
BCUHB	17.18%	72	685	645	651	664	678	693	706	540	540	5,874
CTMUHB	11.42%	71	493	466	468	477	487	496	505	394	394	4,251
CVUHB	24.53%	75	930	873	884	903	923	944	963	725	725	7,945
HDUHB	12.96%	71	544	514	517	527	538	549	558	433	433	4,684
SBUHB	17.58%	73	698	657	663	677	692	707	720	550	550	5,986
Total Recurring Revenue Costs	**100.00%**	**434**	**4,005**	**3,772**	**3,807**	**3,886**	**3,967**	**4,053**	**4,127**	**3,160**	**3,160**	**34,371**

The total share of revenue funding required from CAVUHB would be £7,945,000 over the 10 year term, commencing next financial year (although timescales may slip due to aspiration for all HB's to go live at the same time). The apportionment by Health Board has been derived by potential providers' assessment of existing workloads and complexities with 4% annual growth anticipated per Health Board, with CAVUHB workload significantly higher than any other Health Board.

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

It is recognised that there is a monetary cost associated with this programme and that the efficiencies that will be generated to mitigate this cost are not easily identifiable. This project, recently implemented in Ireland, for instance has recognised that the financial benefits will not be realised until 5-7 years after implementation. However, the clinical benefits are more instantaneous.

If the strategy were not supported at CAVUHB, it would be detrimental to service delivery. All Health Boards are being asked to support this, and as such, if it were not adopted locally, there is a risk that the service at CAVUHB would fall significantly behind those provided by other Health Boards. This would result in a further deterioration in service due to recruitment and retention difficulties, which would impact on referring specialties and patients through repeated cancelled appointments, increased anxiety of patients and increased risk associated with delayed diagnosis from a backlog that would never be able to be cleared. It would also put at risk every tertiary service in the Health Board. It is unlikely that the project could continue if one Health Board withdrew, which would put at risk all Cellular Pathology services in Wales.

The recommendation is to support and approve the digitisation of Cellular Pathology services.

The business case has been received by the Investment Group and the Senior Leadership Board where it was endorsed for recommendation to the Finance & Performance Committee and to Board.

Recommendation:

The Committee is requested to:

a) To recommend to the Board the approval of the Business Justification Case for Digital Cellular Pathology Programme Phase 3 - National Scale Up.

Link to Strategic Objectives of Shaping our Future Wellbeing:
Please place an "X" in the below boxes as relevant.

Objective		Objective	
1. Putting People First **Click the objective above to view more detail.**	X	2. Providing Outstanding Quality **Click the objective above to view more detail.**	X
3. Delivering in the Right Places **Click the objective above to view more detail.**	X	4. Acting for the Future **Click the objective above to view more detail.**	X

Five Ways of Working (Sustainable Development Principles) considered
Please place an "X" in the below boxes as relevant

Prevention		Long term	X	Integration		Collaboration	X	Involvement	X

Quality Impact Assessment Completed?:
Please place an "X" in the below boxes as relevant.

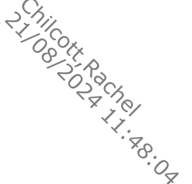
Yes – (*please provide completed QIA document*)		No – ***(Please provide reasoning, e.g. not required)***	X	*N/A*

Impact Assessment:
*Please state **yes** or **no** for each category. **If yes please provide further details.***

Risk: Yes/No
Safety: Yes/No
Financial: Yes/No
Workforce: Yes/No
Legal: Yes/No
Reputational: Yes/No

Callcott, Rachel
21/08/2024 11:48:04

Socio Economic: Yes/No - *Useful Guidance on the application of the Socio-Economic Duty can be found at the following link: [The Socio-economic Duty: guidance | GOV.WALES]*	
Equality and Health: Yes/No - *Useful guidance on the completion of an EHIA can be found at the following link: EHIA toolkit - Cardiff and Vale University Health Board (nhs.wales)*	
Decarbonisation: Yes/No	
Welsh Language: Yes/No	
Approval/Scrutiny Route *(please note anywhere else this paper has been before):*	
Committee/Group/Exec	Date:
Investment Group	12.06.2024
Senior Leadership Board	20.06.2024



Business Justification Case for National Digital Cellular Pathology Project Phase 3 –

National Scale Up

Chilcott,Rachel
21/08/2024 11:48:04

Contents

1 Executive Summary 5
Introduction 5
Strategic Context 7
Spending Objectives 9
Existing Arrangements 9
Business Needs 12
Potential Scope and Services 12
Options Framework 13
Main Options 13
Options Appraisal 14
Preferred Option 14
Procurement Route 15
Procurement Scope and Specification 15
Timeline for Procurement 16
Payment Mechanism 16
Contractual Arrangements 16
Legal and Personnel Implications 16
Affordability Analysis 17
Project Management Arrangements 17
Structure 17
Timescales 18
Assurance 18
Change Management Arrangements 18
Benefits Realisation 19
Risk Management Arrangements 20
Contract Management Arrangements 20
Post Evaluation Arrangements 20
Contingency Plan 20

2 Introduction 21
Purpose of Business Justification Case 21
Structure and Content of the Document 21

3 Strategic Case 22
Strategic Context 22

Chilcott,Rachel
21/08/2024 11:48:04

Case for Change 29
Spending Objectives 29
Existing Arrangements 30
Business Needs 36
Potential Scope and Services 37
Main Benefits 39
Main Risks & Issues 39
Constraints 40

4 Economic Case 42
Critical Success Factors 42
Options Framework 42
Main Options 44
Options Appraisal 45
Preferred Option 58

5 Commercial Case 60
Procurement Route 60
Procurement Scope and Specification 61
Timeline for Procurement 61
Payment Mechanism 62
Contractual Arrangements 62
Legal and Personnel Implications 62

6 Financial Case 64
Introduction 64
Accounting Treatment 64
Capitalisation 64
IFRS16 64
VAT 64
Costing Methodology 65
Implementation Plan 65
Project Team 65
DHCW Support 65
Solution Costs 65
Additional Health Board Staff 66
Capital Requirements 66

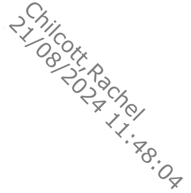
Chilcott, Rachel
21/08/2024 11:28:04

Revenue Requirements.......... 66
Affordability.......... 67

7 Management Case.......... 69
Project Management Arrangements.......... 69
Project Management Principles.......... 69
Governance.......... 69
Structure.......... 69
Timescales.......... 72
Assurance.......... 72
Change Management Arrangements.......... 72
Benefits Realisation.......... 73
Risk Management Arrangements.......... 74
Contract Management Arrangements.......... 75
Post Evaluation Arrangements.......... 76
Contingency Plan.......... 76

8 Document Control.......... 77
Document Information.......... 77
Document History.......... 77

9 The Appendices.......... 79



1 Executive Summary

Introduction

It is now clear that digitisation of cellular pathology services is realistically the only option to enable delivery of a robust and sustainable diagnostic cellular pathology service fit for the future. The national move towards scanning of histological material for primary diagnosis and more recently, the adoption of artificial intelligence (AI)/computational pathology to improve the accuracy, reliability and quality of reports, means that most Pathologists, especially new trainees who are already using digital technology, will, in the future, choose to work in departments where digital technology will enhance and underpin their diagnosis thus benefiting the quality of patient care.

The last four years have posed significant challenges to the NHS and the cellular pathology service generally. In particular, it is becoming increasingly difficult to attract and retain suitably skilled professionals and demand is growing, both in terms of volume and the complexity of cases. The impact of the pandemic has resulted in a growing backlog of activity. These factors combined have created a capacity gap and the service urgently needs mitigations to address this and to ensure it is fit for the future.

In addition, Wales are at real risk of falling behind the rest of the UK. Northern Ireland have a fully digitised cellular pathology service and Scotland are almost fully digital. In England, the practice is building up of digital networks. For example, Nottingham, Leeds and surrounding (NPIC), and PathLink (pathlake) Midlands, Norwich area are all fully digital and almost every network is at various stages of deployment.

As clinical and service leads for cellular pathology across Wales, we are therefore requesting your support to procure the most suitable equipment which will help us mitigate these challenges and ensure we provide a high quality and reliable cellular pathology service for Wales.

The purpose of this Business Justification Case (BJC) is to set out the proposals for Phase 3 of the National Digital Cellular Pathology (NDCP) Project. This will build upon the previous work, where investment in infrastructure and staffing has allowed us to evidence proof of concept, most recently identifying the opportunities and benefits of AI & computational pathology.

We can only progress this and fully understand and realise the related benefits by providing further digital enablement allowing cellular pathology services to digitise services as completely as possible. National Scale Up (to enable full digital reporting) will require investment in scanning and reporting hardware, a laboratory management software system, digital image storage and staff resource.

This document seeks approval to undertake full procurement of the new solution and commitment to provide the following funding:

- **Non-recurring revenue funding of £423,000 requested from Health Boards (£71,000 per HB)** for the implementation costs associated with the project team and DHCW support between 2025/26 – 2027/28.

Chilcott,Rachel
21/08/2024 11:58:06

- **Ongoing revenue funding which in total equates to £34.4m between 2025/26 – 2034/35 requested from Health Boards,** related to annual recurring revenue costs associated with the managed service contract for the solution and additional staff required to support Health Boards with the implementation and ongoing management of the solution.

Table 1 Indicative Revenue Costings

		Year 0 2025/26 £'000	Year 1 2026/27 £'000	Year 2 2027/28 £'000	Year 3 2028/29 £'000	Year 4 2029/30 £'000	Year 5 2030/31 £'000	Year 6 2031/32 £'000	Year 7 2032/33 £'000	Year 8 2033/34 £'000	Year 9 2034/35 £'000	Total £'000
Project Team (non-recurring)		101	101	50								251
DHCW Support (non recurring)		34	34	34								101
20% Contingency		27	27	17								71
Non-recurring revenue costs		**161**	**161**	**101**	-	-	-	-	-	-	-	**423**
Project Team (recurring - contract manager)		57	57	57	57	57	57	57	57	57	57	574
Solution Costs (recurring)		28	3,336	3,103	3,172	3,251	3,333	3,418	3,493	2,525	2,525	28,184
Health Board Additional Staff (recurring)		263	525	525	491	491	491	491	491	491	491	4,749
DHCW Support (recurring)		86	86	86	86	86	86	86	86	86	86	864
Recurring revenue costs		**434**	**4,005**	**3,772**	**3,807**	**3,886**	**3,967**	**4,053**	**4,127**	**3,160**	**3,160**	**34,371**
Total costs		**595**	**4,167**	**3,873**	**3,807**	**3,886**	**3,967**	**4,053**	**4,127**	**3,160**	**3,160**	**34,795**

	Apportionment	Year 0 2025/26 £'000	Year 1 2026/27 £'000	Year 2 2027/28 £'000	Year 3 2028/29 £'000	Year 4 2029/30 £'000	Year 5 2030/31 £'000	Year 6 2031/32 £'000	Year 7 2032/33 £'000	Year 8 2033/34 £'000	Year 9 2034/35 £'000	Total £'000
ABUHB	16.32%	72	656	618	623	636	650	664	676	518	518	5,631
BCUHB	17.18%	72	685	645	651	664	678	693	706	540	540	5,874
CTMUHB	11.42%	71	493	466	468	477	487	496	505	394	394	4,251
CVUHB	24.53%	75	930	873	884	903	923	944	963	725	725	7,945
HDUHB	12.96%	71	544	514	517	527	538	549	558	433	433	4,684
SBUHB	17.58%	73	698	657	663	677	692	707	720	550	550	5,986
Total Recurring Revenue Costs	**100.00%**	**434**	**4,005**	**3,772**	**3,807**	**3,886**	**3,967**	**4,053**	**4,127**	**3,160**	**3,160**	**34,371**

		Year 0 2025/26 £'000	Year 1 2026/27 £'000	Year 2 2027/28 £'000	Year 3 2028/29 £'000	Year 4 2029/30 £'000	Year 5 2030/31 £'000	Year 6 2031/32 £'000	Year 7 2032/33 £'000	Year 8 2033/34 £'000	Year 9 2034/35 £'000	Total £'000
ABUHB		27	27	17								71
BCUHB		27	27	17								71
CTMUHB		27	27	17								71
CVUHB		27	27	17								71
HDUHB		27	27	17								71
SBUHB		27	27	17								71
Total Non-Recurring Revenue Costs		**161**	**161**	**101**	-	-	-	-	-			**423**

This investment will deliver a wide range of benefits *(please see page 51),* most critically the ability of the service to keep pace with the rest of the UK and enable it to attract and retain the highly skilled staff required to address the growing capacity gaps within the service.

While many of the benefits related to this investment are not easily quantifiable in monetary terms, service leads at each of the Health Boards have identified a range of productivity gains as a result of a more streamlined workflow which will reduce the time currently spent on existing manual processes. A prudent assessment of the total number of hours saved across Wales equates to around £750k of staff time saved each year which can be re-directed to deal with growing demand.

As demand continues to grow in the future, the value of these productivity gains will be even greater and combined with greater ability to attract and retain workforce will increase internal capacity. It is estimated that almost £4million was spent on outsourcing for 23/24 (an increase from £1.2million that was reported in previous version of the BJC). While investment in digital cellular pathology will not necessarily reduce this, as there are multiple factors influencing this expenditure, it will help reduce the risk of increased activity needing to be outsourced to external providers, or covered by expensive temporary staffing, in the future, and the risk of this expenditure increasing in line with growing demand.

In addition to this, realisation of the substantial wider system benefits offered by AI/computational pathology, will only be possible following investment in the digital cellular pathology solution.

Chilcott, Rachel
21/08/2024 11:46:04

STRATEGIC CASE

Strategic Context

There is no single pathology service across Wales. Services are delivered through the six University Health Boards (UHBs) and Trusts (N.B. Powys Teaching Health Board has no district general hospitals or associated pathology services therefore pathology services are provided by neighbouring UHBs and Trusts). Pathology services in Wales are being developed in line with the vision set out in the Pathology Statement of Intent 2019 and, more recently, the Diagnostics Recovery and Transformation Strategy for Wales 2023-25.' The National Pathology Programme has been established to deliver these aims and is managed by the NHS Wales Executive (formerly NHS Wales Health Collaborative).

Working as part of the wider National Pathology Programme, the NDCP Project was set up to capitalise on a previous investment to modernise Cellular Pathology services at Betsi Cadwaladr University Health Board (BCUHB). The aim of the NDCP Project is to scale up and digitise cellular pathology services as completely as possible for the whole of Wales.

Digital pathology is critical to the ongoing development of an efficient, effective and optimal pathology service that contributes to the delivery of the current national strategy. Crucially, the NDCP Project will support delivery of the **NHS Planning Framework 2023-2026** which builds on learning from the pandemic and sets out Ministerial priorities for the recovery and sustainability of health services. It is similarly aligned with the **Diagnostics Recovery and Transformation Strategy for Wales 2023-25**, published in April 2023, which outlines plans to recover diagnostic services by 2025, addressing the impact of the pandemic, and sets the groundwork for longer term sustainability. This is because the NDCP Project will:

- Provide opportunities to create additional diagnostic capacity to support the National Recovery Programme, a key priority of all Health Boards, which will help reduce the numbers of people waiting for diagnostic tests.
- Provide opportunities to reduce reporting time which will contribute to the achievement of national cancer pathway targets and reduce the backlog of patients waiting too long on their cancer pathway.
- Enable the workforce to operate across boundaries, reducing inequality of access and reducing the pressure on the wider system.
- Utilise digital technology to enable the service to deploy existing and future workforce to best effect, including supporting multidisciplinary teamworking and advanced practice models, while enabling people to develop their careers and work at the top of their license. It will also provide greater opportunities to support hybrid working and 'reporting from home'.
- Ensure that digital, innovation, technology and transformation underpins plans to deliver optimum care and services for patients. The resulting digital solution will provide more opportunities to work with others in line with NHS Wales' approach to innovation. In particular, this will:
  - Enable investment and support for national diagnostic programmes in endoscopy, pathology, genomics, and imaging.
  - Provide opportunities to adopt innovative digital technology solutions including AI/computational pathology.

Chilcott,Rachel
21/08/2024 11:48:04

In supporting the key strategies, the NDCP Project aligns with a number of other national strategies, including *(for more details please refer to page 26)*:

- Review of Histopathology Services in Wales (2010)
- National Clinical Framework: A learning health and care system (2021)
- The Parliamentary Review of Health and Social Care in Wales. Final Report. (January 2018)
- A Healthier Wales: Our Plan for Health and Social Care (June 2018)
- The Wellbeing of Future Generations (Wales) Act (2015)
- Prudent Healthcare: Securing Health and Well-Being for Future Generations
- Welsh Government's Digital Strategy for Wales (2021)
- Welsh Government's Digital and Data Strategy for Health and Social Care in Wales (2023)

It should be noted that the NDCP Project is critical to Pathology's ability to support ongoing NHS Wales activities and current and future initiatives. In particular, this includes:

- Supporting the elective pathway and enabling NHS Wales to deliver on the associated Recovery Plan depends on the service's capacity to meet target turnaround times
- Supporting public health initiatives such as screening programmes and the cancer pathway, depends on the service's ability to meet target turnaround times
- Genomics pathway – histological identification and classification of a tumour by histopathologists is paramount in delivering a precise and accurate genomic profile
- R&D – pathology has steadily expanded its role in tumour diagnostics and beyond from disease entity identification via prognosis estimation to precision therapy prediction. Recent applications for the analysis of molecular profiling data from different sources and clinical data support the notion that AI/computational pathology will enhance both histopathology and molecular pathology in the future
- Developing the role of advanced practitioners requires input from pathologists, which a digital cellular pathology solution could support
- Supporting the development of regional diagnostic hubs depends on the service capacity to deliver on turnaround times and having the appropriate infrastructure in place to support regional working. It is essential that we have an integrated and standardised cellular pathology service for Wales to provide a robust and reliable service for the future
- Ongoing transformation initiatives such as regionalisation and a 'Centre of Excellence' as outlined below
- Recruitment will be very challenging if Wales is not utilising digital technology within the next few years. Many cellular pathology national quality assurance schemes are already using digital technology. Within the next few years, it is anticipated that the RCPath exam for Consultant Histopathologists will be based on digital technology rather than glass slides
- Allowing working from anywhere in the UK which allows greater potential for working when convenient (potential additional hours worked) and would allow for collaboration

Chilcott, Rachel
21/08/2024 11:48:04

There are two ongoing regionalisation pieces of work, both require digital cellular pathology as key enablers. The ARCH (A Regional Collaboration for Health) Project in South West Wales plans to merge the departments in Hywel Dda and Swansea Bay University Health Boards into a single managed network. The South East looks to do the same with a similar project bringing together the cellular pathology services from Cwm Taf Morgannwg, Cardiff and Vale and Aneurin Bevan University Health Boards. Both will require digital pathology to be able to report cases from any laboratory by the combined reporting capability in the network. Digital pathology has proved a key facilitator in the successful regionalisation of cellular pathology services in BCUHB.

Genomics Partnership Wales, All Wales Medical Genomics Service, Pathogen Genomics Unit (PenGU), Wales Gene Park and Public Health Genomics Programme, have moved to a bespoke modern facility at Cardiff Edge Science Park, Coryton. Co-localisation with cellular pathology will create a 'Centre of Excellence' that will be of benefit to patients by making progress in terms of precision medicine as well as creating a bioscience park that will be of huge benefit in terms of recruitment and retention as well as future collaborative work with university and third sector companies. This requires a digital pathology service to fully realise the benefits.

Spending Objectives

The following spending objectives and associated benefits have been identified based on the aims of the overall NDCP Project and specifically the goals of Phase 3 which are informed by the strategic context.

Table 2 Spending Objectives

SO1	Build a standardised, robust and sustainable cellular pathology service for the whole of Wales
SO2	Introduce national scanning equipment with the capability to fully digitise cellular pathology service for Wales with a footprint that allows for service increase over the next seven years
SO3	Fully integrate with both the current All Wales Laboratory Information Management System (LIMS) and its successor
SO4	Enable reporting and review of any case from any location, using any device.
SO5	Enable rapid, specialist, second opinion both internal and external to Wales
SO6	Enable the routine use of Artificial Intelligence, Machine Learning and Deep Learning to enhance diagnosis, teaching and research
SO7	Build stronger relationships between NHS, Academia and Commercial Partnerships

Existing Arrangements

Cellular pathology services in Wales processed more than 1 million slides in 2022/2023, with actual and forecast growth suggesting that by 2025/26 the service will be processing approximately 1.5 million slides.

Chilcott, Rachel
21/08/2024 11:46:0...

The forecast growth in activity is compounded by the increasing complexity of the workload along with an increasing proportion of urgent specimens being processed and the number of tests per specimens generally increasing. As a result, turnaround times are slower and there are increasing backlogs of cases in all

Health Board areas. Services face increasing challenges in achieving target turnaround times of 7 days for Urgent Suspected Cancer (USC), 14 days for urgent and 28 days for routine specimens.

Increased turnaround times have a significant negative impact on patients and the wider system creating the following risks:

- Costly cancellations and stressful appointment delays when results are not ready.
- Additional anxiety for patients and their families awaiting results.
- Diseases, especially cancer, become more advanced while patients are waiting for results.
- Prioritising urgent specimens to meet cancer and screening targets has a significant impact on turnaround times for routine specimens. This increases the risk of a delayed diagnosis of cancer in samples clinically thought to be benign
- The General Medical Council (GMC) undertook a national training survey in 2023 and reported an increase in burnout for histopathology trainers (25% high risk, 62.5% moderate to high risk).

