

Cyfarfod a dyddiad: Meeting and date:	Finance and Performance committee 29/10/2020						
Cyhoeddus neu Breifat: Public or Private:	Public						
Teitl yr Adroddiad Report Title:	Diagnostic and Treatment centre pre-Strategic Outline Case						
Cyfarwyddwr Cyfrifol: Responsible Director:	Gill Harris CEO						
Awdur yr Adroddiad Report Author:	Andrew Kent- Interim head of planned care transformation						
Craffu blaenorol: Prior Scrutiny:	Gavin MacDonald and Gill Harris						
Atodiadau Appendices:	Appendix 1 – Graphic of DTC model Appendix 2 – DTC Service Specification Appendix 3 – Comparative summary of DTC options in light of NHS England report “Diagnostics: Recovery and Renewal” Appendix 4 – Summary of estimated backlog treatment costs Appendix 5 – Analysis of potential timelines for DTC delivery						
Argymhelliad / Recommendation:							
F&P are asked to review presented options and confirm intentions for progress to development of Strategic Outline case and development of a DTC business case project.							
Please tick as appropriate							
Ar gyfer penderfyniad /cymeradwyaeth For Decision/ Approval	<input checked="" type="checkbox"/>	Ar gyfer Trafodaeth For Discussion	<input checked="" type="checkbox"/>	Ar gyfer sicrwydd For Assurance	<input type="checkbox"/>	Er gwybodaeth For Information	<input checked="" type="checkbox"/>
Sefyllfa / Situation:							
<p>The COVID19 pandemic has had a significant impact on planned care service as previously reported. Length of times for patients have increased across all the pathways, particularly diagnostics and treatments at stage 4. Referrals for routines have yet to reach pre-COVID levels and many outpatient services are just re-starting with limited capacity. When these levels increase, it will compound the issue.</p> <p>In August, the Finance and Performance committee requested a paper to explore strategies to reduce backlogs and to discuss and agree the principles and possible options going forward. This paper develops the emergent options into the format of a potential SOC; provides updated high level costs; and comments on the wider strategic context. This paper should also be considered alongside the accompanying paper presented to the committee meeting of 29 October which sets out proposals for an interim solution to waiting list backlogs.</p>							
Cefndir / Background:							
The country is facing a similar dilemma and a number of strategies are emerging nationally, including the guidance from the National planned care programme, that suggest the way forward is to provide carved out/ring fenced elective capacity, that could be considered as COVID light as							

possible. To ensure this occurs, any facility needs to separate from unscheduled care and provide an environment that is as safe as possible to both patients and staff.

As of the end of September 2020, the number of “all over 36 week waiters” has increased to over 40,000 and the total diagnostic waits currently stand at over 14,000, of which 8,515 are radiology. Taking the quarter 1 average increase and applying this to a “no change” scenario, presents a risk of reaching over 80,000 over 36 week waiters by the end of March 2021.

Asesiad / Assessment & Analysis

Strategy Implications

This paper aligns a number of current business cases in process, namely the endoscopy, Ophthalmology, orthopaedic and Radiology cases. It aligns with the national planned care strategic approach of providing facilities that would be minimised from disruption and provides COVID low burden for patients and staff

Options considered

- Once for North Wales (option 5)
- Business cases listed above

Financial Implications

There are significant financial implications both capital and direct treatment costs described in the paper. It does not take into account any lease costing of the modular health units. Please note these are minimum financial costs and would be expected to rise (direct treatment costs) if the backlog increases.

Risk Analysis

Long waiters and clinical harm, post COVID planned care activity.

Legal and Compliance

We would need to comply with procurement rules and financial regulations, which would be explored as part of the next steps, if accepted.

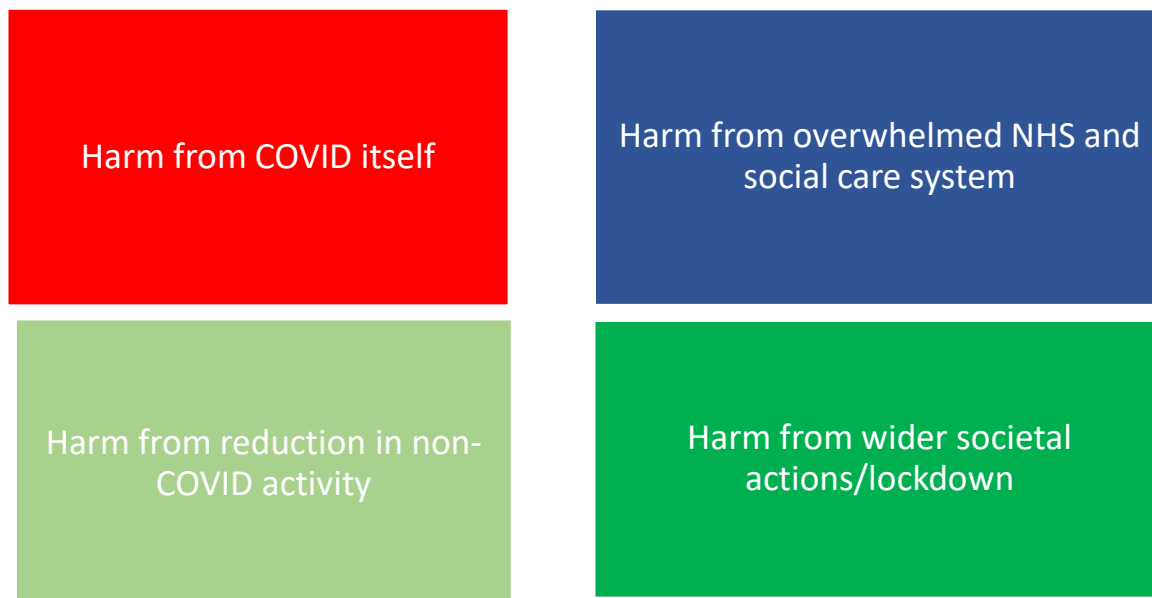
Impact Assessment

Not yet undertaken

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1. Introduction

The impact of COVID-19 on the communities we serve is demonstrated within the quadrant model shared by Welsh Government below.



