

Outline Business Case North Denbighshire Community Hospital Betsi Cadwaladr University Health Board

November 2018

Draft for Board Approval

Contents

		Page
1	Executive Summary	3
2	Structure and Contents of the Document	14
3	The Strategic Case	16
4	The Economic Case	68
5	The Commercial Case	110
6	The Financial Case	115
7	The Management Case	124
8	Conclusion and Recommendation	141
9	Appendices	142

1. Executive Summary

1.1 Introduction

This Outline Business Case (OBC) proposes the investment of £40.24 million in the development of a North Denbighshire Community Hospital (NDCH) in Rhyl, creating a healthcare and well-being campus on and around the site of the Royal Alexandra Hospital (RAH).

The project will deliver a range of expanded and redesigned services within new and existing facilities on the RAH site, supporting regeneration plans for the local area. The scheme is informed by various national and local drivers, notably "A Healthier Wales: Our Plan for Health and Social Care", and the Health Board's overarching 10-year clinical strategy, "Living Healthier, Staying Well" (LHSW). It supports the shift of resources to community settings, the movement of care closer to home, the development of seamless multi-agency services and the emphasis on a well-being system. It also fulfils the commitments made by the Health Board in 2013 following public consultation as part of "Healthcare in North Wales is Changing" (HCiNWiC). Specifically, it was agreed as part of that consultation that an inpatient facility would be provided following the closure of Prestatyn Community Hospital in 2013 and closure of inpatient wards at the RAH in 2010.

Subject to the approval of this case, the Full Business Case will be submitted in March 2020. The new build elements of the proposal are planned to open in April 2022, and the refurbishment of the existing hospital will be completed in December 2022.

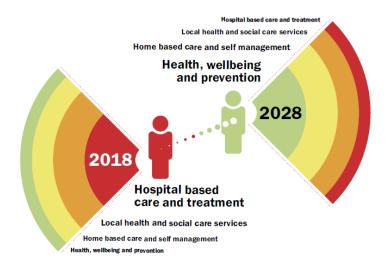
1.2 The Strategic Case

This section describes the investment objectives of the scheme, sets out how the project fits with national and local strategies, makes the case for change, and specifies the scope of the project.

The investment objectives are as follows:

- 1. To provide safe and sustainable services in response to the current and future health and well-being needs of the local population;
- 2. To further develop multi-agency, integrated, responsive primary and community care services in the area:
- 3. To increase the range of local services, thereby reducing the reliance on the DGH:
- 4. To deliver services in an environment which is fit for purpose and enhances health and well-being for service users and staff;
- 5. To move care closer to people's homes, including inpatient bed based care;
- 6. To improve economic, social, environmental and cultural well-being, as outlined in The Future Generations Act.

Nationally the key strategic drivers behind these objectives are outlined in: A Healthier Wales; The Well-being of Future Generations Act (Wales); The Social Services and Well-being Act (Wales); Our Plan for a Primary Care Service for Wales; and the Inquiry into Primary Care Clusters, National Assembly for Wales. In particular A Healthier Wales outlines a vision which includes the shift of resources to community settings, the movement of care closer to home, the development of seamless services and the emphasis on a well-being system. This is summarised in the following diagram:



Locally the primary strategic drivers are articulated in Living Healthier, Staying Well (LHSW), the Health Board's overarching 10-year clinical strategy, approved in 2018. This includes a strong emphasis on Care Closer To Home, in line with A Healthier Wales.

LIVING HEALTHIER, STAYING WELL:

We will influence.... We will commission and work in partnership.... We will provide.... Health and well-being Care closer to home Care for more serious health needs People, their families, carers, and communities Individual and Lifestyle Social & community networks Living & working Socio-economic conditions factors

A key element of that programme is the creation of a series of Health and Well-being Centres, the largest of which is defined as "a medium to large local campus, based around existing Primary care practices, Health Centres or Community Hospitals". The following table summarises the envisaged range of services, all of which will be provided at NDCH:

H&WB Centre Services	Level 1	NDCH
Rehabilitation and re-ablement providing both inpatient and day facilities	✓	✓
Outpatient / Assessment appointments	✓	✓
Higher level services including advanced diagnostics e.g. x-ray	✓	✓
Minor Injuries and Illness services	✓	✓
Access to consultant expertise through a Virtual Ward Round	✓	✓
Telehealth facility	✓	✓
Access to multidisciplinary team	✓	✓
GP services will have additional wrap around from community services	✓	✓
Navigation and Triage service	✓	✓
Social prescribing	✓	✓
Health promotion	✓	✓
Access to information and advice	✓	✓

The project is also aligned to the strategies of other organisations - in particular the local authority's plans for the regeneration of Rhyl and the need to provide a solution to the sustainability of the Royal Alexandra Hospital building.

The case of need is driven by the gap between the future service model, as articulated in both A Healthier Wales and LHSW, and the current service provision in

North Denbighshire. It also takes account of the poor physical condition of the Royal Alexandra Hospital. This has resulted in the following scope for the project:

- Re-provision of community beds in Rhyl, including repatriation of beds which transferred to Holywell and Denbigh when Prestatyn Community Hospital and the RAH wards closed
- Provision of a Same Day service to reduce admissions and support the reduction of A&E attendances at YGC
- The potential provision of an Ambulatory Care Unit, subject to the outcome of the pilot being implemented in Llandudno
- Provision of a Treatment Zone to support BCUHB's changing model of care for community nurses to undertake more complex activity in a community hospital setting
- Provision of a Level 1, 2 and 3 sexual health service
- Provision of an enhanced outpatient therapy service
- Provision of a Day Therapy Assessment Unit (IV Suite) to provide care closer to home for those living in the Rhyl and Prestatyn area
- Re-provision and extension of the Community Dental Service
- Re-provision and extension of Radiology services
- Re-provision of services currently undertaken on the RAH site:
 - Outpatients
 - Older People's Mental Health Services
 - Adult Psychology Services
- Provision of Advice and Information through third sector presence onsite and close working with the Community Resource Team, co-located on the campus
- Delivery of preventative programmes such as smoking cessation to support selfmanagement
- Creation of multi-disciplinary accommodation to enable integrated working between primary, community, local authority and third sector care
- Car parking enhancements
- Improvement to the physical environment for patients and staff, including achieving a greater level of statutory compliance

1.3 The Economic Case

The Economic Case focuses on the main options available for delivering the objectives of the scheme, in order to identify the option which gives the best Value for Money.

A long-list of potential options has been evaluated, looking at: scope; service solution; service delivery; implementation; and funding. The analysis concluded that all shortlisted options should be for a single stage implementation funded by public capital, with the clinical services provided by the Health Board. It is also clear, following discussion with the Local Authority, that any planning application made in regard to this project would need to include the future of the RAH, and that an unoccupied building on the sea front would not support the regeneration plans for the area. All shortlisted options therefore locate the development on the RAH site, with a combination of refurbishment and new building. Four options were shortlisted, and the following is a brief summary of the evaluation.

- The Status Quo or business as usual: this does not address any of the objectives of the project, but is included as a baseline against which the other shortlisted options are compared.
- 2. Refurbish and extend the RAH to provide clinical and office accommodation. Provide the full scope of services outlined in the strategic section of the case: this design was the preferred way forward in the SOC. However a more in-depth analysis, undertaken by Interserve following the approval of the SOC, indicates that issues with the exisiting building would significantly constrain the design and prove costly.
- 3. Refurbish the RAH and provide a new build on the site for clinical accommodation. Provide a greater scope of services than is outlined in the strategic case: the range and scale of services included in the scope of the project has been determined through a rigorous process of analysis, and an increase (e.g. providing more than the 28 inpatient beds proposed) cannot be justified as value for money.

4. Refurbish the RAH and provide a new build on the site for clinical accommodation. Provide the full scope of services outlined in the strategic case: this design means that clinical services will be delivered in new fit for purpose accommodation, with office accommodation provided in upgraded facilities in the RAH. The condition of the RAH building will be improved, and the solution supports the regeneration plans for the area. It delivers the full scope of the project, and is the preferred option.

1.4 The Commercial Case

This section of the OBC outlines the proposed contract strategy in relation to the preferred option. The aim of the Commercial Case is to secure the optimal deal for the preferred option.

In accordance with the Welsh Government NHS Infrastructure Investment Guidance the required services have been procured via the *Designed for Life: Building for Wales 3 Framework*. The key appointments are as follows:

- Interserve Construction Limited has been appointed as the Supply Chain Partner who will undertake the construction;
- Gleeds Management Services are providing Construction Project Management;
- Gleeds Cost Management are the Cost Advisors.

The contract will be the National Engineering Contract 3 (NEC 3) Option 3.

The full commercial case outlines: the approach adopted to risk transfer, the charging mechanisms, the proposed contract lengths; and the procurement strategy and implementation timelines. In summary, the implementation timeline is as follows:

Milestones	Key Dates
Submission of Outline Business Case	November 2018
WG Approval of Outline Business Case	January 2019
Submission of Full Business Case	March 2020
Approval of Full Business Case	June 2020
Commissioning – new clinical build	April 2022
Complete refurbishment of RAH	December 2022

1.5 The Financial Case

The purpose of this section is to set out the financial implications of the preferred option (as outlined in the Economic Case) and the proposed deal (as described in the Commercial Case).

In terms of capital, the total cost of the scheme is £40.24 million.

From a revenue perspective, the full year costs from 2023, when the building is complete and the service model fully implemented, is as follows:

Revenue Costs	Current Costs (£000s)	Proposed Costs (£000s)	Variance (£000s)
Inpatient Facilities (excludes costs of ACU)	0	1,542	1,542
Same Day Care Service	0	268	268
Treatment Zone/Outpatients	398	398	0
Therapies: Outpatients	621	621	0
Older People Mental Health (Day Services)	230	230	0
Day Therapy Assessment Unit	0	176	176
Dental	779	779	0
Sexual Health	495	495	0
Clinical Support	192	395	203
Estate and Facilities Costs	411	1,000	589
Sub Total	3,126	5,904	2,778
Contingency	0	15	15
Depreciation Charge	351	1,164	813
TOTAL	3,477	7,083	3,606

This will be afforded from a range of sources, as follows:

	£000s
Total Additional Cost	7,083
Existing Funding	3,477
WG Depreciation Charge Funding	813
Net Additional Revenue Costs	2,793
Reduction in escalation beds within the Acute Hospital setting	337
Reduction in Nurse Bank & Agency costs through improved recruitment	107
and productivity	107
Community bed variable-cost savings through efficiencies and	135
productivity	133
Savings from the closure of community dental clinics and transfer into NDCH	16
Impact of NDCH on CHC activity; the clinical model for the NDCH is	
expected to provide enhanced step up / step down facilities directly	
impacting on the level of patients discharged from Glan Clwyd directly	200
into CHC packages, thereby generating further cash-releasing CHC	
savings for re-investment	
Alternative community hospital beds - 10 beds at Holywell and 6 at	385
Denbigh were opened when beds were originally closed in RAH, with	
the intention of releasing these resources back to NDCH when complete	
Primary Care Treatment Zone to be funded from the Primary Care	130
Pathfinder resources, given its clear and direct link to reducing the	
pressures on primary care services within the area	
Sub-Total Savings / Alternative Funding Sources	1,310
Net Revenue Shortfall (before Care Closer to Home)	1,483
Maximising the benefits of the Care Closer To Home strategy to further	
reduce escalation beds, DTOC, improve Average Length of Stay and	894
Patient Flow, and through a reduction in other community hospital beds	
Net Revenue Shortfall	589
Covering:	
Estates and Facilities (net increase and retaining RAH)	589

In summary, the case entails a net increase in revenue costs in four years' time of £589,000. This net increase recognises the estate and facilities cost implications of developing a new build and retaining the existing RAH site. The strategic case for this development reflects a critical part of the Board's overall future clinical services model, in particular the intent to provide care closer to home and reduce dependence on the acute sector. Living Healthier Staying Well sets out plans to transform the way in which services are delivered in North Wales to ensure excellent outcomes for patients and a stable and sustainable workforce. This strategy will be delivered within the overall financial resource which is available to the Health Board. The early development of the North Denbighshire Community Hospital will bring additional costs and these costs will be managed as part of the Board's overall longer term financial strategy of returning to a sustainable recurring financial position, in a timescale to be agreed with Welsh Government.

1.6 The Management case

This part of the Business Case addresses the achievability of the scheme. It sets out the actions that will be undertaken to ensure the successful delivery of the project.

The project will be managed in line with BCU's Procedure Manual for Managing Capital Projects, which outlines: the project governance framework; the approach to engagement and communication; the project plan; the arrangements for benefits realisation; the approach to the management of risk; and post-project evaluation.

1.7 Recommendation and Conclusions

This OBC builds on the case outlined in the SOC. The strategic case for change has been updated to reflect the latest thinking in terms of models of care to support care closer to home, and fulfils the Health Board's commitments following the closure of Prestatyn Hospital as part of Healthcare in North Wales is Changing. The economic case provides a robust assessment of both the service model options and the physical build solutions and reaches a clear preferred option in which the appropriate range and scale of services are provided through a combination of a new-build clinical facility and office accommodation in a refurbished RAH. The analysis outlined in the case gives robust capital and revenue costs. The management case provides

assurance that the project is achievable, and that the known risks and issues are being robustly managed. This business case is recommended for approval.

2. Structure and Contents of the Document

There are 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 SOC establishes the strategic context, makes a robust case for change and provides a suggested way forward. The SOC for this scheme was approved in 2013. The purposes of this OBC are to:

- Identify the option which optimises value for money (VfM)
- Prepare the scheme for procurement
- Put in place the necessary funding and management arrangements for the successful delivery of the scheme.

The FBC: sets out the negotiated commercial and contractual arrangements for the deal; demonstrates that it is 'unequivocally' affordable; and puts in place the detailed management arrangements for the successful delivery of the scheme. Subject to OBC approval, the FBC for this case will be produced in March 2020.

The Outline Business Case has been prepared using the agreed standards and format for business cases, as set out in the NHS Wales Infrastructure Investment Guidance. This approved format is the *Five Case Model*, and comprises the following key components:

- The Strategic Case section this sets out the strategic fit and case for change,
 together with the supporting investment objectives for the scheme
- The **Economic Case** section this demonstrates that the organisation has selected a preferred option which optimizes public value for money
- The **Commercial Case** section this outlines that the preferred option will result in a viable procurement and well-structured deal
- The Financial Case section this demonstrates that the preferred option will result in a fundable and affordable deal

• The **Management Case** section - this demonstrates that the scheme is achievable and can be delivered successfully in accordance with accepted best practice

3. The Strategic Case

3.0 Introduction

The purposes of the Strategic Case are: to explain how the scope of the project fits within the existing business strategies of the organisation; and to provide a compelling case for change, in terms of existing and future operational needs.

The Strategic Case is split into three sections:

A: A brief summary of key strategic changes since the production of the SOC in 2013 B: The strategic context: this contains an overview of BCUHB. It also confirms that there is a strategic fit between the proposed project and both national and local policies and objectives

C: The case for change: this section summarises the investment objectives, highlights the challenges with the status quo, outlines the potential scope of the project, and summarises the benefits, risks, constraints and dependencies of the project.

Part A: Strategic Changes since the Production of the SOC

There have been various developments in the strategic environment in the five years since the SOC was approved in 2013. Most notably 2018 saw the publication of both "A Healthier Wales: Our Plan for Health and Social Care" by Welsh Government, and the Health Board's overarching 10-year clinical strategy, "Living Healthier, Staying Well" (LHSW). These national and local strategies both confirm that the key drivers for the SOC – the shift of resources to community settings, the movement of care closer to home, the development of seamless services and the emphasis on a well-being system – remain fundamentally unchanged. This brief summary of the key strategic drivers is expanded on in part B.

There have, however, been important developments in both the local context and specific strategies for individual services in the last 5 years, which have resulted in changes to the scope of the project. These include:

• The changing model of care for Older People Mental Health inpatients

- The evolution of the model of care for supporting people to stay independent for longer, and therefore reduce hospital admissions
- Changes in the scope required for this project to respond to the decisions made as part of the YGC Re-Development project, which has affected both therapies and sexual health services
- Changes in the requirements for Dental services
- A review of the bed numbers required for the local population.

The specifics of these changes are outlined in section C, which describes the revised scope of the project.

Part B: Strategic Context

3.1 Organisational overview

BCUHB was established on 1st October 2009 and is the largest health organisation in Wales providing a full range of primary, community, acute and mental health services for a population of approximately 700,000 across North Wales and some parts of North Powys. BCUHB is responsible for the operation of three Acute Hospitals as well as 19 community hospitals, over 90 health centres, clinics, community health team bases and mental health units.

BCUHB employs approximately 16,500 staff and has an annual revenue budget of about £1.3 billion. The Board's operational management structure consists of three Area Directorate teams: West (Gwynedd and Ynys Môn); Centre (Conwy and Denbighshire) and East (Flintshire and Wrexham). Each acute hospital has its own Hospital Directorate team managing Wrexham Maelor Hospital, Ysbyty Glan Clwyd (Rhyl) and Ysbyty Gwynedd (Bangor).

This business case focuses on the provision of a range of community and mental health services in North Denbighshire, which is part of the Central Area. The coastal locality of North Denbighshire includes Rhyl, Prestatyn, Rhuddlan, Dyserth and surrounding villages. Some residents of Abergele and Kinmel Bay also use

community services at the Royal Alexandra Hospital in Rhyl, as do some people from St. Asaph, Bodelwyddan and parts of North Flintshire.

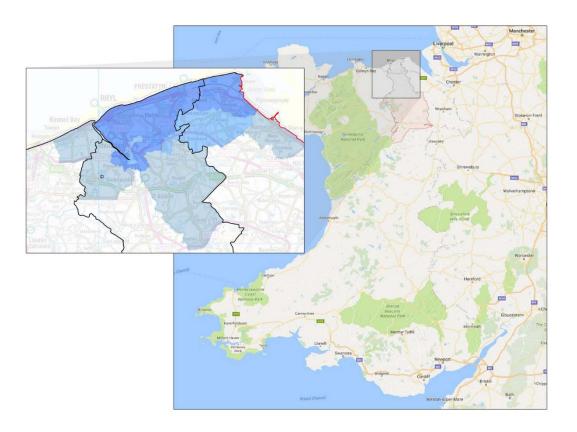


Figure 1: Map of North Denbighshire

3.1.1 Primary Care

There are currently 6 GP practices delivering primary care services in North Denbighshire:

Practice	Address		
Clarence Medical	West Kinmel Street, Rhyl LL18 1DA		
Centre	West Killiner Street, Killyr EE 10 15/1		
Healthy Prestatyn	Ty Nant, Nant Hall Road, Prestatyn LL19 9LG		
lach	Ty Want, Want Hall Woad, 1 Testatyli LE19 9EG		
Park House Surgery	26 Nant Hall Road, Prestatyn LL19 9LN		
Madryn House	6 Madryn Avenue, Rhyl LL18 4RS		
Surgery	o Madryn Avende, Knyr EE 10 4KG		
Lakeside Medical	203 Wellington Road, Rhyl, LL18 1LR		
Centre	203 Wellington Road, Rifyl, EL 10 TER		
Kings House	Kings Avenue, Rhyl LL18 1LT		
Surgery	Milys Aveilde, Milyi Ello Illi		
Healthy Rhuddlan	Rhuddlan Surgery, 7 Vicarage Lane, Rhuddlan, LL18		
lach	2UE		

Table 1: GP Practices in North Denbighshire

Primary care services in the locality are facing increasing pressures and, as such, need to transform the way services are provided. These challenges include:

- an ageing population, growing co-morbidities and increasing patient expectations,
 resulting in a large increase in consultations, especially for older patients
- workforce pressures including recruitment and retention challenges
- challenges associated with provision of a mixed economy of GMS and hospital managed practices
- increasing pressure on NHS financial resources
- the need to address inequalities in access of primary care

One of the aims of this project is to alleviate the growing pressures by enabling general practice to play an even stronger role at the heart of more integrated community services that deliver better health outcomes, a more holistic model of care, excellent patient experience and the most efficient possible use of resources.