The increased turnaround times also mean that fewer specimens can be processed within existing capacity and this has contributed to a growing backlog of cases, placing the staff and service under additional pressure. Work is ongoing to accurately quantify the extent of the capacity gap. However, given the forecast growth in volumes, prioritisation and complexity of cases, it is clear that significant mitigation measures are urgently required at all Health Boards to address this.

Outsourcing adds to the pressure as well as dramatically increasing costs - it is estimated that almost £4million was spent on outsourcing for 23/24. Unless action is taken to facilitate an all-Wales digital service, this cost will inevitably increase rapidly.

This is particularly difficult given the ongoing challenges recruiting and retaining appropriately skilled workforce. There is a well-documented shortage of diagnostics professionals across the UK and various studies have identified specific issues related to the pathology service in Wales. This results in a high dependency on outsourcing of work to locums or external providers to mitigate workforce capacity gaps, which increases costs and impacts on service quality, and has a very negative effect on staff morale and reputation of the service.

A large proportion of the workforce are approaching retirement age or have already retired and returned to the service. There are 20 substantive pathologists are over the age of 55 and over 8 of these have already retired and returned. Pathology is a highly specialised field, and it takes around a decade to train a pathologist from scratch and the service competes with other disciplines for trainees from the reducing number of junior doctors who successfully complete foundation training and progress into specialty training. Many trainee pathologists are now using digital pathology and are likely to seek employment in departments where digital technology is available to support and enhance their diagnosis. Mitigations are therefore urgently required to address these ongoing workforce risks.

Chilcott,Rachel
21/08/2024 11:48:04

Currently the reporting for this service is largely based on the traditional method of glass slides and light microscopes. Gathering slides and reports for multi-disciplinary team (MDT) meetings and for sending out to specialists for second opinion is time-consuming and often causes delay. Irreplaceable diagnostic material can also be lost or damaged in transit – digital imaging removes this risk.

Technological advances in the digitisation (scanning) of glass microscope slide preparations have reached a level of quality, efficiency and effectiveness where immediate adoption in NHS diagnostic cellular pathology services is now not only possible, but is essential to keep pace with the rest of the UK. Digital pathology is fundamental to support the pathologists in decision making and while AI/computational pathology is not designed to replace the pathologists, the use of AI/computational pathology tools has already shown improvements in quality and capacity in the service as detailed below.

The NDCP Project was established to modernise cellular pathology services in Wales and to maximise the use of digital technologies nationally. To date, two phases have been achieved:

Phase 1: Rapid Evaluation and Verification – demonstrated proof of concept and confirmed accuracy.

Phase 2: Partial National Scale Up – partial procurement and installation of digital equipment for each of the Health Boards.

Each Health Board is currently connected to the digital hub in a spoke model and has some limited scanning capability. There is irrefutable evidence that the digital technology delivers many benefits as already experienced in BCUHB who are acting as a pilot site for digital pathology in Wales. Scanners are currently in everyday use in BCUHB and are being used to scan routine and cancerous slides enabling both on site and remote digital reporting. Images of scanned slides are shared at MDTs, and cross site working with Swansea Bay University Health Board (SBUHB) is enabling rapid reporting of digital images by the All Wales Lymphoma panel reducing from 2 weeks to just 24 hours. The All Wales Lymphoma panel is only partly supported by digital cellular pathology, for instance cases referred to the panel from BCUHB will be seen much quicker than those from ABUHB, which results in an inequitable service for patients until a digitisation is scaled up across all Health Boards.

BCUHB have successfully completed Phases 1 and 2 of a Small Business Research Initiative (SBRI) Project where AI has been successfully used to pre-analyse prostatic biopsies and triage malignant cases for early reporting. Phase 2 of the Project included rolling out to SBUHB and ABUHB and over 1900 prostatic cases were scanned between the 3 Health Boards. The project has recently also been rolled out to Cwm Taf Morgannwg UHB, Hywel Dda UHB and Cardiff & Vale UHB and by mid-May 2024, all Health Boards in Wales will be using the AI platform to assist pathologists in the reporting of prostatic biopsies. The benefits from Phase 2 have shown an improvement in accuracy of around 13% and a possible 50% reduction in the demand for immunohistochemistry (IHC) to support clinical suspicion of cancer, and other benefits are being considered. In BCUHB, the Moondance Breast AI Project has carried out the validation phase and is now processing breast biopsies and in CVUHB, a pilot project is due to commence shortly for gastric biopsies.

Chilcott, Rachel
21/08/2024 11:48:04

During a visit to BCUHB Cellular Pathology laboratory, the Minister for Health and Social Services, Eluned Morgan said "*we are seeing how AI presents incredible opportunities to transform the way we interact and deliver NHS services. The benefits of using AI to help diagnose cancer has exceeded all our expectations and it is fantastic that six Welsh Health Boards are undertaking further trials of this technology. The IBEX system has shown real promise and the possibilities of what this type of technology can do and how it could be used in the future across a number of suspected cancers is an exciting prospect.*"

BCUHB, SBUHB and ABUHB are using voice recognition and command software to improve dissection and report turnaround times by as much as 5 days. Despite the partial success, none of the Health Boards currently has sufficient scanning capability to fully maximise the use of digital technologies.

Business Needs

It is now the intention of the NDCP Project to build on the previous phases by increasing digital scanning, reporting and capacity for Wales in line with the global direction of travel. This includes *(please refer to page 36 for more detailed Business Needs)*:

- **Business Need 1:** Procurement of All Digital Pathology Capability
- **Business Need 2:** Determine and Agree a National Image Store
- **Business Need 3:** Management of the Future Digital Hub
- **Business Need 4:** Work with Health Boards to find a Solution for Cross-Boundary Working as part of a National Network of Cellular Pathologists
- **Business Need 5:** Work with Health Boards to Develop Workflows and Workforce to ensure maximum benefits are realised from the implementation of the new LIMS

Potential Scope and Services

The NDCP Project agreed that the following would be included within the scope of Phase 3 *(please refer to page 38 for more details on the scope)*:

- **Slide scanners**
- **Medical grade screens** (with the appropriate graphics cards).
- **Management systems** (additional software or as part of the scanning package – to include voice recognition)
- **Additional workstations/laptops**
- **Image storage** (investigation of cloud storage options)
- **AI/computational pathology**
- **Standardisation of services** (via Standardisation Group)
- **Adoption of standardised technical standards for image formats**

It should be noted that the procurement scope does not include tissue processors, stainers and other specialist laboratory equipment. These are out of scope since the standardisation of existing equipment is not currently considered achievable due mainly to cost.

Chilcott,Rachel
21/08/2024 11:48:04

ECONOMIC CASE

Options Framework

In accordance with the HM Treasury Green Book and Welsh Government Better Business Cases guidance, a long list of options was identified and evaluated against spending objectives and critical success factors using the options framework. The results of this are presented in the following table:

Table 3 Options Framework

Project	Do Nothing	Do Minimum	Intermediate	Do Maximum
1. Service Scope *As outlined in Strategic Case*	All cases are reported using microscopes and glass slides. Would leave Wales behind the rest of the UK and could lead to collapse of service	Most cases are reported using microscopes and glass slides plus some limited digital reporting.		Most cases are reported digitally. Would ensure Wales keeps pace with rest of cellular pathology global community
	Carried Forward	**Carried Forward**		**Preferred Way Forward**
2. Service Solution *In relation to the preferred scope*	Return to previous process (glass slides and microscope)	Partial procurement and installation of digital capability for each Health Board.		National scale up of digital capability including image storage and digital hub solution.
	Carried Forward	**Carried Forward**		**Preferred Way Forward**
3. Service Delivery *In relation to the preferred scope and service solution*		NHS Wales purchases equipment and support provided via a maintenance contract		Fully managed service contract where provider owns and manages the digital solution
		Carried Forward		**Preferred Way Forward**
4. Implementation *In relation to preferred scope, solution and method of service delivery*		Phased approach in which HBs transition one at a time		Big Bang approach in which all HBs transition together
		Preferred Way Forward		**Discounted**
5. Funding *In relation to preferred scope, solution, method of service delivery and implementation*		Fully capital funded	Combination of capital and revenue funded (NHS owned asset/revenue model)	Fully revenue funded
		Discounted	**Carried Forward**	**Preferred Way Forward**

Main Options

The resulting shortlist of options comprises:

- **Do Nothing:** Return to the pre-Project position with cellular pathology services reporting all cases using microscopes and glass slides. This would put the service at considerable risk and is no longer a viable option.
- **Do Minimum:** Continue with existing arrangements whereby cellular pathology services continue to report most cases using microscopes/glass slides and perform some digital reporting using current limited digital

Chilcott, Rachel
21/08/2024 11:48:04

capability. This would require two pathways to operative simultaneously and would be prone to error and considerable inefficiency.

- **Intermediate - Capital and Revenue Funding Model:** Cellular pathology services utilise as much digital reporting as possible through national scale up of digital enablement, digital storage and digital hub solution, along with AI/computational pathology functionality. Funded through a combination of capital and revenue funding.
- **Preferred Way Forward - Fully Revenue Funded Managed Service Model:** Cellular pathology services utilise as much digital reporting as possible through national scale up of digital enablement, digital storage and digital hub solution, along with AI/computational pathology functionality. Funded through a fully revenue funded managed service option.

Options Appraisal

An economic appraisal was prepared to determine the value for money of the shortlisted options. This was based on indicative costs, benefits and risks which were estimated in accordance with the level of information available at this stage in the process. An overview of the results is presented in the table on page 58.

Preferred Option

Based on the financial and non-financial analysis outline in the Economic Case, the Preferred Way Forward delivered via a fully revenue-funded model, which reflects a cellular pathology service that utilises as much digital reporting as possible through national scale up of digital enablement, digital storage and digital hub solution, along with AI/computational pathology functionality.

It will improve sustainability and equity of the service ensuring realisation of Project benefits including:

- Sustainable, equitable, and future proofed cellular pathology service across NHS Wales
- Ability to report nationally across Health Board boundaries to realise the Project ethos of any Consultant, reporting any case, from any location
- National image sharing
- Improvement in attractiveness of service for recruitment and retaining of staff
- AI/computational pathology can be utilised to support the pathologists and improve the quality and efficiency of clinical diagnosis
- Supports delivery of Single Cancer Pathway targets as detailed in 'A Cancer Improvement Plan for NHS Wales 2023-2026'
- Utilise digital equipment purchased during Phase 1 & 2
- Utilise integration developed between current and new LIMS
- Improved quality and drive innovation through AI/computational pathology
- The sharing of specialist clinical resource/expertise through improved digital networking of services in Wales progressing towards a proposed national network of cellular pathologists
- Greatly improved rapid access to different specialities as already demonstrated by referral of digitalised lymphoma cases between BCUHB and SBUHB and digitally supporting MDTs for national screening services such as cervical cytology from a remote site.
- Improve patient care through the use of a national digitalised network, facilitating quicker second opinions and facilitate cross boundary working

Chilcott,Rachel
21/08/2024 11:46:04

- Improved MDT preparation by eliminating time spent collating cases for MDT review also saving laboratory staff time retrieving slides from file storage and re-filing following review.
- Enable pathologists to interact easier with colleagues e.g. virtual multi-disciplinary team meetings and virtual review of cases online.
- Improvements in education, training (both in class and virtual) and for presenting at MDTs, tumour boards, audit etc
- Aligned to international direction of travel for the service
- Heat mapping and annotation of images will assist with identifying areas for molecular genetics improving precision medicine
- Reduce risks associated with HTA regulations on slide storage

COMMERCIAL CASE

Procurement Route

Three procurement models were considered as part of the options framework:

1) Traditional purchase and service support model
2) Managed service provider model
3) Hybrid model:

The managed service provider model has been selected as the preferred way forward. The extent of the managed service provider model may be limited, for example with NHS Wales taking ownership of some infrastructure either located in NHS organisations and/or an NHS Data Centre, but with the supplier taking responsibility for management and ongoing service support. As with the traditional purchase and service support model this would involve capital and revenue accounting treatment of costs and associated funding.

Two procurement routes were explored: full tender and a framework agreement. It has been agreed that a full tender process is the most suitable route.

Procurement Scope and Specification

The principal aim of the procurement is to procure additional software and equipment to create a cellular pathology service that will maximise the use of digital reporting, replacing as much of the existing traditional microscopy service as possible. The scope of the procurement includes *(please refer to page 38 for a more detailed description):*

- **Slide scanners**
- **Medical grade screens**
- **Management systems**
- **Additional workstations/laptops**
- **Image storage**
- **AI/computational pathology solution**

It should be noted that the procurement scope does not include tissue processors, stainers and other specialist laboratory equipment. These are out of scope since the standardisation of existing equipment is not currently considered achievable due mainly to cost. The final specification will be agreed following pre-tender engagement with suppliers.

Chilcott, Rachel
21/08/2024 11:48:04

Timeline for Procurement

The following table sets out the procurement milestones and complies with all applicable legal requirements.

Table 4 Procurement Timeline

Activity	Date
Update specification of requirements	Ongoing
Sign off final specification and agree award criteria	April 2025
Publish ITT	April 2025
ITT response deadline	June 2025
Evaluation of responses	June - October 2025
Contract award	November 2025
Contract start date	April 2026 (staggered across Health Boards)

Payment Mechanism

Payment mechanisms will be confirmed with the preferred bidder.

Contractual Arrangements

The final contractual arrangements will be confirmed with the preferred bidder.

Legal and Personnel Implications

A Programme Manager will be appointed to lead the Procurement Project working to the National Pathology Portfolio Programme Lead.

It is likely that specific individuals will be involved across multiple activities. The combined staff and consultancy team will cover the following roles for the procurement:

- **Digital Cellular Pathology Project Team:** Comprising the Senior Responsible Owner, National Pathology Programme – DCP Clinical Lead, National Pathology Portfolio Programme Lead, Programme Manager, Senior Project Manager, and Senior Project Support Officer
- **Procurement Project Team:** NWSSP Procurement Project Manager/Category Manager will be appointed to manage the Project and deliver the planned outputs as expected within quality, time and budget constraints. The Procurement Project Manager will report to the Programme Manager and be supported by the Project Team.
- **Health Board representatives** (Pathologist, Manager and IT)
- **DHCW Representatives**
  Other representatives will be co-opted as appropriate

Each Health Board has a laboratory manager and a clinical lead who act as digital pathology champions from within their laboratory. The work done so far with AI/computational pathology implementation has benefited from a "do once and share approach" which also supports national standardisation. The role in the local laboratories is not envisaged to be full time position but a duty required by all laboratory managers as part of the modernisation of pathology. Each laboratory

Chilcott,Jackie
21/08/2025 11:48:02

will already have a quality manager in place who should be able to help support the quality/regulatory and assurance work required. The NDCP Project will assist in developing documentation such as SOPS/risk assessments and governance documents. Also, included in the Health Board revenue costs is Band 3, Band 6 biomedical scientist (BMS) and a part time Band 7 IT (one day per week) which will also form part of the membership.

It is not expected that any Phase 3 activities will fall under TUPE – Transfer of Undertakings (Protection of Employment) Regulations 1981.

FINANCIAL CASE

Affordability Analysis

Indicative costs have been estimated at this stage based on current market knowledge and resourcing requirements. Costs are outlined in Appendix F1, and a detailed explanation of the costing methodology is included above. In summary:

- **Solution costs:** Procurement of a managed service contract to provide digital scanners, workstations, other hardware, integration with other systems, software, training and the ongoing storage and service to maintain the system. Costs at this stage are based on the results of recent market testing.
- **Project Team:** Including non-recurring costs of Programme Manager and Senior Project Support Officer and recurring costs of NWSSP Procurement Project Manager/Category Manager. It is assumed that the National Pathology Portfolio Programme Lead and Senior Project Manager will continue to be funded through the National Pathology Programme budget.
- **DHCW Support:** Non-recurring and recurring costs based on anticipated DHCW requirements for Lead Engineer Networking, Support Integration, Development Integration and Infrastructure Design roles.
- **Additional Health Board Staff**: Ongoing cost of a Band 6 BMS, Band 3 Healthcare Support Worker and 1 day per week of Band 7 IT support for each Health Board.

Based on these assumptions, it is anticipated that funding is below: *(please see a more detailed breakdown on page 5).*

- **Non-recurring revenue funding which in total equates to £423,000 requested from Health Boards**
- **Ongoing revenue funding which in total equates to £34.4m between 2025/26 – 2034/35 requested from Health Boards**

MANAGEMENT CASE

Project Management Arrangements

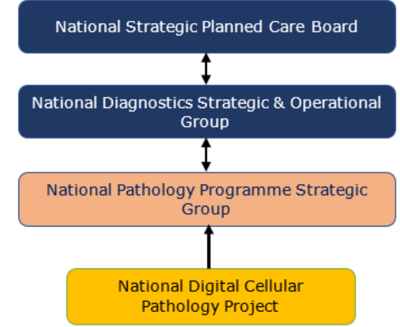
The Project is being managed in accordance with the standards set out in Managing Successful Programmes (MSP).

Structure

The suggested structure to enable the NDCP Project to effectively develop and deliver the "new capability" is outlined in the following diagram.

Chilcott, Rachel
21/08/2024 11:48:04

Figure 1 Structure



Timescales

The high-level timeline for the Project is set out in the following table:

Table 5 Project Timeline

Tranche 1	Tranche 2	Tranche 3
Pre-procurement	Procurement	Implementation
Apr 24 – Mar 25	Apr 25 – Mar 26	Apr 26 – Mar 27
Standardisation approach Development of the Business Justification Case Health Board Executive approval of the BJC (x 6) Update service specification	Tender process Supplier engagement Finalise service specification Contract Award Implementation Preparation Digital hub/storage preparation Recruit HB staff	Digital hub/storage implementation Implementation in Health Boards (phased approach) Training

Assurance

The NDCP Project has a Quality and Assurance Strategy developed in accordance with MSP to ensure that all management aspects of the Project are working appropriately and that the Project stays on target to achieve its objectives. Project reviews to be undertaken at the end of each tranche.

Change Management Arrangements

The NDCP Project is a transformational change Project underpinning the development of modern, safe, sustainable Pathology services the use of innovative systems resulting in sustainable futureproofed services. The Project is aligned to the principles of the Pathology Statement of Intent 2019 and ensures continued alignment through a robust governance structure and reporting mechanism into the National Pathology Programme. Transformational service change forms the basis of the NDCP Project which seeks to deliver the change in a way that is welcomed, supported and embraced by the Pathology service and the wider NHS. The NDCP Project will deliver this through leadership, vision, stakeholder engagement, strong governance, excellent communications and robust plans. Building on lessons learned from Phases 1 and 2, Phase 3 will:

- Appoint an executive level SRO

Chilcott,Rachel
21/08/2024 11:40:04

- Reinforce clinical leadership arrangements, for instance the National Pathology Programme now has a National Clinical Lead and a Clinical Lead for Digital Cellular Pathology
- Strengthen existing membership ensuring IT representation from each organisation
- Formalise DHCW membership
- Continue to update National Diagnostics Strategic & Operational Group at regular intervals
- Continue to work with the Cellular Pathology Standardisation Group to drive the Project forward and ensure Subject Matter Expert (SME)

This approach will ensure the continuation of a robust, governance structure ensuring enabling high quality delivery at pace.

Transformational Leadership

The NDCP Project is providing transformational leadership enabling the Pathology service to create their vision and own the Project at every stage of the process.

Health Board and Trust Leadership

Health Boards and Trusts will provide the leadership necessary for the successful implementation of the new NDCP Service by supporting the following:

- Approval of the BJC at National Strategic Planned Care Board;
- The level of business change required to support the standardisation of services as far as possible to deliver a modern, high quality, safe and sustainable Pathology service;
- Establish a Local Deployment Project team to oversee the implementation and deployment of the new digital enablement and ensure the pathology service has the support and resources it requires to contribute to the Project
- Include NDCP Project in their integrated medium-term plans (IMTPs)
- Enable their pathology services to contribute to the development, testing and validation of the new service;
- Release their staff for training for the new service

Management of Requests for Change

Requests for change can take several forms and will be managed accordingly. Throughout the life of the Project until the new digital service is fully deployed, all requests for change will be recorded in a dedicated Project change log and managed by the Project Team. The Project Team will decide the appropriate route for the change to be dealt with. A decision is needed regarding ongoing arrangements following handover of services to operations, and the ongoing the management of change requests during the managed service contract.

Benefits Realisation

The Benefits Management Strategy developed in Phases 1 and 2 of the Project will continue to be developed and refined to model benefits in more detail, determine methods for measuring them and ensure there is a process for tracking their realisation (see Section 3.8 for list of benefits). It is recognised that this will require buy-in and support from Health Boards.

Chilcott,Rachel
21/08/2024 11:48:04

Risk Management Arrangements

The Risk Management Strategy developed in Phases 1 & 2 of the Project will continue to be developed and will outline how risks and issues will be identified and managed during Phase 3 of the Project. It is recognised that this will require buy-in and support from Health Boards. The Programme Manager will work with key leads to detail potential risks and issues in the Project Plan. A detailed Risk & Issues Register has been developed by the Project Team to assist with risk & issue management throughout the development process. Risks will be assessed and values attributed to each area.