This paper is a follow up to the discussion document presented to the Finance and Performance Committee on 30 September 2020 and focusses primarily on the harm from reduction in non-COVID activity described above. This followed a number of clinical engagement events earlier in the year, as part of a concerted effort to define clinical and operational responses to the specific challenges presented by the COVID-19 pandemic. The focus of this approach centred on maintaining levels of elective care, and options for use of existing elective capacity.

During the COVID-19 pandemic, the potential option to designate one or two acute sites for elective activity only was considered to be too great a risk to deliver within the required timescales. Therefore “Option 5 - Once for North Wales” was developed for key specialties. This ensured an approach to ameliorating inequalities of access, and reducing some of the significant variations in waiting times across the sites/localities. It recognised that this approach did not deliver any additional capacity.

Detailed below is a proposal for a structured programme of work to develop the proposal for a transformational project for diagnostic and treatment services. The initial paper presented to the Finance and Performance Committee outlined the options under consideration, also setting out the key areas of potential for service development and transformation.

The specific focus of the initial paper was on out-patient, day case and ambulatory care. However, it recognised the wider implications for delivery of in-patient care,

considering the opportunities for service transformation within the context of wider Health Board strategy and its existing programme of service developments.

In order to further develop the concepts and options described in the initial paper this document provides an additional opportunity for discussion and feedback. This will form the basis for the work required to develop the required business case, using established models of best practice.

2. Approach

Subject to comment and approval, the proposed approach to the development of this transformational project will utilise the established three key stages in the development of a project business case. These are the Strategic Outline Case (SOC); the Outline Business Case (OBC); and the Full Business Case (FBC). The Health Board will prepare these elements using the agreed standards and format for business cases, as set out in the NHS Wales Infrastructure Investment Guidance (see comments and information provided in section 3.3. below)

This paper will outline the key issues for consideration within the development of the Strategic Outline Case, to support the development of a formal document. It will also provide an indicative timeline (and possible scenarios) for business case development and implementation.

3. Development of the Strategic Outline Case

The main components of the Strategic Outline Case are intended to establish the strategic context, make a robust case for change and provide a suggested way forward (rather than a definitive preferred option). As part of the work to develop a SOC document, the following sections will consider content for the following areas:

- The Strategic Case -this sets out the strategic fit and case for change, together with the supporting investment objectives for the scheme;
- The Economic Case - this explores the suggested way forward – or how best to deliver the objectives of the scheme;
- The Commercial Case - this assesses the ability of the market place to deliver the required goods and services, and summarises the organisation's commercial strategy;
- The Financial Case - this gives outline estimates of the capital and revenue implications of the scheme, and a view of affordability.

3.1. The Strategic Case

The Health Board has already published key strategy documents such as “Living Healthier, Staying Well” (March 2018) and an accompanying updated Estates Strategy (February 2019).

Living Healthier, Staying Well (LHSW) sets out how health, wellbeing and healthcare might look in ten years' time and describes current plans along with implications for how resources are allocated and how staff prioritise their time. The strategy is based on three overlapping major programmes within the overall portfolio:

- Improving health and reducing inequalities
- Care closer to home
- Excellent hospital care

Key elements of the LHSW strategy for ensuring excellent hospital care have a focus on:

“looking at how we deploy our workforce and using modern approaches including integrated teams of different professionals like therapists, advanced nurse practitioners and doctors; and finding new ways to deliver services”¹

The Health Board's Estate Strategy supports the strategic aims of LHSW and sets out a goal to ensure that:

“the estate is aligned to our clinical and enabling strategies and supports transformation plans”²

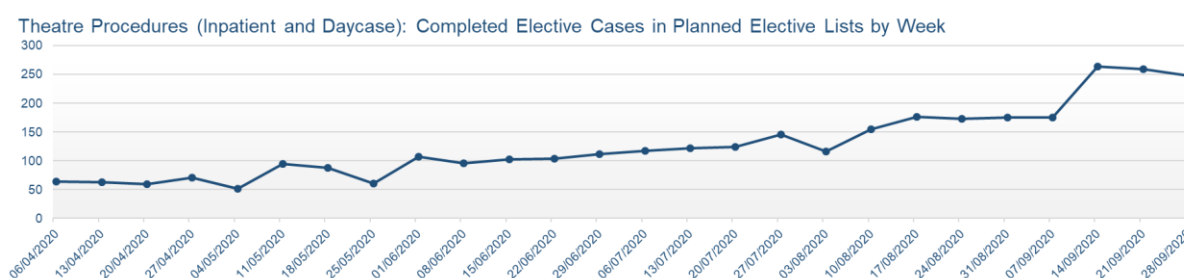
The development of the proposal described below should be considered within the context of the Health Board's agreed strategic aims to develop new ways of delivering services, with an estates strategy aligned to support transformation plans. It further aligns with the key priority agreed by the board to continue to provide care under 'essential' services whilst supporting the safe stepping up of planned care.