This project aims to improve integration with primary care in the following ways:

- The service model offers the opportunity to treat minor injuries and minor ailments at the hospital and this could reduce pressure on an already overburdened primary care service
- GPs will manage the inpatient beds occupied by their patients and this model will enable an easier transfer into community settings for many patients, reducing the average length of stay.
- Collaboration with GPs will engender a sensitive and appropriate local service appreciated by patients, carers and families, as GPs are well placed to understand and respond to the overall needs of the people they know.
- Activities such as leg ulcer management, wound care, phlebotomy and ear syringing will be delivered under one roof, affording efficiency through scale of service and helping to sustain GP practices
- The Community Resource Team onsite will work closely with the Primary Care cluster. Onsite presence of local GPs will engender closer working relationships with Primary care at the heart of the community response.

3.2 Demography and Health Needs

There are a number of significant issues affecting the North Denbighshire locality which impact on the shape of future service provision for this community. A particular feature of the population is the significant proportion of older people and the high levels of multiple-deprivation.

Population

The population of Denbighshire is 94,800. 20% of residents are over the age of 65. Older persons are disproportionately affected by chronic conditions. The Welsh Health Survey in 2015 reported that 82% of respondents aged 65 years and over have a chronic condition. 54% of this cohort suffer from two or more co-morbidities. If current trends continue the number of people living with chronic conditions will

continue to increase in the future, with people living longer and developing more than one chronic condition¹.

StatsWales ² projections show that the number of over 65s living in Wales will rise by 27% over the next 20 years. It is anticipated that Denbighshire's overall population is projected to increase by 2.7% (around 2,500 people) by 2039. The population aged 75 years and over is projected to increase by 7,500, while the population aged 18 to 74 years is projected to decrease by 4,800.³ These population changes, which are mirrored across North Wales, inform the agreed clinical model to move healthcare delivery out of hospital settings and into local communities.

Deprivation

The link between deprivation and poor health is well recognised. People in the most deprived areas have higher levels of mental illness, hearing and sight problems, and long-term conditions, particularly chronic respiratory diseases, cardiovascular diseases, Type 2 diabetes and arthritis. Healthy life expectancy in males is 19 years lower in the most deprived areas of Wales compared with the least deprived areas; in females the gap is 18 years⁴.

The Welsh Index of Multiple Deprivation 2014⁵ highlights that Rhyl West has high levels of deprivation. For example, Rhyl West 1 area has the 4th highest level of income deprivation in Wales. The coastal towns of Rhyl and Prestatyn are home to communities which are amongst the most deprived in Wales with high levels of health, housing and income deprivation, and high levels of multiple deprivation exist particularly in the areas of West/South West/East Rhyl, Abergele and Kinmel Bay. The focus on health, well-being and education will have a positive impact on

prevention of health issues associated with areas of social deprivation and poverty.

¹ Public Health Wales Observatory (2013) GP Cluster Profiles: Betsi Cadwaladr University Health Board

 $^{^2 \, \}underline{\text{https://gov.wales/docs/statistics/2016/160929-local-authority-population-projections-2014-based-en.pd} \\$

³ North Wales population assessment Draft 0.1 24 November 2016

⁴ Public Health Wales Observatory (2013) GP Cluster Profiles: Betsi Cadwaladr University Health Board

⁵ https://gov.wales/statistics-and-research/welsh-index-multiple-deprivation/?lang=en

Tourism

The towns of Rhyl and Prestatyn in North Denbighshire are tourist resorts. Consequently the number of people accommodated in the towns rises in the summer months. Analysis of Emergency Department data at YGC shows that there is a spike of those with postcodes outside of North Wales during peak holiday season. This equates to an average of nine additional people per day during holiday season from April to September, peaking at 15 during August. It more than doubles the footfall from local Rhyl/Prestatyn postcodes during August and increases by nearly one-third during other peak season months, supporting the development of the Same Day Service to be delivered from the proposed NDCH in order to divert activity from the YGC Accident and Emergency department.

3.3 Business strategies

3.3.1 National Policy Drivers

This section of the business case outlines the national policy context which has informed the development of the proposal. It briefly summarises the following key national policies, and their relevance to the case:

- The National Strategy A Healthier Wales which builds on the Parliamentary Review of Health and Social care in Wales, 2018 ('Parliamentary Review')
- The Well-being of Future Generations Act (Wales) 2015
- The Social Services and Well-being Act (Wales) 2014
- Our Plan for a Primary Care Service for Wales (2015)
- Inquiry into Primary Care Clusters, National Assembly for Wales (October 2017)

The National Strategy A Healthier Wales, 2018 ('A Healthier Wales')

A Healthier Wales builds on the Parliamentary Review. It sets out the vision to deliver against four mutually supportive goals, 'the Quadruple Aim'. They are to:

- improve population health and well-being through a focus on prevention;
- improve the experience and quality of care for individuals and families;

- enrich the well-being, capability and engagement of the health and social care workforce; and
- increase the value achieved from funding of health and care through improvement, innovation, use of best practice, and eliminating waste.

It also outlines ten national design principles to drive change and transformation:

- Prevention and early intervention acting to enable and encourage good health and well-being throughout life; anticipating and predicting poor health and well-being.
- Safety not only healthcare that does no harm, but enabling people to live safely
 within families and communities, safeguarding people from becoming at risk of
 abuse, neglect or other kinds of harm.
- Independence supporting people to manage their own health and well-being, be resilient and independent for longer, in their own homes and localities, including speeding up recovery after treatment and care, and supporting selfmanagement of long term conditions.
- Voice empowering people with the information and support they need to
 understand and to manage their health and well-being, to make decisions about
 care and treatment based on 'what matters' to them, and to contribute to
 improving our whole system approach to health and care; simple clear timely
 communication and co-ordinated engagement appropriate to age and level of
 understanding.
- Personalised health and care services which are tailored to individual needs
 and preferences including in the language of their choice; precision medicine;
 involving people in decisions about their care and treatment; supporting people to
 manage their own care and outcomes.
- Seamless services and information which are less complex and better coordinated for the individual; close professional integration, joint working, and information sharing between services and providers to avoid transitions between services which create uncertainty for the individual.
- **Higher value** achieving better outcomes and a better experience for people at reduced cost; care and treatment which is designed to achieve 'what matters' and

which is delivered by the right person at the right time; less variation and no harm.

- Evidence driven using research, knowledge and information to understand what works; learning from and working with others; using innovation and improvement to develop and evaluate better tools and ways of working.
- Scalable ensuring that good practice scales up from local to regional and national level, and out to other teams and organisations.
- Transformative ensuring that new ways of working are affordable and sustainable, that they change and replace existing approaches, rather than add an extra permanent service layer to what we do now.

The Well-being of Future Generations (Wales) Act 2015 (WFG Act)

The WFG Act requires all public bodies to change the way they work in order to improve well-being for the whole population, by acting in accordance with the sustainable development principle, and meeting the 7 Well-being Goals (see figure below):



Figure 2: Well-Being Goals

By considering the 7-well-being goals, BCUHB can better meet the needs of its current population without compromising the ability of future generations to meet their own needs. Sustainable developments connect the environment in which we

live, the economy in which we work, the society which we enjoy and the cultures that we shared to the people that we serve and their quality of life.

The Social Services and Well-being (Wales) Act 2014 (SSWB Act)

The Social Services and Well-being (Wales) Act provides the legal framework for improving the well-being of people who need care and support, and carers who need support. Its aim is to maximise each individual's well-being by increasing their sense of control; strengthening their resilience and ability to access resources to cope when needed. People will have more say in the care and support they receive. The Act also promotes a range of help available within the community to complement and reduce the need for formal care.

The 6 Local Authorities and the Health Board have developed a Population Needs Assessment which describes the care and support needs of the North Wales population. The assessment has informed the development of the Health Board's "Living Healthier Staying Well" strategy (described below) and informs the development of this project.

The implementation of the Act requires a significant cultural and behavioural shift within the Health Board, especially in relation to working with the public with other strategic partners. The co-location of Community Teams, including the Single Point of Access offering information, advice and assistance at the new hospital, represents an opportunity to create conditions which can improve the well-being of both current and future generations in North Wales.

Our Plan for a Primary Care Service for Wales (2015)

In 2015, Welsh Government published "Our Plan for a Primary Care Service for Wales up to 2018." This highlighted the current and prospective challenges in the strategic environment in which the NHS in Wales operates. In particular:

- The challenges of the economic environment in which the NHS is operating
- The pressures of increased demand in Primary Care, as a result of the success of drug treatment in enabling the population to live longer. In addition, more people are being diagnosed with one or more long term conditions like

diabetes and dementia and frail older people increasingly have more complex needs

- Rising public expectations
- A demographic picture of the GP workforce which indicates that significant numbers of GPs are coming close to retirement age at the same time as parts of Wales are experiencing difficulty in recruiting GPs

Underpinning this plan, the overall principles are defined as:

- Prevention, early intervention and improving health, not just treatment
- Co-ordinated Care where generalists work closely with specialists and the wider support in the community to prevent ill health, reduce dependency and effectively treat illness
- Active involvement of the public, patients and their carers in decisions about their care and well-being
- Planning services at a community level of 25,000-100,000 people which the King's Fund has determined as the optimum size for planning and provision of Primary Care
- Prudent Healthcare

The WG Plan details the need for GP practice cluster networks to develop their local plans to improve the health and well-being of the population and to reduce health inequalities. The cluster architecture of North Wales, consisting of 14 clusters, is therefore key to shaping how services are delivered in the future and in determining the key milestones for delivery.

North Denbighshire Cluster members have been closely involved in the development of this proposal. The local practices are playing a key role in the development of integrated Community Resource Teams for the local area, working closely with Therapy services, District Nurses, Social Care and Children's Services Teams to deliver a holistic service, wrapped around and responding to the needs of the individual and with local knowledge and understanding of people and place at the heart of the service model. This ethos will be an integral aspect of the seamless service provision in the new hospital and the links will be tightened between Community and Hospital teams through co-location and active GP involvement in

bed management, the Same Day Service and the Community Resource Team onsite.

Additional Welsh Guidance

Other significant national policy drivers which have influenced this proposal are listed below:

- Together for Mental Health A Strategy for Mental Health and Well-being in Wales', Welsh Government (2012)
- Together for Health, Welsh Government, 2012, placing primary and community services at the heart of the health care delivery; emphasising the importance of prevention, early diagnosis and high quality services, with patient feedback as a key driver for continuous improvement
- Setting the Direction: Primary and Community Services Strategic Delivery Programme 2010, (Welsh Government)
- Designed to Add Value: A Third Dimension for One Wales: A strategic direction for the third sector in supporting Health and Social Care, 2008, (Welsh Government)
- Designed for Life, Welsh Assembly Government, 2005
- Beyond Boundaries: Citizen Centred Local Services for Wales; Welsh Assembly Government, 2005
- The Welsh Language Measure (Wales) 2011
- Taking Wales Forward (2016-2017)

3.3.2 Local Strategic Drivers

This section of the business case outlines the key local drivers that inform the business case. Some of them are the local interpretation and application of the national policies outlined above. Others are more specific to the circumstances in North Denbighshire, such as the impact of the Glan Clwyd Hospital Redevelopment project.

Living Healthier, Staying Well

"Living Healthier, Staying Well" (LHSW) is the Health Board's overarching ten-year clinical strategy, approved in May 2018. It describes how health, well-being and healthcare might look in ten years' time and how we will start working towards this now. Having a clear and well thought out strategy will help us to achieve our objectives for the NHS in North Wales and contribute to sustaining safe, effective patient care. It is driven by the following set of key principles which will be applied to everything we do:

- We promote equality and human rights
- We will actively provide Welsh language services to address the needs of our welsh speaking population in line with the Welsh Language (Wales) Measure 2011
- We will work together with local authorities, other services and organisations, including third sector
- We listen to what matters to people and involve them in decisions
- We will address the needs of individuals and their carers
- We use evidence of what works so we can improve health and learn
- We work to improve services
- We use our resources wisely (finances, buildings and staff)
- We will work with the principles of prudent healthcare

We will also ensure that the strategy programmes are consistent with, and will help us work towards, the Quadruple Aim as set out in a "Healthier Wales: our plan for Health and Social Care".

Delivering the strategy will be supported by partnership working with people and partner organisations and other public services, the third sector, independent organisations.

The Strategy is structured around three main programmes:

Health Improvement and Health Inequalities

We will use our influence to promote health and well-being, physical, mental and emotional, for all. We will focus on the broader aspects of health improvement and

prevention, and seek to support those with the greatest health needs first. This sits alongside our contribution to the Well-being Plans developed for the broader population by the Public Service Boards.

Care Closer to Home

As and when people begin to need support or health care to stay healthy, we will provide as much of this close to people's homes as is safe and effective to do so. Care Closer to Home (CCTH) will work with people to prevent, detect early and manage physical and mental health needs. This also recognises the broader factors that influence health. This sits alongside the partnership plans for provision of care and support to individuals and their carers – for example, veterans, and people with learning difficulties or disabilities – which are being developed with the Regional Partnership Board.

Care for More Serious Health Needs

When health needs are more serious and people need hospital care, from more specialist teams working in the community. People want the safest and highest quality of care possible and a good experience. They will be treated by the right person, in the right place, at the right time and with the right facilities.

The strategy recognises the importance of adapting the planning and delivery of services to the differing needs of people at different stages of life. There are two supporting frameworks which have been developed to reflect this:

- Children and young people supporting the best start in life
- Ageing well supporting people aged 50 and over to stay healthy and independent as long as possible

Together with a further strategic framework to reflect the importance of addressing holistic health needs:

Mental health and well-being

The Care Closer to Home programme and the three supporting frameworks will be taken forward through partnership working, as part of the North Wales Region Partnership Board.

This business case responds to the drive to provide CCTH in particular.

Care Closer to Home

The scope of CCTH is very broad; it places the person and carer, whenever appropriate, at the centre with all available primary and community services (and some secondary care services) inputting and co-ordinating care and support to meet identified needs. Needs can range from information, advice and education through to more specific interventions such as diagnostics, minor injury services, community-based inpatient "step up" and step down" care and respite. The principal elements of this service model across North Wales include:

- Targeted prevention & self-care
- Putting the person at the centre, always starting with "what matters" to the individual and wrapping services round the person
- Supporting well-being, improve health and address inequalities in health
- Developing Community Resource Teams (CRTs), enabling integration of primary and community care and social care delivery
- Enhanced Care at Home service, an extended multi-professional community nursing service, enabling more people to remain at home for care or to return home sooner, when a period of hospital admission might otherwise be needed (In time this service will be part of the role of CRTs)
- Moving care from acute hospitals to community locations, for example, a wider range of outpatient and diagnostic services, supported by integrated community teams
- Developing a network of strategic hospital hubs that provide more consistent and reliable inpatient, outpatient, X-ray, therapies and 7-day minor injury services.

Health and Well-being Centres

The definition of Health and Well-being centres is where a range of services are available with co-location of other service providers, and could include primary care, community services e.g. minor injuries and illness services and step-down beds. Health and Well-being Centres have been further categorised following public engagement, into three levels. The service definition for a Level 1 Health and well-

being Campus best fits the proposed scope of service for North Denbighshire, defined as: "...medium to large local campus, based around existing Primary care practices, Health Centres or Community Hospitals".

There is a public commitment to deliver a new service model for the local population and LHSW was widely consulted on. Inpatient beds at Prestatyn Community Hospital were closed in May 2013 following the outcome of an earlier public consultation with a commitment to offer a new model of care in the community. The service model will support and underpin primary care sustainability, in line with the National Assembly for Wales' Inquiry (2017) into Primary Care. The service model proposed is based on close collaboration between primary care and community services with the aim of encouraging independence, self-reliance and prevention in the locality. This will be strengthened by close on-site integration of Social Care and Third Sector partners. It is envisaged that NDCH will be an integral part of the health care system in the BCUHB central area, providing a source of referral to and from YGC and an extension to primary care services.

The table below shows a summary of services in Level 1 Centres and where the NDCH proposal is aligned to this model:

H&WB Centre Services	Level	NDCH
Rehabilitation and re-ablement providing both inpatient and day facilities	✓	✓
Outpatient / Assessment appointments	✓	✓
Higher level services including advanced diagnostics i.e. x-ray	✓	✓
Minor Injuries and Illness services.	✓	✓
Access to consultant expertise through a Virtual Ward Round	✓	✓
Telehealth facility	✓	✓
Access to multidisciplinary team	✓	✓
GP services will have additional wrap around from community services	✓	✓
Navigation and Triage service	✓	✓
Social prescribing	✓	✓
Health promotion	✓	✓
Access to information and advice	✓	✓

Table 2: Services in Level 1 Centres and proposal for NDCH

Integrated Community Resource Teams (CRTs)

The primary and community services elements of this programme cover a broad spectrum of care and support. This includes a wide network of services and teams:

- General Practice (General Practitioners GPs and the wider practice team);
- Pharmacists;
- Optometrists;
- Community dentists;

- Therapists;
- Community nursing and health visiting teams;
- End of life and palliative care support;
- Primary and Community mental health services;
- Intermediate care;
- "Step up" and "step down" care as a bridge between community and hospital;
- Community inpatient care;
- Rehabilitation.

Integrated health and social care services are a key part of this network, as is close working with third sector, independent sector and community groups which are important assets within the community setting.

The multi–disciplinary team will offer flexibility and responsiveness. The link between the GP, the community and the hospital will be central to improving outcomes and a sense of involvement in the decisions which affect patients - and the quality and responsiveness of services they receive.