Contract Management Arrangements

The contract will be managed by maintaining relationships with the successful supplier(s) throughout the duration of the Project, including engaging through supplier performance management (SPM). Regular contract review meetings will be held by NWSSP Procurement Services with input from the working group, using the SPM standardised agenda.

Post Evaluation Arrangements

The Project has a Quality and Assurance Strategy developed in accordance with MSP to ensure that all management aspects of the Project are working appropriately and that the Project stays on target to achieve its objectives. To complement the Quality and Assurance Strategy, gateway reviews will be planned at the end of tranches 2 and 3, to assure the readiness for service prior to go live and once the project has finished and the new digital service is fully deployed to assess operations and review benefits realisation.

Contingency Plan

There is a contingency built into Tranche 3 should there be any delays in the implementation of the Project. In the event that the Project fails, the aim will to be to ensure business continuity by:

- Exploring the opportunities to contract with another supplier within the procurement, should the supplier fail to deliver;
- Undertaking a re-procurement.
- Ensuring traditional reporting via glass slides and microscope as contingency

2 Introduction

Purpose of Business Justification Case

As outlined in the Executive Summary on page 5, the purpose of this BJC is to set out the proposals for Phase 3 of the NDCP Project. This will build upon the previous work of the Project, where investment in infrastructure and staffing has allowed us to evidence proof of concept, most recently identifying the opportunities and benefits of AI/computational pathology. We can only progress this and fully understand and realise the benefits by providing further digital enablement allowing cellular pathology services to digitise services as completely as possible. National scale up (to enable full digital reporting) will require investment in scanning and reporting hardware, a laboratory management software system, digital image storage and staff resource.

This document seeks approval to undertake full procurement of the new solution and commitment to provide the following funding:

- **Non-recurring revenue funding of £423,000 requested from Health Boards (£71,000 per HB)** for the implementation costs associated with the project team and DHCW support between 2025/26 – 2027/28.
- **Ongoing revenue funding which in total equates to £34.4m between 2025/26 – 2034/35 requested from Health Boards,** related to annual recurring revenue costs associated with the managed service contract for the solution and additional staff required to support Health Boards with the implementation and ongoing management of the solution.

Structure and Content of the Document

The BJC has been prepared using the agreed standards and format for business cases, as set out in the Welsh Government Better Business Cases guidance. The approved format is the Five Case Model, which comprises the following key components:

- The **Strategic Case** outlines the strategic context and demonstrates that there is a compelling case for change.
- The **Economic Case** demonstrates that the preferred option best meets the existing and future needs of the service and optimises value for money (VFM).
- The **Commercial Case** outlines the procurement route and the content and structure of the negotiated deal.
- The **Financial Case** confirms funding arrangements and affordability and outlines the impact on balance sheet and income and expenditure.
- The **Management Case** demonstrates that the scheme is achievable and can be delivered successfully to cost, time and quality.

3 Strategic Case

Strategic Context

Pathology Overview

Pathology is involved in 70% of all diagnosis made in the NHS, however, this figure does not reflect the role that pathology has in screening and monitoring and in relation to chronic conditions. Pathology underpins all clinical services and 95% of clinical pathways including those referred from primary and community care rely on patients having access to efficient, timely and cost-effective pathology services, within secondary care. Cellular pathology is also integral to the delivery of precision medicine and genomic services.

During 2018, pathology processed more than 34 million tests at an estimated cost of 1.9% of the total healthcare budget. A key component in the delivery of prudent health services, pathology is an enabler to other Welsh Government health strategies including those in cancer and stroke services.

Organisation Overview

The NHS Wales Executive is a national support body which has been operational since 1st April 2023. Its key purpose is to drive improvements in the quality and safety of care - resulting in better and more equitable outcomes, access and patient experience, reduced variation, and improvements in population health. The NHS Wales Executive will also provide strong leadership and strategic direction through the National Strategic Planned Care Board which is attended by all Chief Executives of UHBs, Trusts, and enabling organisations, providing support and directing NHS Wales to transform clinical services in line with national priorities and standards.

The National Pathology Programme

The National Pathology Programme is managed by the NHS Wales Executive. The National Pathology Programme was established to:

- Develop and implement a Programme of strategic work which contributes to delivering the vision of the Pathology Statement of Intent 2019.
- Ensure the adoption of all Wales standards and protocols for pathology services in NHS Wales.

The National Pathology Programme Strategic Group, chaired by a CEO Lead, was formed to ensure oversight and ongoing development of the implementation plan and report to the National Diagnostics Strategic & Operational Group and the National Strategic Planned Care Board.

Delivery of the agreed actions of the Pathology Statement of Intent 2019 is the responsibility of the National Pathology Programme Strategic Group who have oversight of each of the dedicated all Wales delivery groups, which include Pathology Workforce and Education Group, Point of Care Strategy Group, National Pathology Operational Managers Group, Pathology Quality and Regulatory Compliance Group, and the NDCP Group. See section below for more details on the NDCP Project.

Chilcott,Rachel
21/08/2024 11:48:04

The development of pathology services across Wales includes:

- Some progress to consolidate pathology services into three regions, in line with the Carter Report (2008), completed in north Wales.
- A Regional Collaboration for Health (ARCH) is a partnership between SBUHB and Hywel Dda UHB to deliver service transformation across south west Wales.
- Regionalisation work ongoing with CVUHB, CTMUHB and ABUHB in south east Wales
- Maximise digitisation and IT connectivity for cellular pathology – in line with the long-term requirement documented in the Richards Report 'Diagnostics: Recovery & Renewal' October 2020 and more recently WG's Digital and data strategy for health and social care in Wales (2023).
- Expansion and retention of the workforce within cellular pathology – as identified in the Pathology Statement of Intent (2019).
- Impact of COVID-19 on pathology – as documented in the Richards Report and WG's Diagnostics Recovery and Transformation Strategy for Wales 2023 to 2025.
- Realignment to support the National Clinical Framework.
- A pilot in digital cellular pathology has created the capacity for reporting on digital images for a wider area.
- Boundary changes have taken place with CTMUHB now managing the Princess of Wales Hospital in Bridgend.
- The Public Health Wales (PHW) microbiology network has consolidated many investigations to a regional or national model of delivery and continues to transform services, such as the six additional hot labs for COVID-19 testing.

The National Digital Cellular Pathology Project

The NDCP Project is critical to the continued delivery of a modern and sustainable Pathology service as well as ongoing transformation initiatives.

Established in 2016, under the auspices of the National Pathology Programme (then National Pathology Programme Board), the NDCP Project was formed following a successful bid to the Efficiency through Technology Fund, on behalf of the National Pathology Operational Managers Group. The bid was submitted to capitalise on a previous investment made to modernise cellular pathology services at BCUHB, through rapid verification of the procured equipment and then national implementation if verification was successful. Benefits were expected to include but would not be limited to the pooling of clinical resource and standardised working across Wales to enable any consultant to report any case using any device from any location in Wales. This would reduce costs by reducing the necessity to outsource work.

Pathology Service Strategic Aims

Plans for the development of modern, sustainable pathology services are described in the Pathology Statement of Intent (2019). The NDCP Project supports many of the key priorities set out in the Statement, including:

- **Workforce Development**. A modern and innovative digital cellular pathology service will make it easier to recruit and retain staff. The Project will also improve operational efficiency and support changing roles, MDT working and cross-boundary collaboration.

Chilcott, Rachel
21/08/2024 11:48:04

- **Equipment.** The modernisation and standardisation of scanning equipment (as detailed within the scope) will increase service productivity and will fully integrate with the wider NDCP Project.
- **Quality and Safety**. The current digital system has been fully verified for accuracy and safety. It enables treatments to be more easily tailored to individuals, supporting evidenced-based care. Errors and loss of slides are minimised as all samples are held digitally.
- **Services** A fully digital system will improve service efficiency and support the aim to work beyond geographical barriers by exploiting new technologies.
- **Informatics & Information**. Informatics support and enhanced business intelligence will be a key feature of the new solution including a national image storage repository.
- **Research and Innovation**. The new infrastructure supports the sharing of information and will promote and accelerate innovative practice for cellular pathology. There will be enhanced opportunities for learning, development, and research.
- **National and Regional Working.** The new service will provide one seamless system for the whole of Wales, which is co-ordinated nationally and delivered regionally and locally.

Alignment to National Policies and Strategies

The national strategies informing the NDCP Project are summarised in the following table:

Table 6 Alignment to National Policies & Strategies

Strategy/ Policy	Summary	How the National Digital Cellular Pathology Project supports this
NHS Planning Framework 2023-2026	This NHS Planning Framework for 2023-26 builds on the learning from the pandemic and sets out the Ministerial priorities to support recovery and sustainability of health services, with the three-year context being a commitment to improving population health and reducing the burden of disease. Delivering efficiently, effectively, and optimising service delivery is how the improvements must be embedded in the DNA of NHS in Wales.	Provide opportunities to create additional capacity to support Planned Care and Recovery as led by the National Recovery Programme and prioritised by Health Boards. The Framework outlines that Diagnostics services improvements must result in a reduction in numbers of people waiting for diagnostic tests to pre-pandemic levels as a minimum. Provide opportunities to reduce reporting time which will contribute to the achievement of national cancer pathway targets and reduce the backlog of patients waiting too long on their cancer pathway. Ensure that digital, innovation, technology and transformation underpins plans to deliver optimum care and services for patients. The resulting digital solution will provide more opportunities to work with others as part of NHS Wales' approach to innovation. Focus on ways to deploy the existing and future workforce to best effect, including enhanced use of multidisciplinary teamworking, role redesign, developing new roles, and

Chilcott,Rachel
21/08/2024 11:48:04

Strategy/ Policy	Summary	How the National Digital Cellular Pathology Project supports this
		advanced practice models, enabling people to develop their careers and work at the top of their license.
Diagnostics Recovery and Transformation Strategy for Wales (2023-2025)	Outlines plans to recover diagnostic services by 2025, addressing the impact of pandemic, and set the groundwork for longer term sustainability including: • Catch up unmet diagnostics demand for important conditions • Transform services and move beyond traditional boundaries to put patients at the centre, reduce inequality, improve outcomes and reduce secondary care demand • Create and sustain safe services with prudent value-based pathways and workforce models • Be informed by evidence and be data driven • Create an environment where research and innovation improve outcomes and experience and success is scaled. • Connect seamlessly with the National Clinical Plan	Provides opportunities to create additional diagnostic capacity, addressing the current gap and contributing to the recovery of waiting list volumes. Enables the workforce to operate across boundaries, reducing inequality and reducing the pressure on the wider system. Provides a digital solution that can help mitigate capacity gaps, contribute to the attraction and retention of suitably skilled staff, support training of diagnostic specialists and advanced practice roles, and enable hybrid working and 'reporting from home'. Builds on the success of earlier stages, allowing the service to scale up the benefits across NHS Wales. Provides a digital solution that will enable investment and support for national diagnostic programmes in endoscopy, pathology, genomics, and imaging. Provides opportunities to adopt innovative digital technology solutions including AI/computational pathology
National Clinical Framework: A Learning Health and Care System (2021)	The Framework builds on the vision described in A Healthier Wales for a National Clinical Plan. Recognising that healthcare should be driven by planning rather than the market, the Framework sets out a health system that is coordinated nationally and delivered locally or through regional collaborations. It includes all clinical services and clinicians. The Framework will be underpinned by a suite of new commitments outlined in 'Quality Statements', which provide the next level of detail for specific clinical services.	A nationally planned pathology service that is delivered locally and regionally. Will act as an enabler to personalise medicine where therapies can be tailored to individuals, leading to more efficient and prudent provision of evidenced-based care. Will enable the extraction and analysis of data to understand the links between tests and treatment, improving clinical outcomes.
Quality & Safety Framework – Learning & Improving	Building on the aspirations set out in a Healthier Wales, the Framework provides guidance and direction for NHS Wales, focusing on requirements for multi-level, strong quality management systems – in turn reducing variation in quality.	Improving quality and equity through the implementation of a nationally planned service.

Chilcott,Rachel
21/08/2024 11:48:04

Strategy/ Policy	Summary	How the National Digital Cellular Pathology Project supports this
Healthcare Science in NHS Wales – Looking Forward	Referred to the role of healthcare professionals in realising the potential from new technologies and diagnostics to allow services to address challenges associated with increasing diagnostic demand and ageing population.	Utilising technological advances such as AI/computational pathology will help increase capacity and capability.
The Parliamentary Review of Health and Social Care in Wales. Final Report. (January 2018)	The Parliamentary Review set out a vision for the future, to include health and social care moving forward together and developing primary care services out of hospitals. The Review's recommendations focus on key themes around seamless care, a great place to work and maximising the benefits of technology and innovation.	Improving the efficiency of the patient care pathway. Improving facilities. Providing greater opportunities in order to attract a highly skilled workforce Maximising the benefits of technology and innovation.
A Healthier Wales: Our Plan for Health and Social Care (June 2018)	'A Healthier Wales' is the Welsh Government's response to the Parliamentary Review. It sets out the vision of a 'whole system approach to health and social care' which is focused on health and wellbeing, and on preventing physical and mental illness. It focuses on 'providing more joined-up services, in community settings', and shifts the emphasis from treating illness to prevention and supporting people to stay well and lead healthier lifestyles.	Addressing the recommendations set out in the Parliamentary Review as described above Focusing on improving services that will enable better targeted treatments.
The Wellbeing of Future Generations (Wales) Act 2015	The Wellbeing of Future Generations Act is about improving the social, economic, environmental, and cultural wellbeing of Wales. It makes the public bodies listed in the Act think more about the long-term, work better with people and communities and each other, look to prevent problems and take a more joined-up approach.	Deliver a sustainable service that focuses on: • Addressing health inequalities • Improving outcomes for patients • Attracting and developing a highly skilled workforce.
Prudent Healthcare: Securing Health and Well-being for Future Generations	Contributing to the four prudent healthcare principles: • Public and professionals are equal partners through co-production • Care for those with the greatest health need first • Do only what is needed and do no harm • Reduce inappropriate variation through evidence-based approaches	Better information sharing Patients are prioritised according to their need Treatments can be more easily personalised Improved business intelligence supports evidence-based care

Chilcott,Rachel
21/08/2024 11:48:04

Strategy/ Policy	Summary	How the National Digital Cellular Pathology Project supports this
Digital Strategy for Wales, March 2021	The purpose of the strategy is to develop a digital approach for people, public services and the business community across Wales. It has six main aims: 1. Digital services – deliver modern and user-friendly digital services 2. Digital inclusion – ensure people can engage with the digital world 3. Digital skills – ensure the workforce has the digital skills and confidence to excel 4. Digital economy – exploit digital innovation to drive economic prosperity 5. Digital connectivity – ensure services are supported by fast and reliable infrastructure 6. Data and collaboration – improve services by sharing data and working together	Creating a more efficient and cost-effective service by ensuring that: • reporting times are reduced; • productivity is increased; • digitised slides can be shared easily facilitating quicker second opinions and cross boundary working, leading to better clinical outcomes for patients.
Digital Service Standards for Wales	Sets out what's expected from new or redesigned digital services funded by Welsh public sector organisations, in three main areas: • Meet user needs • Create digital teams • Use the right technology	Supports several of the Future Generations Wellbeing goals including reducing health inequalities, improving outcomes for patients and developing a skilled workforce. Embeds digital ways of working in the service Ensures flexibility by using software that meets open standards, is cloud based and is widely supported Supports the use of data analytics to improve patient pathways and deliver better clinical outcomes

Supporting Other Initiatives

It should be noted that the NDCP Project is critical to Pathology's ability to support ongoing NHS Wales activities and current and future initiatives. In particular those outlined in the Executive Summary on page 8.

In addition, there are two ongoing regionalisation pieces of work, both require digital cellular pathology as key enablers. The ARCH (A Regional Collaboration for Health) project in south west Wales plans to merge the departments in Hywel Dda and Swansea Bay University Health Boards into a single managed network. The south east looks to do the same with a similar project bringing together the Cellular Pathology services from Cwm Taf Morgannwg, Cardiff and Vale and Aneurin Bevan University Health Boards. Both will require digital pathology to be able to report cases from any laboratory by the combined reporting capability in the network.

Chilcott, Rachel
21/08/2024 11:48:04

Genomics Partnership Wales, All Wales Medical Genomics Service, Pathogen Genomics Unit (PenGU), Wales Gene Park and Public Health Genomics Programme, have moved to a bespoke modern facility at Cardiff Edge Science Park, Coryton. Co-localisation with cellular pathology will create a 'Centre of Excellence' that will be of benefit to patients by making progress in terms of precision medicine as well as creating a bioscience park that will be of huge benefit in terms of recruitment and retention as well as future collaborative work with university and third sector companies. This requires a digital pathology service to fully realise the benefits.

Integration

The ability to use a single integrated all Wales LIMS system to provide a secure national reporting platform for cellular pathology is key to the NDCP Project. The ability to securely share images with pathology colleagues in any part of Wales for specialist reporting and consultation has already been shown to reduce reporting times for Lymphoma case by several days and has been recognised as a vital step in improving outcomes for some of our most severely ill patients. The reports generated using digital images can be linked to patients clinical data and health outcomes through the single patient record and the clinical portal. Quicker, more accurate and comprehensive reports are facilitated by digital images supported by AI/computational pathology platforms. Digital images will also support the All Wales Medical Genomics Service in identifying specific areas of tumour which will improve analytical outcomes and improve targeted therapies. It has recently been shown how data from the all Wales LIMS system can be interrogated to produce valuable information relating to workloads, backlogs, outsourced work as well as productivity and turnaround times for each laboratory in Wales. This can be used to enable future service planning and provide data to drive more efficient innovative and productive health care. Information form standardised reports generated by AI platforms could be fed automatically into the big data projects.

Foundational Economy

The foundational economy is focused on reversing the deterioration of employment conditions and encouraging local excellence to support the Welsh economy. This will be vital in retaining and attracting cellular pathology staff to NHS Wales. It will make it possible for specialist staff to work remotely and to benefit from work life balance policies. The use of digital pathology enhances flexibility and could help retain experts approaching retirement age by allowing more flexibility in working practices such as part time or flexible working. The IBEX AI prostate biopsy project has been supported by SBRI to work with commercial partners to pilot new ways of working. AI/computational pathology could provide opportunities for Welsh universities to work with Health Boards to support developmental and research projects that could support future diagnostic projects. Digital pathology can not only help remove Health Board boundaries but can also deliver shared learning and necessary documentation to quickly roll out a robust digital diagnostic service. The training of future pathologists and laboratory staff must be tailored to ensure the workforce can be recruited locally and the working environment meets the expectations of trainee staff who are now developing skills in digital services. There are opportunities to facilitate national imaging training centres with remote learning material that would attract trainees from across Wales and provide future generations with a robust cutting-edge pathology

Chilcott, Rachel
21/08/2024 11:48:04

service. Failure to deliver a fully digitised service within the next 3-5 years would adversely impact abilities of laboratories to meet the necessary quality standards.

Case for Change

Spending Objectives

Spending objectives describe what the NDCP Project is seeking to achieve and provide a basis for post-Project evaluation. The following spending objectives have been identified based on the aims of the overall Project and specifically the goals of Phase 3.

Table 7 Spending Objectives & Outcomes

Ref	Spending Objective	Outcomes
SO1	Build a sustainable robust and sustainable cellular pathology service for Wales	• Remote working • Flexible working • Improved ergonomics • Reduction in temporary staffing • Reduction in insourcing and outsourcing
SO2	Introduce national scanning equipment with the capability to fully digitise cellular pathology service for Wales with a footprint that allows for service increase over the next seven years	• Use of 2D bar codes to identify requests, specimens, blocks, slides and images • Reduced risk of tissue/slide loss or damage during transport or storage • Use of annotated scanned image to identify tumour areas required for genomic analysis • Electronic case assembly • Transfer of information on electronic request direct to report. Storage of post mortem images to improve management of cases to meet HTA standards
SO3	Fully integrate with both the current All Wales Laboratory Information Management System (LIMS) and its successor	• Reporting of H&E samples • Diagnostic efficiency (of digital tech) • Digital dictation direct into report in dissection room
SO4	Enable reporting and review any case from any location, using any device	• Case sharing and collaboration • Single identifier for a sample across Wales • Assessing disease progression • Digitally generated request information available to pathologist on screen
SO5	Enable rapid, specialist, second opinion both internal and external to Wales	• Link H&E and IHC /special stains on screen • Synchronous analysis of slides • Flip and rotate images to aid interpretation • Measurement and annotation • Easy access to archived images, slides & case tracking, archival and retrieval • Image storage and retrieval & slide storage and retrieval - where cases need to be referred for second opinion or second review, electronic images can be retrieved quickly and efficiently, improving turnaround time. • Speedier diagnosis of urgent cases • Improved access to external second opinion & improved case transfer times • Clearer diagnostic audit trails • Faster access to molecular testing
SO6	Enable the routine use of Artificial Intelligence, Machine Learning and Deep Learning to enhance diagnosis, teaching and research	• Improved quality in obtaining section • Improved turnaround times due to digital workflow • Case allocation to pathologist

Chilcott, Rachel
21/08/2024 11:48:04

Ref	Spending Objective	Outcomes
		• Electronic test request and workload management in laboratory enabling improved planning and workforce management • Reduced risk of patient/slide misidentification errors • Quantification of specific cells and markers • Highlighting and heat mapping of areas of abnormality • Quality control and audit • Prioritisation of cases to meet cancer targets • Automatic formatting of certain reports such as normal colonic biopsies based on AI pre-screened slides • Improved confidence in diagnosis if slide pre-screened by AI • Convenient and reproducible cancer staging • AI to identify micro-organisms • AI to identify special features not readily recognised by pathologist • AI/computational pathology for enhanced cancer research • Fewer microscopes to service in the future • Capture of digital image at macro dissection using macropath systems • Decrease in number of costly IHC tests • Reduction in number of repeat biopsies • Reduction in requirement of 2nd review pre-MDT
SO7	Build stronger relationships between NHS, Academia and Commercial Partnerships	• To increase teaching, training and mentoring • Improved recruitment and retention • Research resource

Existing Arrangements

Traditional Cellular Pathology

Cellular pathology services in Wales make a major contribution in many disease pathways, most significantly the early detection, diagnosis, staging and monitoring of cancer. Cellular pathology laboratories produce microscope slides from tissue samples sent for analysis from patients in surgical/outpatient settings. Consultant cellular pathologists subsequently make their diagnoses by evaluating microscope slide preparations using a light microscope.