The development of options for a transformational approach to support the above strategic objectives has also been driven by recognised operational challenges. The COVID19 pandemic and the legacy of long waiters at the end of 2019/20 has left the organisation with a significant clinical risk. Whilst not unique to this organisation, the size of activity required to be undertaken and the previous backlog does present a challenging environment.

As of the end of September 2020, the number of “all over 36 week waiters” has increased to over 40,000 and the total diagnostic waits currently stand at over 14,000, of which 8,515 are radiology. Taking the quarter 1 average increase and applying this to a “no change” scenario, presents a risk of reaching over 80,000 over 36 week waiters by the end of March 2021. The run rate of in-patient and day case procedures, shown below, signals the “new normal” after COVID with late August delivering 250 cases per week, compared to the March position of 500 per week, a reduction of 50%.

¹ “Living Healthier, Staying Well”, BCUHB, March 2018

² Estates Strategy (version 6), BCUHB, February 2019



As part of this planning, we have undertaken a harm risk analysis across our current waiting lists. Working on the assumption that 3 -4% of cancers are only picked up after they are escalated via a more routine appointment, this demonstrates a significant and growing clinical risk across the HB.

Our analysis suggests that a total of 2,699 stage 4 patients who have been classified as P2/3 who need definitive treatment in the next 3 months will not be treated and are therefore at risk of developing some form of consequential harm. A further 1,623 from our routine waiting list will fall into this category based upon the 4% assumption. This will increase to 2,583 if our growth rate continues as per current trajectory. A similar analysis of our stage 1 patients demonstrates a risk of harm to 337 patients. These figures exclude our most challenging speciality of orthopaedics. Clearly this will increase if there is a subsequent need to reduce planned care as a result of the pandemic or we are unable to manage the backlog.

To address this problem mid to long term a potential option has been developed based on a diagnostic and treatment centre strategic approach that would “carve out” Outpatients, Day case, Oscopies and other key ambulatory services. (e.g. Cardiac services). This would provide long term resilience to the organisation by enabling the treatment of highly vulnerable patients without interruption from pressures in unscheduled care and further COVID-19 surges. By increasing available capacity within a ‘COVID light environment, it would also help retain clinical activity (and associated resources) within Wales. This would provide a tangible economic benefit and significantly reduce reliance on other external providers including English capacity and the Independent sector.

Many organisations across the U.K. have introduced diagnostic and treatment centres. South Wales have recently adopted this approach, predominantly for cancer services.

These centres provide outpatient, diagnostic and day case surgical capacity. Usually located away from an acute hospital site to provide ring fenced ambulatory care. Many different models exist; however, a two centre approach is considered amongst the possible viable options. A task and finish group has commenced to look at the clinical specification and significant clinical engagement has been undertaken to invite feedback on the concept.

It is acknowledged that delivery of this strategy could take between two and three years. Therefore, short to mid-term solutions for the delivery of planned care are underway. These include introducing smaller modular builds of theatres plus wards,

to commence backlog clearance. This would provide the organisation with a viable short-term solution.

The two centres would provide a low COVID-19 burden and a new service model for ambulatory care for the population of North Wales. The approach “future proofs” capacity for potential cancer patients and those that are regarded high risk but ambulatory. An example of the two centre model is attached at **Appendix 1**.

The challenges and potential solutions being considered will need to be evaluated with reference to the recent national report, “Diagnostics: Recovery and Renewal” (Professor Sir Mike Richards, NHS England, October 2020).

The report states that:

“The COVID-19 pandemic has further amplified the need for radical change in the provision of diagnostic services, but has also provided an opportunity for change.”³

The report identifies the following key actions:

- Acute and elective diagnostics should be separated wherever possible to increase efficiency.
- Acute diagnostic services (for A&E and inpatient care) should be improved so that patients who require CT scanning or ultrasound from A&E can be imaged without delay.
- Inpatients needing CT or MRI should be able to be scanned on the day of request.
- Community diagnostic hubs should be established away from acute hospital sites and kept as clear of COVID-19 as possible.
- Diagnostic services should be organised so that as far as possible patients only have to attend once and, where appropriate, they should be tested for COVID-19 before diagnostic tests are undertaken.
- Community phlebotomy services will be improved, so that all patients can have blood samples taken close to their homes, at a minimum of six days a week, without needing to access acute hospital sites.

The summary recommendations of this report are highly relevant to the development of the Health Board’s plans and will be a key point of reference for the appraisal of service options.

The key investment objectives of the project are summarised as follows:

1. To reduce the risks from disruption to service delivery and diagnostic capacity
2. To reduce harm to patients by providing early diagnostic and treatment to suspected cancers and vague symptoms

³ “Diagnostics: Recovery and Renewal”, NHS England, October 2020

3. Provide further capacity for In-patient activity by providing Day case procedures elsewhere
4. Provide faster/same day access to diagnostic tests
5. Deliver sustainable improvements in day case access and treatment times
6. Provide “ring fenced” elective capacity and deliver pathways that protect patients and staff from COVID-19.
7. Eliminate the backlog of patients waiting over 36 weeks for day case
8. Support development of new roles and improve recruitment and retention
9. Reduce reliance on external providers
10. Deliver socio-economic benefits to the North Wales economy
11. To provide a sustainable strategic platform which will support a coherent, timely and cost effective approach to addressing the underlying known system pressures through a complimentary range of short, intermediate and longer term measures.