The figure below, from the North Wales response to "A Healthier Wales", illustrates the pivotal role of the CRT:



Figure 3: North Wales response to A Healthier Wales

Integrated Service Model

The vision for better and more sustainable healthcare rests on community based models that are co-ordinated around people's needs and what matters to the individual, as illustrated by the examples below:

- Prevention and early intervention
 - Professionals will take every opportunity to prevent poor health or prevent deterioration, enabling individuals to stay healthier for longer
 - The integrated approach will enable professionals from a range of disciplines to assess and determine how best to enable people to achieve well-being outcomes and what matters to them
- Integrating health and social care
 - The wider primary and community services teams will work increasingly collaboratively, involving a range of professionals, ensuring that the skills and role of all professionals are maximized
 - Core data will be logged only once and shared between professionals
 - More "combined" roles will be developed across health and social care to reduce multiple/duplicate visits to people in the community
- More specialist community-based care
 - "Step up" care will be provided where a person needs more support to prevent admission to hospital or nursing care. This could be through an enhanced level of intermediate care from the community teams or in a community hospital setting
 - "Step down" care will support people to be safely discharged from acute hospital care when they are medically fit to do so but may need additional rehabilitative or recuperative care
 - Early discharge planning upon admission to an acute or community hospital
 - The Virtual Ward is similar to a ward in a hospital environment in that it has a structure of both clinical and administrative staff that coordinates and provides direct care to patients. The main difference is that the actual ward does not physically exist to house all the patients in one location, the care is provided in the individual patient's own home

- A team of clinical staff, with the assistance of the operational support staff, provide responsive assessment, monitoring, investigations, support and education for patients to prevent unnecessary hospital admission or to facilitate early supported discharge from hospital; or as an alternative to an acute admission where appropriate.
- A virtual ward round using VC technology to enhance patient care, increase the capacity and increase accessibility to consultant expertise for GPs and ward staff. In turn this has the potential to reduce the length of hospital stay and transfers to District General Hospitals with a saving in costs to the NHS.
- Specialists who have traditionally been hospital based will play a greater role in supporting primary and community services to care for people closer to home.
- The role of the Welsh Ambulance paramedics in delivering more care at home and outside hospital will be developed.

<u>Cluster Development</u>

It is becoming more evident that the development of the Primary Care Clusters is key to make the necessary changes required in the NHS, as set out in A Healthier Wales.

As part of the CCTH programme we will develop Clusters from a collection of GP based services to a full range of agencies, professionals and services to collaborate in offering flexibility and responsiveness to improve health outcomes.

The mature cluster will provide holistic care for their community by offering a range of generalist skills in-house and bringing specialist skills into the team when needed. The model supports co-ordinated care for the entire population, making referrals only when necessary and returning people to the care of the primary care team as soon as possible. New professional roles, therefore, have the potential to not only contribute significantly to the sustainability of primary care, but also to impact on the unprecedented demand and pressures on unscheduled and scheduled care services in the acute setting.

Local Authority

This scheme provides an opportunity to work in collaboration with partners to preserve the health and well-being of future generations. The new NDCH enables joint working of partners across health, the Council, and voluntary sector, to support positive changes in services and the well-being of:

- people with mental health needs
- people with learning disabilities
- older people with health and social care needs
- children and families
- people with health and social care needs in the criminal justice system.

The project is being developed with Denbighshire County Council (DCC), Conwy County Borough Council, (as some residents of Abergele and Kinmel Bay also use community services in the locality) and Denbighshire Voluntary Services Council (DVSC). As outlined earlier, the scheme will enable co-location of Community Resources Teams and will entail joint working in the community between Community Health services, Primary care and social services. It is expected that a single Integrated Assessment, based on an understanding of what matters to each service users, will be used in the hospital and community settings. Infrastructure will be in place to better enable sharing of information and a shared understanding between partners of individuals' needs and how best to support people to meet their well-being outcomes.

Planning

BCUHB recognises the local significance of the RAH building and its responsibility to ensure that it forms an integral part of the new community hub proposed on this site. BCUHB has had a preliminary discussion with DCC in relation to this development, during which it was agreed that any planning application made in regard to the site would provide a solution to the sustainability of the RAH building to ensure that it does not become derelict. This also supports public opinion and the views of the local MP and Welsh Assembly Member.

Regeneration

Neptune Developments Ltd was appointed in February 2015 to develop concepts to assist Denbighshire County Council (DCC) in revitalising leisure and facilities along the Rhyl coastline. The waterfront development is part of recreating Rhyl as a place where people want to live and visit, and follows on from other key investments such as Foryd Harbour, West Rhyl urban park, new housing and key investments in the Promenade.

The proposed scheme is currently split into five distinct zones along the Rhyl coast:

- The Cultural & Hospitality Zone: refurbishment of the Pavilion Theatre, construction of new hotel and family pub/restaurant, demolition of the Sun Centre and potential replacement with a facility to complement the Pavilion. These developments are in progress
- The Active Leisure Zone: creation of new commercial outdoor activities in the area between Memorial Garden and the outdoor Events Arena
- The Family Entertainment Zone: construction of Town Plaza with high quality public realm and restaurant zone, positioned by the existing cinema and around the Sky Tower, which is proposed for refurbishment as a static light beacon. The proposals for this zone also incorporate revisions to the Children's Village and Underground Car Park areas
- The Aquatic Centre: new leisure facility to replace the former Sun Centre, to be located next to the Family Entertainment Zone
- The Town Centre: developments to ensure the regenerated Waterfront links appropriately to the Town Centre to ensure footfall flows into this area

The public response was overwhelmingly positive to the proposals presented. Leader of Denbighshire, Councillor Hugh Evans OBE, who is also the Cabinet Lead Member for the Economy, said: "These proposals will regenerate the Rhyl Waterfront, adding new attractions, consolidating existing ones and introducing missing commercial elements, all of which it is anticipated will significantly increase footfall in Rhyl; both from visitors but importantly also from Rhyl, Denbighshire and wider North Wales residents"⁶.

_

⁶ https://www.denbighshire.gov.uk/en/resident/news/February-2016/Rhyl-waterfront-developments-move-to-the-next-stage.aspx

The proposed NDCH development is fully aligned with the local authority's regeneration plans for the area, not only through the creation of a state of the art new build community facility on the waterfront but also by the renovation and refurbishment of the existing RAH.

Mental Health and Dementia Strategies

BCUHB is committed to the delivery of high quality, person-centred care to people identified or assessed as having known or suspected dementia and those affected by it. The North Wales Mental Health Strategy and the BCUHB Dementia Strategy support the Health Board's overall strategy for health, well-being and healthcare, Living Healthier, Staying Well and the development of these strategies has been shaped by a number of national and local policies and drivers.

In summary, services will be delivered by:

- supporting a local emphasis for the commitment to creating 'dementia supportive communities' within our organisation
- respecting the voice of people affected by dementia
- consulting and listening to the people who access our services and developing plans in co-production with services users, their carers and families
- ensuring services available are accessible and responsive to the needs of the community we serve, working in partnership with local public, private and voluntary sector organisations
- ensuring clinical models help earlier identification of needs and intervention, to reduce the likelihood of escalation and distress and support recovery;
- underpinned by a commitment to support outcome-focused, intelligent and data-driven care.

The Community Mental Health and Older People's Mental Health teams will be colocated at the new hospital and will work together to ensure care is wrapped around each individual. Understanding and knowledge of people's needs will feed into the care and support offered throughout the hospital, particularly in outpatient services and in-patient care, where it is important to understand the mental health of frail,

older people when treating physical needs. This ethos will also influence the development of services provided at home by community teams co-located on site.

Ysbyty Glan Clwyd Redevelopment Project

YGC is the district general hospital for the central area of North Wales. The acute hospital service has a total of 684 beds, with a full range of specialties. The main drivers for the redevelopment project are:

- The removal of asbestos from the building
- To enable YGC to focus on delivering acute care in a fit for purpose building

Due to the reconfiguration of services associated with this scheme, the proposed new NDCH is required to support the sustainability of the DGH through integrated services in Therapies and Sexual Health and meet the needs of patients with minor ailments and injuries locally, closer to home.

Part C: The case for change and proposed scope

3.4 Introduction

This section of the business case provides a detailed account of the problems and service gaps associated with existing arrangements, and outlines the proposed solutions. It incorporates the changes that have happened since the production of the SOC in 2013.

3.4.1 Royal Alexandra Hospital building

The development of the NDCH project centres on the Royal Alexandra Hospital (RAH) site, and what role the hospital will take in the future. This section describes the environmental challenges facing the current delivery of services from this site.

The RAH was built as a children's hospital and convalescent home opened in the 1890s and is a Grade II listed building of historical significance to the local community. Cadw (the Welsh Government's historic environment service working for an accessible and well-protected historic environment for Wales) has listed the RAH as a building that is "an excellent example of a hospital building. It represents a clear expression of the established orthodoxy of its period in its adoption of the pavilion

plan; the massing of the building and the loose symmetry of its detail clearly articulate its functions, while its special purpose is stressed by the incorporation into the design of extensive integral balconies. The chapel, with its richly crafted interior, is a special feature of the building. Its siting on the sea front and its plan; notable for the integral open balconies and verandas of the west wing; reflected the importance then attached to fresh-air treatment.



Figure 4: Photograph of the RAH circa 1902

Part of BCUHB's well-being goals (from the "Well-being of Future Generations (Wales) Act 2015") is to encourage a society that promotes and protects culture. However, incorporating the existing building into the "vision" for the proposed NDCH presents its own particular challenges, as follows:

- Grade II listed building status has placed limitations on the building beyond what had been originally assumed
- Constraints arising from being unable to remove or adapt internal walls or doorways in the RAH building have adversely affected the flexible use of space. This means that services and staff have, in some instances, been allocated space that is larger or smaller than required
- Remedial action is required to ensure that the RAH building meets health and safety standards such as the removal of asbestos, the provision of compliant

-

⁷ CADW listed buildings database

- M&E supplies, replacement of some but not all windows, basic repairs to stonework and replacement of guttering where necessary
- Many parts of the hospital are unoccupied and in a poor state of repair, which
 presents challenges in providing services to the required quality and safety
 standards
- The infrastructure is out-dated and not suited to modern healthcare. Safety is
 of the highest priority. As medical care becomes more complex this has an
 impact on where and how services can safely be delivered

The resolution of these infrastructure issues is a key part of the scope of the case.

3.4.2 Community Beds

The NDCH scheme forms part of a wider programme of changes to services in North Wales which focus on the shift of care from acute to community settings. This programme was the subject of formal engagement and consultation as part of BCUHB's strategy "Health Care in North Wales is Changing" (HiNWiC) and agreed by the Board in January 2013. Driven by this strategy the Board agreed a series of service changes, including the closure of the 12 hospital beds at Prestatyn Community Hospital. In addition to this, the inpatient beds at RAH had already been closed in June 2010 due to quality of environment and fire code compliance deficiencies. BCUHB has given a clear public commitment to re-provide community beds in the locality as part of this project. In the meantime, those patients from North Denbighshire who still require community based care must now travel to Colwyn Bay, Holywell, Denbigh or Ruthin, none of which could be considered close to home for those people.

The SOC supported this commitment to provide access to community beds in the locality for patients requiring additional care which cannot be delivered safely in their own home. Beds were to be used to 'step up' the intensity of care required from the community and to allow patients to be discharged safely from a District General Hospital prior to returning home.

As part of the development of this OBC, further bed modelling has been undertaken to establish the required number of community beds. This modelling has taken into account BCUHB's revised model of care set out under "Care Closer To Home", which aims to:

- Focus on health promotion and management
- Encourage independence and re-ablement
- Improve integration of health and social care within designated Community Resource Teams, leading to more efficient patient pathways and treatment plans
 By focusing on these key objectives BCUHB aims to:
- reduce the average length of stay from slightly over 28 days (in BCUHB's current Community Hospitals) to 21 days
- reduce the number of avoidable admissions
- Promote independence by supporting people in the community and at home wherever practicable

As part of this revised model the Home Enhanced Care Service (HECS) provides both 'step up' and 'step down' care for patients in their own homes which includes patients living in a nursing or residential home where this is their normal/current place of residence. There are currently 15 'virtual' HECS beds within the North Denbighshire area and all patients are managed by the Multi-Disciplinary Team (MDT) through a virtual ward round to ensure that each patient has an agreed care plan which details their care over a 24 hour period, including weekends where this is appropriate and required by the patient. This care plan will be initiated by the GP who will agree this with the Advanced Nurse Practitioner and, through him/her, with the wider Enhanced Care (EC) team to ensure that the care plan is delivered by the most appropriate professionals within the EC Team.

Over a 12 month period the North Denbighshire Enhanced Care service undertook 11,906 visits, which incorporates the services of GPs, Advanced Nurse Practitioners, District Nurses, Occupational Therapists, Physiotherapists, Social Workers and Healthcare Support Workers.

The table below highlights the number of admissions over a 12 month period from Rhyl and Prestatyn:

Treatment Site Code	Total Patients from Rhyl/Prestatyn	Bed Days for Rhyl/Prestatyn Patients	No. of Beds in the Hospital
Colwyn Bay Community Hospital	149	5824	42
Denbigh Community Hospital	218	5252	44
Holywell Community Hospital	128	4249	44
Ruthin Community Hospital	32	1156	22
GRAND TOTAL	527	16481	152

Table 3: Assessment of Bed Numbers

The total number of bed days available is 152*365 = **55,480**, of which 30% of the actual capacity (**16,481**) are utilised by patients from Rhyl and Prestatyn. This demonstrates that 527 admissions per annum are currently utilising a community bed as a step down from the DGH.

A review of these admissions highlighted that of these 20 will continue to use orthopaedic beds in Ruthin leaving the cohort at 507. It is anticipated that a further 15% (76 patients) could be diverted from a DGH bed through enhanced Community services and would therefore not require a community bed leaving the cohort at 431. Of these, it is anticipated that a further 20% will no longer require a "step down" facility due to improved discharge arrangements and discharge alternatives. Based on this assessment and revised admissions the NDCH project would need to accommodate **346** admissions per annum.

BCUHB's intention is to reduce the average length of stay from 28 days to a more sustainable 21 days. This supports local and national trends to reduce length of stays and focus on re-ablement and independence. The rationale behind this thinking is as follows:

- Early accessibility of services within the community which support the climate of CCTH
- Enhanced Primary care support and monitoring

 Discharge planning from admission with a rapid response of multi-agency working, involving the patient and their family/carer(s)

The table below highlights the bed requirement **based on 346 admissions per annum** on a 21 day average length of stay at 85% Occupancy:

Admissions	Inpatient Bed Days	Target Bed Occupancy	Target Average Length of Stay	Required Beds at 85% occupancy
346	7,266	85%	21	24

Table 4: Predicted required beds at 85% occupancy

The projected growth in the local population, particularly the increase in the number of older people, suggests that it would be prudent to include an additional 4 beds for future flexibility. 28 beds are therefore being proposed for NDCH, to be configured as a 22 single ensuite bedrooms, and two 3-bedded bays.

3.4.3 Ambulatory Care Unit

The building design now includes space for the provision of an Ambulatory Care Unit (ACU). The purpose of an ACU is to provide assessment and treatment for adults with sub-acute care needs close to patients' homes and so avoid admission to inpatient beds. Assessment and treatment are provided by medical, nursing and therapy staff.

The rationale for such a development is as follows:

A person who has frailty issues typically presents in crisis with the 'classic' frailty syndromes of delirium, sudden immobility or a fall (and subsequent unsafe walking) and is often admitted to hospital. However, there is evidence that rapid medical assessment, followed by specific treatment, supportive care and rehabilitation, is associated with lower mortality, greater independence and reduced need for long-term care. The development of an ACU in a community hospital setting can offer the following potential benefits:

- Reduced hospital admissions and attendance at ED
- More local response to patient needs
- Speed of referral for patient; from GP to unit and home again in same day

- Not de-compensating older patients with confinement in bed, e.g., older people typically lose between 10% to 15% muscle mass during a week in bed
- Preventing dependence on Inpatient beds
- Encouraging independence and re-ablement, in line with the strategic direction of "Living Healthier Staying Well"
- A focus on co production of re-ablement/treatment plan with the patient in line with "Social Services and Well-being (Wales) Act (2014)"
- Mitigation of risk of secondary infections in vulnerable adults from long hospital stays

This service model is currently being trialled at Llandudno Hospital. There will be a preliminary evaluation in the spring of 2019, and a full review when it has been open for 12 months (October 2019). The results of the evaluation will be considered as the Full Business Case is developed, and a judgement made about whether an ACU should be included, and if so the shape and scale of the service.

3.4.4 Same Day Service

In line with the commitment to provide care closer to home, BCUHB plans to make services such as Minor Injuries Services available within 40 minutes' drive for nearly all of the population in North Wales. At present many minor injuries for North Denbighshire residents are treated at YGC in the Emergency Quarter (EQ), where 25% of attendances are by people from the North Denbighshire locality. This adds significantly to the pressures on the EQ.

The proposal for North Denbighshire therefore now includes provision of a Same Day service to respond to demand for treatment of minor injuries and minor ailments in the locality. This was not included in the scope of the SOC. Service users will be able to access the Same Day service on referral by a GP or other healthcare practitioner; or walk in and receive treatment the same day. This offers the following benefits:

- Diverting the equivalent of 2 patients per hour away from YGC; it is estimated that NDCH could treat nearly 11,000 people per annum
- A reduction in demand on the ambulance service from patients with minor injuries;

- Relieving the pressure on YGC at peak times and during the holiday season
- A reduction in demand on GP practices. The service will be fully integrated with primary care but will predominantly be delivered by nurse practitioners, nurses and support staff
- The addition to the portfolio of community services benefiting an area of social deprivation; The potential to co-locate GP Out of Hours to assist with the existing workload, particularly during the evenings

This proposed development is strongly supported by the A&E Department team at YGC, the General Practices within the North Denbighshire cluster and local elected representatives in Rhyl.

3.4.5. Treatment Zone

The original SOC scope included a community nurse clinic, incorporating leg ulcer, continence and Doppler services. Since then, the scale and complexity of services undertaken by community nurses has increased significantly. This includes the management of long-term conditions. As a result, the size and scope of the proposed service at the RAH has been increased and the physical location rebadged as a treatment zone. The Community nurse led services will also include Phlebotomy and Wound Care delivered in clinics, to complement the services delivered at home.

As well as the benefit of increasing the range of services available, the presence of a greater number of community nurses on site will also increase efficiency by allowing cross-cover for other services on the site, including the Same Day Service and outpatients.

3.4.6. Sexual Health

The current provision of sexual health services in Denbighshire is split across two sites: the RAH (Level 1 services) and YGC (Level 2 and 3 services). The SOC scope of services allowed for Level 1 services (e.g. HIV and sexually transmitted infection (STI) testing and routine contraception advice) to continue to be provided at the RAH, delivered as part of the outpatient clinic.

However, it was noted in the YGC Re-development Project that Level 2 and 3 services (including ongoing management of HIV, complicated contraception, vulval pain, psychosexual services, child protection issues, sexual assault and high risk populations) no longer needed to be delivered in an acute setting, and that they could safely be delivered in a community setting.

Therefore, the sexual health service scope has changed to include Level 1, 2 and 3 services to be delivered from the proposed NDCH, which will reduce the number of ambulatory patients at YGC, improve the flexibility of clinic times, improve laboratory throughput and provide capacity for future growth at the hospital.