Cellular pathology services are typically organised to be as regional to the clinical teams they support as possible, with regular engagement in MDT meetings the top priority for consultant cellular pathologists. Departments prioritise cases identified for MDT review so as not to delay the patient pathway.

Primary care cellular pathology services are organised in various ways across Wales to support their local health boards. There is a need for regular engagement with MDT meetings across sites, this is now often done via videoconferencing.

Due to increasing complexity in diagnosis, sub-specialisation has become the norm. Increasing sub-specialisation within cellular pathology often requires external opinion to be obtained – this currently requires microscope slides to be physically sent for external review within the UK NHS and sometimes further afield. The consequence of this is significant time delays (and costs) transporting slides by courier/post for expert review, and further time delays in receiving reviewed case reports.

Chilcott, Rachel
21/08/2024 11:48:04

In addition, severe difficulties in recruiting and retaining medical staff mean most departments have vacant posts at any moment in time. The Royal College of Pathologists' workforce census of 2018 showed that only 3% of NHS histopathology departments have enough staff to meet clinical demand.

This capacity gap results in backlogs of unreported cases, with either expensive medical agency locum or external outsourcing used to maintain minimum performance levels. These solutions also contribute to delays in reporting turnaround times.

Demand and Capacity

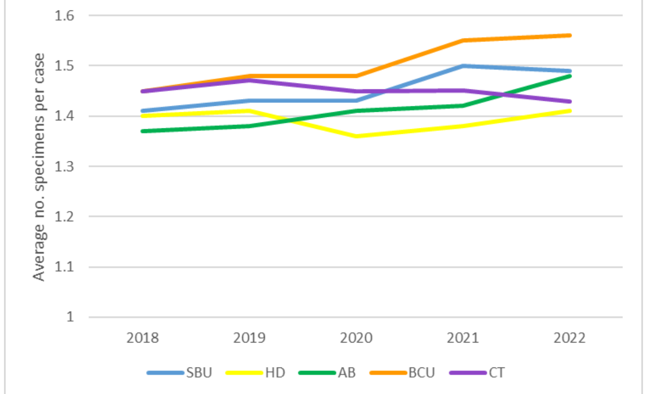
Pathology services in Wales processed more than 1 million slides in 2022/2023 Although activity reduced significantly during the early months of the pandemic, it has been increasing steadily since and by early 2022 had returned to pre-pandemic levels in most UHBs.

It is anticipated that factors such as the Recovery Plans outlined in the NHS Planning Framework 2023-2026 will mean that activity continues to increase during 2023/24. Forecast activity analysis suggests that by 2025/26 the service will be processing approximately 1.5 million slides.

The recent and forecast growth in demand is compounded by the increasing complexity of the workload including:

- The most urgent specimens making an increasing percentage of specimens in most Health Boards.
- The number of specimens per case is generally increasing and increasing number of tests are needed for many specimens.

Figure 2 Average no Specimens per case



As a result of this, turnaround times are now at, or are higher than, pre-Covid levels.

Figure 3 Turnaround times

Turnaround Time (Days)
40 35 30 25 20 15 10 5 0
2018 2019 2020 2021 2022
Year
AB BCU C&V CT HD SBU

Chilcott,Rachel
21/08/2024 11:48:04

This is impacting on the service's ability to achieve target turnaround times for specimens of 7 days for Urgent Suspected Cancer (USC), 14 days for urgent and 28 days for routine specimens. Target time breaches have increased across the board during 2022, with the percentage of USC and routine specimens processed within target time having decreased in recent years.

Prioritising urgent specimens to meet cancer and screening targets has a significant impact on routine specimens. This creates several risks including:

- Reduced opportunities for early intervention in the routine specimens that lead to a cancer diagnosis, particularly since audits have shown the cancer rate in routine specimens to be between 8% and 11%.
- Cancellations and appointment delays when results are not ready.
- Additional stress for patients and families awaiting results.

The backlog of activity has been gradually increasing following a previous reduction in 2020. This creates additional pressure to create more capacity to address this, which is challenging given the workforce pressures outlined below.

This has resulted in a gap between demand and capacity since mid-2022, particularly in south Wales where there are a number of pathologist vacancies. BCUHB following implementation of digital technology, have been able to attract pathologists to any vacant posts. Work is ongoing to accurately quantify the size of this gap but given the forecast growth in volumes, prioritisation and complexity of cases, then mitigation measures are required at all HBs to address this.

Workforce

It is widely recognised that there is a shortage of diagnostics professionals across the UK, and this is particularly evident in the Pathology service in NHS Wales. The Royal College of Pathologists published 'Briefing: The pathology workforce in Wales' in June 2019 and the 'Royal College of Pathologists' Priorities for Wales' in March 2021. Both papers outlined the workforce challenges and highlighted the need to invest in the workforce for patients and to achieve the Welsh Government's commitment to earlier cancer diagnosis.

NHS Wales Executive modelling in 2022 showed a capacity gap of 25% in west Wales for cellular pathology, with only 3 substantive cellular pathology consultants in HDUHB and a requirement for 9 to satisfy current levels of service. In addition, for south east Wales, the current gap is the equivalent of 8.5 cellular pathology consultants.

The associated studies referenced in these reports highlight a growing retirement crisis in the service. In 2019 it was estimated that 36% of the consultant workforce was over 55 years old and 10% of histopathologists 'retired and returned'. This largely remains the case based on the current pathologist workforce establishment outlined in the table below:

Chilcott,Rachel
21/08/2024 11:48:04

Table 8 Number of Pathologists (November 2023)

	BCUHB	ABUHB	CVUHB	SBUHB	HDUHB	CTMUHB
Number of substantive pathologists in post	12	14 (13 Medics, 1 reporting BMS)	20 "general" pathologists, 2 paediatric pathologists 2 neuropathol-ogists 1 consultant reporting scientist.	16 plus an external pathologist providing 2 digital sessions working from Birmingham 1 post out to advert	2	8
Number of above pathologists aged over 55	4	4	6	4	2	0
Number who have 'retired and returned'	3	0	2	2 (1 currently & 1 pending imminently)	1 retiring & returning Apr	0

The Royal College of Pathologists estimated in 2019 that 17% of consultant pathologists in Wales were locums. The service continues to rely on outsourcing to mitigate capacity gaps in the service, as outlined earlier, at an overall cost to NHS Wales of almost £4million at the time of writing.

Table 9 Outsourcing & Agencies (November 2023)

	BCUHB	ABUHB	CVUHB	SBUHB	HDUHB	CTMUHB
Cost of outsourced reporting in last 12 months	0	£660,100	£389,194	£900,000	Currently don't outsource to external companies however have significant In-lieu of locum costs for in house consultant reporting above their contracted sessions – Approx. £400,000	£2 million
Number of agency pathologists employed	nil but heavy insourcing in place	0	0	Nil, we are however issuing an average of 20 extra sessions to existing consultants per week	2 NHS locums on long term contracts 1 high cost agency locum	0
Average number of cases sent to agencies for reporting each work	No send any cases away for reporting, the extra work generated is reported as out of hours work by the Pathologists on site.	Wet to slide capped at 226 cases per week	Slides to outsourcing each week is around 150 but depends on admin support to get them out and back in, push to do in house WLI's as well	Currently sending 100 wet specimens per week	No send any cases away for reporting, the extra work generated is reported as out of hours work by the pathologists on site.	400-500 specimens wet tissue/ week. Plus 30-50 slides for reporting/ week

Chilcott,Rachel
21/08/2024 11:48:04

As well as increasing costs, reliance on outsourcing impacts on the quality of the service.

This is clearly not sustainable and is expected to worsen over time due to ongoing challenges recruiting and retaining staff. Short to medium term mitigations are limited. Pathology is a highly specialised field, and it takes around a decade to train a Pathologist from scratch. The Royal College of Pathologists highlighted that pathology competes with other disciplines for trainees from the reducing number of junior doctors who successfully complete foundation training and progress into specialty training.

Table 10 Current BMS vacancies and trainee Pathologists (November 2023)

	BCUHB	ABUHB	CVUHB	SBUHB	HDUHB	CTMUHB
Number of BMS vacancies	1 x B6 waiting to interview	2 x B6 whole time equivalents	2 x BMS B5 1 x BMS B6	5 x B3 support workers	3 x B4 1 x B5 1 x B6 currently vacant, adverts out or waiting for a start date	2 x B6, 6 x fixed term B3 MLA current vacancies do not enable the department to meet the demand placed on it
Number of trainee pathologists	3 +2 fellows	One	Trainee pathologists: 6 x Year 1 6 x Year 2 2 x Year 3 1 x Year 4 2 x Year 5 /Stage 4	2, but we have a request to increase from the deanery	No trainee Pathologists.	0
Number of BMS dissection roles currently filled / vacant	1 but a split role – part Senior BMS	2 (training started awaiting examination results)	2 BMS reporting / dissection for GI in post	4 advanced practitioners in dissection with one of these posts vacant 1 advanced practitioner reporting Gynae	We do not currently do BMS dissection.	1 advanced practitioner in Histological dissection

Mitigations are therefore urgently required to address these ongoing workforce risks.

Digitisation of Cellular Pathology Services

Technological advances in the digitisation (scanning) of glass microscope slide preparations have reached a level of quality, efficiency and effectiveness where immediate adoption in NHS diagnostic cellular pathology services is now not only possible but is essential to keep pace with the rest of the UK.

The system consists of a slide scanner, capable of creating high resolution images of microscopic preparations of human tissue, at comparable magnifications to that of a traditional light microscope. Other components of the system are a software interface, data storage servers, and computer workstations with high power graphics cards and high-resolution monitors to enable viewing and manipulation/sharing of slide images. Integration of the software interface with LIMS enables cases to be reported within an all-digital environment.

Chilcott, Rachel
21/08/2024 11:48:06

Consequently, moving to digitise cellular pathology services as completely as possible would eliminate many of the physical, time-consuming steps involved in

transporting microscope slides to consultant cellular pathologists, both locally and externally. Digital images can reduce the turnaround time from two days to a couple of hours. In addition, the preparation of slides for MDT review is much faster: the time taken to find and share physical slides is significant (there are currently up to 28 MDTs per week in BCUHB). When compared with radiology, which has been digitised for many years, it is estimated that the number of MDT administrative staff for pathology could be reduced from two to one.

An example of this occurred in SBUHB when, at a recent central urology MDT, the slides had not been received for review. During the MDT, SBUHB were able to email HDUHB and requested that the slides were scanned and the report sent electronically. The case was then immediately reviewed, discussed at MDT, saving another week on the pathway for MDT review.

Voice command is a major advantage, also supporting quicker turnaround times, improved reporting and a reduced need for secretarial support. And the risk of misplacing slides is also reduced, which reduces duplication and litigation risks.

Digitisation also offers benefits in terms of the time saved in retrieving and storing slides. Exact figures on this won't be available until Phase 3 is complete but, based on early studies from the digitisation of cellular pathology services in Leeds, it is estimated that a saving of between two and three WTE administrators will be possible with a fully digitised service. In addition, case review and external expert opinion can be undertaken electronically in real-time, with the likelihood that additional diagnostic expertise/precision will be more attainable than before.

Remote consultant MDT attendance through videoconferencing such as Microsoft Teams (including display of images), increasing the potential for greater sub-specialisation and shared working across NHS Wales.

Finally, without national scale up, the full benefits of AI/computational pathology cannot be realised across Wales. The benefits of AI/computational pathology are significant. For example, a pathologist cannot manually count one million cells, but this will now be possible through machine learning, leading to greater accuracy and faster reporting times.

The NDCP Project was established to modernise cellular pathology services in Wales and to introduce a fully digitised national service. To date, two phases have been achieved.

Phase 1: Rapid Evaluation and Verification
Phase 1 demonstrated proof of concept through the high correlation achieved when comparing the results obtained using both traditional glass slide methodology and digital image to report 3000 cases. This resulted in receipt of a mandate from All Wales CEOs to proceed with national implementation of digital enablement.

Phase 2: Partial National Scale Up
Phase 2 has realised, through investigation, procurement, and installation, the delivery of partial, standardised, digital enablement for each of the Health Boards including the delivery of local storage and an interim hub solution. Phase 2 has

Chilcott,Rachel
21/08/2024 11:38:04

also progressed the work of integrating the current digital scanning solution into the current LIMS with work expecting to be completed quarter 1 2024/25.

Current position

The current position is outlined previously in the executive summary on page 9.

Business Needs

It is now the intention of the NDCP Project to build on the previous phases by increasing digital scanning, reporting and capacity for Wales in line with the national direction of travel. This includes:

Business Need 1: Procurement of All Digital Pathology Capability
The budget for Phase 2 was not sufficient to digitise cellular pathology services as completely as possible. It was agreed at the time that an incremental approach to implementation would be taken ensuring that work progressed at pace giving some digital capability to each Health Board. The aim of the final Phase is to fund the procurement and installation of the remaining infrastructure, equipment and software to digitise services as completely as possible solution for the whole of Wales.

Business Need 2: Determine & Agree National Image Store
As an interim measure during Phase 2 images were stored on additional server space purchased at each of the Health Boards with local IT back up providing the required resilience. This current storage availability will greatly limit digital reporting in the future. Going forwards a national long-term storage solution (including plans for back up) is required which should meet the following:

- Images should be accessible easily and quickly by any reporting pathologist from any location
- Image storage needs to be compliant with retention schedules and GDPR.
- Images should be available for research purposes.
- The size of a 20x20 slide is approximately 1GB-1.5GB per slide and a megaslide would be around 3GB each, however megaslides are not currently being scanned.
- For governance reasons, a backup file of all clinically significant images including any AI heat maps, would be required.
- It is important to have instant access to current and the most recent cases (probably around 12 months). However, images more than 12 months old could be stored where access would be available within 24-48 hours which will hopefully help to reduce storage costs.

Business Need 3: Management of the Future Digital Hub
There are currently interim arrangements for managing the digital hub. The aim of Phase 3 is to investigate all options for managing a national central hub and to procure the agreed solution. The hub would act as a repository for meta data relating to the images for all Health Boards.

Business Need 4: Work with Health Boards to find a Solution for Cross-Boundary Working as part of a National Network of Cellular Pathologists
Cross-boundary working is needed to maximise access to specialisms available within different organisations to provide equity to patients across Wales. A 'virtual lab' will support cross-boundary working by enabling anyone from any location to

Chilcott,Jackie
21/08/2024 11:18:47

review any slide. This has been critical during the COVID-19 pandemic when 20-30% of staff have been off site. Cross-boundary working will need to be underpinned by the recruitment of more cellular pathologists to address current gaps in the workforce. The RCPath workforce census (2018) proposed a range of solutions to address the shortages, including:

- More funded training places for specialist cellular pathology trainees;
- Better IT for day-to-day work;
- Investment to implement digital pathology more widely so staff can work efficiently and flexibly;
- The development of advanced clinical practitioners to work alongside medically qualified cellular pathologists.

Business Need 5: Work with Health Boards to Develop Workflows and Workforce to Ensure Maximum Benefits are Realised from the Implementation of the New LIMS

Workflows are being developed as part of the wider Project of digital work to standardise pathology processes for integration in the LIMS system. LIMS is the national reporting system for all pathology and all reports from different disciplines need to be available for easy review by reporting pathology clinicians. Nationally sample numbering and identification depends on unique identifiers generated by the LIMS. The unique identifiers for episode, case and sample are printed in bar code which is used to identify and track the samples in LIMS. The barcode label on the glass slide is scanned to identify the image and link it to the request in LIMS. All reporting is done on LIMS and authorised digital results are stored and transmitted via LIMS to the Welsh Clinical Portal where results are nationally available to clinicians and GPs treating patients anywhere in Wales, LIMS is the agreed reporting system and will be integrated to any scanners procured either directly or through laboratory workflow management middle-ware.

Future cellular pathology workforce requirements will be determined by the Pathology Workforce and Education Group (PWEG) in collaboration with Health Education and Improvement Wales (HEIW) and academia.

Potential Scope and Services

During a NDCP Project Board meeting, held on 22nd February 2021, members agreed that the following would be including within the scope:

In Scope

- **Slide scanners**
- **Medical grade screens** (with the appropriate graphics cards).
- **Management systems** (additional software or as part of the scanning package – to include voice recognition)
- **Additional workstations/laptops** (appropriate graphics cards for the new screens would need to be compatible. Possibility of workstations in MDT and seminar rooms, and for trainees and hot-desking. High-specification laptops to support working from home, which could also be used with docking stations and medical grade screens in the MDT/seminar rooms as an alternative to a full workstation. Keyboards and mice should be washable. Joysticks to be included)
- **Image storage** considering the different file formats, storage over a defined length of time, the file sizes and the bandwidth needed etc. In line with the

Chilcott, Rachel
21/08/2024 14:48:04

DHCW principle of 'cloud first' (which will deliver benefits such as secure, fully managed, predictable performance, rapidly available, and resilient), cloud storage will be the storage method of choice. Most of the AI systems use cloud storage to analyse copy images- the analysed diagnostic images will need to be stored along with the original image as long as deemed necessary for the active case.

- **AI** is a rapidly developing computational tool designed to support pathologists in reaching a quick and reliable diagnosis. It is not designed to replace the pathologists. Described at a high level only, to remain as flexible as possible, as the technology is developing rapidly. AI provider would need to be system 'agnostic'. Several different providers can deliver targeted analytical platforms to suit different tissue types.
- **Standardisation of services** (via Standardisation Group)
- **Adoption of standardised technical standards for image formats** (e.g. DICOM) and Interoperability (e.g. HL7 FHIR)

Out of scope

- **Tissue processors**
- **Stainers**
- **Other specialist laboratory equipment**

These are out of scope since the standardisation of existing equipment is not currently considered achievable due mainly to cost.

By considering the range of business functions, areas and operations to be affected and the key services required to improve organisational capability, 'scope creep' can be avoided during the options appraisal stage of the Project.

Coverage and services are considered on the following continuum of need:

- **Core:** Essential elements that must be included in the Project to address immediate risks and ensure service continuity.
- **Desirable:** Additional elements that should be included in the Project to enhance the service and deliver greater value for money through additional benefits.
- **Optional:** Possible elements that could be included in the Project to maximise benefits providing they can be justified on a marginal low cost and affordability basis.

The potential scope of service coverage was reviewed at various points of the Project and categorised the main elements in line with this continuum of need. The results of this analysis is provided in the table below.

Table 11 Summary of items in scope

	Core	Desirable	Optional
Scanners			
• Cellular pathology scanners	✓		
• High resolution haematology scanners			✓
Workstations			
• Medical grade screens	✓		
• Keyboards and mice	✓		

Chilcott, Rachel
21/08/2024 11:48:04

• Joysticks		✓	
Management systems (including voice recognition)	✓		
Additional workstations/PCs			
• High resolution laptop, docking station and medical grade screen	✓		
Image storage	✓		
AI	✓		
Standardisation of services	✓		
Integration with current/future LIMS	✓		

Main Benefits

Investment in the NDCP Project is expected to deliver a wide range of benefits, many of which were proven during Phases 1 and 2. Benefits include:

- Enabling greater information sharing that will lead to better collaboration including facilitating cross boundary working and improving turnaround times for second opinions and peer review.
- Providing access to digital images enables remote and cross-site working, reducing travel time which will have a positive impact on staff welfare and enables more efficient ways of working. It will also help reduce the carbon footprint.
- Improved efficiency and cost savings associated with reduced transportation of physical slides and time spent retrieving and collating data. Further reduction of carbon footprint.
- Improving the quality of patient care by enabling the tailoring of therapies, risk-based case prioritisation, better control over samples managements and improved reporting that leads to more accurate diagnosis.
- Contributing to improvements in treatment by improving data analysis and business intelligence used in the day to day management as well as teaching and research.
- Creating a modern and efficient service by adopting up to date technologies will improve staff satisfaction and support recruitment and retention.
- Meet standards of prudent healthcare and improve the service's reputation.
- Opportunities to adopt AI/computational pathology technologies and maximise efficiencies.

The quantification of these benefits are explored in the Economic Case and plans to manage realisation of them in the Management Case. The full benefits register is provided in Appendix M1.