A set of specific measurables that contribute to each of these high level objectives, including baseline measurements, will be developed pending approval to develop the OBC.

3.2 The Economic Case

The critical success factors are being considered as part of the work by the Task and Finish group and a proposed list is provided below:

- CSF1: business needs – how well the option satisfies the existing and future business needs of the organisation.
- CSF2: strategic fit – how well the option provides holistic fit and synergy with other key elements of national, regional and local strategies.
- CSF3: benefits optimisation – how well the option optimises the potential return on expenditure – business outcomes and benefits (qualitative and quantitative, direct and indirect to the organisation) – assists in improving overall VFM (economy, efficiency and effectiveness) and socio-economic benefits.
- CSF4: potential achievability – the organisation’s ability to innovate, adapt, introduce, support and manage the required level of change, including the management of associated risks and the need for supporting skills (capacity and capability). The organisation’s ability to engender acceptance by staff.
- CSF5: supply side capacity and capability – the ability of the market place and potential suppliers to deliver the required services and deliverables.
- CSF6: potential affordability – the organisation’s ability to fund the required level of expenditure – namely, the capital and revenue consequences associated with the proposed investment.

The discussion paper presented to the Finance and Performance Committee set out a number of options for approaches to address service pressures, reduce day case backlogs and deliver services in line with emerging national guidance which

recommends carved out/ring fenced elective capacity, that could be considered as 'COVID light' as possible.

To ensure this occurs, any facility needs to separate from unscheduled care and provide an environment that is as safe as possible to both patients and staff. The challenge the organisation faces is that its current facilities all have busy unscheduled care services, including A&E departments, which means it, is impossible to carve out pure elective capacity on the same site, which would be free from disruption. With this in mind the options proposed for discussion were:

1. Business as usual post-COVID
2. Three session days and 7 day working -all sites
3. Diagnostic and treatment centre – including theatres
4. Diagnostic centre – Outpatient and diagnostics only
5. Diagnostic and treatment Centre that has limited theatre capacity to clear backlogs and service transformation is undertaken to instigate COVID light Day case pathways within the current DGH's
6. Diagnostic and treatment centre incorporating the proposals within the existing Orthopaedics business case project. An option developed since the discussion at the F&P Committee on 30/9/20.

A summary of the review of the above options is provided in the following table:

Option	Initial Finding
1. Business as usual post-COVID	<p>Even if the COVID measures are lifted and no further interruption to planned care delivery, the backlogs will at best stay static. Previously the organisation outsourced significant activity. This may not be available to the organisation as they too have backlogs that require clearing for their own population.</p> <p>The national contract with Spire at Wrexham has been reviewed and it is known that capacity will decrease from November/December. It is unclear, at the time of writing, how much capacity RJAH will offer the organisation but this is limited to orthopaedics. Unfortunately, the backlogs are now significant across most specialties. It is clear this option is not viable and will not deliver safe effective care to our population.</p>
2. Three session days and 7 day working -all sites	<p>Model is dependent on the good will of staff working extra shifts or changing working patterns to work out of hours for a considerable period. Recovery could take 4-5 years to achieve reduction in backlog.</p> <p>To support this option extra staff would be required and discussions with clinicians around changing their job plans to weekend working or employing</p>

	<p>extra locums for mid-term contracts. The disadvantage is that we would be providing extra staff costs but no guarantee of capacity for them to operate in, with a risk of not getting value for money from their contracts. Further discussions would be required on whether this would be consolidated on one, two or all three sites. There would be additional costs associated with increased bed capacity to make this model viable and the model would not address the underlying capacity and demand pressures within the system.</p> <p>All three sites have unscheduled activity, disruption due to these pressures is likely to occur, and sustained planned care activity would be unlikely.</p>
3. Diagnostic and treatment centre – including theatres	<p>Many organisations across the U.K. have introduced diagnostic and treatment centres. South Wales have recently adopted this approach, predominantly for cancer services.</p> <p>These centres provide Outpatient, diagnostic and day case surgical capacity. Usually located away from an acute hospital site to provide ring fenced ambulatory care. A task and finish group has been established to look at the clinical specification (see Appendix 2). Significant clinical engagement has been undertaken to receive reaction to the concept.</p> <p>Initial capacity modelling suggests that two centres are required. One being East/Centre the other being Centre/West, as illustrated in Appendix B. Site location is yet to be considered, as we are ensuring the clinical specification is correct which will allow the floorplan to be developed, which in turn will allow the geographical location to be identified.</p> <p>The task and finish group support the modular building approach, similar to the theatres placed at Wrexham over the last few years. The modular units can be provided for outpatients, diagnostics, oscopies and theatres.</p>
4. Diagnostic centre – Outpatient and diagnostics only	<p>This option would be the same process except without the theatres and could be seen as a reduced cost option. The challenge with this is that theatres would become the bottleneck. Patients would be treated through to diagnostics and then may be held due to the lack of theatres. Cancellations due to no beds and the current restrictions within the day case units due to surge and COVID peaks would still be a risk. Leaving</p>

	patients vulnerable at the stage 4. This model does not enable backlog clearance.
5. Diagnostic and treatment Centre that has limited theatre capacity to clear backlogs and service transformation is undertaken to instigate COVID light Day case pathways within the current DGH's	This option provides all the benefits of option 3, but again at a lower cost, with the disadvantages that recurring activity would be undertaken at the DGH's, however it does provide the organisation with "buffer capacity" that could be switched on and off after clearing the backlogs, comparable to an outsourcing model. Although attractive, it does not provide all patients with a one-stop approach but could be seen as a compromise position. These could be purchased or leased and allows the ability to have them removed after the 2-3 year duration.
6. Diagnostic and treatment centre incorporating the proposals within the existing Orthopaedics business case project	This option was proposed following the discussion at the F&P Committee on 30/9/20. It is an expansion of the model described at option 3. The orthopaedics business case is currently being reviewed. The proposal here would be to align the implementation with the DTC component. Assessment of how the projects will be aligned will need to be developed at part of the Business Case process for this entire option.