The benefits of providing the enhanced service at the proposed NDCH include:

- Streamlined care pathway
- Improved access for patients, some of whom have difficulties travelling to YGC
- Service delivery and staffing efficiencies due to co-location of service
- Simplified record management, with records kept on one site
- Improved staff support and opportunities for clinical supervision
- Improved team building and understanding of each other's roles
- · Access to more efficient point of care testing
- Ability to run sub-specialty clinics in conjunction with Primary Care, such as menopause and erectile dysfunction
- Ability to stream patients into "Test No Talk" (a confidential sexual health screening service for people who don't think they have put themselves at risk or have any signs of infection, but would just like peace of mind. They are not examined, or asked any questions; they just test and go)
- Improved vaccination rates as unable to do vaccinations in Level 1 Hepatitis
 B/Human Papilloma Virus (HPV) at RAH at present.

3.4.7 Physiotherapy Services

The Physiotherapy department is located on the ground floor of the RAH and provides ambulatory or outpatient services to patients with a wide variety of conditions including:

- Musculoskeletal (muscle, bones and joints)
- Orthopaedics (pre and post-operative or post trauma)
- Respiratory (management of breathing issues post infection or disease and rehabilitation to improve function)
- Maternity
- Continence
- Falls and general mobility issue
- Pain management
- Cardiac rehabilitation
- Rehabilitation for patients with Stroke or other neurological conditions

Although located on the ground floor, if using the main car park, patients enter at basement level. There is a long way to walk to their appointment if using the lift, as it is located at the opposite end of the building to the department, which is not ideal for this patient group.

The accommodation currently comprises:

- 12 curtained physiotherapy bays
- Treatment room (laser and women's health)
- Treatment room (upper limb rehab, including splinting facilities)
- 1 small gym area used for education sessions for cardiac and pulmonary rehab, neurological out patients, paediatric outpatients, some mobility assessments and other disciplines such as speech and language therapy and dietetics
- 1 large gym with standard gym equipment and treatment plinths

There are insufficient rooms for individual treatment and private conversation. Not all North Denbighshire residents can be seen here and have to attend clinics at YGC and Denbigh Community Hospital. Since the production of the SOC the decision has been made to transfer more of the Therapies service out of Glan Clwyd into the RAH, in line with shifting care closer to home.

3.4.8 Diagnostics (X-Ray and Ultrasound)

The X-Ray department is located on the basement level of the RAH and provides a walk in X-Ray service to all patients having a referral for a general or dental X-Ray. The existing department comprises:

- X-Ray Room
- OPG (Orthopantomography) Room which gives a wide view x-ray of the lower face

The accommodation is of reasonable quality, however the department has some accessibility issues and its configuration impedes the throughput and flow of patients. The service would like to offer ultrasound services at the RAH, but there is insufficient space to accommodate this within the current configuration.

3.4.9 Children's Services

Children's services are based on the first and second floor of the RAH, providing physiotherapy, occupational therapy and CAMHS (Child and Adolescent Mental Health) services. The accommodation is badly configured for a modern service and the environment is of a poor quality for both patients and staff, symptomatic of the generally poor fabric of the RAH building.

3.4.10 Health and Social Care Services

There is health and social care office accommodation located on the first floor of the RAH. The area accommodates a Community Resource Team (CRT) serving Rhyl and the surrounding area – the Community team supporting Prestatyn is based near to the Healthy Prestatyn lach managed practice. The CRT is starting to develop stronger working relationships between District Nurses, Adult Social care and the Third Sector and the local Primary care Cluster Team. Further investment is planned from Integrated Care Fund to enable better integration with Primary Care and development of information sharing and information management to ease collaborative working. The redevelopment of the site will enable provision of accommodation for the Single Point of Access (SPOA). This team serves the county of Denbighshire, takes referrals and re-routes for community support from community Health and Social care and directly from citizens. The SPOA enables

prevention of escalating needs and offers information, advice and assistance to support citizens to achieve their own well-being goals.

3.4.11 Outpatients

The outpatient service is delivered from a neighbouring building, Glan Traeth, which also accommodates Older People's Mental Health teams. This comprises 13 clinical rooms including 2 Audiology rooms. This building (pictured below) has been in use as an outpatient facility since December 2017. The accommodation is a temporary solution following decant and demolition of a prefabricated building adjoining the RAH. This extension has been demolished, as it was no longer fit for purpose and could no longer support the delivery of outpatient services due to its lack of compliance with health and safety, privacy and dignity and infection control.



Figure 5: Photograph of Outpatient Department Temporary Building

There is no scope for expansion in the Glan Traeth setting.

OPD Services include:

- General Outpatients
- Audiology
- Ophthalmology
- Sexual Health
- Third Sector

The building is not appropriate for long term use as a modern Outpatients facility, and the intention is to re-provide these services in modern accommodation

3.4.12 Mental Health Services

The two Glan Traeth buildings are situated next to the RAH site; separated by Alexandra Road. One building houses the Outpatients Service, as outlined above, and the Community Older Person's Mental Health Team's offices. The remaining building accommodates the Older People's Mental Health Specialist Day Service, Memory Service, and the Alzheimer's Society. Some of the smaller rooms are not fit for purpose and the largest day service room is compromised by being a thoroughfare to other rooms. The Community Mental Health Team and Alzheimer's Society rooms are situated on the first floor, with no wheelchair access.

In terms of the service, the SOC stated that the inclusion of Mental Health Services for Older People within the scope of the project would be subject to the outcome of a separate review being undertaken by the Mental Health and Learning Disabilities Clinical Programme Group. This would be an opportunity to improve service provision for inpatient beds in the locality as well as improve the base for older person's day services and community mental health teams working in the wider community.

The "Strategic Review of Older People's Mental Health Services" report (Flynn and Eley Associates) dated 19 November 2014, stated that the principles embedded in the Audit Commission's statement were:

- inpatient care provides specialist expertise, with intensive levels of assessment, monitoring and treatment that cannot be provided elsewhere; this requires the full range of multidisciplinary expertise in an environment suitable to meet the needs of older patients who may have physical co-morbidities or major cognitive and perceptual problems
- access to physical healthcare is essential, with robust arrangements for geriatric medical liaison; this should be on a reciprocal basis and the Royal College of Psychiatrists recommends that ideally mental health beds should be located on general hospital sites

• community services must be in place to provide proper alternatives to inpatient care, to prevent unnecessary hospital admission and facilitate timely discharge

It was therefore concluded that the older people's mental health community team and day service should be based in the proposed NDCH, but that the inpatient service should be delivered from a district general hospital. The provision of inpatient OPMH beds will be addressed in the Ablett Unit business case, which will be completed by the end of 2018. There are no dedicated OPMH beds at the site, though that some inpatients may have attendant mental health needs and the integrated OPMH Team onsite will better enable the services to respond. The inclusion of this service into the overall scope will allow for improved integration with other services including the ward team to provide a more holistic model of care for older people and the multi-agency Community Resource Team, located at the site.

3.4.13 Community Dental Services



Figure 6: Photograph of Edith Vizard

Building

The community dental service is delivered from the Edith Vizard Building on the RAH site, opened in 1908 as a nurses' home, from three dental surgeries, in addition to a mobile unit delivering the latex allergy service.

There are 88 dental surgeries in North Wales, 4 orthodontic practices and a total of 262 dentists. BCUHB currently has the second worst access rate in Wales (49.8%) as opposed to the Welsh average of 55% (Cardiff and Vale University Health Board has the best at just over 60%). The Health Board has commissioned additional activity for the delivery of an additional 8,000 patient places.

The building is no longer practical for the service, which provides treatment and care for a wide and very diverse group of patients, "priority patients" who are unable to

obtain the more specialised and tailored care that they require within the primary dental services. The adult patients treated include:

- learning disabilities patients
- patients with physical disabilities
- · patients with challenging behaviour
- patients with mental health problems
- patients with severe medical conditions
- · patients with terminal care needs
- patients with neurological and/or sensory impairment
- adolescents leaving Special Schools
- older patients with frailty and memory issues

The teams also provide care for a range of vulnerable groups, such as those:

- who are homeless
- with substance misuse issues
- who have sought asylum from oppression

The SOC scope assumed that the community dental services undertaken in the Edith Vizard Building would be re-provided as existing; i.e., three dental surgeries and a mobile unit (delivering the latex allergy service). The scope has now been extended to include 6 surgeries, for the following reasons:

- BCUHB has commissioned the delivery of an additional 8,000 patient places, a proportion of whom will be seen at the proposed NDCH in order to improve access rates
- The plan is to transfer of services from Prestatyn Dental Clinic, which is a single surgery with identified environmental challenges including difficult access for patients with disabilities
- This will create the potential to transfer further community dental clinics and further rationalise the Estate.

The proposed NDCH aims to be a "Centre of Excellence", offering the following:

- Routine care for vulnerable patients
- Out of Hours Emergency Dental Care

- Specialist services in the fields of Special Care Dentistry, Sedation and GA
 assessment and other specialised services such as paediatric dentistry,
 orthodontics, oral surgery, and an endodontic service which it is intended will
 transfer from Mold (along with the specialist microscope)
- Provision of OPG facilities needed to support the service will also be incorporated in the adjacent X-Ray department; intra-oral X-Ray machines will be available in the surgeries
- Training programmes for clinicians; one or more Dental Core Trainees and a Specialist Trainee in Special Care Dentistry who need to work alongside the specialists or experienced dentists. Other cadres will also be attending on training programmes from time to time, such as Dental Nurses and Dental Therapists/Hygienists
- The centre will also serve as a base for domiciliary care and screening and the domiciliary/screening equipment to support this work needs to be stored there

3.4.14 Prevention and early intervention

There is now an increased focus on prevention and early intervention. The North Denbighshire campus design therefore includes a well-being Information Point in the foyer, to be staffed by voluntary organisations, and provide information and advice on local community activities and groups. There are 2 large meeting rooms designated for Third Sector groups and activities to help improve the health of local people and support them to live healthier lives. These activities will include:

- Smoking Cessation Services
- Alcohol Screening
- NHS Health Checks such as glucose testing and cholesterol
- Pre-diabetes and obesity programme helping our local communities address the food, nutrition and exercise improvements they need through a number of initiatives and support programmes.
- Better breathing programme asthma, COPD and other breathing conditions can have a huge effect on the sufferer, better breathing programmes will be

developed in the local community including exercise and physio programmes, singing groups, smoking cessation courses, etc.

3.4.15 Offices

An element of the original SOC was to promote integrated working not only among clinical teams but also with community and third sector services. This scope has increased and will see NDCH develop as a 'healthcare campus' where multi-disciplinary teams can be co-located on a single site linked closely to clinical accommodation.

Currently the office accommodation at RAH is configured to use general management, community and support services administration. However, it is envisaged that the new hospital campus will provide enhanced accommodation, including:

- Administration offices for clinical teams based at NDCH
- Hot-desk offices and resources for community and third sector service providers
- Supporting accommodation including meeting and interview rooms to improve accessibility, integration and promote working in partnership
- Increased office space for integrated community teams and single point of access

The RAH building currently accommodates some 270 staff, some of whom will be reaccommodated in new clinical environments when ready. In redeveloping the RAH site as part of the campus, the intent is to make best use of the available space to accommodate staff who need to be on site to support the new hospital, alongside other, multi-disciplinary community services such as the Community Resource Team. For example, there is provision of clinical space for OMPH services in the new hospital and staff offices and medical records, including Community Mental Health services will be based in the original RAH building. A key purpose of this building will be to enable the integration between Community Teams, including the Single Point of Access for information, advice and assistance, and engender closer multi-agency working.

The design intent with respect to the RAH is to utilise the existing layout and accommodation to best advantage with the minimum of alteration. The majority of the building will be to support staff in delivering clinical services with approximately 14% required for direct patient care. The clinical element will comprise counselling and interview rooms. There will be no accommodation to support invasive treatment. As a consequence, whilst the specification and scope of the works will ensure that the building meets all statutory requirements, NHS design guidance (i.e. WHBNs and WHTMs) will be reviewed and the design will be proportionate to the risks identified and derogations agreed as appropriate.

3.4.16 Car Parking

The RAH site has approximately 150 car parking spaces; 12 at the front of the building and approximately 138 to the rear of the building (of which 19 are disabled) where the main entrance is accessed. Car parking is a major concern on the site with an already limited number of spaces being compounded by:

- Lack of demarcation lines for car parking bays; leading to inappropriate parking
- Numbers being reduced due to inaccessibility caused by flooding
- Inappropriate use of the car park; by those not attending RAH

There is the opportunity to increase capacity by demolishing on site extraneous buildings.

3.5 Potential business scope

Based on the analysis of issues with current arrangements outlined above, a summary of the scope of the project is as follows:

- Re-provision of community beds in Rhyl, including repatriation of beds which transferred to Holywell and Denbigh when Prestatyn Community Hospital and the RAH wards closed
- Provision of a Same Day service to reduce admissions and support the reduction of A&E attendances at YGC
- The potential provision of an Ambulatory Care Unit, subject to the outcome of the pilot being implemented in Llandudno

- Provision of a Treatment Zone to support BCUHB's changing model of care for community nurses to undertake more complex activity in a community hospital setting
- Provision of a Level 1, 2 and 3 sexual health service
- Provision of an enhanced outpatient therapy service
- Provision of a Day Therapy Assessment Unit (IV Suite) to provide care closer to home for those living in the Rhyl and Prestatyn area
- Re-provision and extension of the Community Dental Service
- Re-provision and extension of Radiology services
- Re-provision of services currently undertaken on the RAH site:
 - Outpatients
 - Older People's Mental Health Services
 - Adult Psychology Services
- Provision of Advice and Information through third sector presence onsite and close working with the Community Resource Team, co-located on the campus
- Delivery of preventative programmes such as smoking cessation to support selfmanagement
- Creation of multi-disciplinary accommodation to enable integrated working between primary, community, local authority and third sector care
- Car parking enhancements
- Improvement to the physical environment for patients and staff, including achieving a greater level of statutory compliance.

3.6 Objectives and Main benefits criteria

This section describes the objectives of the project and main outcomes and benefits associated with the implementation of the potential scope in relation to business needs.

Drawing on the strategic aims of BCUHB and the infrastructure investment criteria as defined in the NHS Wales Infrastructure Guidance (WHC(2015)012), the Project Board agreed the following investment objectives:

- To provide safe and sustainable services in response to the current and future health and well-being needs of the local population
- To further develop multi-agency, integrated, responsive primary and community care services in the area
- To increase the range of local services, thereby reducing the reliance on the DGH
- To deliver services in an environment which is fit for purpose and enhances health and well-being for service users and staff
- To move care closer to people's homes, including inpatient bed based care
- To improve economic, social, environmental and cultural well-being, as outlined in "The Future Generations Act"

In terms of the benefits the four categories of benefit are as follows:

- CRB: Cash Releasing Benefits
- Non-CRB: Non-Cash Releasing Benefits
- QB: Quantifiable Benefits
- Non-QB: Non-Quantifiable or Qualitative Benefits

The following table summarises the benefits arising from each of the investment objectives:

Investment Objective 1. To provide safe and sustainable services in response to the current and future health and well-being needs of the local population

Stakeholder group	Benefit	Category
Patients	An increase in self-management in the	Qualitative (Non
	local population enabled, through	QB)
	education, information and	
	preventative services offered in	
	partnership with social services and	
	the third sector	

Health Board Staff:	meets national and local policy	Qualitative (Non
Clinical & Non-Clinical	objectives to develop services which	QB)
	focus on community well-being	
Health	Supports the delivery of 'Healthcare in	Qualitative (Non
Community/Others	North Wales is Changing', Betsi	QB)
	Cadwaladr University Health Board,	
	(2012)	
	Avoidance of costs from harm and	Quantifiable
	complications of hospital episodes	

Table 5: Benefits Criteria based on Investment Objective 1

2. To further develop multi-agency, integrated, responsive primary and community care services in the area

Stakeholder group	Benefit	Category
Patients	Best outcomes for patients – quality of	Qualitative (Non
	care is enhanced, in terms of the	QB)
	model of care and seamless pathways	
	of care	
Health Board Staff:	Efficient use of resources enabled	Qualitative (Non
Clinical & Non-	through co-location and collaborative	QB)
Clinical	working	
Health	Prudent healthcare and the early	Qualitative (Non
Community/Others	intervention/prevention agenda in	QB)
	social care supported.	
	Re-ablement of service users on the	Quantifiable (QB)
	Ward and ACU to return home safely,	
	preventing avoidable in-patient bed	
	admissions	

Admission avoidance to	secondary	Non-cash
care, reducing the number	er of A&E	releasing
attendances - 15% transfer	admissions	
from YGC. 9,000 admissio	ns @ Cost	
per attendance of £179 x m	arginal rate	
Reduced pressure on	the Welsh	Non-cash
Ambulance Services N	HS Trust	releasing
(WAST) through care close	er to home.	
11% of admissions to	Same Day	
service result in avoidance	of transport	
conveyance		

Table 6: Benefits Criteria based on Investment Objective 2

3. To increase the range of local services, thereby reducing the reliance on the DGH

Stakeholder group	Benefit	Category
Patients	Patients will benefit from improved	Qualitative (Non
	access to healthcare	QB)
Health Board Staff:	Step up care from GP referral will	Non-cash
Clinical & Non-Clinical	reduce some admissions into YGC.	releasing
	76 (20%) fewer patients pa staying	
	an average of 11 days each in YGC	
	at £376 per day	
Health	Support delivered to 9000 service	Quantifiable (QB)
Community/Others	users per annum the Same	
	Day/Urgent Centre, which provides	
	care closer to home and reduces	
	pressure on the DGH and Primary	
	Care.	