Main Risks & Issues

All outstanding risks and issues from Phases 1 and 2 have been carried forward into Phase 3. These are identified in Appendix M2 and include:

Table 12 Risk & Issues

Chilcott, Rachel
21/08/2024 11:48:04

Ref	Risk Type	Risk	Mitigation
PROGRAMME RISKS & ISSUES			
008 (Issue)	Financial	Funding for NDCP procurement and implementation not secured:	Funding avenues are currently being explored.

		• WG confirmed no funding available for the procurement phase of NDCP • HB revenue funding for 2025/2026 (and ongoing) has not yet been secured, which could impact progress of the work.	Revisions to the BJC are in progress.
039 (Risk)	Financial	If revenue funding is no longer available for NDCP, there is a risk of not being able to procure a managed service contract which may result in obsolete equipment being out of date and HB's not in financial position to replace	Capital funds are now looking an unlikely option therefore revenue managed service contract. Alternative funding streams being investigated
OPERATIONAL RISKS & ISSUES			
002 (Risk)	Operational	Delays in integrating Leica scanners with current WLIMS1 data infrastructure. Risk that integration is not implemented within Project timescales. Impact on the ability for National reporting and, there will not be an interface for new LIMS if the interface for current LIMS not implemented.	Interface is available to link LIMS and Leica. Work ongoing to operationalise
004 (Risk)	Operational	NDCP Image Storage: risk of individual Cellular Pathology departments being unable to store images and therefore being unable to use DCP as a reporting tool.	NPP progressing the Phase 3 BJC which includes a long term national storage solution. WG funding provided to HBs for interim storage solution
040 (Risk)	Operational	Risk of a delay to the integration of new LIMS2.0 with newly procured DCP solution	Mitigation around specification and DCP specification working group working with potential suppliers and Intersystems. Implementation of new solution due to commence after LIMS2.0 deployment has finished

Constraints

The Project is subject to the following constraints:

- **Funding**. Phase 2 funding was not sufficient to digitise cellular pathology services as completely as possible. A partial implementation only has been achieved. Without further funding Phase 3, national scale up, will not be possible.
- **Image storage**. The 49TB of server storage initially purchased at each of the Health Boards is now almost full and further scanning will not be possible without the development of a long-term solution for image storage. In 2023, £150,000 has been allocated to each Health Board as an interim solution prior to a move to cloud storage as part of the full BJC.
- **Resources** For Phase 2, BCUHB agreed as an interim measure, to host the data hub (hub to store the meta data for all images). A permanent national image storage solution will be identified and agreed in Phase 3

The Project is subject to the following dependencies:

- The requirement for digital pathology system to integrate with the new LIMS service.

Chilcott,Rachel
21/08/2024 11:48:04

- Revenue funding from each of the individual Health Boards
- Local staff resource to support implementation and ongoing scanning capability incorporated once into the routine service.

4 Economic Case

Critical Success Factors

Critical Success Factors (CSFs) are the essential attributes for successfully delivering the Project and are used along with spending objectives that are outlined in the Strategic Case to evaluate the options. The CSFs are provided in the table below.

Table 13 Critical Success Factors

Critical Success Factor	How well the option:
Strategic Fit and Business Needs	• Meets the agreed spending objectives, related business needs and service requirements, and • Provides holistic fit and synergy with other strategies, Programmes and Projects.
Potential Value for Money	• Optimises public value (social, economic and environmental), in terms of the potential costs, benefits and risks.
Supplier Capacity and Capability	• Matches the ability of potential suppliers to deliver the required services, and • Is likely to be attractive to the supply side.
Potential Affordability	• Can be funded from available sources of finance, and • Aligns with sourcing constraints.
Potential Achievability	• Is likely to be delivered given the organisation's ability to respond to the changes required, and • Matches the level of available skills required for successful delivery.

Options Framework

The options framework, outlined in HM Treasury Green Book and Welsh Government Better Business Cases guidance, provides a systematic approach to identifying and filtering a broad range of options. An overview of the key dimensions within the options framework is provided in the table below.

Table 14 Key elements of the options framework

Dimension	Description
Scope	What to include in the future service model
Service solution	How to deliver the future service model
Service delivery	Who will deliver the future service model
Implementation	Timescales and phasing for delivering the future service model
Funding	Financing the future service model

The process for identifying and assessing options takes each of the key dimensions in turn and undertakes the following steps:

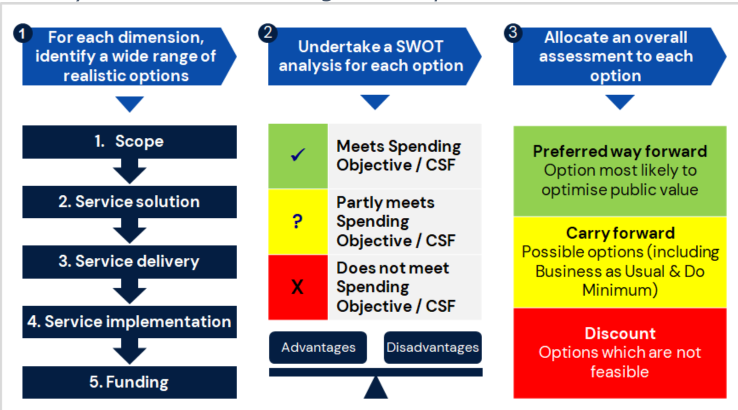
- Identify a wide range of realistic potential options within that dimension
- Undertake an analysis for each option to:
  - Assess how well the option meets the Project's spending objectives and critical success factors; and

Chilcott, Rachel
21/08/2024 11:48:04

- Identify the option's main strengths, weaknesses, opportunities and threats (SWOT analysis).
- Use the outputs of the analysis to determine whether the option will be carried forward as the preferred way forward, carried forward as a possible solution, or discounted at this stage.

A diagram illustrating this process is shown in the figure below.

Figure 4 Process to identify and assess the long list of options



A long list of options for each of the five dimensions was developed by the NDCP Project and evaluated to determine how well each meets the spending objectives and critical success factors at a series of workshops. The detailed analysis is provided in Appendix E1 and an overview in the table below.

Table 15 Summary of long list assessments

Project	Do Nothing	Do Minimum	Intermediate	Do Maximum
1. Service Scope *As outlined in Strategic Case*	All cases are reported using microscopes and glass slides. Would leave Wales behind the rest of the UK and could lead to collapse of service	Most cases are reported using microscopes and glass slides plus some limited digital reporting.		Most cases are reported digitally. Would ensure Wales keeps pace with rest of cellular pathology global community
	Carried Forward	**Carried Forward**		**Preferred Way Forward**
2. Service Solution *In relation to the preferred scope*	Return to previous process (glass slides and microscope)	Partial procurement and installation of digital capability for each Health Board.		National scale up of digital capability including image storage and digital hub solution.
	Carried Forward	**Carried Forward**		**Preferred Way Forward**
3. Service Delivery *In relation to the preferred scope and service solution*		NHS Wales purchases equipment and support provided via a maintenance contract		Fully managed service contract where provider owns and manages the digital solution
		Carried Forward		**Preferred Way Forward**

Chilcott, Rachel
21/08/2024 11:48:04

4. Implementation *In relation to preferred scope, solution and method of service delivery*		Phased approach in which HBs transition one at a time		Big Bang approach in which all HBs transition together
		Preferred Way Forward		**Discounted**
5. Funding *In relation to preferred scope, solution, method of service delivery and implementation*		Fully capital funded	Combination of capital and revenue funded (NHS owned asset/revenue model)	Fully revenue funded
		Discounted	**Carried Forward**	**Preferred Way Forward**

The possible options are carried forward to the shortlist as outlined in the table below.

Table 16 Developing the shortlist

Options	Do Nothing	Do Minimum	Intermediate Option	Preferred Way Forward (PWF)
Project Scope	All cases are reported using microscopes and glass slides.	Most cases are reported using microscopes and glass slides plus some limited digital reporting.	Most cases are reported digitally.	Most cases are reported digitally.
Project Solution	Return to previous process (glass slides and microscope).	Partial procurement and installation of digital capability for each Health Board.	National scale up of digital capability including image storage and digital hub solution.	National scale up of digital capability including image storage and digital hub solution.
Service Delivery	N/A	NHS Wales purchases equipment and support provided via a maintenance contract	NHS Wales purchases equipment and support provided via a maintenance contract	Fully managed service contract where provider owns and manages the digital solution
Project Implementation	N/A	Phased approach in which HBs transition one at a time	Phased approach in which HBs transition one at a time	Phased approach in which HBs transition one at a time
Project Funding	N/A	Combination of capital and revenue funded (NHS owned asset/revenue model)	Combination of capital and revenue funded (NHS owned asset/revenue model)	Fully revenue funded

Main Options

The resulting shortlist of options comprises:

- **Do Nothing:** Return to the pre-Project position with cellular pathology services reporting all cases using microscopes and glass slides. This would put the service at considerable risk and is no longer a viable option
- **Do Minimum:** Continue to with existing arrangements whereby cellular pathology services continue to report most cases using microscopes/glass slides and perform some digital reporting using current limited digital capability. This would require two pathways to operative simultaneously and would be prone to error and considerable inefficiency.

Chilcott, Rachel
21/08/2024 11:48:04

- **Intermediate Option:** Cellular pathology services utilise as much digital reporting as possible through national scale up of digital enablement, digital storage and digital hub solution, along with AI/computational pathology functionality. Funded through a combination of capital and revenue funding (NHS owned asset and ongoing support/maintenance contract).
- **Preferred Way Forward:** Cellular pathology services utilise as much digital reporting as possible through national scale up of digital enablement, digital storage and digital hub solution, along with AI/computational pathology functionality. Delivered through a fully revenue funded managed service contract (provider owns and manages the digital solution).

Options Appraisal

The key features of the shortlisted options included an analysis of advantages and disadvantages is provided below.

Table 17 Key features of Do Nothing

OPTION 1	DO NOTHING
Description	The 'do nothing' option reflects the position pre-Project where cellular pathology services reported all cases using microscopes and glass slides. If this option was to be used, all digital enablement and voice command procured pre-Project and in Phases 1 & 2 would not be utilised. The benefits demonstrated in the AI prostate project could not be realised.
Advantages	• No training on digital systems required • No digital image storage requirements • No requirement for digital hub
Disadvantages	• Wales not benefitting from digital technology whilst the rest of the UK takes advantage of the latest technology resulting in an adverse impact on patients as well as recruitment and retention. • Unsustainable in the long term likely to lead to backlogs • Decreased recruitment and retention of staff due to non-innovative practice • Unlikely to support Single Cancer Pathway TATs • Not utilising digital equipment purchased for Phases 1 & 2 • Not utilising the integration development between current supplier & LIMS • Unable to employ AI solutions • Inequity of service provision across Wales • Not aligned to international direction of travel for the service • Light microscopy will become a virtually obsolete diagnostic modality and it will be even harder to recruit pathologists particularity newly qualified pathologist and almost certainly impossible to support histopathology training in Wales again exacerbating the current recruitment issues
Conclusion	Cellular pathology services in NHS Wales are incredibly fragile and probably unsustainable in the long term. The increase in demand such as the current increase in volume of work during the Recovery Phase of COVID-19 has put additional strain on

Chilcott,Rachel
21/08/2024 11:48:04

	the service which has led to very lengthy backlogs in reporting and a significant increase in the volume and cost of outsourcing. As well as inability to deliver target turnaround times for many cancers.

Table 18 Key features of Do Minimum

OPTION 2	**DO MINIMUM**
Description	The 'do minimum' option reflects the current position whereby cellular pathology services continue to report most cases using microscopes /glass slides and perform some digital reporting using current limited digital capability.
Advantages	• Some digital enablement in each of the Health Board's • A small amount of cross boundary working e.g. BCUHB/SBUHB • Proved the proof of concept through interim hub and spoke formation and sharing of images • Ability to use a very limited amount of AI
Disadvantages	• Not aligned to international direction of travel for the service • Decreased recruitment and retention of staff • Unsustainable in the long term and already leading to significant backlogs • Unable to maximise the benefit from the use of AI • Unlikely to be able to support Single Cancer Pathway TATs • Inequity of service provision across Wales • Limited digital image storage
Conclusion	Cellular pathology services in NHS Wales are incredibly fragile and probably unsustainable in the long term. The increase in demand such as the current increase in volume of work during the Recovery Phase of COVID-19 has put additional strain on the service which has led to very lengthy backlogs in reporting and a significant increase in the volume and cost of outsourcing. As well as inability to deliver target turnaround times for many cancers.

Table 19 Key features of Preferred Way Forward Option - Capital

OPTION 3	**INTERMEDIATE**
Description	This option reflects a cellular pathology service that utilises as much digital reporting as possible through national scale up of digital enablement, digital storage and digital hub solution. Funded through a combination of capital and revenue funding.
Advantages	• Aligned to international direction of travel for the service • Digital storage solution • Sustainable equitable cellular pathology service across NHS Wales • The sharing of specialist clinical resource/expertise through improved digital networking of services in Wales progressing towards a proposed national network of cellular pathologists • Improvement in attractiveness of recruitment and retaining of staff

Chilcott,Rachel
21/08/2024 11:48:04

	• Ability to report nationally across Health Board boundaries to realise the Project ethos of any Consultant, reporting any case, from any location • National image sharing • AI/computational pathology can be better utilised to support and improve the quality of clinical diagnosis • Improve quality and drive innovation through the development of AI • Supports Single Cancer Pathway TATs • Access to different specialities e.g. lymphoma cases between BCUHB and SBUHB • Improve patient care through the use of a national digitalised network, facilitating quicker second opinions and facilitate cross boundary working • Improved MDT preparation by eliminating time spent collating cases for MDT review • Enable pathologists to interact easier with colleagues e.g. multi-disciplinary team meetings • Use in education, training (both in class and virtual) and for presenting at MDTs, tumour boards etc • Access to NHSE and UK wide expert networks for fragile services such as paediatric pathology and neuropathology which are difficult to sustain unilaterally in Wales. • Minimises revenue impact for Health Boards • Utilise digital equipment purchased during Phase 1 & 2 • Utilise integration developed between current supplier and new LIMS • Reduces risks associated with the transfer of tissues, tissue blocks and slides. • Digital images are not covered by the Human Tissue Act and therefore moving toward the use and storage of digital image for autopsy cases removes a significant existing HTA compliance risk with management and disposal of post mortem slides. • Reduces costs associated with secure storage and retrieval of PM slides across Wales. • Frees up existing internal space and reduce footprint refurbishment or new build costs. • Reduction in the carbon footprint
Disadvantages	• Training on digital systems required (much of this is already underway) • Digital image storage requirements • Requirement for digital Hub • Capital funding unlikely to be available over the longer term.
Conclusion	Option 3 would improve sustainability and equity of the service ensuring realisation of Project benefits but is unlikely to be affordable over the longer term because of ongoing capital

Chilcott,Rachel
21/08/2024 11:48:04

	investment requirements to replace and maintain the digital equipment in the future.

Table 20 Key features of Preferred Way Forward Option - Revenue

OPTION 4	**PREFERRED WAY FORWARD**
Description	The 'Preferred Way Forward' option reflects a cellular pathology service that utilises as much digital reporting as possible through national scale up of digital enablement, digital storage and digital hub solution. Delivered through a fully revenue funded managed service contract.
Advantages	• Aligned to international direction of travel for the service • Digital storage solution • Sustainable equitable future proofed cellular pathology service across NHS Wales • The sharing of specialist clinical resource/expertise through improved digital networking of services in Wales progressing towards a proposed national network of cellular pathologists • Improvement in attractiveness of recruitment and retaining of staff • Ability to report nationally across Health Board boundaries to realise the Project ethos of any Consultant, reporting any case, from any location • National image sharing • AI and computational pathology can be utilised to support and improve the quality of clinical diagnosis • Improved quality & drive innovation through the development of AI/computational pathology • Supports Single Cancer Pathway TATs • Greatly improved rapid access to different specialities as already demonstrated by referral of digitalised lymphoma cases between BCUHB and SBUHB and digitally supporting MDTs for national screening services such as cervical cytology from a specific site. • Improve patient care through the use of a national digitalised network, facilitating quicker second opinions and facilitate cross boundary working • Improved MDT preparation by eliminating time spent collating cases for MDT review • Enable pathologists to interact easier with colleagues e.g. multi-disciplinary team meetings • Use in education, training (both in class and virtual) and for presenting at MDTs, tumour boards etc • Ensures that all equipment and technology remains up to date over the life of the contract without the need for capital investment • Avoids the need for capital investment upfront and in the future. • Reduces risks associated with the transfer of tissues, tissue blocks and slides.

Chilcott,Rachel
21/08/2024 11:48:04

	• Reduces costs associated with secure storage and retrieval of PM slides across Wales. • Frees up existing internal space and reduce footprint refurbishment or new build costs. • Reduction in the carbon footprint • Utilise digital equipment purchased during Phase 1 & 2 • Utilise integration developed between current supplier and LIMS
Disadvantages	• Training on digital systems required (already ongoing) • Digital image storage requirements • Requirement for digital Hub • Increased revenue consequences for Health Board
Conclusion	Option 4 would improve sustainability and equity of the service ensuring realisation of Project benefits without the need for initial and future capital investment. A managed service contract will provide the flexibility to take advantage of innovations in the future however NHS Wales cloud could be considered too.

The options have been considered in further detail with a cost benefit analysis below.

Estimating Costs

For the purposes of the BJC, indicative costs have been estimated based on the information that is currently available. This includes:

- **Do Nothing:** It has not been possible to determine baseline costs at this stage as costs differ significantly across the service and are impacted by various factors. In any event, existing operating costs are expected to continue since there will be an ongoing need for the acquiring, using, and storing glass slides. Baseline costs are therefore excluded for comparison purposes as it is expected they would apply consistently to all options. Any opportunities for efficiency savings or cost reductions are dealt with in the benefits section.
- **Do Minimum:** Indicative costs have been estimated for the continuation of partial digital capability. This includes the cost of initial set up in each of the Health Boards (although this does not include costs for image storage, integration with LIMS or integration costs for speech) and ongoing annual costs for maintenance and warranty.
- **Intermediate Option:** Indicative costs have been estimated based on current knowledge of the market and anticipated resource requirements as outlined in the Financial Model (Appendix F1).
- **Preferred Way Forward:** Indicative costs have been estimated based on current knowledge of the market and anticipated resource requirements as outlined in the Financial Model (Appendix F1).

Chilcott,Rachel
21/08/2024 11:48:04

The table below outlines the resulting indicative costs for each of the options over a 20-year appraisal period:

Table 21 Indicative Costs

	Option 0 - BAU	Option 1 - Do Min	Option 2 - Cap/Rev	Option 3 - PWF (Rev)
	£'000	£'000	£'000	£'000
Project Team	0	0	826	0
DHCW Support	0	74	0	0
Solution Costs	0	672	8,184	0
Initial capital costs	**0**	**746**	**9,010**	**0**
Lifecycle costs (20-year appraisal period)	0	1,492	16,368	0
Whole life capital costs	**0**	**2,238**	**25,377**	**0**
Project Team inc. DHCW element (non-recurring)	0	0	0	423
DHCW Support (Recurring)	0	0	966	1,728
Additional Health Board staff (20-year appraisal period)	0	0	9,498	9,498
Solution Costs (20-year appraisal period)	0	0	53,980	56,368
Maintenance and Warranty (20-year appraisal period)	0	608	0	0
Whole life revenue costs	**0**	**608**	**64,443**	**68,017**
Total whole life costs (20-year appraisal period)	**0**	**2,846**	**89,821**	**68,017**
Equivalent Annual Costs	**0**	**142**	**4,491**	**3,401**

Estimating Benefits

The Project to date has identified specific benefits associated with these factors and work has been undertaken to quantify them, building on experience of the first two phases and establishing baseline positions and target improvements. Where possible, these metrics have been stated in monetary equivalent values to enable a thorough cost benefit analysis to be prepared.

For the purposes of the BJC, indicative values have been estimated to determine the potential opportunities available to NHS Wales organisations for the following categories of financial benefits:

- **Cash releasing benefits:** Direct cost saving as results of reduced resource requirements.
- **Non-cash releasing benefits:** Productivity savings that can be quantified in monetary equivalent values but are not expected to directly reduce costs although they will release staff time to focus on alternative activities.
- **Societal benefits:** Indirect benefit that will be realised by wider society and can be quantified in monetary equivalent values.

For the purposes of the BJC, efficiency benefits are assumed to be non-cash releasing to give an indication of the scale of opportunity available, but this will be reviewed in detail as the benefits are developed and opportunities sought to convert into cash releasing benefits.

Calculations are based on the early phases and findings at BCUHB and individual Laboratory Managers' assessments of how this is expected to apply at a Health Board level. The main assumptions are outlined in the following table with the total NHS Wales impact outlined. Specific Health Board assumptions and values are provided in Appendix M1.