3.2.1 Outline capacity required for option 3

To be able to estimate the costs and size of the building required for option 3, a high-level analysis using assumptions based on the previous year's activity was undertaken; no productivity assumptions have been made.

Outpatients: Using this modelling approach it is estimated that 45 outpatient rooms would be required if a two centre approach, or 90 if a one-centre approach.

Oscopy: is estimated to be 24 rooms on each site to undertake an "Oscopy unit" this would future proof a growing diagnostic and procedure and takes into account all services that would be utilising it, as described in the option.

Theatre capacity: A number of options are available for the theatre capacity, which are tabled below; the more potentially more economical option is to undertake backlog clearance at the diagnostic sites, over a three-year period. This would bring the need to 2 to 3 theatres over a 2-3 year period. To move all recurring activity, it would mean 9.8 (10) theatres split across two sites. These options are appraised below.

	Theatres required (normal recurring activity)	theatres required to clear backlog - 1 year	theatres required to clear backlog - 2 year	theatres required to clear backlog - 3 years	recurring +1 year backlog clearance	recurring +2 year backlog clearance	recurring + 3 year backlog clearance
2 sessions per day 5x week	12.2	7.6	3.8	2.5	19.8	16.0	14.7
2 sessions per week 6 days	10.1	6.3	3.1	2.1	16.4	13.3	12.2
3 sessions per week x 5 days	8.1	5.1	2.5	1.7	13.2	10.7	9.8
3 sessions per week over 6 days	6.7	4.2	2.1	1.4	10.9	8.8	8.1

A key task for the Task and Finish group – as part of the work to complete a SOC will be to confirm the project objectives and critical success factors, and complete a final review of the options within that context. Further consideration will also be given to an analysis of how main components of the listed options align with the key actions and recommendation set out in the “Diagnostics: Recovery and Renewal” report recently published by NHS England.

The summary at **Appendix 3** sets out an illustrative summary comparison (of recommendations on service delivery models) based on current information. It should be noted that the national report also includes recommendations on equipment and facilities; workforce; digitisation and connectivity; and delivery.

3.3 The Commercial case

The details of the commercial case will be confirmed subject to the final review of the option appraisal described above.

In term of timelines for delivery, initial work has taken place to model a number of possible scenarios. The table shown below assumes a scenario where current guidelines and processes are followed in full (i.e. a 3-stage business case process), with appointment of contractors from the framework.

In this instance, the estimated times for the production of business cases and construction are based on previous experience in the Health Board and elsewhere in Welsh Government. The total estimated time to completion is 5 years 9 months.

Milestone	Target Date
Completion of Strategic Outline Case (SOC)	January 2021
Completion of Outline Business Case (OBC)	March 2022
Completion of Full Business Case (FBC)	May 2023
Completion and Handover	July 2026

Further details of this estimated timeline and scenarios are shown at Appendix 5. It also includes information on two further scenarios which seek to shorten the process by a number of mitigating measures.

The second scenario shortens the process, through assumptions about accelerated governance/approvals, producing a combined OBC/FBC and the use of modular construction. The estimated time to completion is 3 years 4 months (multi-storey build) or 2 years 8 months (single storey build).

The third scenario shortens the process further, by assuming the use of single-tender waivers to speed up appointments and accelerated working. The estimated time to completion is 2 years 7 months (multi-storey build) or 2 years 3 months (single storey build).

Further information on the assumptions used for the scenarios above are included at Appendix 5.

Further analysis will be required as part of the business case process to determine options for the potential location of the DTC facilities. This will include assessment of whether they can be accommodated within the existing estate or whether further land purchase(s) will be necessary.

3.4. The Financial Case

The purpose of this section is to set out the indicative financial implications of the preferred option (as set out in the economic case section) and the proposed deal (as described in the commercial case section). The detailed analysis of the financial case, including affordability, takes place at OBC stage.

Subject to completion of the SOC, the initial high level financial analysis is set out below.

The estimated outline costs linked to the various options are listed below. Since the presentation of the initial estimates to the F&P Committee meeting of 30/9/20, further work has been undertaken to develop and refine these opening estimates. The outcome of this work to date is therefore reflected in the table below. Note that the capital costs for Option 6 includes an element of the £10m already factored into the current Orthopaedics business case, which is presently being reviewed.