Table 7: Benefits Criteria based on Investment Objective 3

4. To deliver services in an environment which is fit for purpose and enhances health and well-being for service users and staff

Stakeholder group	Benefit	Category
Patients	Patients will benefit from the improved	Quantifiable (QB)
	physical environment in terms of:	
	Functional suitability;	
	Fire safety compliance;	
	Accessibility;	
	Ease of use for those suffering from	
	Dementia;	
	Reduced risk of infections.	
Health Board Staff:	The building will meet key Welsh	Quantifiable (QB)
Clinical & Non-Clinical	Health Technical Memoranda (WHTM)	
	and Welsh Health Building Note	
	(WHBN) requirements.	
	Recruitment, retention and well-being	Quantifiable (QB)
	of staff enhanced	
Health	The community will benefit from a	Qualitative (Non
Community/Others	modern purpose-built building	QB)
	National Estate Key Performance	Quantifiable (QB)
	Indicators achieved	

Table 8: Benefits Criteria based on Investment Objective 4

Investment Objective			
5. To move care closer to people's homes, including inpatient bed based care			
Stakeholder group	Benefit	Category	
Patients	Independence of patients enabled in	Qualitative	(Non
	an environment which supports co-	QB)	
	production and asset-based approach		
	to re-ablement and promotes continuity		
	in relation to carer involvement.		
	Repatriation of assumed 10% patients	Non	cash-
	in LL18 and LL19 postcodes receiving	releasing	
	IV treatment at Llandudno General		
	Hospital (LGH) - average cost per non		
	elective short stay of £833		
Health Board Staff:	Working climate for innovation, AP and	Qualitative	(Non
Clinical & Non-Clinical	R&D created. The opportunity is	QB)	
	created to add value through		
	knowledge transfer through		
	collaboration and co-location of staff.		
	Community beds available for LL18	Non	cash-
	and LL19 patients (transferring from	releasing	
	Holywell Community Hospital and		
	Denbigh Community Hospital)		
Health	Increased provision of services	Qualitative	(Non
Community/Others	operating after 17:00 and at the	QB)	
	weekend.		
	Avoidance of need for private sector	Quantifiable	
	placement (nursing/residential home)		
	reducing Continuing Health Care costs		

Table 9: Benefits Criteria based on Investment Objective 5

6. To improve economic, social, environmental and cultural well-being, as outlined in The Future Generations Act

Stakeholder group	Benefit	Category
Patients	Ease of Access	Qualitative (Non QB)
	Improved building	
	quality	
Health Board Staff: Clinical & Non-	Recruitment and	Quantifiable (QB)
Clinical	retention	
	Supports a	
	Campus model of	
	Care	
Health Community/Others	Supports the	Qualitative (Non QB)
	councils	
	regeneration plans	
	for the area	
	Emotional	
	attachment	

Table 10: Benefits Criteria based on Investment Objective 6

3.7 Main risks

The risk register is attached as an appendix. The main business and service risks associated with the scope for this project are:

- Unexpected changes in service capacity/demand
- Failure to the model of care, in particular the integration of services
- Recruitment and retention of the workforce
- Affordability

The table below highlights these key service risks from the analysis documented in the Risk register in the Appendices.

Main Risk	Counter Measures
Design: Planning Implications of Design	Engagement commenced during development of Technical Options and throughout development of OBC. Membership from Local Authority on project board
Development: Challenging programme – risk of design changes	Change Control process followed as per BCUHB capital procedure and DFL framework
Implementation risks	
Failure to meet the model of care, in particular the integration of services	Framework for Care Closer to home to be developed with partners. Engagement through Regional; Partnership Board. Ongoing representation at project board and team.
Recruitment and retention	Detailed workforce strategy and implications included below.
 of the workforce Affordability (Budget not achievable) 	Mitigation and alternative funding streams confirmed within Financial Case to be monitored through Project Board. Benefits of Care Closer to home strategy to be maximised to further reduce escalation beds, improve average length of stay and patient flow.
Operational risks	
Unexpected changes in service capacity/demand	Service model and demand management framework to be put in place through care Closer to Home programme, linking to our Unscheduled Care work in acute settings. This model to enable flexibility to respond to service demand.

Table 11: Main risks and counter measures

3.7.1 Workforce

Focusing on workforce, it is envisaged that the development of the proposed NDCH will generate an opportunity to create a place that is desirable to work in. However, BCUHB like all other NHS organisations across the UK has to compete within a challenging labour market. As a result, we have a number of strategies in place to ensure we attract local, national and international candidates. These include creating our own attraction and recruitment website and brand - Train Work Live North Wales

which showcases what it is like to work for the Health Board in the words of our own employees and what it is like to live and work in North Wales. We attend careers events and fairs locally and nationally and have a strong social media presence.

We offer a number of different routes into the Health Board from schemes to supporting the local community back into work, through to apprenticeships, supported training places, return to practice and utilisation of the Certificate of Eligibility for Specialist Registration for doctors. Strong links remain with educational establishments across North Wales and we work in partnership with local colleges and universities who offer a wide range of courses. We also work with education and training providers further afield to encourage students to come and work in North Wales.

Internal development is also key and a 'grow our own 'approach is very much encouraged with support for staff to move from unqualified to qualified roles. We also work with schools across North Wales to promote careers within Health and Social Care with particular emphasis on the importance being able to communicate in the medium of Welsh. Other initiatives include working with our overseas colleagues who may have qualified friends and family who wish to relocate to North Wales.

In terms of retention we have various initiatives which impact on staff retention these include a staff recognition scheme; a staff listening model which ensures staff are involved in service improvement, contributing to ideas and resolve issues; Staff Achievement Awards, and Staff Engagement Ambassadors and Listening Leads within departments. The Health Board also provides a range of learning and development opportunities for all staff to ensure continuous development of knowledge and skills and career progression opportunities are available.

Effective teamwork and collaboration are fundamental to the delivery of continually improving, high-quality care. Where multi-professional teams work together, patient satisfaction is higher, health care delivery is more effective, there are higher levels of innovation in ways of caring for patients, lower levels of stress, absenteeism and turnover, and more consistent communication with patients. The NDCH will create the environment where the workforce have the opportunity to enhance their skills in

working in multi-disciplinary teams, extend their roles within community settings and provide more personalised care. It is envisaged that the proposed NDCH will facilitate:

The work style to be underpinned by an ethos of "working with, not doing to"

Users to make a difference to the quality of service they receive when they participate in the delivery of the service themselves. One approach, which emphasises the importance of the collaboration between service providers and users, is co-production. It is also known as co-creating services, whereby service recipients are involved in different stages of the process, including planning, design, delivery and audit of a public service.

The training and encouragement of staff to promote enabling solutions for service users which actively support their ongoing independence – e.g. encourage a patient to walk to the toilet rather than fetch a commode for them. This is in line with philosophy of the "Social Services and Well-being (Wales)" Act 2014 which requires co-production with citizens

Co-production to challenge the assumption that service users are passive recipients of care and recognises their contribution in the successful delivery of a service (Cahn, 2000). At the same time, it involves the empowerment of front-line staff in their everyday dealings with customers (Needham and Carr, 2009). Co-production will also involve those who care for service users and will enable them to participate in deciding how an individual's healthcare needs may be met, building from what matters to each individual to design personal care plans

3.8 Constraints

The project is subject to the following constraints:

 The RAH is a Grade II listed building of significant historic significance to the local community and will need to be refurbished to an appropriate standard as part of any development on the site • The available site area is limited with little room for expansion, meaning any proposed new build solution is constrained by existing site boundaries

3.9 Dependencies

- Any solution on the RAH site will require planning permission, as the current footprint of the buildings on site are not of a sufficient size or condition from which to provide modern healthcare services. In developing the design a series of meetings have been held with the planning authority and contact made with other agencies including CADW and Welsh Government. The design addresses the requirement of the planning authority that any planning application made in regard to the site would provide a solution to the sustainability of the RAH building to ensure that it does not become derelict. The scope and extent of the works have been developed in consultation with DCC conservation officers. Full planning permission will be sought as part of the development of the FBC.
- The development of the NDCH service scope is dependent on the following services transferring much of its activity from YGC, in line with the YGC Re-Development project:
 - Sexual Health
 - Therapies Outpatients

4. The Economic Case

4.1 Introduction

The Economic Case is the technical core of the business case and is a fundamental requirement as it fulfils HM Treasury's requirements on how to demonstrate value for money. This section of the business case focuses on the main options available for delivering the required services. These options are evaluated, and the option which gives the best Value for Money (VfM) is established. The Economic Case of the original SOC has been reviewed and refined and has been tested against the following "long list to short list" criteria:

- Do any of the options fail to deliver the spending objectives and critical success factors for the project?
- Do any of the options appear unlikely to deliver sufficient benefits, bearing in mind that the intention is "to invest to save" and to deliver a positive net present value?
- Are any options clearly impractical or unfeasible?
- Is any option clearly inferior to another, because it has greater costs and lower benefits?
- Do any of the options violate any of the constraints (e.g. clearly unaffordable)?
- Are any of the options sufficiently similar to allow a single representative option to be selected for detailed analysis?
- Are any of the options clearly too risky?

As a result of the review, we have made amendments to a number of the long-list options and developed a revised set of short-list options.

4.2 Critical Success Factors

The Critical Success Factors (CSF's) are the attributes which are essential to the successful delivery of the scheme. The Project Team identified the following critical success factors for the project:

Critical Success Factors	How well does the option
Strategic Fit and Business	meet and support the over-arching aims
Needs (Strategic Case)	of local and national strategy/legislation
Potential Value for Money	maximise the return on the required
(Economic Case)	investment in terms of the economy
(Lectionia Gass)	minimise associated risks
Capacity and Capability	deliver the required level of service and
(Commercial Case)	functionality
Potential Affordability	deliver the project within the ascribed
(Financial Case)	capital and revenue envelope
	deliver the project within the agreed
	timescale
Potential Achievability	deliver an operational, fit-for-purpose
(Management Case)	facility
	satisfy the level of skills required to deliver
	the project successfully

Table 12: Critical Success Factors

4.3 Long-List of Options

The long list of options for the original SOC was generated by a workshop held on 19 February 2013, in accordance with best practice contained in the Capital Investment Manual.

The options in the long list were all developed to be consistent with the key strategic decisions taken by BCUHB in January 2013 following the Healthcare in North Wales is Changing (HCiNWiC) public consultation. BCUHB then gave their approval to a series of recommendations/changes to the way health care services are delivered in

North Wales including the closure of inpatient beds at PCH. BCUHB also confirmed the development of a new, integrated NHS Community Hospital; replacing PCH, the RAH and some other health service facilities in the area including Glan Traeth, Lawnside Child and Adolescent Mental Health Service and dental clinics in the area. The new hospital would also reduce the number of beds needed at YGC.

4.3.1 Long-List Development

When developing the long list, BCUHB took into account the change in service scope, as detailed in Section 3.6 including:

- The changing model of care of caring for Older People Mental Health inpatients in a district general hospital setting
- The changing model of care for supporting people to stay out of hospital
- The potential changes in scope required to respond to the decisions made as part of the YGC Re-Development project

Subsequently a further options workshop was held on 24 October 2016 to review, validate and update the original long list of options. Attendees of this workshop were as follows:

Name	Title				
Gareth Evans	Project Director (Clinical Director, Central Area)				
Stephanie O'Donnell	Project Manager, Central Area				
Ian Howard	Assistant Director, Strategic Analysis and				
	Development				
Mark Jenkinson	Older Persons' Mental Health Programme Manager				
Dilys Percival	Assistant Area Director for Therapy Services, Central				
	Area				
Sandra Naughton	Locality Manager, Community Services, Denbighshire				
	County Council				

Table 13: OBC Option Appraisal Team

The revised long list of options was developed and categorised under the headings of Scope, Technical Solution, Service Delivery, Implementation and Funding as follows.

4.3.2 Scoping Options

In accordance with the Treasury Green Book and Capital Investment Manual, the do nothing/status quo/option has been considered as a baseline for potential Value for Money. Within the broad scope outlined in the strategic case, the following main options have been considered:

- Option 1.1: Maintain Status Quo
- Option 1.2: SOC Scope (reference point)
- Option 1.3: the Minimum Scope
- Option 1.4: the Intermediate Scope
- Option 1.5: the Maximum Scope

Service	1.1 Status Quo	1.2 SOC Scope	1.3 Minimum Scope	1.4 Intermedia te Scope	1.5 Maximum Scope
Same Day Service	x	x	×	√	√
Treatment Zone	×	x	×	✓	√
Sexual Health	√ Level 1	√ Level 1	√ Level 1	Enhanced Level 2/3	Enhanced Level 2/3
District Nurse Clinic	×	✓	√	(inc.in Treatment Zone above)	√ (inc.in Treatment Zone above)
Third Sector	√	√	√	√	√
Diagnostics	√ X-Ray	√ X-Ray	√ X-Ray	√ X-Ray & Ultrasound	X-Ray & Ultrasound

Service	1.1 Status Quo	1.2 SOC Scope	1.3 Minimum Scope	1.4 Intermedia te Scope	1.5 Maximum Scope
Community	√	√	√	√	✓
Dental					
Outpatients	√	√	√	√	✓
OPD	√	√	√	√	√
Therapies					
Older					
People					
Mental					
Health	✓	×	✓	✓	✓
Community					
Day					
Service					
Inpatient	×	✓	√	✓	✓
Therapies					
IV Therapy	×	✓	✓	✓	✓
Community		✓	✓	✓ 	✓
Inpatient	×	30-Bed	30-Bed	28-Bed	30-Bed
Beds		Ward	Ward	Ward	Ward
011				plus ACU	
Older					
People					
Mental	×	✓	×	×	√
Health					
Beds Children's					
Children's	✓	\checkmark	✓	✓	✓
Services				√	√
Office	√	✓	/		
Accommod	· ·	V	√	plus additional	plus additional
ation:				auuilionai	สนนแบบส

Service	1.1 Status Quo	1.2 SOC Scope	1.3 Minimum Scope	1.4 Intermedia te Scope	1.5 Maximum Scope
Integrated				teams	teams
Health and					
Social Care					
Community					
Teams					

Table 14: Potential Scope of Services

4.3.2.1 Option 1.1: Status Quo

There will not be a new Community Hospital development with in-patient beds in the locality. Services will continue to be provided as they currently are, i.e., there would be no replacement of the services which were delivered from Prestatyn Community Hospital (PCH). Inpatient step-up or step-down care will be provided either from community hospitals in neighbouring localities or at YGC. Other community healthcare services will be provided either from local satellite bases or facilities in adjacent localities. There will be no further opportunity for enhancement or colocation with Social Care services or third sector. Essential maintenance will be carried out to RAH over the lifetime of the project but it will not be brought up to modern standards.

Advantages	Disadvantages
Less capital investment required.	Not aligned to the <i>Living Healthier</i> ,
	Staying Well strategy or other local and
	national policy guidance.
	Does not allow for integration or co-
	location of social and community
	services or third sector.
	Current accommodation does not allow
	for expansion in range or capacity
	Recruitment/retention difficulties may

lead to workforce shortages.
Does not respond to the specific
healthcare needs/requirements of the
local population.
Existing buildings are not fit for purpose,
and infrastructure is unsuitable for the
provision of modern healthcare service
delivery.
Existing sites present fragmented
access to services; preclude greater
one-stop approach being developed.

Table 15: Advantages and Disadvantages of Option 1.1

4.3.2.2 Option 1.2: SOC Scope

The scope of services identified in the SOC was reviewed, resulting in the following advantages and disadvantages:

Advantages	Disadvantages
Some change to current	Not aligned to the "Living Healthier,
accommodation that enables improved	Staying Wel"l strategy or other local and
Health Board services.	national policy guidance, such as the
	inclusion of a Same Day Service
Some reduction in fragmented	Does not respond to the change in
accessibility of current sites.	model of "Care Closer To Home",
	supporting people to stay out of hospital
	such as the Treatment Zone and the
	Emergency Ambulatory Care Unit
	Does not take into account changes in
	scope as a result of the YGC Re-
	Development Project regarding
	therapies and sexual health
	Does not support the model of care of
	caring for Older People Mental Health
	inpatients in a district general hospital
	setting

Table 16: Advantages and Disadvantages of Option 1.2

Due to the developments highlighted above (Section 0), the SOC scope does not fully allow BCUHB to respond to the key drivers in the "Living Healthier, Staying Well" strategic framework, particularly provision of "Care Closer to Home". This leads to an unbalanced service model where only some of the changes have been made and current service delivery in the locality is limited in scope.

4.3.2.3 Option 1.3: Do Minimum

For the minimum option, the project team considered services that could potentially be removed from the SOC scope. There was a consensus that the Older People Mental Health beds could be removed from the scope, as work is being undertaken for their provision within a district general hospital setting. This resulted in the following advantages and disadvantages:

Advantages	Disadvantages	
Supports the model of care of caring for	Not aligned to the Living Healthier,	
Older People Mental Health inpatients	Staying Well strategy or other local and	
in a district general hospital setting	national policy guidance, such as the	
	inclusion of a Same Day Service	
Some change to current	Does not respond to the change in	
accommodation that enables improved	model of Care Closer To Home,	
Health Board services.	supporting people to stay out of hospital	
	such as the Treatment Zone and the	
	Multi-disciplinary Assessment Unit	
Some reduction in fragmented	Does not take into account changes in	
accessibility of current sites.	scope as a result of the YGC Re-	
	Development Project regarding	
	therapies and sexual health	
	Some Capital Investment required	

Table 17: Advantages and Disadvantages of Option 1.3

4.3.2.4 Option 1.4: Intermediate Scope

For the intermediate option, service issues that were recognised as disadvantages in options 1.1 and 1.2 (above) were added to the scope. This resulted in the following advantages and disadvantages:

Advantages	Disadvantages
Aligned to the strategic framework "Living	Capital Investment required
Healthier, Staying Well" and other local	
and national policy guidance	
Responds to the change in model of care	
for supporting people to remain at home	
such as the Treatment Zone and the	
Ambulatory Care Unit.	
Takes into account changes in scope as a	
result of the YGC Re-Development Project	
regarding therapies and sexual health	
Supports the model of care of caring for	
Older People Mental Health inpatients in a	
district general hospital setting	
Enables the integration/co-location of	
social and community services and third	
sector	

Table 18: Advantages and Disadvantages of Option 1.4

4.3.2.5 Option 1.5: Maximum Scope

For the maximum option, the project team considered incorporating all of the services in all of the scopes (above) as a comparator. This resulted in the following advantages and disadvantages:

Advantages	Disadvantages
Aligned to the strategic framework	Does not support the model of care of
"Living Healthier, Staying Well" and	caring for Older People Mental Health
other local and national policy guidance	inpatients in a district general hospital
Responds to the change in model of	Capital Investment required
care for supporting people to remain at	
home such as the Treatment Zone and	
the Multi-disciplinary assessment Unit	
Takes into account changes in scope as	
a result of the YGC Re-Development	
Project regarding therapies and sexual	
health	
Supports the model of care of caring for	
Older People Mental Health inpatients	
in a district general hospital setting	

Table 19: Advantages and Disadvantages of Option 1.5

4.3.2.6 Overall Conclusion: Scoping Options

The table below summarises the assessment of each option against the investment objectives and critical success factors:

Option:	1.1	1.2	1.3	1.4	1.5
Description:	Status	SOC	Minimum	Inter-	Maximum
	Quo	Scope	William	mediate	Waxiiiidiii
Investment Objectives					
1. To provide safe and					
sustainable services in					
response to the current and	×	✓	×	✓	×
future health and well-being					
needs of the local population					
2. To further develop multi-					
agency, integrated, responsive	×	✓	√	√	✓
primary and community care	~	,	V	V	v
services in the area					
3. To increase the range of					
local services, thereby	×	×	×	✓	✓
reducing the reliance on the	^	×	^	v	v
DGH					
4. To deliver services in an					
environment which is fit for					
purpose and enhances health	×	\checkmark	✓	✓	✓
and well-being for service					
users and staff.					
5. To move care closer to					
people's homes, including	×	\checkmark	✓	✓	✓
inpatient bed based care.					
6.To improve economic, social,					
environmental and cultural	×	✓	√	√	./
well-being, as outlined in The	~	V	V	v	V
Future Generations Act					

Critical Success Factors					
Strategic Fit and Business	×	×	×	√	×
Needs (Strategic Case)	^	~	~	Ý	^
Potential Value for Money	×	×	×	✓	√
(Economic Case)	^			Ý	·
Capacity and Capability	×	×	×	√	1
(Commercial Case)	^	~	~	·	•
Potential Affordability	✓	✓	√	√	✓
(Financial Case)	v	¥	v	¥	V
Potential Achievability	✓	√	√	√	√
(Management Case)	v	·	Ý	·	•
Summary	Taken	Discount	Discount	Preferred	Possible
	Forwar	ed	ed		
	d				

KEY	×	does not	√	partially	√	meets
		meet		meets		

Table 20: Assessment of Scoping Options

Option		Findings
Scope		
1.1	Do Nothing	Possible: This option does not meet the principal needs of the
		scheme as defined in the investment objectives and critical
		success factors. However it has been retained as a comparator.
1.2	SOC Scope	Discounted: This option fails to meet the majority of the
		principal needs of the scheme as defined in the investment
		objectives and critical success factors.
1.3	Do Minimum	Discounted: This option fails to meet the majority of the
		principal needs of the scheme as defined in the investment
		objectives and critical success factors.
1.4	Intermediate	Preferred: This option would meet all of the principal needs of
		the scheme as defined in the investment objectives and critical
		success factors.
1.5	Do Maximum	Possible: This option partially meets the needs of the scheme
		as defined in the investment objectives and CSFs.