Chilcott,Rachel
21/08/2024 11:48:04

Table 22 Benefits Overview

ID	Description	Measure	Target Improvement	Value £'000	Assumptions
Increased capacity to meet growing demand					
B01	Streamlined workflow and greater ability to recruit and retain suitably skilled staff will contribute to increasing capacity to enable the service to meet growing demand. This will reduce reliance on outsourcing in the future.	Outsourcing and temporary staffing costs	Potential cost avoidance in the future	**See risk R2 below**	It is not possible to reduce current outsourcing costs because there are multiple factors which drive the need for external capacity. However, full digitisation could potentially reduce the need for increased outsourcing / use of locums in the future to deal with growing demand, as the streamlined workflow and better recruitment/retention will increase future internal capacity.
Streamlined workflow leading to productivity gains					
B02	Greater ability to get the section quality right first time will reduce the need to re-work slides	Number of reworked slides	**823 fewer slides re-worked** each year across Wales	**£4k p.a.** Non-cash releasing	Based on Health Boards' assessments of the potential in reduced number of reworked slides for each lab, based on estimated average cost per re-cut.
B03	Use of voice recognition/command software reduces workforce time spent reporting on H&E samples	Number of hours spent reporting on H&E samples	**2,984 fewer hours spent reporting on H&E samples** each year across Wales	**£146k p.a.** Non-cash releasing	Based on Health Boards' assessments of the potential in time saving, based on average salaries of staff involved in the process.
B04	Ability to link H&E and IHC /special stains on screen will reduce the amount of time workforce spend linking individual cases	Number of hours spent linking cases	**2,866 fewer hours spent linking cases** each year across Wales	**£63k p.a.** Non-cash releasing	Based on Health Boards' assessments of the potential in time saving, based on average salaries of staff involved in the process.
B05	Ability to undertake online real time consultations and reviews will reduce the amount of time workforce spend searching for and sharing case information	Number of hours spent searching for and sharing case information	**4,491 fewer hours spent searching for and sharing case information** each year across Wales	**£80k p.a.** Non-cash releasing	Based on Health Boards' assessments of the potential in time saving, based on average salaries of staff involved in the process.

Chilcott, Rachel
21/08/2024 11:48:04

ID	Description	Measure	Target Improvement	Value £'000	Assumptions
B06	Easier access to archived slides and case tracking, archival and retrieval will reduce the amount of time workforce spent filing and retrieving slides	Number of hours spent slide filing and retrieval	**5,764 fewer hours spent on slide filing and retrieval** each year across Wales	**£78k p.a.** Non-cash releasing	Based on Health Boards' assessments of the potential in time saving, based on average salaries of staff involved in the process.
B07	Improved access to external second opinion and improved case transfer times will reduce the amount of workforce time spent sending slides	Number of hours spent sending slides	**5,357 fewer hours spent sending slides** each year across Wales	**£78k p.a.** Non-cash releasing	Based on Health Boards' assessments of the potential in time saving, based on average salaries of staff involved in the process.
B08	Easier access to archived slides and case tracking, archival and retrieval will reduce the amount of workforce time spent preparing for MDT meetings	Number of hours spent preparing for MDT meetings	**9,558 fewer hours spent preparing for MDT meetings** each year across Wales	**£139k p.a.** Non-cash releasing	Based on Health Boards' assessments of the potential in time saving, based on average salaries of staff involved in the process.
B09	Fully automated electronic case assembly will reduce the amount of workforce time spent assembling cases	Number of hours spent assembling cases	**7,643 fewer hours spent assembling cases** each year across Wales	**£155k p.a.** Non-cash releasing	Based on Health Boards' assessments of the potential in time saving, based on average salaries of staff involved in the process.
Non-pay costs					
B10	Use of 2D bar codes to identify requests, specimens, blocks, slides and images reduces the need for paper labels	Number of labels printed	Limited information available to measure improvement	Unmonetisable	Data is not currently available from Health Boards to quantify at this stage. However, when fully integrated, this is likely to be cash releasing.
B11	Single identifier for a sample across Wales will reduce the need to transport slides	Number of slides transported	Limited information available to measure improvement	Unmonetisable	Data is not currently available from Health Boards to quantify at this stage. However, BCU identified this as a cash releasing benefit during earlier phases
B12	Reduced risk of tissue/slide loss or damage will reduce the need to repeat tissue collection	Number of tissue samples/slid	Limited information available to measure improvement	Unmonetisable	Data is not currently available from Health Boards to quantify at this stage

Chilcott, Rachel
21/08/2024 11:48:04

ID	Description	Measure	Target Improvement	Value £'000	Assumptions
		es lost or damaged			
Improved workforce experience					
B13	More flexible of ways of working open to the workforce as the new system will enable remote working	Not easily measurable	Qualitative	Unmonetisable	Not easily measurable but enabling more flexible ways of working will contribute to the recruitment and retention of staff
B14	Teaching, training and mentoring	Not easily measurable	Qualitative	Unmonetisable	
B15	Improved recruitment and retention of highly skilled staff	Not easily measurable	Qualitative	Unmonetisable	Not easily measurable but investing in digitisation which keeps pace with the rest of the UK and wider global Pathology community will support the recruitment and retention of staff
Improved patient outcomes					
B16	Prioritisation of cases to meet cancer targets	Not easily measurable	Qualitative	Unmonetisable	
B17	Speedier diagnosis of urgent cases	Not easily measurable	Qualitative	Unmonetisable	
B18	Reduced risk of patient/slide misidentification errors	Not easily measurable	Qualitative	Unmonetisable	
Opportunities to deliver benefits of Computational Pathology and AI					
B19	AI/computational pathology for enhanced cancer research	Not easily measurable	Qualitative	Unmonetisable	
Other system improvements					
B20	Automated case allocation to pathologist	Not easily measurable	Qualitative	Unmonetisable	
B21	Electronic test request and workload management in lab	Not easily measurable	Qualitative	Unmonetisable	

Chilcott,Rachel
21/08/2024 11:48:04

ID	Description	Measure	Target Improvement	Value £'000	Assumptions
	enabling improved planning and work force management				
B22	Synchronous analysis of slides	Not easily measurable	Qualitative	Unmonetisable	
B23	Flip and rotate images to aid interpretation	Not easily measurable	Qualitative	Unmonetisable	
B24	Measurement and annotation	Not easily measurable	Qualitative	Unmonetisable	
B25	Improved ergonomics	Not easily measurable	Qualitative	Unmonetisable	
B26	Use of annotated scanned image to identify tumour areas required for genomic analysis	Not easily measurable	Qualitative	Unmonetisable	
B27	Transfer of information on electronic request direct to report	Not easily measurable	Qualitative	Unmonetisable	
B28	Clearer diagnostic audit trails	Not easily measurable	Qualitative	Unmonetisable	
B29	Quantification of specific cells and markers	Not easily measurable	Qualitative	Unmonetisable	
B30	Highlighting and heat mapping of areas of abnormality	Not easily measurable	Qualitative	Unmonetisable	
B31	Quality control and audit	Not easily measurable	Qualitative	Unmonetisable	
B32	Automatic formatting of certain reports such as normal colonic biopsies based on AI pre-screened slides	Not easily measurable	Qualitative	Unmonetisable	

Chilcott, Rachel
21/08/2024 11:48:04

ID	Description	Measure	Target Improvement	Value £'000	Assumptions
B33	Research resource	Not easily measurable	Qualitative	Unmonetisable	
B34	AI to identify micro-organisms	Not easily measurable	Qualitative	Unmonetisable	
B35	Assessing disease progression	Not easily measurable	Qualitative	Unmonetisable	
B36	Fewer microscopes to service in the future	Not easily measurable	Qualitative	Unmonetisable	
B37	Capture of digital image at macro dissection using macro path systems	Not easily measurable	Qualitative	Unmonetisable	
B38	Digital dictation direct into report in dissection room	Not easily measurable	Qualitative	Unmonetisable	

The resulting indicative benefits values have been applied to the options as follows:

- **Do Nothing:** will not deliver any benefits.
- **Do Minimum:** will only allow partial delivery of benefits since it will provide limited digital capability. For the purposes of the BJC it is assumed that 10%-20% of activity will use digital reporting. However, to reflect the inefficiencies that will be inherent in dual running of a system, this is reduced by half and so it is assumed that just 7.5% of potential benefits are deliverable.
- **Preferred Way Forward:** Provides the opportunity to deliver 100% of the benefits value.

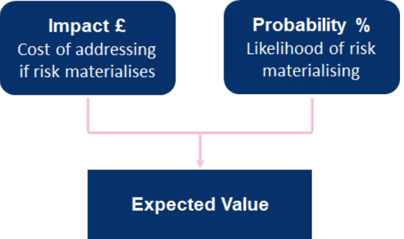
Estimating Risks

To present a comprehensive cost benefit analysis, an indicative assessment of risks has been undertaken and efforts made to quantify these in monetary equivalent values. The main risks that have been considered for this purpose are:

- Risk that digital cellular pathology information and images are not backed up as data storage is not resolved.
- Risk that inadequate systems impact on sustainability of services

These risks have been quantified by calculating an 'expected value'. This provides a single value for the expected impact of all risks. It is calculated by multiplying the likelihood of the risk occurring (probability) by the cost of addressing the risk (impact) and summing the results for all risks and outcomes.

Figure 5 Risk quantification approach using single-point probability analysis



The assumptions included to assess the impact and probability of these risks are outlined in the tables below:

Table 23 Risk Assumptions

	Do Nothing	Do Minimum	Preferred Way Forward
R1: Data storage			
Risk	**Digital cellular pathology information and images are not backed up as data storage is not resolved.**		
Consequence	**Data images could be lost impacting on diagnostic reporting**		
Impact	Benefits will not be realised - Do Minimum: £56k p.a.; Preferred Way Fwd.: £773k p.a.		
Probability	N/A	75%	1%
Timescales	N/A	Years 0-20	Years 0-20
Risk Value £'000 (Total 20-year)		**836**	

Chilcott, Janet 21/08/2024 11:48:04

	Do Nothing	Do Minimum	Preferred Way Forward
R2: Sustainability			
Risk	**Risk that inadequate systems impact on service sustainability**		
Consequence	**In addition to patient impact (which is not quantifiable in monetary terms), staff morale and ability to recruit impacted.**		
Impact	Vacancies will increase - Assume that between 20% - 40% of current established Pathologists posts (equates to between 12 – 24 WTE) become vacant and cannot be recruited to and that this would result in additional temporary staff costs. Assuming 25% premium on average pay costs, equates to an impact of £288k - £576k p.a.		
Probability	80%	80%	1%
Timescales	Years 0-20	Years 0-20	Years 0-20
Risk Value £'000 (Total 20-year)	**6,912**	**6,912**	**86**

Economic Appraisal Results

The indicative assumptions above have been incorporated into a discounted cash flow for each of the options, using DHSC's Comprehensive Investment Appraisal (CIA) model, to support the appraisal of overall value for money and cost-benefit analysis of the shortlisted options. In line with HMT Green Book requirements:

- Costs, benefits and risks are calculated over a 20-year appraisal period.
- Year 0 is 2025/26.
- Costs and benefits use real base year prices – all costs are expressed at 2023 prices in line with the baseline costs.
- The following costs are excluded from the economic appraisal:
- Exchequer 'transfer' payments, such as VAT.
- General inflation.
- Sunk costs.
- Non-cash items such as depreciation and impairments.
- A discount rate of 3.5% is applied.

The results of the economic appraisal suggest that the Do Minimum provides a better net present cost than the two Preferred Way Forward options because of the minimal costs involved. However, there are several other factors that should be considered in comparing the options:

- The Do Nothing and Do Minimum options represent significant risks that it is not possible to express in monetary values and so are not accounted for in this analysis, such as sustainability impact on patients and the wider service and inequity of service across Wales.
- The Preferred Way Forward is necessary to deliver a service that is in line with international best practice and provides opportunities for maximising benefits through the adoption of AI/computational Pathology technologies.

A summary of the overall options appraisal is provided in the following table:

Chilcott,Rachel
21/08/2024 11:48:04

Table 24 Options appraisal summary

	Do Nothing	Do Minimum	PWF – Capital / Revenue	PWF - Revenue
Net Present Cost (£'000)	**Unable to be calculated, see pg.49**	**4,749**	**41,715**	**34,370**
Benefit Cost Ratio	**-**	**0.05**	**0.67**	**0.81**
Significant non-financial benefits	N/A	Some benefits for small proportion of activity.	Service in line with international direction of travel. Improved collaboration and flexibility of service. Opportunities to maximise benefits e.g. adoption of AI.	Service in line with international direction of travel. Improved collaboration and flexibility of service. Opportunities to maximise benefits e.g. adoption of AI. Managed service contracts provide opportunities to keep pace with technological advances
Residual risks	Significant risk to sustainability and inequitable service across Wales. Unable to provide modern Pathology service leading to challenges recruiting and retaining workforce.	Significant risk to sustainability and inequitable service across Wales. Unable to provide modern Pathology service leading to challenges recruiting and retaining workforce. Ongoing inefficiencies of running two systems.	Capital investment required initially and in the future Restricts opportunities to keep pace with technological advances	Additional revenue funding required from HBs

Preferred Option

Based on the financial and non-financial analysis above, the Preferred Way Forward has the highest cost benefit ratio, based on delivering cash benefits in the form of significantly reducing the requirement for outsourcing from year 3 when the digital cellular pathology solution is fully in place and based on Health Boards/Trust experience, organisations are more able to attract consultant staff. This option involves a national scale up digital reporting which is recommended as

Chilcott, Rachel
21/08/2024 11:08:04

the preferred option. This will be delivered via a combination of Health Board revenue funding - both non-recurring and recurring.

Although Option 2 Capital/Revenue model could deliver the same benefits, it is at a higher cost so the cost benefit ratio is lower. Option 1, Do minimum has the lowest cost benefit ratio due to only delivering 10% of the benefits that options 2 and 3 are able to deliver.

Chilcott,Rachel
21/08/2024 11:48:04

5 Commercial Case

The Commercial Case sets out the procurement route and seeks to demonstrate that the preferred option will result in a viable procurement and a well-structured deal between the public sector and the supplier.

Procurement Route

Three procurement models were considered as part of the options framework. These are:

1) **Traditional Purchase and Service Support Model**: In this model the equipment and software is purchased outright as a capital asset and is owned by NHS Wales. The supplier implements the system, but once implemented it would be managed by NHS Wales with the supplier providing technical and service support under a contract arrangement requiring recurrent revenue funding. The service support contract would still include all the same management responsibilities and KPIs etc as a managed service provider model.
2) **Managed Service Provider Model**: In this model, NHS Wales purchases a "service" from the supplier. The supplier then implements and manages the system with charges based on fee-per-service arrangements. NHS Wales does not own the hardware or software. This model moves most of the capital acquisition costs into recurrent revenue budget, spreading that expenditure across the life of the system.
3) **Hybrid Model**: The extent of the managed service provider model may be limited, for example with NHS Wales taking ownership of some infrastructure either located in NHS organisations and/or an NHS Data Centre, but with the supplier taking responsibility for management and ongoing service support. As with the traditional purchase and service support model this would involve capital and revenue accounting treatment of costs and associated funding.

The managed service provider model has been selected as the preferred way forward, following review by the NDCP Project Board and NHS Wales Executive. Two procurement routes were explored: full tender and a framework agreement. The strengths and weaknesses of each route are outlined in the table below.

Table 25 Procurement route options - strengths and weaknesses

Tender Process		Framework Agreement	
Strengths	Weaknesses	Strengths	Weaknesses
All suppliers can bid therefore not limiting market	Can increase timelines slightly	Doesn't require an advert out to Find a Tender Service (FTS)	Some suppliers on potential framework 1 and other suppliers on potential framework 2 limiting bidders.
Can shape specification exactly to requirements		Could reduce timelines slightly	Having engaged with the market, suppliers could potentially challenge why we have used a framework limiting competition. Justification would be required as to why framework used.
Other procedures can be used that may aid			QE Procurement Framework only

Chilcott,Rachel
21/08/2024 11:48:04

the process e.g. a competitive procedure with the negotiation, or a competitive dialogue if required			permits purchase of a full solution so scanners and PACS must be from same supplier (albeit this could be a primary bidder who is supplying products from another manufacturer)

It has been agreed by the NDCP Project Board that a full tender process is the most suitable route.

Procurement Scope and Specification

The principal aim of the procurement is to procure appropriate services to create a fully digitised cellular pathology service that will replace the existing traditional microscopy service. The scope of the procurement (as agreed by the NDCP Project Board) is explained in more detail on page 38:

- **Slide scanners**
- **Medical grade screens**
- **Management systems**
- **Additional workstations/laptops**
- **Image storage**
- **AI/computational pathology**
- **Standardisation of services**
- **Adoption of technical standards for image formats**

It should be noted that the Procurement scope does not include tissue processors, stainers and other specialist laboratory equipment. These are out of scope since the standardisation of existing equipment is not currently considered achievable due mainly to cost.

The final specification will be agreed following pre-tender engagement with suppliers. It will be made clear as part of any procurement exercise that all images remain the property of the Health Boards. The Health Boards will remain responsible for ensuring data protection and security. This provides extra resilience and security through independent review. It is anticipated that all data collected will form part of the single patient record.

Timeline for Procurement

The table below sets out the procurement milestones and complies with all applicable legal requirements.

Table 26 Key Procurement Milestones

Activity	Date
Update specification of requirements	Ongoing
Sign off final specification and agree award criteria	April 2025
Publish ITT	April 2025
ITT response deadline	June 2025

Chilcott, Rachel
21/08/2024 11:48:04

Activity	Date
Evaluation of responses	June - October 2025
Contract award	November 2025
Contract start date	April 2026 (staggered across Health Boards)

Payment Mechanism

Payment mechanisms will be confirmed when the preferred bidder is identified.

Contractual Arrangements

An FTS tender procedure has been established as the most suitable procurement route. This will require the development of a specification of requirements. This will be undertaken by the NDCP Project, taking account of lessons learned from other similar initiatives.

Key aspects of the contractual relationship that the NDCP Project is seeking to achieve will be reflected in the contract as follows:

- Value for Money (VfM) – the proposed procurement will have an underpinning financial model that provides transparency and certainty around costs for key system and service elements. These costs can be considered alongside how well the system design meets the clinical and technical requirements. The aim is to secure the optimum combination of whole-of-life costs and quality (or fitness for purpose) of the system and services to meet NHS Wales requirements. A value-based approach to procurement should be adopted to deliver long-term outcomes for patients, including improved patient experience and better clinical outcomes. A key contractual issue when considering the VfM is how risks are allocated between the supplier and NHS Wales.
- Intellectual Property Rights (IPR) – The IPR from the application and the interfaces is not envisaged to have significant value for the Contracting Authority and need not be pursued to any major extent. In instances where the Authority works with the successful Contractor to develop and refine clinical content, question sets and workflow, then IPR equivalent to the invested resource by the Authority shall be retained.
- Warranties and guarantees – this is notionally a high-cost deal and the perceivable risk of loss (of the service) is moderate, given its intended use by the NHS in Wales. These should be pursued within the contract.

Legal and Personnel Implications

It is anticipated that a Programme Manager will be appointed to lead the Procurement Project working to the National Pathology Portfolio Programme Lead. The Programme Manager will manage the procurement, working with the Procurement Lead allocated by NWSSP and specialist advice as required.

It is likely that specific individuals will be involved across multiple activities and/or may undertake more than one role in order to ensure consistency and assist in securing an appropriately robust outcome. The combined staff and consultancy

Chilcott,Rachel
21/08/2024 11:48:04

team will cover the following roles for the procurement (for more details see page 17):

a) **National Digital Cellular Pathology Project Team**
b) **NWSSP Procurement Project Team**
c) **Health Board Representatives**
d) **DHCW Representatives**

It is not expected that any Phase 3 activities will fall under TUPE – Transfer of Undertakings (Protection of Employment) Regulations 1981.

6 Financial Case

Introduction

At the time of writing the BJC, limited supporting information is available to determine accurate costs, therefore indicative figures have been estimated based on initial information received from suppliers and the assumptions outlined below.

Accounting Treatment

Given the lack of clarity around costs at this stage, assumptions have been made about the appropriate financial treatment. These will be validated during the procurement process as specifications are drafted and tenders received by potential suppliers outlining firm costs and potential contractual arrangements.

Capitalisation

Since the preferred option involves delivering the digital cellular pathology solution via a managed service contract, it is anticipated that no assets will be created, and therefore all costs associated with the scheme will be treated as revenue costs.

IFRS16

The baseline assumption of this business justification case is that this will be a revenue cost driven solution, however as part of the procurement exercise an assessment of the service offering, contractual requirement, terms & conditions and ownership will be required to ascertain whether there are any portions of the "managed service" (broken down within the supplier financial model) that constitute a "right of use asset".

This principle would mean that any embedded lease's C-DEL (Capital Delegated Expenditure Limit) impact will occur at the time of procuring the right of use asset & lease liability and will equal the value of the right of use asset necessitating a transfer from revenue to capital, the mechanism for completing this via the "revenue recovery" process will be made clear within the final case (if required).

VAT

Initial advice will be sought from one of the NHS Wales VAT advisors as to the possible VAT accounting treatment for the procurement in order to ascertain the likely VAT treatment of the contract. Initial review of VAT guidance would suggest:

- In relation to Software as a Service (SaaS) and Cloud Services, the current HMRC view is based on the question - is the solution as a whole something that can be demonstrated to be 'to the specification of' NHS Wales. If NHS Wales can demonstrate that the answer to this question is yes, as appears to be the case for this procurement, the costs should be VAT recoverable.
- All participating organisations, at the time of placing local deployment orders, should consult with their own VAT advisors and auditors to ensure VAT treatment is compliant with HMRC definitions. For the purposes of this iteration of the BJC, it is assumed that all capital costs (excluding capitalised staff) are not deemed VAT recoverable whilst ongoing service provision, support and maintenance will be recoverable as per COS Heading 14 - Computer services supplied to the specification of the recipient.