Option	Session	Theatres	Capital Cost (£m)	E&F Cost p.a.(£m)
Option 1 – Business as Usual	BAU	BAU	BAU	BAU
Option 2 - Three session days and 7 day working -all sites	3 sessions x 7 days x 3 years	BAU	tbc	tbc
Option 3– backlog + recurring + Out-patient + endoscopy + theatres	3 sessions x 5 days x 3 years	10	98.6	2.0

Option 4 - Diagnostic centre – Outpatient and diagnostics only	3 sessions x 5 days x 3 years	-	73.8m	1.6
Option 5 -DTC and treatment Centre that has limited theatre capacity to clear backlogs. Service transformation for COVID light DC pathways in current DGH's	3 sessions x 5 days x 3 years	3	81.2	1.7
Option 6 - Diagnostic and treatment centre incorporating the proposals within the existing Orthopaedics business case project	3 sessions x 5 days x 3 years	12	112.8	2.2
Notes: All costs are current as at Sept 2020 (PUBSEC 250) Costs allow for 3 storey modular construction Enabling includes allowance for substructures, structural frame, plant room and engineering supply and externals Costs exclude land costs and legal fees				

Since the discussion at the F&P committee on 30/9/20, further work has been to done to give estimated costs of equivalent leasing arrangements for the capital elements described above. This is set out in the following table.

Option	Enable & Clear (£m)	Lease* (£m)
Option 1 – Business as Usual	N/A	N/A
Option 2 - Three session days and 7 day working -all sites	N/A	N/A
Option 3– backlog + recurring + Out-patient + endoscopy + theatres	30.5	91.6
Option 4 - Diagnostic centre – Outpatient and diagnostics only	24.7	70.1
Option 5 -DTC and treatment Centre that has limited theatre capacity to clear backlogs. Service transformation for COVID light DC pathways in current DGH's	26.5	76.6
Option 6 - Diagnostic and treatment centre incorporating the proposals within the existing Orthopaedics business case project	34.5	103.8

*Estimates based on 5 year term

High-level revenue financial analysis

The assumptions made for the direct treatment costs is that all out-patient activity will be lifted and placed into the diagnostic centre and the same for any recurring theatre activity, therefore the increase cost will be the backlog clearance. The theatre direct treatment costs are summarised at **Appendix 4** and show an indicative cost of £15.3m. This cost is the minimum and will increase as backlogs increase based on Q3/4 capacity plans. The implications for Endoscopy and Radiology are being worked through via the diagnostic and endoscopy business cases.

4. The Management Case

One of the key components of the further development of the DTC model (and associated business case process) will be to examine the impact and risks of the project.

This will need to include an assessment of how the scheme aligns and compliments related business cases already under review or in development; the challenges around workforce in terms of the scale of the development, the implications for delivering a significant step change in activity levels (and the financial implications for delivering this type of transformative change).

Analysis of the potential socio-economic impact is also required to provide a robust evidence base of the benefits that the programme can provide.

The health board will also need to consider the resources that it may wish to commit to support the successful development of the business case. This will be an important consideration given the transformative nature and scale of the proposal and the relevance to other business plans and strategic aims.

Furthermore, the work to develop this proposal may require further detailed consideration of wider plans and service configuration to ensure the successful delivery of longer-term strategic aims and objectives.

5. Next Steps and Finalisation of the Strategic Outline Case

This paper presents the detail of progress made to date, and the development of material to support a Strategic Outline Case.

Key immediate tasks for completion to ensure the completion of a robust SOC include:

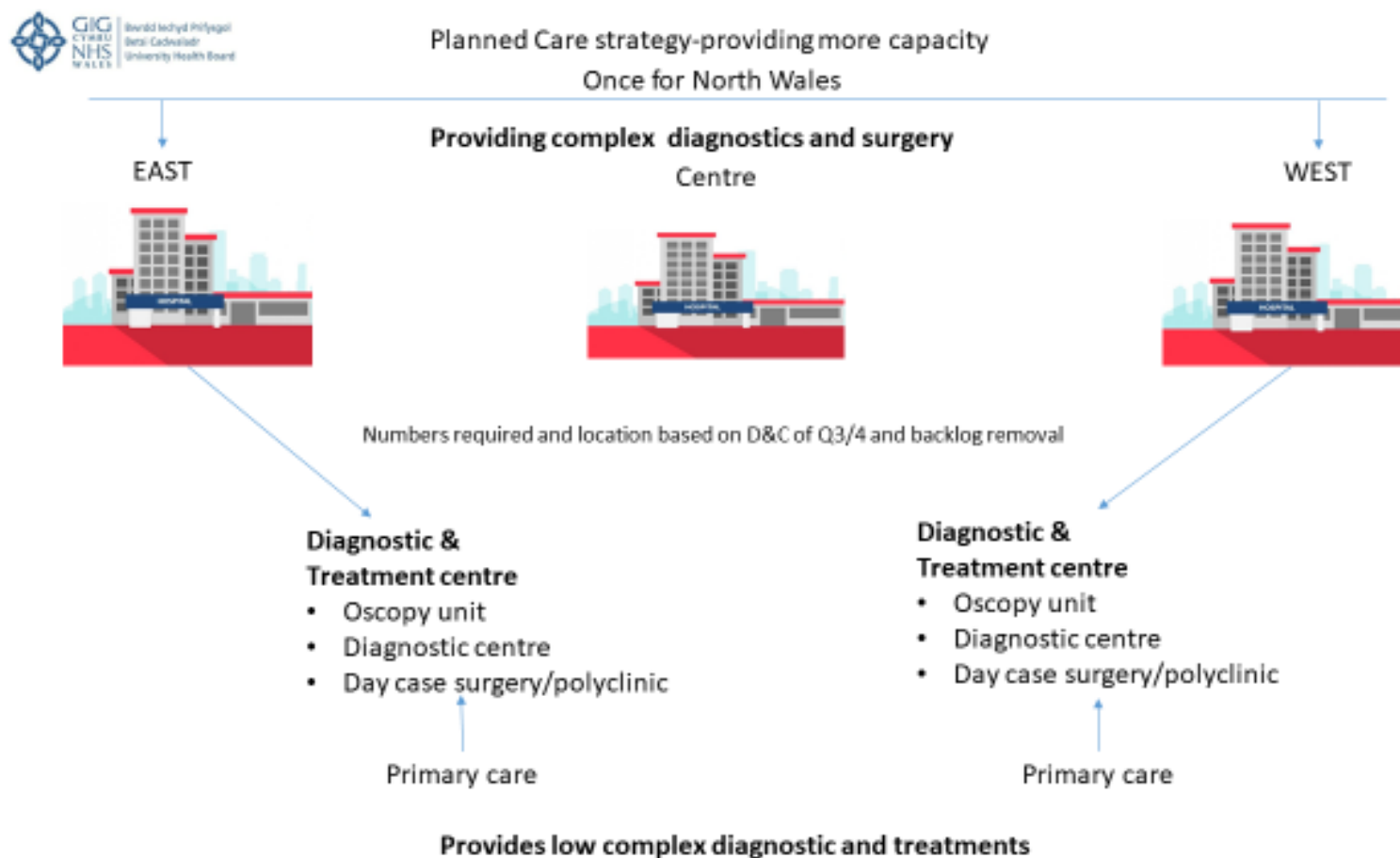
- Confirmation of any updated costings for the high level financial analysis
- Review of project objectives and critical success factors to enable confirmation of the SOC Economic Case
- Capture of any further clinical feedback on emergent models
- Identification of resources to support the development of the business case process, in view of the scale and complexity of the work required
- Review of milestones with key organisation leads