Table 21: Scoping Options Findings

4.3.3 Technical Solution Options

4.3.3.1 Introduction

The following technical solution options were considered during the workshop:

	New Build	Royal Alexandra Hospital	Offices
1	new build (clinical and	retain	in new build
	offices)		
2	new build (clinical and	dispose	in new build
	offices)		
3	new build (clinical and	demolish	in new build
	offices)		
4	extension to RAH	retain	part of new extension
			and RAH
5	new build (clinical)	retain	refurbish RAH

6	new build (clinical)	dispose	lease off-site
7	new build (clinical)	retain	lease off-site
8	new build (clinical)	demolish	lease off-site
9	new build (clinical)	dispose	buy off-site
10	new build (clinical)	retain	buy off-site
11	new build (clinical)	demolish	buy off-site
12	new build (clinical)	dispose	build off-site offices
13	new build (clinical)	retain	build off-site offices
14	new build (clinical)	demolish	build off-site offices
15	new build (clinical)	dispose	build on-site offices
16	new build (clinical)	retain	build on-site offices
17	new build (clinical)	demolish	build on-site offices

Table 22: Technical Solutions Options

Following discussion it was agreed that it would not be feasible to demolish or dispose of RAH for the following reasons:

- The building is Grade II listed and is of local historic significance
- Planning advice received suggests that any planning application made in regard to this project should consider/include RAH and that an unoccupied building on the sea front would not support the regeneration plans for the area
- Public feedback indicates a strong level of emotional attachment to RAH

Therefore, any available options which would render RAH surplus to requirements have not been short-listed.

It was also agreed that office accommodation is required to be on-site, close to clinical services in line with multi-disciplinary working and the "Care Closer To Home" framework for service delivery, set out in BCUHB's "Living Healthier, Staying Well" strategy. A key investment objective for the NDCH development is to further develop multi-agency, integrated, responsive primary and community care services in the

area. For this reason a 'Campus' solution is preferred which will support integrated working and the option of providing off-site offices was discounted.

Following this review, four options were identified as being viable for the long list. This range of options considers the technical solutions in relation to the preferred scope. The range of technical solution options are detailed below:

- Option 2.1: Refurbish and extend RAH
- Option 2.2: 100% New Build (clinical and office accommodation)
- Option 2.3: New Build clinical/refurbish RAH for office accommodation
- Option 2.4: New Build clinical/build separate on-site office accommodation

4.3.3.2 Option 2.1: Refurbish and Extend RAH

This Option (developed as the preferred way forward following SOC approval) involves refurbishing RAH to provide clinical and office accommodation as well as providing a new build extension to house diagnostic services and Wards which would not practicably fit within the existing hospital building envelope.

Advantages	Disadvantages
The RAH would benefit from fabric	Higher levels of capital investment
improvements and remain an integral	required to provide clinical
part of the NDCH campus	accommodation within the existing
	building
Co-location of staff administration areas	The existing building constraints of RAH
to clinical areas	would make it difficult to refurbish into
	modern fit for purpose clinical
	accommodation and some services
	would still fail to meet current health
	care guidelines
Would support the regeneration plans	The infrastructure upgrades necessary
for the area and satisfy the planning	to refurbish RAH for clinical
authority	accommodation would prove complex
	and costly

Advantages	Disadvantages
	The existing building has significant
	access and fire evacuation issues which
	would need to be addressed as part of
	any refurbishment

Table 23: Advantages and Disadvantages of Option 2.1

4.3.3.3 Option 2.2: 100% New Build (clinical and office accommodation)

This option explores the opportunity to develop a single new build solution. This would mean that the RAH would not form part of the solution and could potentially be disposed of or form part of a future investment for BCUHB.

Advantages	Disadvantages
Services would be provided in new fit	The available site area would not
for purpose accommodation	accommodate all of the required
	services without developing a multi
	storey solution which may not be
	acceptable to the planning authority
	This option does not address the
	existing RAH building
	This option does not take advantage of
	the economic benefits of housing offices
	in purpose built accommodation

Table 24: Advantages and Disadvantages of Option 2.2

4.3.3.4 Option 2.3: New Build clinical/Refurbish RAH

This option considers the disadvantages associated with option 2.2 involving a smaller new build solution exclusively for clinical accommodation whilst including RAH as part of the overall 'Campus' by refurbishing it to house on site office accommodation.

Advantages	Disadvantages
Clinical services would be provided	in Potentially high capital costs associated
new fit for purpose accommodation	with refurbishing RAH (although

	refurbishment for office accommodation
	would be more cost effective than a
	clinical refurbishment)
Office accommodation would be	
provided locally in upgraded facilities	
within RAH	
The RAH would benefit from fabric	
improvements and remain an integral	
part of the NDCH campus	
Would support the regeneration plans	
for the area and satisfy Planning	

Table 25: Advantages and Disadvantages of Option 2.3

4.3.3.5 Option 2.4: New Build clinical/Build separate On-Site office accommodation

As above this option includes the development of a new build solution for clinical accommodation but explores the advantages and disadvantages for building a separate purpose built office building. This would mean that the RAH would also be maintained by BCUHB but not form part of the 'Campus' solution.

Advantages	Disadvantages
Clinical services would be provided in	This option does not address the
new fit for purpose accommodation	existing RAH building
Office accommodation would be	
provided locally in new fit for purpose	
accommodation	
Potentially lower Capital investment	
required	

Table 26: Advantages and Disadvantages of Option 2.4

4.3.3.6 Overall Conclusion: Technical Solutions Options

The table and narrative below summarises the assessment of each option against the investment objectives and critical success factors.

Option:	2.1	2.2	2.3	2.4
Description:	Refurbish	100% New	New build	New build
	and	build	(clinical) &	(clinical) &
	Extend	(clinical &	refurbish	build on site
	RAH	offices)	RAH for	offices
			offices	
Investment Objectives				
1. To provide safe and				
sustainable services in				
response to the current and	✓	✓	✓	✓
future health and well-being				
needs of the local population				
2. To further develop multi-				
agency, integrated, responsive	√	√	√	
primary and community care	v	·	·	¥
services in the area				
3. To increase the range of local				
services, thereby reducing the	✓	✓	✓	✓
reliance on the DGH				
4. To deliver services in an				
environment which is fit for				
purpose and enhances health	✓	✓	✓	✓
and well-being for service users				
and staff.				
5. To move care closer to				
people's homes, including	✓	✓	✓	✓
inpatient bed based care.				
6. To improve economic, social,				
environmental and cultural well-	√	√	√	√
being, as outlined in The Future	V		V	V
Generations Act				
Critical Success Factors				

Option:	2.1	2.2	2.3	2.4
Strategic Fit and Business	✓	√	✓	√
Needs (Strategic Case)	,	·	,	·
2. Potential Value for Money	✓	×	✓	×
(Economic Case)	,		,	
3. Capacity and Capability	√	✓	√	√
(Commercial Case)				
4. Potential Affordability	✓	×	√	×
(Financial Case)			·	~
5. Potential Achievability	✓	×	✓	×
(Management Case)			,	
Summary	Possible	Discounted	Preferred	Discounted

KEY	×	does not	√	partially meets	√	meets
		meet		meets		

Table 27: Assessment of Technical Solutions Options

Option		Findings			
Technical Solution					
2.1	Refurbish and	Possible: This option partially meets the principal			
	Extend RAH	needs of the scheme as defined in the investment			
		objectives and critical success factors			
2.2	100% New Build	Discounted: This option partially meets the principal			
	(clinical and	needs of the scheme as defined in the investment			
	office	objectives, but not the critical success factors			
	accommodation)				
2.3	New Build	Preferred: This option would meet all of the principal			
	clinical/Refurbish	needs of the scheme as defined in the investment			
	RAH	objectives and critical success factors. Delivery and			
		complexity are acceptable but require capital funding			
2.4	New Build	Discounted: This option partially meets the principal			

Option		Findings
Technic	al Solution	
	clinical/Build	needs of the scheme as defined in the investment
	separate On-Site	objectives, but not the critical success factors
	office	
	accommodation	

Table 28: Technical Solutions Options Findings

4.3.4 Service Delivery Options

4.3.4.1 Introduction

The following range of options considers the technical options for service delivery in relation to the preferred scope and solution. The range of service delivery options are detailed below:

- Option 3.1: In House management and delivery of services by the Health Board
- Option 3.2: Outsource management and delivery of services by an external organisation.
- Option 3.3: Strategic Partnership a managed arrangement between the Health Board to jointly manage and deliver services

4.3.4.2 Option 3.1: In House

This option describes the services delivered by the Health Board, and managed by the Health Board.

Advantages	Disadvantages
The Health Board retains overall	Service delivery risks remain with the
responsibility and control of service	Health Board
delivery.	
Expertise is retained/managed within	
the Health Board	
Staffing resource is retained/managed	
by the Health Board.	

Table 29: Advantages and Disadvantages of Option 3.1

4.3.4.3 Option 3.2: Outsource

This option describes the service being delivered by an organisation outside the Health Board.

Advantages	Disadvantages
The bulk of service delivery risks are	Loss of control, staff and expertise;
transferred to the provider.	professional accountability in specialist
	professions and accountability for the
	Health Board in the execution and
	delivery of its statutory responsibilities.
Potential to deliver services for which	Requires complex contractual models,
internal expertise does not exist.	which currently do not exist or do not
	comply with Welsh Government policy.

Table 30: Advantages and Disadvantages of Option 3.2

4.3.4.4 Option 3.3: Strategic Partnership

This option describes a strategic partnership arrangement for the provision of services between the Health Board and other organisations (e.g.: consideration of a strategic partnership agreement with an outside organisation to help in the provision of services).

Advantages	Disadvantages
Shared responsibility of service delivery	Potential for problems to arise over
and risk.	integration of services; professional
	accountability in specialist professions
	and accountability for the Health Board
	in the execution and delivery of its
	statutory responsibilities.
Potential to deliver services for which	May requires complex contractual
internal expertise does not exist.	models, which currently do not exist or
	do not comply with Welsh Government
	policy.

Table 31: Advantages and Disadvantages of Option 3.3

4.3.4.5 Overall Conclusion: Delivery Options

The table below summarises the assessment of each option against the investment objectives and critical success factors.

Option:	3.1	3.2	3.3
Description:	In House	Outsource	Strategic
			Partnership
Investment Objectives			
1. To provide safe and sustainable services			
in response to the current and future health	√	×	×
and well-being needs of the local	·		
population			
2. To further develop multi-agency,			
integrated, responsive primary and	✓	×	×
community care services in the area			
3. To increase the range of local services,	✓	×	×
thereby reducing the reliance on the DGH	·	~	~
4. To deliver services in an environment			
which is fit for purpose and enhances	✓	×	×
health and well-being for service users and	Ý	^	*
staff.			
5. To move care closer to people's homes,	✓	×	×
including inpatient bed based care.	·	~	~
6. To improve economic, social,			
environmental and cultural well-being, as	✓	✓	✓
outlined in The Future Generations Act			
Critical Success Factors			
Strategic Fit and Business Needs	√	×	×
(Strategic Case)	·		
2. Potential Value for Money (Economic	√	×	×
Case)	•	~	~
3. Capacity and Capability (Commercial	√	?	?

Option:	3.1	3.2	3.3
Case)			
4. Potential Affordability (Financial Case)	✓	?	?
5. Potential Achievability (Management	√	7	2
Case)		·	
Summary	Preferred	Discounted	Discounted

		does				
KEY	×	not	?	unknown	✓	meets
		meet				

Table 32: Assessment of Service Delivery Options

Option		Findings
Service I	Delivery	
3.1	In-House	Preferred: This option provides the most acceptable
		solution in terms of use of staff, skills and resources.
3.2	Outsource	Discounted: This option has been discounted as it fails to
		deliver integration of services.
3.3	Strategic	Discounted: This option has been discounted as it is
	Partnership	unclear whether it delivers integration of services, and
		because of the increased complexity and achievability
		issues.

Table 33: Service Delivery Options Findings

4.3.5 Implementation Options

4.3.5.1 Introduction

This range of options gives consideration for implementation in relation to the preferred scope, service solution and method of service delivery. The range of implementation options is detailed below:

- Option 4.1: Single Stage All service changes delivered within a single phase.
- Option 4.2: Phased Service changes are implemented in multiple phases.

4.3.5.2 Option 4.1: Single Stage

This option assumes that all the required services could be delivered within the initial phase(s) of the project

Advantages	Disadvantages
Faster Implementation	
Potentially lower costs	

Table 34: Advantages and Disadvantages of Option 4.1

4.3.5.3 Option 4.2: Phased

This option assumes that the implementation of the required development and services would be phased.

Advantages	Disadvantages
	Phased approach takes longer to
	implement and delays benefits.
	Potentially higher Capital costs

Table 35: Advantages and Disadvantages of Option 4.2

4.3.5.4 Overall Conclusion: Implementation Options

The table below summarises the assessment of each option against the investment objectives and critical success factors

Option:	4.1	4.2
Description:	Single Phase	Phased
Investment Objectives		
To provide safe and sustainable services in response to	✓	✓
the current and future health and well-being needs of the		
local population		
2. To further develop multi-agency, integrated, responsive	✓	✓
primary and community care services in the area		
3. To increase the range of local services, thereby reducing	✓	√
the reliance on the DGH		
4. To deliver services in an environment which is fit for	✓	✓
purpose and enhances health and well-being for service		
users and staff.		
5. To move care closer to people's homes, including	✓	√
inpatient bed based care.		
6. To improve economic, social, environmental and cultural	√	√
well-being, as outlined in The Future Generations Act	·	·
Critical Success Factors		
Strategic Fit and Business Needs (Strategic Case)	✓	√
Potential Value for Money (Economic Case)	✓	×
Capacity and Capability (Commercial Case)	√	×
Potential Affordability (Financial Case)	√	×
5. Potential Achievability (Management Case)	√	×
Summary	Preferred	Discounted

KEY	×	does not meet	√	meets	
-----	---	------------------	----------	-------	--

Table 36: Assessment of Implementation Options

Option		Findings
Impleme	ntation	
4.1	Single	Preferred: This option provides the best balance of cost,
	Phase	implementation timescale and earlier delivery of benefits
4.2	Phased	Discounted: This option is discounted due to potential
		increased cost and complexity, which is unnecessary to
		maintain service delivery in this project.

Table 37: Implementation Options Findings

4.3.6 Funding Options

The range of options considers the choices available for funding and financing the scheme in relation to the preferred scope, technical solution, method of service delivery and implementation. The ranges of funding options available are detailed below:

- Option 5.1: Private Funding The scheme is delivered via a 3rd party developed scheme utilising private capital monies.
- Option 5.2: Public Funding The scheme is delivered via the NHS Capital Expenditure Programme.

Welsh Government has confirmed that, subject to the submission of a satisfactory business case, this scheme will be publically funded and owned as part of the NHS All-Wales Capital Programme. It is clear that the Health Board is not in a position to absorb the revenue pressures that alternative means of funding would entail.

Option	Scope	Findings
Funding		
5.1	Private	Discounted: Third Party Development funding has been
	Funding	excluded as a viable funding option as the Health Board is
		not in a position to absorb the revenue pressures that this
		would entail.
5.2	Public	Preferred: This scheme will be publicly funded and is part
	Funding	of the NHS Capital Expenditure Programme.

Table 38: Implementation Options Findings

4.3.7 The Long List: Inclusions and Exclusions

The long list has appraised a wide range of possible options.

Option		Findings
Scope		
1.1	Status Quo	Possible: This option does not meet the principal
		needs of the scheme as defined in the investment
		objectives and critical success factors. However it has
		been retained as a comparator.
1.2	SOC Scope	Discounted: This option fails to meet the majority of
		the principal needs of the scheme as defined in the
		investment objectives and critical success factors.
1.3	Do Minimum	Discounted: This option fails to meet the majority of
		the principal needs of the scheme as defined in the
		investment objectives and critical success factors.
1.4	Intermediate	Preferred: This option would meet all of the principal
		needs of the scheme as defined in the investment
		objectives and critical success factors.
1.5	Do Maximum	Possible: This option partially meets the needs of the
		scheme as defined in the investment objectives and
		critical success factors.
Technica	al Solution	
2.1	Refurbish and	Possible: This option partially meets the principal
	Extend RAH	needs of the scheme as defined in the investment
		objectives and critical success factors.
2.2	100% New Build	Discounted: This option does not meet the principal
	(clinical and	needs of the scheme as defined in the investment
	office	objectives and critical success factors
	accommodation)	
2.3	New Build	Preferred: This option would meet all of the principal
	clinical/Refurbish	needs of the scheme as defined in the investment
	RAH	objectives and critical success factors. Delivery and

Option		Findings
Scope		
		complexity are acceptable but require capital funding.
2.4	New Build	Discounted: This option does not meet the principal
	clinical/Build	needs of the scheme as defined in the investment
	separate On-Site	objectives and critical success factors
	office	
	accommodation	
Service	Delivery	
3.1	In-House	Preferred: This option provides the most acceptable
		solution in terms of use of staff, skills and resources.
3.2	Outsource	Discounted: This option has been discounted as it
		fails to deliver integration of services.
3.3	Strategic	Discounted: This option has been discounted as it is
	Partnership	unclear whether it delivers integration of services, and
		because of the increased complexity and achievability
		issues.
Impleme	entation	
4.1	Single Phase	Preferred: This option provides the best balance of
		cost, implementation timescale and earlier delivery of
		benefits
4.2	Phased	Discounted: This option is discounted due to potential
		increased cost and complexity, which is unnecessary
		to maintain service delivery in this project.
Funding		
5.1	Private Funding	Discounted: 3PD funding has been excluded as a
		viable funding option as the Health Board is not in a
		position to absorb the revenue pressures that this
		would entail.
5.2	Public Funding	Preferred: This scheme will be publicly funded and is
		part of the NHS Capital Expenditure Programme.