Chilcott, Rachel
21/08/2024 11:48:04

This assumption regarding VAT accounting will be confirmed with NHS Wales VAT Advisors as the procurement progresses and the design of the solution and contract terms become clearer.

Costing Methodology

Indicative costs for delivering the preferred option have been estimated for the following categories:

- Project team
- DHCW support
- Solution costs
- Additional Health Board staff

Further details are available in Appendix F1. The methodologies for estimating these cost categories are outlined below.

Implementation Plan

While a detailed project plan will need to be developed and agreed with the final preferred bidder for the solution, for the purposes of the BJC the following timescales are assumed:

- Procurement process: April 2025 – March 2026
- Implementation period: April 2026 – March 2027

Project Team

The cost of the Project team has been estimated based on the staff required to provide support in the initial 3 years of the programme including:

- 1 WTE Band 8a Programme Manager.
- 1 WTE Band 4 Senior Project Support Officer.

The cost of the following will be required for procurement and length of contract:

- 1 WTE Band 7 NWSSP Procurement Project Manager/Category Manager

It is assumed that the National Pathology Portfolio Programme Lead and Senior Project Manager will continue to be funded through the National Pathology Programme budget.

DHCW Support

The cost of DHCW support has been based on anticipated requirements for the development of the infrastructure and integration of the new solution plus the ongoing support including:

- 0.5 WTE Band 8b Lead Engineer Networking.
- 0.5 WTE Band 8a Infrastructure Design (non-recurring).
- 0.5 WTE Band 6 Support Integration.
- 0.5 WTE Band 6 Development Integration.

Solution Costs

Chilcott, Rachel
21/08/2024 17:48:04

Market testing was undertaken to obtain an indication of the likely cost of procuring a solution. Potential bidders provided anticipated costs for each of the

Health Boards based on current cellular pathology activity levels. This included annual charges associated with:

- Digital scanners, workstations and any other hardware required.
- Integration into LIMS
- Storage
- Software (including voice recognition)
- Artificial Intelligence.
- Service.
- Training.
- Managed service contract fee.

The annual running costs are therefore estimated at an average of £3.2m p.a. over a 9-year period based on the following:

- Contingency of 20% to reflect the high degree of uncertainty around these costs in advance of the procurement process.
- At this stage, it is assumed that these costs will be classified as revenue expenditure. It should be noted that this will be subject to further review and advice from specialist advisors.
- As outlined above, it is assumed for the purposes of the BJC that VAT will be recoverable.

Solution costs are expected to be incurred from April 2026 at the start of the implementation period (bandwidth/infrastructure due to be incurred during 2025/26 in readiness for implementation of new solution).

Additional Health Board Staff

It is anticipated that there will be ongoing revenue costs associated with Health Board staff requirements from 2025/26 including:

- Band 6 Biomedical Scientist – 1 WTE per Health Board.
- Band 3 Healthcare Support Worker – 1 WTE per Health Board.
- Band 7 IT – 1 day per week per Health Board, reducing to 0.5 day per week from 2028/29 onwards.

It is anticipated that these roles are recruited and in post 6 months prior to implementation.

Capital Requirements

As the solution is anticipated to be delivered via a managed service contract, no capital investment is expected.

Revenue Requirements

Based on the assumptions outlined above, it is anticipated that the revenue consequences of implementing the preferred option will include the following:

- **Non-recurring revenue funding of £423,000 requested from Health Boards (£71,000 per HB)** for the implementation costs associated with the project team and DHCW support between 2025/26 – 2027/28.
- **Ongoing revenue funding which in total equates to £34.4m between 2025/26 – 2034/35 requested from Health Boards,** related to annual recurring revenue costs associated with the managed service contract for the

Chilcott, Rachel
21/08/2024 11:48:04

solution and additional staff required to support Health Boards with the implementation and ongoing management of the solution.

An indicative apportionment of the recurring revenue costs by Health Board based on potential providers assessment of existing workload is provided below.

Table 27 Indicative Revenue Costings

	Year 0 2025/26 £'000	Year 1 2026/27 £'000	Year 2 2027/28 £'000	Year 3 2028/29 £'000	Year 4 2029/30 £'000	Year 5 2030/31 £'000	Year 6 2031/32 £'000	Year 7 2032/33 £'000	Year 8 2033/34 £'000	Year 9 2034/35 £'000	Total £'000
Project Team (non-recurring)	101	101	50								251
DHCW Support (non recurring)	34	34	34								101
20% Contingency	27	27	17								71
Non-recurring revenue costs	**161**	**161**	**101**	-	-	-	-	-	-	-	**423**
Project Team (recurring - contract manager)	57	57	57	57	57	57	57	57	57	57	574
Solution Costs (recurring)	28	3,336	3,103	3,172	3,251	3,333	3,418	3,493	2,525	2,525	28,184
Health Board Additional Staff (recurring)	263	525	525	491	491	491	491	491	491	491	4,749
DHCW Support (recurring)	86	86	86	86	86	86	86	86	86	86	864
Recurring revenue costs	**434**	**4,005**	**3,772**	**3,807**	**3,886**	**3,967**	**4,053**	**4,127**	**3,160**	**3,160**	**34,371**
Total costs	**595**	**4,167**	**3,873**	**3,807**	**3,886**	**3,967**	**4,053**	**4,127**	**3,160**	**3,160**	**34,795**

	Apportionment	Year 0 2025/26 £'000	Year 1 2026/27 £'000	Year 2 2027/28 £'000	Year 3 2028/29 £'000	Year 4 2029/30 £'000	Year 5 2030/31 £'000	Year 6 2031/32 £'000	Year 7 2032/33 £'000	Year 8 2033/34 £'000	Year 9 2034/35 £'000	Total £'000
ABUHB	16.32%	72	656	618	623	636	650	664	676	518	518	5,631
BCUHB	17.18%	72	685	645	651	664	678	693	706	540	540	5,874
CTMUHB	11.42%	71	493	466	468	477	487	496	505	394	394	4,251
CVUHB	24.53%	75	930	873	884	903	923	944	963	725	725	7,945
HDUHB	12.96%	71	544	514	517	527	538	549	558	433	433	4,684
SBUHB	17.58%	73	698	657	663	677	692	707	720	550	550	5,986
Total Recurring Revenue Costs	**100.00%**	**434**	**4,005**	**3,772**	**3,807**	**3,886**	**3,967**	**4,053**	**4,127**	**3,160**	**3,160**	**34,371**

	Year 0 2025/26 £'000	Year 1 2026/27 £'000	Year 2 2027/28 £'000	Year 3 2028/29 £'000	Year 4 2029/30 £'000	Year 5 2030/31 £'000	Year 6 2031/32 £'000	Year 7 2032/33 £'000	Year 8 2033/34 £'000	Year 9 2034/35 £'000	Total £'000
ABUHB	27	27	17								71
BCUHB	27	27	17								71
CTMUHB	27	27	17								71
CVUHB	27	27	17								71
HDUHB	27	27	17								71
SBUHB	27	27	17								71
Total Non-Recurring Revenue Costs	**161**	**161**	**101**	-	-	-	-	-			**423**

Affordability

Indicative costs have been estimated at this stage based on current market knowledge and resourcing requirements. Costs are outlined in Appendix F1, and a detailed explanation of the costing methodology is included above. In summary these include:

- **Solution costs:** Procurement of a managed service contract to provide digital scanners, workstations, other hardware, integration with other systems, software, training and the ongoing storage and service to maintain the system. Costs at this stage are based on the results of recent market testing.
- **Project Team:** Including non-recurring costs of Programme Manager and Senior Project Support Officer and recurring costs of NWSSP Procurement Project Manager/Category Manager. It is assumed that the National Pathology Portfolio Programme Lead and Senior Project Manager will continue to be funded through the National Pathology Programme budget.
- **DHCW Support:** Non-recurring and recurring costs based on anticipated DHCW requirements for Lead Engineer Networking, Support Integration, Development Integration and Infrastructure Design roles.
- **Additional Health Board Staff**: Ongoing cost of a Band 6 BMS, Band 3 Healthcare Support Worker and 1 day per week of Band 7 IT support for each Health Board.

Chilcott,Rachel
21/08/2024 11:48:04

Based on these assumptions, it is anticipated that funding is required as follows:

- **Non-recurring revenue funding of £423,000 requested from Health Boards (£71,000 per HB)** for the implementation costs associated with the project team and DHCW support between 2025/26 – 2027/28.
- **Ongoing revenue funding which in total equates to £34.4m between 2025/26 – 2034/35 requested from Health Boards,** related to annual recurring revenue costs associated with the managed service contract for the solution and additional staff required to support Health Boards with the implementation and ongoing management of the solution.

This investment will deliver a wide range of benefits, most critically the ability of the service to keep pace with the rest of the UK and enable it to attract and retain the highly skilled staff required to address the growing capacity gaps within the service.

While many of the benefits related to this investment are not easily quantifiable in monetary terms, service leads at each of the Health Boards have identified a range of productivity gains as a result of a more streamlined workflow which will reduce the time currently spent on existing manual processes. A prudent assessment of the total number of hours saved across Wales equates to around £750k of staff time saved each year which can be re-directed to deal with growing demand.

As demand continues to grow in the future, the value of these productivity gains will be even greater. This combined with greater ability to attract and retain workforce will reduce the risk that increased activity will need to be outsourced to external providers or covered by expensive temporary staffing in the future.

In addition to this, realisation of the substantial wider system benefits offered by AI/computational pathology, will only be possible following investment in the digital cellular pathology solution.

7 Management Case

Project Management Arrangements

The Project is being managed in accordance with the standards set out in Managing Successful Programmes (MSP).

Project Management Principles

The principles that will be observed by the work undertaken by the NDCP Project are:

- Remaining aligned with national strategy
- Leading change
- Envisioning and communicating a better future
- Focusing on benefits such as improving outcomes, patient benefit and service efficiencies
- Adding value
- Designing and delivering coherent capability
- Learning from experience

Governance

Governance Framework

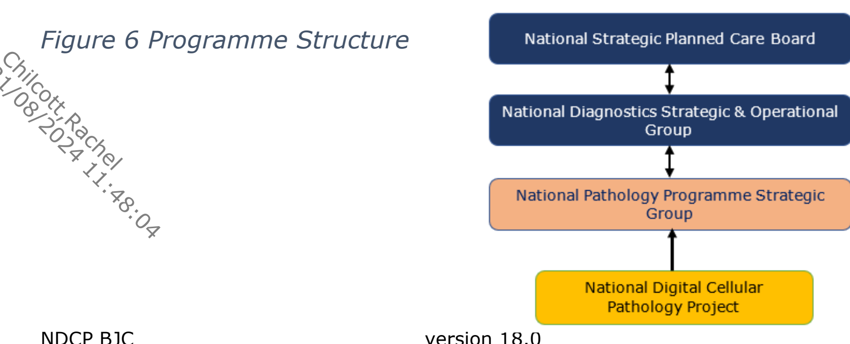
The Governance Framework that will be developed will build on current arrangements, ensuring that:

- Governance, decision-making and escalation routes are transparent.
- Decisions, including investment decisions, are better informed.
- Lines of accountability are clear, as are limits of authority and delegations.
- Efforts are focused on delivering results rather than on processes.
- Standards and processes are simple and clear.
- Strategic oversight and governance of the Project is maintained.
- The whole contributes towards a clear and consistent vision.
- There is adequate design assurance (business and technical).
- Risks and interdependencies are identified and managed
- SROs, and Project teams, are clear about their roles and responsibilities for delivering outcomes and what they are being asked to achieve.
- There is clear ownership of and accountability for delivering benefits
- Programme and Project Management (PPM) knowledge and best practice can be readily shared.
- PPM capability is developed and relevant behaviours become embedded.
- The need for support or resources can be identified at an early stage.

Structure

The suggested structure to enable the NDCP Project to effectively develop and deliver the "new capability" is outlined in the following diagram:

Figure 6 Programme Structure



Chilcott,Rachel
21/08/2024 11:48:04

Sponsoring Group

The key role of the Sponsoring Group is to ensure the Project remains aligned with the strategic objectives for NHS Wales and resolve any conflicts arising from directional/policy changes or overlap with interfacing Programmes or initiatives. Its role is also to approve any investment decisions and sign off final delivery and closure of the Project. The National Strategic Planned Care Board will be performing this role.

Senior Responsible Owner

The SRO role is concerned with the leadership, direction and ultimate accountability for delivery of the Project and management of risk.

National Pathology Portfolio Programme Lead

The National Pathology Portfolio Programme Lead is responsible for ensuring the Project remains aligned to the deliverables within the Pathology Statement of Intent, reporting on progress to National Pathology Programme Strategic Group.

Programme Manager

The Programme Manager is responsible for establishing the Project arrangements, governance and the delivery of new capabilities or outcomes. This role is accountable to the SRO.

National Digital Cellular Pathology Project Board

The Board's role is to drive the Project forward, manage the risks and ensure the outcomes are delivered. It reports to the SRO, who chairs the Board and members are individually accountable to the SRO for their area of responsibility within the Project. Key responsibilities are:

- Define acceptable risk thresholds for the overall Project;
- Ensure the Project delivers its objectives on time, within budget and to the required quality standard;
- Resolve strategic issues between Projects;
- Ensure the integrity of benefits profiles and the benefits realisation plan;
- Provide assurance for operational stability through transition.

Established and chaired by the SRO, and coordinated and supported by the Programme Manager, the prime purpose of the Board is to:

- Drive the Project forward to deliver the outcomes and benefits;
- Provide assurance that the Project meets needs of stakeholders;
- Resolving dependencies with other Projects and areas of work;
- Ensure that members provide resource and specific commitment to support delivery;
- Have ownership for ensuring resolution of risks.

The Board reports to the SRO, and whilst the SRO may delegate responsibilities and action to members of the Board, its existence does not dilute the SRO's accountabilities and decision-making authority.

Chilcott, Rachel
21/08/2024 11:46:04

Members of the Board are individually accountable to the SRO for their areas of responsibility and delivery within the Project as follows:

- Defining the acceptable risk profile and risk thresholds for the Project;

- Ensuring the Project delivers within its agreed parameters (e.g. cost, organisational impact, rate/scales of adoption, expected/actual benefits realisation);
- Resolving strategic and directional issues between Projects, which need the input and agreement of senior stakeholders to ensure the progress of the Project;
- Ensuring the integrity of benefits profiles and benefits realisation plans and ensuring that there is no double-counting of benefits;
- Providing assurance for operational stability and effectiveness through the Project delivery cycle.

Each member of the Board will provide and commit to the SRO for some or all of the following as appropriate for the area they represent:

- Understanding and managing the impact of change;
- Benefits estimates and achievement;
- Owning the resolution of risks and issues that the Project faces;
- Resolving dependencies with other pieces of work, whether change or business operations;
- Representing local strategy as expressed in, for example, medium-term plans and operational blueprints;
- Supporting the application of and compliance with operating standards.
- Making resource available for planning and delivery purposes

The current NDCP Group will be enhanced to provide procurement and implementation oversight in order to deliver Project success. Members (*however subject to change)* include:

- Senior Responsible Owner (SRO)
- National Pathology Programme – DCP Clinical Lead
- National Pathology Portfolio Programme Lead
- Programme Manager
- Senior Project Manager
- Senior Project Support Officer
- Pathologists (one representative for each Health Board)
- Laboratory Managers (one representative for each Health Board)
- IT (one representative for each Health Board)
- DHCW/LIMS Representative
- DHCW Cyber Security Representative
- DHCW Information Governance Representative
- NWSSP Specialist Diagnostic and Therapies Equipment Representative
- NWSSP Procurement Project Manager/Category Manager

Other members will be co-opted as appropriate.

Timescales

The high-level timeline for NDCP Project is set out in the table below.

Table 29 Timescales

Tranche 1	Tranche 2	Tranche 3
Pre-procurement	Procurement	Implementation
Apr 24 – Mar 25	Apr 25 – Mar 26	Apr 26 – Mar 27
Standardisation approach Development of the Business Justification Case Health Board Executive approval of the BJC (x 6) Update service specification	Tender process Supplier engagement Finalise service specification Contract Award Implementation Preparation Digital hub/storage preparation Recruit HB staff	Digital hub/storage implementation Implementation in Health Boards (phased approach) Training

Assurance

The NDCP Project has a Quality and Assurance Strategy developed in accordance with MSP to ensure that all management aspects of the Project are working appropriately and that the Project stays on target to achieve its objectives. Project reviews to be undertaken at the end of each tranche.

Change Management Arrangements

The NDCP Project is a transformational change Project underpinning the development of modern, safe, sustainable pathology services and the use of innovative systems resulting in sustainable futureproofed services. The Project is aligned to the principles of the Pathology Statement of Intent 2019 and ensures continued alignment through a robust governance structure and reporting mechanism into the National Pathology Programme. Transformational service change forms the basis of the NDCP Project which seeks to deliver the change in a way that is welcomed, supported and embraced by the Pathology service and the wider NHS. The NDCP Project will deliver this through leadership, vision, stakeholder engagement, strong governance, excellent communications and robust plans.

Building on lessons learned from Phases 1 and 2, Phase 3 will:

- Request an executive level SRO
- Reinforce clinical leadership arrangements, for instance The National Pathology Programme now has a National Clinical Lead and a Clinical Lead for Digital Cellular Pathology
- Strengthen the existing Group ensuring IT representation from each organisation
- Formalise DHCW membership and responsibilities

Chilcott,Rachel
21/08/2024 11:48:04

- Continuing to update the National Diagnostics Strategic & Operational Group at regularly intervals, obtaining document sign off when required
- Continuing to work with the cellular pathology Standardisation Group to drive the Project forward and ensure SME

This approach will ensure that a robust governance structure is put in place ensuring high-quality delivery at pace.

Transformational Leadership

The NDCP Project is providing transformational leadership enabling the pathology service to create its own vision and own the Project at every stage of the process.

Health Board and Trust Leadership

Health Boards and Trusts are expected to provide the leadership necessary for the successful implementation of the new national digital cellular pathology service by supporting the following:

- Approval of the BJC
- The level of business change required to support the standardisation of services as far as possible to deliver a modern, high quality, safe and sustainable pathology service;
- Establish a local deployment project team to oversee the implementation and deployment of the new digital enablement and ensure the pathology service has the support and resources it requires to contribute to the Project;
- Include the NDCP Project in their integrated medium-term plans (IMTPs);
- Enable their Pathology services to contribute to the development, testing and validation of the new service whilst maintaining any ongoing services;
- Release their staff for training for the new service.

Management of Requests for Change

Requests for change can take several forms and will be managed accordingly. Throughout the life of the Project until the new digital service is fully deployed, all requests for change will be recorded in a dedicated Project change log and managed by the Project Team. The Project Team will decide the appropriate route for the change to be dealt with. A decision is needed regarding ongoing arrangements following handover of services to operations, and the ongoing management of change requests.

Benefits Realisation

The Benefits Management Strategy developed in Phases 1 and 2 will continue to be developed and refined to model benefits in more detail, determine methods for measuring them and ensure there is a process for tracking their realisation following implementation of the agreed service model. Work has been undertaken to identify key benefits of investing in this Project.

A Benefits Management Framework has been developed to ensure the Project benefits are realised from the initial investment. It helps the Project focus on achieving its strategic objectives and getting best values from its investment.

Chilcott, Rachel
21/08/2024 11:48:04

The approach being adopted is based on the Public Sector Programme Management approach with the 'Managing Successful Programmes' (MSP®) and APM's 'Managing Benefits' publications the main source of guidance on the benefit

realisation management process. Benefit Realisation Management is a core element of Programme/change management. It provides a systematic approach to identifying, defining, tracking, realising, optimising, reviewing and communicating benefits during and beyond a Programme/Project lifecycle.

The reason for having processes in place to manage and realise benefits include:

- Ensuring benefits are identified and clearly defined clearly
- Ensuring benefits are aligned to the vision, objectives and to the strategic direction of the organisation.
- Ensuring service areas take ownership of the benefits and are committed to their realisation.
- Ensuring that the Project outputs support the benefits and business changes that will be needed;
- Ensuring benefits are tracked and recorded and that achievements are properly recognised.
- Ensuring key benefit measures are mainstreamed into the performance framework.

The NDCP Project will manage, track, and control the realisation of benefits through the Benefits Realisation Plan. The Benefits Realisation Plan is to be maintained by the Project Team, in detail by a designated Benefits Lead working in conjunction with the benefits group.

The plan will contain and provide information on:

- A schedule that details when each benefit or groups of benefits (including any dis-benefits) will be realised
- Milestones for undertaking Benefits Review(s), to determine progress and inform questions about the likelihood of ongoing success in the future
- Dates when specific outcomes (i.e. business transition(s)) that will bring about benefits, are planned to be achieved
- Details of the handover and embedding activities necessary to realise any benefits after the Project has closed.

The key objectives of benefit realisation are to understand how the new system has made a difference to the service, to patients and patient care both in terms of outcomes and experience of services.

Work is ongoing with Health Technology Wales to fully evaluate the wider benefits of IBEX AI application.