- Consideration of alignment with agreed short/interim term measures being implemented by the health board to address waiting list backlogs.
- Continued engagement with Welsh Office around development of the project
- Development of communication and stakeholder engagement plan

6. Summary and Recommendations

Members of the F&P Committee are asked to:

- i. Note the development of the analysis of options and actions to develop a SOC
- ii. Review and consider the financial estimates included with each option
- iii. Review proposed draft timelines and scenarios (Appendix 5)
- iv. Consider resources to develop the business case process



Service specification of diagnostic treatment centre (28/8/2020)

OPD- 1 stop pathway approach

Specific specialties that require diagnostics & one stop basis

1. Cancer

- Max/fax
- ENT/audiology
- Obs/gynae
- Breast
- Dermatology
- Urology
- Respiratory medicine
- Oncology

2. Non cancer services

- Orthopaedics
- Ophthalmology ARMD IVT service
- Rheumatology (TBC)
- ? *Therapies (gyms) OT*

Cardiology- HF/stress echo
respiratory centre (TBC)

Oscopy suite

Endoscopy
Bronchoscopy
Cystoscopy
Hysteroscopy

Pre-operative assessment

Diagnostic

Radiology
Plain film
CT
Ultrasound
Audiology TBC
Neurophysiology
Phlebotomy
Pharmacy
Other support CSSD (TBC)
Near patient testing

Theatres/OPROC

Day case all specialties
described
Ambulatory orthopaedics
ODTC



Diagnostic and treatment Centre

Example of Summary Analysis of DTC long list options against key actions and recommendations of “Diagnostics: Recovery and Renewal” Report (NHS England, October 2020).

NHS England Report	BCUHB DTC Long List Options					
Diagnostics: Recovery and Renewal – Service Delivery Model	1	2	3	4	5	6
New pathways to diagnosis should be established, building on those already developed as part of the initial phase of the response to COVID19, with virtual consultations and community diagnostics promoted to keep visits to acute hospital sites to a minimum.	?	?	Y	Y	Y	Y
New pathways should separate emergency/acute and elective diagnostics wherever possible to improve efficiency and reduce delays for patients.	?	?	Y	Y	?	Y
Emergency/acute diagnostic services should enable patients to be imaged in A&E without delay and for inpatients to be imaged or to undergo endoscopy on the day of request.	?	?	Y	?	?	Y
Community diagnostic hubs should be rapidly established to provide COVID-19 minimal, highly productive elective diagnostic centres for cancer, cardiac, respiratory and other conditions. For patients with suspected cancer, these should incorporate the rapid diagnostic centre service model.	?	?	Y	?	Y	Y
During recovery, triage tools should be used to prioritise patients according to likelihood of having serious disease. FIT levels for patients with possible bowel cancer and NT-proBNP for heart failure are examples.	Y	Y	Y	Y	Y	Y
Commissioners working with acute trusts and pathology services should ensure that phlebotomy services are easily and safely accessible within the community six days a week.	?	?	Y	Y	Y	Y
New diagnostic technologies should be rapidly evaluated – e.g. near patient virus testing for COVID-19, advanced genomic technologies, artificial intelligence in imaging and endoscopy and wearables.	Y	Y	Y	Y	Y	Y
Option summary 1. Business as usual post-COVID 2. Three session days and 7 day working -all sites 3. Diagnostic and treatment centre – including theatres 4. Diagnostic centre – Outpatient and diagnostics only 5. Diagnostic and treatment Centre that has limited theatre capacity to clear backlogs and service transformation is undertaken to instigate COVID light Day case pathways within the current DGH's 6. Diagnostic and treatment centre incorporating the proposals within the existing Orthopaedics business case project						

Summary of Estimated Direct Treatment Costs
Day case Backlog Cases Longer Than 36 week Wait

Specialty	Backlog Cases @ 31st Aug 20	Cost @ WLI Rates	Estimated Cost
Max Fax	557	1,281	713,785
ENT	1,368	1,243	1,699,740
Breast Surgery	93	1,593	148,180
Gynaecology	322	1,141	367,288
Obstetrics	-	1,243	-
Trauma & Orthopaedics	4,582	1,418	6,496,894
Urology	930	1,083	1,007,218
Ophthalmology	5,760	860	4,952,291
Grand Total	13,612		15,385,396

Notes

Cost includes consultant surgeon (with Pre-op), Anaesthetist, theatre staff & consumables, HSDU, POAC and Day case ward.