Table 39: Long List Inclusions and Exclusions

4.3.8 Preferred Way Forward

The *preferred* and *possible* options identified above have been carried forward into the short list for further appraisal and evaluation. All the options that were *discounted* as impracticable have been excluded at this stage. On the basis of this analysis, the recommended short-list for further appraisal within this business case is as follows:

	Option 1	Option 2	Option 3	Option 4	
Scope	Status Quo	Intermediate	Intermediate	Maximum	
Technical	Status Quo	2.3	2.1	2.3	
Service	In-house	In-house	In-house	In-house	
Implementation	Single Phase	Single Phase	Single Phase	Single Phase	
Funding	Public	Public	Public	Public	

Table 40: Preferred Way Forward

4.4 Economic Appraisal of Short-Listed Options

This section provides a detailed analysis of the main costs and benefits associated with each of the shortlisted options. The benefits are evaluated in terms of:

- a qualitative benefits analysis;
- an analysis of the monetised benefits cash releasing and non-cash releasing;
- a risk analysis

4.4.1 Qualitative Benefits Appraisal

A workshop was held on 10 November 2016 to evaluate the qualitative benefits associated with each option. Attendees of this workshop were as follows:

Name	Title
Gareth Evans	Project Director (Clinical Director, Central Area)
Stephanie O'Donnell	Project Manager, Central Area
Ian Howard	Assistant Director, Strategic Analysis and
	Development
Neil Bradshaw	Assistant Director of Strategy – Capital
Alison Kemp	Head of Community Services, Central Area

Table 41: Workshop attendees

Following this workshop key decisions were then validated through the Project Board.

4.4.1.1 Methodology

The appraisal of the qualitative benefits associated with each option was undertaken by:

- identifying the benefits criteria relating to each of the investment objectives
- weighting the relative importance (in %s) of each benefit criterion in relation to each investment objective
- scoring each of the short-listed options against the benefit criteria on a scale of 0 to 10
- · deriving a weighted benefits score for each option

4.4.1.2 Qualitative Benefits Criteria

The qualitative benefits criteria were defined as follows for each investment objective:

Criteria	Sub Criteria
	Best outcomes for patients; quality of care is
	enhanced, in terms of the model of care and
	seamless pathways of care
	Right care, right place, right time
	Patient safety is enhanced, in terms of infection
	prevention and control, operating risks and other
Clinical &	safety measures
Environmental Quality	Improved clinical outcomes for patients
& Safety	Ability to provide safe, evidence-based services
	Focus on prevention and self-management
	Development of service which supports the
	reduction of inpatient admissions and reduces
	length of stay
	Improved patient satisfaction
	Compliance with Welsh Health Building

Criteria	Sub Criteria
	Notes/Welsh Health Technical Memoranda
	Improve quality of environment
	Improved privacy & dignity
	Improved staff satisfaction and recruitment and
	retention
	Appropriate infrastructure; number and quality of
	staff, right equipment, IT systems, medical records
	Keeping people healthier for longer
	As much care as possible is delivered within North
	Wales
	Supporting the delivery of Living Healthier Staying
	Well
Clinical Sustainability	Delivery of Prudent Healthcare and the early
	intervention/prevention agenda in social care
	 Reducing demands on existing inpatient beds
	Reducing pressure on primary care and DGH
	Definitive care plan prior to discharge
	Maintaining people's independence
	Increase opportunity for multi-agency/partnership
	working
	Increased clinical efficiency
	Improved access to services; primary and
	secondary care
Integration/Efficiency	Less duplication
Integration/Emolency	Improved teaching and shared learning
	Co-location; physically and mentally
	Efficient use of resources
	Flexibility of workforce
	Improved skill mix
	Improved patient pathways

Criteria	Sub Criteria
Deliverability	 The model can be delivered within existing constraints e.g. workforce to deliver the model is available Model of care realistic and achievable within a reasonable timeframe Transition to the model of care can be delivered safely thereby minimising risk to service provision in the interim Deliverable within reasonable timescales (12-18 months)
Corporate Responsibility	 Improve recruitment and retention of staff Supports DCC regeneration plans for the local area Recognises the emotional attachment to RAH by locals Development of a health campus solution Ability to provide support to families who are away from their local area; providing practical and emotional support Increased well-being for the community

Table 42: Non-Financial Benefits Criteria

4.4.1.3 Weighting of Criteria

The weightings given to each of the criteria are shown below:

Criteria	Weighting
Clinical Quality and Safety	30
Sustainability	20
Integration/Efficiency	20
Deliverability	10
Corporate Responsibility	20
Total	100

Table 43: Weighting of Criteria

4.4.1.4 Benefit Scoring

Benefits scores were allocated on a range of 0-10 for each option and agreed in discussion by the workshop participants to confirm that the scores were fair and reasonable.

A score of zero indicated that the option failed to satisfy the criteria in any respect. A score of ten indicated that the option satisfied the criteria perfectly.

4.4.1.4.1 Option 1

Clinical Quality and Safety - The quality of the current service is recognised however, the Status Quo option could not achieve the best outcomes for patients, fully meet standards, enhance patient safety or comply with Health Building Notes (HBNs). It provides no opportunity for further integration therefore improving access to services and clinical pathways for patients. This option was scored as 2.

Clinical Sustainability – Maintaining the Status Quo will not support the new model of care, and is not aligned to Living Healthier Staying Well or other local and national policy guidance. This option was scored as **1**.

Integration and Efficiency – The current model does not allow for further integration of services therefore improving clinical efficiencies. This option was scored as **1**.

Deliverability – Maintaining the Status Quo is achievable however, this will increasingly have capital and revenue implications for BCUHB. This option was scored as **8**.

Corporate Responsibility – As is the nature of the Status Quo option it does not offer any opportunity to make significant improvements either to the existing fabric of the building or to the service model in order to improve the health and well-being of the community. It does however maintain the use of RAH. This option was scored as **2**.

4.4.1.4.2 Option 2

Clinical Quality and Safety – The intermediate scope is recognised as providing the 'best fit' with the strategic objectives and allows for improved outcomes for

patients, enhanced patient safety and compliance with healthcare standards including HBNs. The build option allows the development of a 'Campus' with clinical services being delivered from new fit for purpose accommodation, however, clinical teams office base would be in a separate building which was considered a potential disadvantage. This option was scored as **8**.

Clinical Sustainability – The intermediate scope is recognised as providing the 'best fit' with the strategic objectives and allows for improved outcomes for patients, enhanced patient safety and compliance with healthcare standards including HBNs. This option was scored as **9**.

Integration and Efficiency – The build option allows the development of a healthcare 'Campus' allowing for improved integration and clinical efficiency. However clinical and administration would be housed in different buildings which was considered potentially less efficient than a single building solution. This option was scored as **8**.

Deliverability – It was felt that this option represents the best balance between benefits and potential Capital cost requirements. This option was scored as **7**.

Corporate Responsibility – This option addresses all of the sub criteria for this benefit. For staff, it would allow the integration of teams and support the creation of a health 'Campus' thus improving recruitment and retention. By refurbishing RAH it not only supports DCC regeneration plans for the area but recognises the historic significance of the existing building. This option was scored as **9**.

4.4.1.4.3 Option 3

Clinical Quality and Safety – As in option 2 the intermediate scope is recognised as providing the 'best fit' with the strategic objectives and allows for improved outcomes for patients. However, as this build option includes refurbishing RAH for clinical accommodation and the design would be constricted by the existing structure of the building some functionality and compliance would be compromised. This option was scored as **6**.

Clinical Sustainability – As above, the scope of this option provides the best strategic fit, however there were some concerns regarding the use of RAH for clinical use as it limits the flexibility and adaptability for any future development in care models. This option was scored as **8**.

Integration and Efficiency – A single site option potentially provides closer proximity for staff between clinical and administrative functions; however the design would be affected by the inherent inefficiencies of the existing building. This option was scored as **7**.

Deliverability – This option involves refurbishing and extending RAH this would mean making significant improvements to the access around the building and specifically evacuation routes making it more complex to deliver. This option was scored as **5**.

Corporate Responsibility – As option 2 this option addresses many of the sub criteria for this benefit. For staff, it would allow the integration of teams and support the creation of a health 'Campus' thus improving recruitment and retention. By refurbishing RAH it not only supports DCC regeneration plans for the area but recognises the historic significance of the existing building. However, the option was scored lower due to the constraints of refurbishing the existing building for clinical use and a potential increase in Capital Costs. This option was scored as 8.

4.4.1.4.4 Option 4

Clinical Quality and Safety –This option includes the addition of OPMH beds which does not support the model of care of caring for Older People Mental Health inpatients in a district general hospital setting. This option was scored as **5**.

Clinical Sustainability – As above the maximum scope does not recognise changing models of care especially around Older People Mental Health patients and is therefore not a sustainable model. This option was scored as **6**.

Integration and Efficiency – As in Option 2 this build option allows the development of a healthcare 'Campus' allowing for improved integration and clinical efficiency. However clinical and administration would be housed in different buildings which was considered potentially less efficient than a single building solution. In addition to this the maximum scope option was considered less efficient in terms of strategic fit. This option was scored as **6**.

Deliverability – As this option contains enhanced scope (which does not support the model of care of caring for Older People Mental Health inpatients in a district general hospital setting) it would mean a larger building area and therefore increased capital costs. This option was scored as **5**.

Corporate Responsibility - As options 2 and 3 this option addresses many of the sub criteria for this benefit. For staff, it would allow the integration of teams and support the creation of a health 'Campus' thus improving recruitment and retention. By refurbishing RAH it not only supports DCC regeneration plans for the area but recognises the historic significance of the existing building. However, the option was scored lower due to the enhanced scope. This option was scored as **7**.

4.4.1.5 Summary of Results

The results of the benefits scoring against each option are detailed below:

		Score				Weighted Score					
Benefit Criteria	Weighting	Opt	Opt	Opt	Opt	Opt	Opt	Opt	Opt		
		1	2	3	4	1	2	3	4		
Clinical &											
Environmental	30	2	8	6	5	60	240	180	50		
Quality & Safety											
Clinical	20	1	9	8	6	20	180	160	120		
Sustainability	20	ı	9	0	0	20	100	100	120		
Integration/	20	1	8	7	6	20	160	140	120		
Efficiency	20	ı	O	,		20	100	140	120		
Deliverability	10	8	7	5	5	80	70	50	50		
Corporate	20	2	9	8	7	40	180	160	140		
Responsibility	20	۷	9	0	,	40	100	100	140		
Total	100	14	41	34	29	220	830	690	580		
Ranking		4	1	2	3	4	1	2	3		

Table 44: Summary of Results

4.4.1.6 Sensitivity Analysis

A sensitivity analysis has been undertaken to test the robustness of the ranking of the options. The methods used were:

- Equal weighting
- Exclusion top ranked criteria
- Switching values

Undertaking the sensitivity analysis shows that the preferred option would not be different under any of the alternative methods.

4.4.2 Financial Benefits Appraisal

The costing assumptions for the economic appraisal of financial benefits are outlined below. The methodology is based upon the information provided by the DoH using the Generic Economic Model (GEM) for OBCs. The assumptions included within the model are:-

- Prices are maintained at a constant rate and are not inflated/indexed each year with 2018/19 as the baseline
- Capital and lifecycle costs are exclusive of VAT
- Revenue costs exclude the depreciation charge
- The cash flow has been discounted over a 30 year period for the do minimum option and 60 years for the other options
- The cash flow factor applied is 3.5% up to 30 years and 3% thereafter.

4.4.2.1 Cost/price base

Capital costs are at base index of 195. Revenue costs are indexed at 2017/18 prices.

4.4.2.2 Appraisal Period

The proposed development is a combination of new build and refurbishment works and as such the appraisal has been undertaken over a period of 60 years plus the construction phase in line with Department of Health (DoH) guidance.

4.4.2.3 Summary of NPC and EAC Appraisal

Summary of NPC and EAC Appraisal										
Option 1 Option 2 Option 3 Option										
	(£000's)	(£000's)	(£000's)	(£000's)						
NPV	79,267	116,001	116,534	150,264						
EAC (Equivalent	4,087	4,398	4,418	5,697						
Annual Cost)										
Ranking	1	2	3	4						

Table 45: Summary of NPV and EAC Appraisal

The detailed economic appraisals for each option are attached in the relevant appendix.

4.4.2.4 Risk Assessment

A risk register was originally developed in 2014/15 by stakeholders including senior clinicians, service managers, and representatives from workforce management and planning. A risk assessment workshop was held in November 2016. The workshop participants were core project team members and they reviewed the key risks identified. Stakeholders were also asked to provide feedback on relevant risk sections independently. This was done during October/November 2016. It was agreed that the following risks should be assessed against each of the options:

- Service Capacity/Demand
- Achieving the ambition with relation to the model of care and integration of services (OPMH, multi-disciplinary assessment)
- Workforce demands
- Affordability of the case

4.4.2.4.1 Service Capacity/Demand

This risk relates to the demographic trend to increasing numbers of older people in the locality and the attendant health and well-being needs of this cohort in what is an area of social deprivation. The number of older people will increase by 2029 by 22% and it is reasonable to expect a similar increase in demand for services throughout the hospital, in particular on the inpatient Ward. The ability to sustain service delivery is reliant on the ability to change focus towards re-ablement and maintaining the independence of service users. The Intermediate service scope enables integration of services, both multi-agency and multi-disciplinary, whilst the maximum scope is a more traditional model segregating services rather than wrapping them round the service user.

⁸ "North Wales Population Assessment", November 2016 (North Wales Social Services Improvement Collaborative). Aligned to Social Services and Wellbeing (Wales) Act, Part 9, 2014.

4.4.2.4.2 Model of Care

This is related to the ability to change the way in which services are delivered in line with current strategies. The BCU Health Board's "Living Healthier Staying Well" strategy commits to the strategic aim of providing care closer to home for inpatients and outpatients and including access to day services and multi-agency services delivered at home. This shift away from hospital based care responds to the direction set out in "A Healthier Wales: Our Plan for Health and Social Care"9.

4.4.2.4.3 Workforce Demands

There are currently no Inpatient beds, nor same day service, nor IV Therapies available in North Denbighshire outside the DGH. It is acknowledged that the NHS in Wales is working within a changing environment and in challenging times in respect to a range of workforce challenges, in particular recruitment of staff. There are skills shortages in some areas of service delivery, a number of which are UK wide. BCUHB, aligned to the vision of the Strategic Workforce Framework for the Public Service in Wales "Working Together for Wales, is meeting these challenges through a range of initiatives. BCUHB has set out its long term workforce requirements including staffing needs of the North Denbighshire development, as part of its annual workforce planning process. In addition, through development of Community Resource Teams, (CRTs), such as the emerging CRT based at the RAH site, BCU is working with partner organisations to deliver a sustainable workforce for the future through the development of combined roles, such as Health and Social care Support Workers and integrated roles in Occupational Therapy for example. In addition BCUHB supports the commissioning of competence based programmes for nonregistered staff leading to the creation of new and extended roles such as the Associate Practitioner. Furthermore traditional models of care, such as ward staffing being based on nurse and nursing support staff only, are being reviewed and the concept of multi-disciplinary staffed wards with a wider blend of registered and nonregistered staff rostered into the ward establishment is under consideration.

 $^{^9\} https://gov.wales/topics/health/publications/healthier-wales/?lang=en$

4.4.2.4.4 Affordability

The SOC was originally developed as part of the Health Board's strategy in "Healthcare in North Wales is Changing". Elements of the strategy included planned repatriation of beds from other community hospitals after beds at the Royal Alexandra Hospital were closed in 2010 due to fire code deficiencies.

4.4.2.4.5 Key Risks Identified

The relative risks of the four shortlisted options have been considered. The key risks associated with each option are identified in the following table:

Risk		Option	า 1	Option 2			Option 3			Option 4		
	Impact (I) X Likelihood (L)= Total											
	I	L	Total	I	L	Total	I	L	Total	I	L	Total
Service												
Capacity/	9	9	81	9	3	27	9	5	45	9	3	27
Demand												
Model of	9	9	81	9	5	45	9	5	45	9	7	63
Care	9	9	01	9	3	45	9	3	45	9	,	03
Workforce	7	9	63	7	6	42	7	6	42	7	6	42
Affordability	6	3	18	6	6	36	6	8	48	6	9	54
TOTAL			243			150			180			186
Ranking	4		1		2			3				

Table 46: Risk Assessment

4.5 Optimism Bias

The risk associated with optimism bias is considered to be relatively low on the basis that:

- The design is well advanced
- There has been (and continues to be) good stakeholder engagement, resulting in a full identification of stakeholder requirements

It is therefore proposed to manage project capital risk through the 10% contingency sum with no adjustment for optimism bias.

4.6 Preferred Option

The table below summarises the key outcomes and rankings of the qualitative benefits, the monetised benefits and the risk appraisals of the shortlisted options:

Appraisal	Option 1	Option 2	Option 3	Option 4
Qualitative	4	1	2	3
Financial	1	2	3	4
Risk	4	1	2	3
Overall	3	1	2	4
Ranking				

Table 47: Overall Assessment

Following an economic, benefits and risk appraisal of each option, it was concluded that **Option 2** was the preferred way forward: an integrated community hospital facility with NHS inpatient beds that brings together a range of health, social care and third sector services over extended hours, 7 days a week. The NDCH clinical services will be provided in a new build facility supported by administration space provided in a refurbished RAH. The sensitivity analyses of the monetised and qualitative benefits confirm the rankings and the conclusion.

5. The Commercial Case

This section of the OBC outlines the proposed contract strategy in relation to the preferred option outlined in *Section 3: The Economic Case*. The aim of the *Commercial Case* is to secure the optimal deal for the preferred option. In accordance with national guidance the contract will be the National Engineering Contract (NEC) 3 with target cost.

5.1 Procurement Strategy

The Supply Chain Partner (SCP) has been appointed via the Designed for Life: Building for Wales 3 Framework (DfL3) with the main objectives of the framework being:

- Obtain Best Value for Money in procuring major health capital developments
- Implement the Welsh Government's construction policy to ensure that the NHS in Wales complies with best practice models of procurement based on long-term strategic partnerships
- Ensure that NHS Wales becomes an exemplar client for all major construction procurement projects
- Create an environment of collaborative working and continuous improvement that utilises strategic partnerships with integrated supply chains

Through the attainment of these objectives the framework will ensure that construction projects are delivered with improved success factors in terms of:

- Lower design and construction costs
- Reduced programme of design and construction
- Higher quality of design and construction and less defects
- Greater predictability in relation to cost and programme
- Reduced accident rate on site
- Higher sustainability ratings
- Community benefits

5.1.1 Required Services

The expected cost of the works requires that the Board utilise the national DfL3 framework and procure the following support:

- Construction Project Manager
- Cost Advisor
- Supply Chain Partner (construction contractor)

NWSSP Specialist Estate Services (NWSSP – SES) have supported and advised the Board on the appropriate procurement processes.