Risk Management Arrangements

The Risk Management Strategy developed in Phases 1 and 2 will continue to be developed and will outline how risks and issues will be identified and managed during Phase 3. The Programme Manager will work with key leads to detail potential risks and issues in the Project Plan.

The management of risk is be embedded into the project management process as follows:

- The requirements of Corporate Governance will be adopted, including more focused and open ways of managing risk;

Chilcott,Rachel
21/08/2024 11:46:04

- The SRO will be the 'risk owner' at senior level – supporting, owning and leading on risk management;
- All members of the Project Team will own risk in commensurate quantum to their role;
- The Project reporting structure will encourage reporting and upward referral of significant issues. Risks will be actively monitored and regularly reviewed at each Project Team meeting;
- The risk management framework for the consistent treatment of risk will be established at an early stage and will be shared at all levels of the organisation and also with partners, particularly in the context of the complex types of risk arising from partnerships etc;
- The Project risk will be managed in the wider context of the whole business.

The Project Team is accountable for managing risk with regard the delivery of their respective workstreams. The Programme Manager is responsible for ensuring that all workstream leads have effective risk management strategies in place.

- Manage risks effectively each lead is required to:
- Understand at any point in time their major risks to delivery and ensure that they are taken into account within their workstream delivery plans;
- Ensure that those risks are allocated to a Risk Owner, who is actively managing a plan to mitigate the risks. The Risk Owner will be held accountable for action to mitigate the risks;
- Share and review risks at NDCP Project Team meetings and NDCP Project Board meetings to ensure that the Risk Register is fully representative of all risks, that these are up to date and being actively monitored;
- Where necessary escalate and bring to the attention of the Programme Manager and/or other key stakeholders, key risks they should be aware of.
- Be supported in this by the Project Manager whose role is to actively manage risk activities, ensuring that the risk register is compiled, maintained, regularly reviewed and refreshed to ensure that they represent the most up to date information and status;

A detailed Risk Register has been developed by the Project Team to assist with risk management throughout the development process. Risks will be assessed and values attributed to each area. The latest Risk Register can be found at Appendix M2.

The RAG Rating key for risks is as illustrated below:

Table 30 Risk Rating Matrix

			IMPACT				
			Very Low	Low	Medium	High	Very High
			1	2	3	4	5
PROBABILITY	Very Low	1	1	2	3	4	5
	Low	2	2	4	6	8	10
	Medium	3	3	6	9	12	15
	High	4	4	8	12	16	20
	Very High	5	5	10	15	20	25

Chilcott, Rachel 21/08/2024 11:48:04

Contract Management Arrangements

The contract will be managed by maintaining relationships with the successful supplier(s) throughout the duration of the Project, including engaging through supplier performance management (SPM).

Regular contract review meetings will be held by NWSSP Procurement Services with input from the working group, using the SPM standardised agenda:

- Supplier preparedness/resilience
- Price management/invoice discrepancies
- Product/service quality
- Delivery
- SMTL product defects
- Accreditation
- Benchmarking
- Information governance
- Innovation
- Regulatory changes
- Sustainability
- Supplier issues/concerns/update
- Supplier performance rating

Post Evaluation Arrangements

The Project has a Quality and Assurance Strategy developed in accordance with MSP to ensure that all management aspects of the Project are working appropriately and that the Project stays on target to achieve its objectives.

To complement the Quality and Assurance Strategy, gateway reviews will be planned at the end of Tranches 2 and 3, to assure the readiness for service prior to go live and once the Project has finished and the new digital service is fully deployed to assess operations and review benefits realisation.

Contingency Plan

There is a contingency built in should there be any delays in the implementation Phase of the Project. In the event that the Project fails, the aim will to be to ensure business continuity by:

- Exploring the opportunities to contract with another supplier within the procurement, should the supplier fail to deliver;
- Undertaking a re-procurement.
- Ensuring traditional reporting via glass slides and microscope as contingency

8 Document Control

Document Information

Document ID:	
Document Name:	Business Justification Case for National Digital Cellular Pathology Project – Phase 3 National Scale Up
Version:	V18.0
Issue Date:	02/05/24
Status:	Final
Document Owner:	National Pathology Programme, NHS Wales Executive
Document Authors:	National Pathology Programme, NHS Wales Executive

Document History

Amended by	Version	Status	Date	Purpose of Change
Archus	1.0	Draft	08/07/21	First draft for initial review and address gaps
CT	1.1	Draft	09/07/21	Second edition of the draft report in response to queries
Archus	1.2	Draft	14/07/21	Updated based on further information received from the Collaborative
Archus	1.3	Draft	16/07/21	Further revisions
CT	1.4	Draft	21/07/21	Further responses
Archus	1.5	Draft	27/07/21	Further revisions
Archus	1.6	Draft	05/08/21	Economic and Financial Cases
Archus	1.7	Draft	09/08/21	Finalise Benefits and Risks, revise Do Minimum
CT	1.8	Draft	02/09/21	Included comments from DCP Board
Archus	1.9	Draft	09/09/21	Included comments from DCP Board
CT	1.10	Draft	29/09/21	Updated formatting & Tranche timeline
MB	1.11	Draft	05/10/21	Further revisions
Archus	2.0	Draft	08/10/21	Updated costs
Archus	3.0	Draft	08/11/21	Minor corrections
Archus	4.0	Draft	31/01/22	Further work to Benefits & Costs
CT	5.0	Draft	01/02/22	Updated timeline
CT	5.1	Draft	01/02/22	Minor corrections
Archus	5.2	Draft	03/02/22	Minor corrections
CT	5.3	Draft	09/02/22	Updated following DCP PB
CT	5.4	Draft	15/02/22	Minor corrections
Archus	6.0	Draft	15/02/22	Updated following comments
CT	7.0	FINAL	16/02/22	Minor corrections
CT	7.1	Draft	07/09/22	Updates following comments
CT	7.1	Draft	07/09/22	Updates following comments
CT	9.2	Draft	30/11/22	Updates
Archus	10.0	FINAL	05/12/22	Final amendments
Archus	11.0	FINAL	09/01/23	Further updates
Archus	12.0	FINAL	13/02/23	Amend to capital funded business case and address comments from HBs and reviewers
CT	12.1	Draft	14/02/23	
Archus	13.0	Draft	28/04/23	Updates – Digital Strategy Wales 2021

Chilcott, Rachel
21/08/2024 11:48:04

Archus	14.0	Draft	26/04/23	Updates to commercial case following comments from Procurement
Archus	15.0	Draft	31/05/23	Updated Economic and Financial Cases and benefits analysis
Archus	16.0	Draft	02/06/23	Final review and strengthen VFM and affordability conclusions
CT	17.0	Draft	07/06/23	Final amendments
CT	17.1	Draft	01/12/23	Update following comments and refreshed costings
CT	17.2	Draft	19/12/23	Minor amendments
CT	17.3	Draft	19/12/23	Minor amendments
CT	17.4	Draft	04/04/24	Revision of costings and updated content following feedback
CT	18.0	FINAL	02/05/24	

Chilcott,Rachel
21/08/2024 11:48:04

9 The Appendices

Appendix 1: Glossary of Terms

Acronym	Full Title
ABUHB	Aneurin Bevan University Health Board
AI	Artificial Intelligence
APM	Association of Project Management
ARCH	A Regional Collaboration for Health
BCUHB	Betsi Cadwaladr University Health Board
BJC	Business Justification Case
CCS	Crown Commercial Services
CSF	Critical Success Factor
CTMUHB	Cwm Taf Morgannwg University Health Board
CVUHB	Cardiff & Vale University Health Board
DHCW	Digital Health and Care Wales
H&E	Haematoxylin and Eosin
HDUHB	Hywel Dda University Health Board
IMTP	Integrated Medium Term Plan
IPR	Intellectual Property Rights
KPI	Key Performance Indicator
LIMS	Laboratory Information Management Service
MDT	Multi-Disciplinary Team
MSP	Managing Successful Programmes ™
NDCP	National Digital Cellular Pathology
NPP	National Pathology Programme
NWSSP	NHS Wales Shared Services Partnership
PHW	Public Health Wales
RCPath	Royal College of Pathologists
SBUHB	Swansea Bay University Health Board
SRO	Senior Responsible Owner
SWOT	Strengths, Weaknesses, Opportunities, Threats
TUPE	Transfer of Undertakings (Protection of Employment) Regulations 1981
VFM	Value For Money

Chilcott,Rachel
21/08/2024 11:48:04

Report Title:	Capital Plan 2024-25			Agenda Item no.	3.2
Meeting:	Finance & Performance Committee	Public	√	Meeting Date:	17th July 2024
		Private			
Status (please tick one only):	Assurance		Approval	√	Information	
Lead Executive:	Director of Finance				
Report Author (Title):	Director of Captial, Estates and Facilities				

Main Report

Background and current situation:

The purpose of this report is to provide the Finance and Performance Committee (the committee) with details of the Health Board's proposed Capital Programme for the financial year 2024/25 and to request that the committee support the plan, endorsed by Capital Management Group (CMG) and Senior Leadership Board, for submission to the UHB Board with a recommendation for approval.

The UHB receives an allocation of Capital funding from Welsh Government (WG) via their Capital Resource Limit (CRL). The 2024/25 CRL, issued by WG allocates £33.942m in total, with £20.288m allocated to Major Capital schemes and £13.654m Discretionary Capital, there is a variance of £0.566m against the CRL and Planned spend due to RISP funding of £0.566m which has not yet been included on the CRL.

The CRL is a live document which is updated as, business cases are approved, national funded programmes are identified or where the cash flows for projects are adjusted, and is monitored by the UHB CMG at their monthly meeting.

It should be noted that the UHB have previously funded the development of a number of Business Cases which have been submitted to WG for approval. Should these Business Cases be approved then the UHB will be able to draw down the expenditure which would be reimbursed to the discretionary capital budget. WG are in the process of undertaking a pan Wales capital prioritisation review and until this exercise is concluded it is not known when the UHB will receive approval of the Business cases and have access to the additional funding.

Business Case Development Expenditure

Scheme	Amount £m
CRI Wellbeing Centre (OBC)	2.301
CRI MEP (FBC)	0.662
Haematology Ward & Day Unit (BJC)	0.090
Total	**3.053**

Table 1 below, indicates the income identified on the CRL for 2024/25, which includes the funding allocated for the approved All Wales Capital schemes in addition to the Discretionary capital allocation. The table currently indicates no receipts from the sale of properties, however, CEF are currently considering options for the rationalization of the estates which may generate some income later in the year.

Hallett, Rachel
21/08/2024 11:48:04

Table 1 – Capital Funding

Description	Funding		
	Major Capital	Discretionary Capital	O'Turn
	£k	£k	£k
Major Capital			
Rookwood reprovision at Llandough	(750)		(750)
EFAB	(3,390)		(3,390)
Park View WBH	(1,174)		(1,174)
Tertiary Tower Infrastructure (BJC)	(1,765)		(1,765)
Urgent Replacement of Interventional Neuroradiology Equipment at University Hospital of Wales	(2,870)		(2,870)
Mortuary (BJC)	(2,993)		(2,993)
Lift Upgrade (BJC)	(4,487)		(4,487)
Electronic Switchgear, UHW	(1,286)		(1,286)
Replacement Boiler, University Hosptial Llandough	(637)		(637)
Diagnostic Equipment	(540)		(540)
Sanctuary Provision for Children and Young People	(10)		(10)
DPIF			
DPIF - Digital Medicines Transformation Portfolio	(386)		(386)
Unapproved			
RISP Programme (Funding letter signed)	(566)		(566)
National Imaging Programme			0
Major Capital Total	(20,854)	0	(20,854)
Discretionary Capital & Sale of Properties			
Discretionary Capital Allocation		(14,871)	(14,871)
EFAB 30% Contribution		1,217	1,217
Discretionary Capital & Sale of Properties Total	0	(13,654)	(13,654)
Total Funding	(20,854)	(13,654)	(34,508)

Discretionary Capital Prioritisation Process

As part of the UHB annual planning process Clinical and Service Boards submitted schemes for funding support against the available unallocated budget. The unallocated budget is, determined after the annual commitments and 'roll over' schemes are taken into consideration.

Given the limited availability of both 'All Wales' Capital and Discretionary Capital the UHB undertook a prioritization exercise using agreed criteria. The schemes identified were then scored independently by strategic service planning, operational planning and Capital Planning (CEF). The initial draft prioritization schedule was presented to SLB in January 2024 to ensure that the logic applied and the direction of travel was supported by the group.

The table below (3) identifies the schemes which scored highest following a final review and taken forward into consideration against the available funding.

Chilcott, Rachel 21/08/2024 11:48:04

Table 3 – UHB Wide Priority Schemes

Rank	Scheme	Current Status	Estimated Capital (£m)	Spend Plan 2024-2025 (£m)
1	Cardiology relocation – critical enabler for the cardio-thoracic and ITU expansion schemes & Separation of planned and emergency Gynae – critical enabler for Cardiology relocation)	Included in Draft Plan	*3.500*	*3.500*
2	Combined Heat & Power – new contract to protect against obsolescence	Removed	*0.500*	*0.000*
3	Medical Gas – Pressure Reducing Sets	Completed 2023/24	*0.040*	*0.000*
4	Urgent Roof Repairs – A Block Plant Room	Potential Welsh Government funding	0.150	0.000
5	Main Chiller – theatres UHW	Potential Welsh Government funding	0.600	0.000
6	Statutory Fire (mainly doors)	Potential Welsh Government funding	0.200	0.200
7	UHL – Amulatory Theatres (High Vol/Low complexity)	Feasibility work underway	*TBD*	*TBD*
8	Air Handling Unit HSSD – replacement	Potential Welsh Government funding	0.650	0.000
9	Emergency Community Dental Service (interim replacement capacity – from Roath Park to CRI)	Feasibility work required	*1.900*	*0.000*
10	CRI/Clinical Addictions Unit – interim works	Included in Draft Plan	*0.100*	*0.100*
11	Welsh Clinical Intensive Care Information System (Deferred to 2025-26)	Deferred until 2025-26	0.950	0.000
Grand Total			**8.590**	**3.800**

Draft Capital Programme 2024/25

At their meeting held on the 20th May 2024,the Capital Management Group (CMG) considered the limited unallocated budget of which equated to circa £2.5m and the significant priority schemes that need to be addressed. The relocation of cardiology from C3 to C1, which principally provides opportunity to increase ITU capacity to support the demands of winter was supported by CMG as being the most urgent priority.

Budget costs for the scheme, which requires a series of moves have been prepared with an anticipated outcome of £3.5m and the only option to bridge the gap between unallocated funding and the budget costs is to commit the Discretionary programme contingency of £1m.

In addition, the CMG were presented with a paper relating to the mortuary refurbishment scheme which requested additional funding of £330k to support the additional structural works that had been identified during construction and the extension required for the temporary body store at Rookwood Hospital.

CEF agreed the draft programme as shown in Table 4 below which is currently forecasting an overcommitment of £0.375m against current available allocation. However, 2 actions were agreed to reduce the anticipated overcommitment:

1. Approach WG for additional support for the Mortuary Refurbishment
2. Undertake the design and tendering of the Cardiology scheme to establish the actual cost as the Budget was based on limited information

The committee should be aware however that there is no contingency remaining and this carries a significant risk given the position in the year.

Chilcott,Rachel 21/08/2024 11:17:04

Table 4 – Draft Expenditure Programme

Description	Expenditure		
	Major Capital	Discretionary Capital	Total
Major Capital Construction			
Rookwood reprovision at Llandough	750		**750**
EFAB	3,390		**3,390**
Tertiary Tower Infrastructure (BJC)	1,765		**1,765**
Urgent Replacement of Interventional Neuroradiology Equipment at University Hospital of Wales	2,870		**2,870**
Refurbishment of Mortuary UHW (BJC)	2,993	330	**3,323**
Lift Upgrade (BJC)	4,487		**4,487**
Electronic Switchgear, UHW	1,286		**1,286**
Replacement Boiler, University Hosptial Llandough	637		**637**
Diagnostic Equipment	540		**540**
Sanctuary Provision for Children and Young People	10		**10**
DPIF - Digital Medicines Transformation Portfolio	386		**386**
RISP Programme (Funding letter signed)	566		**566**
National Imaging Programme			
Relocation of Cardiothoracic Unit from UHL to UHW		1,920	**1,920**
Car Park Enabling CRI		300	**300**
Cardiology Relocation		3,500	**3,500**
Major Capital Business Cases			
Park View Wellbeing Hub (FBC)	1,174	230	**1,404**
	20,854	**6,280**	**27,134**
Annual Commitments:			
UHB Capitalisation of Salaries		700	**700**
UHB Director of Planning Staff		165	**165**
UHB Revenue to Capital		1,015	**1,015**
Business Cases funded via Discretionary Capital			
ITU Refurbishment (SOC)		180	**180**
Pentyrch Surgery - Fees			**0**
Statutory Compliance:			
Fire Risk Works		200	**200**
Asbestos		400	**400**
Gas infrastructure Upgrade		300	**300**
Legionella		450	**450**
Electrical Infrastructure Upgrade		150	**150**
Ventilation Upgrade		500	**500**
Electrical Backup Systems		250	**250**
Upgrade Patient Facilities		350	**350**
Dedicated Team		200	**200**
Other:			
Backlog Estates		598	**598**
Lift 8 & 9 UHW		156	**156**
Biochemistry Cooling UHW completion of project from 23/24		385	**385**
CFPU Chiller Upgrade completion of project from 23/24		50	**50**
UHW Tunnels Phase 2		50	**50**
Community Addiction Unit at CRI		100	**100**
Backlog IM&T		500	**500**
Backlog Medical Equipment		950	**950**
Contingency			**0**
PIE Requests		100	**100**
Unallocated funding			**0**
	0	**7,749**	**7,749**
Total Commitment	**20,854**	**14,029**	**34,883**
Over / Under Commitment	**0**	**375**	**375**

Chilcott,Rachel
21/08/2024 11:48:44

Backlog Maintenance & Patient Safety Funds 2024/25

NWSSP Specialist Estate Services requested that the UHB submit bids relating to backlog maintenance and patient safety to be funded from a £30m capital budget identified by WG. The UHB provided the information which amounted to £11.5m, a number of the schemes are included in table 2 above, which were considered priority by the UHB but could not be funded from the Discretionary Capital Budget. Correspondence has been received from NWSSP SES to advise that a recommendation is being submitted to the Minister for approval. Items 4,5,6&8 in the table above are amongst other schemes shortlisted within the funding.

For completeness, the Major Capital Schemes slippage against IR Suites £0.885m has been managed by bringing forward schemes from 2024/25 as shown in the table below

Scheme	£m
IR Suites	0.887
Efab - Fire	(0.299)
Efab - Decarbonisation	(0.295)
UHL Electrical Infrastructure	(0.072)
Electrical Infrastructure, Tertiary Tower Block at UHW	(0.036)
Lift Refurbishment and Upgrade, UHW	(0.013)
Mortuary Refurbishment, UHW	(0.142)
Electronic Switchgear, UHW	(0.007)
Replacement Boiler, University Hosptial Llandough	(0.023)
Balance	**0.000**

Medical Equipment Backlog and IM&T Backlog

Discretionary Capital backlog allocation is provided to Medical Equipment and IM&T for expenditure in their areas to address urgent replacement. Appendix 1 & 2 of the report sets out their intentions of spend against the available funding.

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

- The capital plan 2024/25 has been endorsed by Capital Management Group at their meeting held 20th May 2024 and supported by Senior Leadership Group at their meeting held 20th June 2024
- The draft capital programme identifies, **Overcommitment £0.375m**
- Contingency in programme has been fully utilised
- NWSSP Specialist Estate Services have issued a recommendation to the Minister for funding allocation of £4.334m against £30m capital budget to address backlog maintenance and patient safety schemes.

Recommendation:

Finance & Performance Committee are requested to:

1. **NOTE:** the content of the paper and in particular the prioritisation process undertaken.
2. **SUPPORT:** the draft capital plan 2024/25 and **RECOMMEND** that the Board approve the plan, recognising the reported overcommitment and risk associated with the unavailability of contingency.
3. **NOTE:** the potential additional Welsh Government funding allocation to support items 4,5,6&8 in table 3 of the report

Chmsc_Rgnd 21/06/2024 14:48:04

Link to Strategic Objectives of Shaping our Future Wellbeing:

Please tick as relevant			
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*									
Prevention		Long term	√	Integration		Collaboration		Involvement	

Impact Assessment: *Please state yes or no for each category. If yes please provide further details.*
Risk: Yes
Lack of capital funding to deliver the scheme has implications on clinical service delivery.
Safety: No
Financial: No
Workforce: No
Legal: Yes
Statutory obligations require investment and the lack thereof can lead to exposure to risk and legal challenge.
Reputational: Yes
The UHB's ability to reduce waiting times and deliver services in an appropriate setting being cognisant of patient's privacy and dignity.
Socio Economic: No
Equality and Health: Yes
Increasing the overall reliability of the Lifts will ensure clinical staff are able to appropriately perform intensive clinicals activities.
Decarbonisation: Yes
Although not been specifically, new equipment installed will be more energy efficient.

Approval/Scrutiny Route:	
Capital Management Group	Date:20/05/2024
Senior Leadership Group	Date: 20/06/2024

Chilcott,Rachel
21/06/2024 11:48:04

Chilcott,Rachel
21/08/2024 11:48:04