No OPD costs included

In conclusion, option 3 has the potential to cost £75.5m, capital and direct treatment costs

Option 5 has the potential to cost £ 22.5m capital and direct treatment costs.

Other business cases as described earlier would contribute to this overall costing, however experts within the organisation have indicated that these are the **minimum** likely costs.

D&TC Programme – Draft timelines

From	To	Duration (Weeks)	Task	Comments
19.10.2020	22.01.2021	14	SOC Completion	Based on achieving: F&P Committee: 22.12.2020 (10.12.2020) Health Board: 21.01.2021 (11.01.2021)
22.01.2021	16.04.2021	12	WG scrutiny and approval	Normal time for scrutiny and approval
19.04.2021	25.06.2021	10	Appointments of Supply Chain Partner, Cost Advisor, Project Manager	Normal time for appointments from the mandated frameworks for this scale of project
28.06.2021	10.12.2021	24	OBC Development	Based on previous projects
13.12.2021	04.03.2022	12	WG scrutiny and approval	Normal time for scrutiny and approval
07.03.2022	03.03.2023	52	FBC Development	Based on previous projects
06.03.2023	26.05.2023	12	WG scrutiny and approval	Normal time for scrutiny and approval
29.05.2023	29.05.2026	156	Build	Based on benchmarking information from WG
01.06.2026	24.07.2026	8	Commissioning	
Total Weeks		300		
Approx.:		5 years 9 months		

Potential Mitigation A				
From	To	Duration (Weeks)	Task	Comments
19.10.2020	31.12.2020	11	SOC Completion - submit to WG end December 2020	Accelerated SOC submission - requires internal agreement
04.01.2021	29.01.2021	4	WG scrutiny and approval	Accelerated approval - requires WG agreement
01.02.2021	09.04.2021	10	Appointments of Supply Chain Partner, Cost Advisor, Project Manager	No change
12.04.2021	08.04.2022	52	Combine OBC / FBC	Requires WG approval. No break point in decision-making before undertaking detailed design work
11.04.2022	13.05.2022	4	WG scrutiny and approval	Accelerated approval - requires WG agreement
16.05.2022	10.11.2023	78	Build: multi-storey	Based on a Modular Build. Land required - 5.6 acres
13.11.2023	08.02.2024	4	Commissioning	Accelerated
16.05.2022	12.05.2023	52	Build: Single storey	Based on a Modular Build. Land required - 5.6 acres
15.05.2023	09.06.2023	4	Commissioning	Accelerated
Total Weeks		163	(78 week build, multi-storey)	
Approx.:		3 years 4 months		
Total Weeks		137	(52 week build single storey)	
Approx.:		2 years 8 months		

Potential Mitigation B				
From	To	Duration (Weeks)	Task	Comments
19.10.2020	31.12.2020	11	SOC Completion - submit to WG end December 2020	Accelerated SOC submission - requires internal agreement
04.01.2021	29.01.2021	4	WG scrutiny and approval	Accelerated approval - requires WG agreement
01.02.2021	12.02.2021	2	Appoint Contractor, Cost Advisor, Project Manager	Requires WG/HB to agree single tender waivers/not using the framework
15.02.2021	11.02.2022	52	Combine OBC / FBC	Requires WG agreement
14.02.2022	11.03.2022	4	WG scrutiny and approval	Accelerated approval
14.03.2022	05.05.2023	60	Build: multi-storey modular: working accelerated	Requires agreement to accelerated working and the resulting cost premium.
08.05.2023	02.06.2023	4	Commissioning	Accelerated
14.03.2022	16.12.2022	40	Build: Single storey modular: 24/7 working	Requires agreement to accelerated working and the resulting cost premium.
19.12.2022	20.01.2023	5	Commissioning	Accelerated
Total		137	(60 week build multi-storey)	
Approx.:		2 years 7 months		
Total		118	(40 week build single storey)	
Approx.:		2 years 3 months		

DTC Draft Timelines - Explanatory Note

The timelines above outline three scenarios for how long it would take from here to have operational DTCs

The first scenario assumes that the current guidelines and processes are followed in full - for example a 3-stage business case process (SOC, OBC, FBC), and appointment of contractors from the framework. The estimated times for the production of business cases and construction are based on previous experience in the Health Board and elsewhere in Welsh Government. The estimated time to completion is 5 years 9 months.

The second scenario shortens the process, through assumptions about accelerated governance/approvals, producing a combined OBC/FBC and the use of modular construction. Two sub-options are shown, one where there is sufficient land to allow a single-storey construction, and one where multi-storey construction is required. The estimated time to completion is 3 years 4 months (multi-storey build) or 2 years 8 months (single storey build).

The third scenario shortens the process further, by assuming the use of single-tender waivers to speed up appointments and accelerated working. Again 2 sub-options are shown, as above. This is likely to incur a cost-premium (which has not been estimated). The estimated time to completion is 2 years 7 months (multi-storey build) or 2 years 3 months (single storey build).