In accordance with the appropriate DfL3 framework invitations to tender where sought from the companies identified within the appropriate national framework. Tender submissions where evaluated on the basis of cost and quality and each company was invited to attend an interview in support of their tender. The interviews, together with the company's written submissions, sought to assess their proposed team, their experience of similar commissions and their approach to the project. Tenders were evaluated by a small team comprising the Project Director, Service Leads and the leads for Capital Development and Operational Estates together with support from NWSSP – SES.

Following the above procurement process the BCUHB has confirmed the following appointments:

• Construction Project Manager: Gleeds Management Services

Cost Advisor:
 Gleeds Cost Management

• Supply Chain Partner (construction contractor) Interserve Construction Ltd

5.1.2 Service Streams and Required Outputs

A Design Annexe is attached as a separate document which captures the scope and content of the potential deal and includes:

- the business areas affected by the procurement
- the business environment and related activities
- the business objectives relevant to the procurement
- the scope of the procurement

- the required service streams
- the specification of required outputs
- the requirements to be met, including: essential outputs, phases, performance measures, and quality attributes
- the stakeholders and customers for the outputs
- the possibilities for the procurement including options for variation in the existing and future scope for services
- the future potential developments and further phases required

5.2 Contractual Arrangements

The form of contract will be the NEC 3 Option C with Target Cost that is utilised within the DfL3 Framework. The contractual relationships between the various parties are subject to the rules and regulations of the framework.

The NEC contract has been chosen as the contract type to be utilised under the framework. The NEC contract will be applicable to both appointment of the Supply Chain Partners and Support Consultants. The Support Consultants will enter into the NEC Professional Services Contracts (PSC) with the BCUHB

5.2.1 Contract Duration

The proposed contract length for the project is 24 months from Full Business Case approval to handover (timescales are provided in Section 0 below). Partnership between the SCP and the BCUHB will continue twelve months after project completion and handover, ensuring any defects have been made good.

5.2.2 Implementation Timescales

The project programme is attached as an appendix. A schedule of key dates is summarised below:

Milestones	Key Dates
Submission of Outline Business Case	November 2018
WG Approval of Outline Business Case	January 2019
Submission of Full Business Case	March 2020
Approval of Final Business Case	June 2020
Commencement of Construction Works	September 2020
Completion of Construction Works – new clinical build	March 2022
Commissioning – new clinical build	April 2022
Complete refurbishment of RAH	December 2022

Table 48: Schedule of Key Dates

5.2.3 Potential Payment Mechanisms

The DfL3 framework ensures that a collaborative working model will be adopted. It is therefore expected that the charging mechanisms in respect of this project will be covered within the framework agreement.

The framework will require a Guaranteed Maximum Price (GMP) and will also stipulate the requirement for a staged payment mechanism, which would normally be monthly via valuation. Once approved by open book the Construction Project Manager would issue an interim certificate for payment.

5.2.4 Potential Risk Apportionment

The general principle is that risks should be passed to *the party best able to manage* them subject to Value for Money (VfM). This section provides an assessment of how the associated risks might be apportion between the BCUHB and the appointed Supply Chain Partner (SCP) and Project Manager (PM).

The risk register details how the risks have been apportioned between the BCUHB and the SCP. The risk register was generated by following the NWSSP-SES Standard Risk Register Template, adding scheme specific risks and the apportionment of the risks between the BCUHB and SCP agreed at an initial risk workshop and updated at regular intervals throughout the process.

Risk Category		Potential Allocation	
Misk Category	BCUHB	SCP	Shared
Design Risk			✓
Construction Risk		✓	
Transition &			
Implementation	\checkmark		
Risk			
Availability &	√		
Performance Risk	•		
Operating Risk	✓		
Revenue Risks	✓		
Termination Risks			√
Technological			✓
Risks			,
Control Risks			√
Residual Value	√		
Risks	·		
Financial Risks			✓
Legislative Risks	✓		
Other Project			✓
Risks			,

Table 49: Risk Allocation

5.3 Personnel Implications

As the service delivery is to be provided in house, it is not anticipated that TUPE (Transfer of Undertakings {Protection of Employment} Regulations {1981}) will apply to this investment as outlined above.

6. The Financial Case

This section sets out the financial case for the proposed development, including an assessment of the revenue affordability of the preferred option. The preferred option has a total projected capital cost of £40,241,000. The capital cost, subject to approval, will be fully funded by the Welsh Government.

The case presents opportunities for cash-releasing savings as the impact of new service models take effect, but entails an initial net increased revenue cost of £2.8 million compared to current expenditure, which can be reduced to a net increase of £0.6 million after the delivery of cash-releasing saving. This net £0.6 million recognises the estate and facilities cost implications of developing a new build and retaining the existing RAH site The strategic case for this development reflects a critical part of the Board's overall future clinical services model, in particular the intent to provide care closer to home and reduce dependence on the acute sector. The Board's strategy ("Living Healthier, Staying Well" which includes "Care Closer to Home") sets out plans to transform the way in which services are delivered in North Wales to ensure excellent outcomes for patients and a stable and sustainable workforce. This strategy will be delivered within the overall financial resource which is available to the Health Board. The early development of the North Denbighshire Community Hospital will bring additional costs as set out in this business case and these costs will be managed as part of the Board's overall longer term financial strategy of returning to a sustainable recurring financial position, in a timescale to be agreed with Welsh Government.

There is an assumption that Welsh Government will fund the increased depreciation charge of £813,000, which does not form part of the net revenue shortfall, together with the projected impairment cost of £10.6 million following a revaluation of the capital asset on completion.

The development opportunities are projected to deliver non-cash releasing benefits which are reflected within the economic case but do not form part of the affordability assessment.

6.1 Capital and Revenue Requirements

6.1.1 Capital Costs

The capital costs of the preferred option are broken down as follows:

Capital Cost Summary	Preferred Option (£000s)
Works Costs	26,848
Fees	5,461
Non-Works Costs	1,342
Equipment Costs	3,759
Quantified Risk Contingency	3,741
Less: VAT Recovery	(910)
TOTAL	40,241

Table 50: Capital Cost Summary

The capital costs include the provision of a new build, light refurbishment of the Royal Alexandra Site and a provision for decant facilities during construction included under non-works costs. The total capital costs do not include costs incurred for work undertaken previously to bring the scheme to OBC stage. These costs total £682,000.

The £40.24 million is an increase from the estimate in the SOC of £22.2 million. There are three main reasons for this. First, the more detailed work undertaken at OBC stage has established that the original proposal to refurbish and extend the RAH for clinical use has established that issues with the existing building would significantly constrain the design and prove costly. Second, the square meterage for the original scope was under-estimated. Third, the increase in the scope of the scheme outlined in the strategic case has increased the size of build required.

6.1.2 Revenue Costs

The revenue costs of the preferred option are broken down as follows:

Revenue Costs	Current Costs (£000s)	Proposed Costs (£000s)	Variance (£000s)
Inpatient Facilities (excludes costs of ACU)	0	1,542	1,542
Same Day Care Service	0	268	268
Treatment Zone/Outpatients	398	398	0
Therapies: Outpatients	621	621	0
Older People Mental Health (Day Services)	230	230	0
Day Therapy Assessment Unit	0	176	176
Dental	779	779	0
Sexual Health	495	495	0
Clinical Support	192	395	203
Estate and Facilities Costs	411	1,000	589
Sub Total	3,126	5,904	2,778
Contingency	0	15	15
Depreciation Charge	351	1,164	813
TOTAL	3,477	7,083	3,606

Table 51: Revenue Costs

Costs are based upon a 2018/19 price base and show the annual recurrent revenue costs of the development. Additional non recurrent costs totalling £244,000 over two years are projected to address the running costs of decanting and dual running. A provision is also included for any potential training costs as there is a projected increase in staffing of 62 WTEs.

6.1.2.1 Inpatient Facilities

Costs are based upon a total ward establishment of 28 beds with a nurse compliment of 33.46 WTEs and are based upon a traditional ward model at this stage, but include a provision for extended day and 7 day working. Further work to develop the Ambulatory Care Unit (ACU) solution will be further explored and refined during the development of the FBC.

6.1.2.2 Same Day Care Service

Costs are based upon an extended day working 7 days per week which is nurse led and includes provision for diagnostic support.

6.1.2.3 Day Therapy Assessment Unit (IV)

Costs are based upon a similar service model operating in Llandudno Hospital, with an extended day working 5 days per week and assumes a potential throughput of 400 treatments per month.

6.1.2.4 Clinical Support

The increase in cost relates to diagnostic and therapy support to cover the inpatient facilities.

6.1.2.5 Estate and Facilities

The increase in cost results from the development of a new facility which will include new catering services and other support costs linked to the ward together with the requirement to retain a significant portion of the existing RAH site. These costs will be reviewed when further detail is available to maximise the energy and maintenance efficiencies of a new build.

6.1.2.6 Contingency

A small contingency is included at OBC stage to allow for unquantified costs such as the impact of patient transport for the proposed new development.

6.1.2.7 Depreciation Charge

The depreciation charge is based upon the capital costs of the new build after allowing for an impairment value reduction of 30% and adjusts for the impact of proposed demolition of parts of the existing site.

6.1.2.8 Movement in Revenue Costs from SOC to OBC

The SOC assumed no increase in costs. The movement in cost of £3,585,000 can be explained as follows:

- The assumption that this will give additional inpatient bed capacity and will not be a transfer from existing sites equates to £1,760,000 (before delivery of new cash releasing savings and includes the contingency)
- The introduction of a same day service equates to £268,000
- The inclusion of costs for an IV therapy unit equates to £176,000
- The retention of the existing site together with an increase footprint equates to £589,000 for estates and facilities and £813,000 for depreciation charges

The proposal formed part of the community service review associated with "Health Care in North Wales is Changing" (HCiNWiC) with savings totalling £979,000 at current prices made from the closure of PCH, together with savings in the acute sector. In addition, funding transfers following the closure of beds from the RAH to Holywell and Denbigh Hospitals totalling £628,000 at current prices were noted and assumed to transfer back. Both elements totalling £1,607,000 at current prices would have previously been offset against the proposed additional cost.

6.2.1.9 Benchmarking of Costs

The following benchmarking analysis compares the direct inpatient cost per day of the new development with neighbouring community hospitals. The proposed costs are mid-range and reflect the size of the ward. The budgeted nurse per bed ratio is also mid-range:

Ward	No of Beds	Cost Per Bed Day	Nurse/Bed Ratio
Comparators			
Holywell	44	167	1.10
Colwyn Bay	42	172	1.08
North	28	185	1.20
Denbighshire			
Denbigh	39	192	1.25
Ruthin	22	225	1.23

Table 52: Benchmarking of Costs

6.1.3 Funding Streams and Assessing Affordability

The capital costs of the proposal are assumed will be fully funded by the Welsh Government.

The revenue costs are proposed to be covered through a number of funding streams. These include savings and efficiency schemes, transfer of existing budgets and services and the recognition of service developments which will feed into the Integrated Medium Term Plan for the Health Board.

The following table provides a summary of the assessment. Further supporting analysis is included within the financial appendix:

Affordability Assessment	£000s
Total Additional Cost	7,083
Existing Funding	3,477
WG Depreciation Charge Funding	813
Net Additional Revenue Costs	2,793
Reduction is escalation beds within the Acute Hospital setting	337
Reduction in Nurse Bank & Agency costs through improved recruitment	107
and productivity	101
Community bed variable-cost savings through efficiencies and	135
productivity	133
Savings from the closure of community dental clinics and transfer into	16
NDCH	10
Impact of NDCH on CHC activity; the clinical model for the NDCH is	
expected to provide enhanced step up / step down facilities directly	
impacting on the level of patients discharged from Glan Clwyd directly	200
into CHC packages, thereby generating further cash-releasing CHC	
savings for re-investment	
Alternative community hospital beds - 10 l beds at Holywell and 6 at	385
Denbigh were opened when beds were originally closed in RAH, with	
the intention of releasing these resources back to NDCH when complete	
Primary Care Treatment Zone to be funded from the Primary Care	130
Pathfinder resources, given its clear and direct link to reducing the	
pressures on primary care services within the area.	
Sub-Total Savings / Alternative Funding Sources	1,310
Net Revenue Shortfall (before Care Closer to Home)	1,483
Maximising the benefits of the Care Closer To Home strategy to further	
reduce escalation beds, DTOC, improve AvLOS and Patient Flow, and	894
through a reduction in other community hospital beds	
Net Revenue Shortfall (Table 1)	589
Covering:	
Estates and Facilities (net increase and retaining RAH)	589

Table 53: Affordability Assessment

6.1.3.1 Depreciation Charge

It is assumed Welsh Government will fully fund the additional £813,000 depreciation charge in line with other strategic business cases approved previously.

6.1.3.2 Savings

New cash releasing and efficiency savings are outlined below. The assessment excludes savings made in previous years linked to HCiNWiC:

6.1.3.2.1 Ward Efficiencies

There is an expectation that savings will be incurred in bank and agency costs within the DGH resulting from escalation bed reductions totalling £337,000. There is also an expectation that there will be non-pay variable cost savings of £135,000 within the Centre Area to include a review of costs paid to external providers

6.1.3.2.2 Staffing Efficiencies

There is an expectation that savings will be incurred in bank and agency staff within the Centre Area through improved capacity and the ability to recruit and retain staff. A 10% target of existing costs above budget equates to £107,000.

6.1.3.2.3 Estate and Facilities Efficiencies

The increased costs are indicative at this stage and will be reviewed when further detail is available to maximise the energy and maintenance efficiencies of a new build. Marginal cash releasing savings of £16,000 from clinic transfers have been included within the assessment.

Savings from the existing RAH site are projected at 20% and have been netted against the additional costs of the new build. Backlog maintenance savings are projected as £5.47m and will form part of the capital cost of the status quo option. Assuming a 15 year profile of cost, this would give a potential capital discretionary cost saving of £365,000 per annum.

6.1.3.2.4 Ambulatory Care Unit (ACU)

The assessment does not presently include the cost benefit evaluation of the ACU.

6.1.3.2.5 Development Cost Pressures to IMTP

The remaining shortfall of £589,000 would mean a cost pressure to BCUHB to address the proposed development opportunities, recognising the commitment made as part of HCiNWiC with previous savings incurred..

6.2 Impact on the Balance Sheet

The business case assumes that funding will come via the conventional route and not through the Private Finance Initiative (PFI). It is anticipated there will be an impairment adjustment against the capital cost once the District Valuer (DV) revalues the site. The impairment is estimated to be £10.6 and is subject to final assessment by the DV. The impairment is after fully utilising the revaluation reserve associated with the site and is assumed this will be funded by the Welsh Government as a funding flow adjustment in line with similar requests in previous years.

7. The Management Case

This section of the Business Case addresses the achievability of the scheme. It sets out the actions that will be undertaken to ensure the successful delivery of the scheme in accordance with best practice.

7.1 Programme and Project Management Strategy

The project management arrangements for capital projects are outlined in the Procedure Manual for Managing Capital Projects, which was adopted by the Health Board in May 2015.

The project will be managed in accordance with PRINCE 2 project management methodology to enable a well-planned and smooth transition to the new service models. There will be a strong focus on the delivery of the objectives and benefits.

7.2 Project Framework

7.2.1 Reporting Arrangements

The project delivery organisation structure is detailed below:

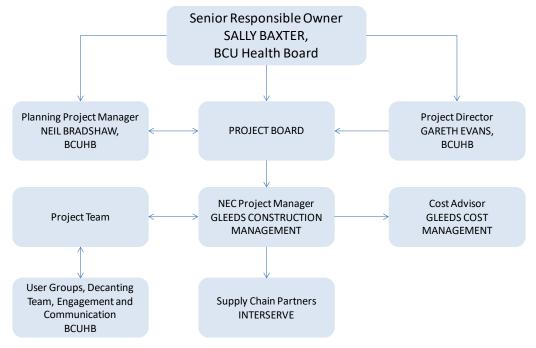


Figure 7: Project Structure

7.2.2 Project Board

The Project Board is responsible to the Capital Programme Sub-group (CPSg) reporting to the Executive Team for the overall direction and management of the Project, and has responsibility and authority for the Project within the remit of the Business Case.

The Project Board is the project's 'voice' to the outside world and is responsible for any publicity or other dissemination of information about the project. The Project Board approves all major plans and requests authorisation for any major deviation from agreed Stage Pans from the CPSg. It is the authority that signs off the completion of each Stage as well as requesting authority to start the next Stage. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems between the project and external bodies. In addition, it approves the appointment and responsibilities of the Project Manager and any delegation of its Project Health Check responsibilities.

The Project Board has the following responsibilities:

- At the beginning of the project:
 - o approving the start of the project via acceptance of the Project Execution Plan
 - o agreement with the Project Manager on that person's responsibilities and objectives
 - o confirmation with CPSg of project tolerances
 - o specification of external constraints on the project, such as quality assurance
 - o approval of an accurate and satisfactory Project Execution Plan, including that it complies with relevant User standards and policies, plus any associated contract with the supplier
 - o delegation of any Project Healthcheck roles
 - o commitment of project resources required by the next Stage Plan
- As the project progresses:
 - o provision of overall guidance and direction to the project, ensuring it remains within any specified constraints

- o review of each completed stage
- o confirm approval of progress to the next stage
- o review of Stage Plans and any Exception Plans
- o requesting approval of Exception Plans causing major deviation from the Stage Plan
- o 'ownership' of the identified risks, as allocated at plan approval time

 that is, the responsibility to monitor the risk and advise the Project

 Manager of any change in its status and to take action, if
 appropriate, to ameliorate the risk
- o approval of changes
- o compliance with Health Board directives
- o equipment purchase (Group 2, 3 and 4)
- o liaison with external bodies

• At the end of the project:

- o assurance that all products have been delivered satisfactorily
- o assurance that all Acceptance Criteria have been met
- o approval of the End Project Report
- o approval of the Lessons Learned Reports (Post Project Evaluation and Benefits Realisation) and the passage of this to the appropriate standards group to ensure action
- o decisions on the recommendations for follow-on actions and the passage of these to the appropriate authorities
- o project closure notification to corporate management

The Project Board directs the project and is ultimately responsible for assurance that the project remains on course to deliver the desired outcome of the required quality to meet the Business Case defined in the Project Execution Plan.

Roles and Responsibilities: the roles and responsibilities to be undertaken are broadly as set out in the Healthcare Capital Investment Manual (HCIM) and as described by the PRINCE2 methodology. Briefly these are as follows:

Investment Decision Maker (IDM) - shall be the BCUHB.

Ownership of Project - The ownership of the project shall be vested in the Senior Responsible Officer (SRO) who shall be the appropriate Executive Director as selected by the Chief Executive. The SRO for this project is Sally Baxter, Acting Director of Strategy.

Project Board - The membership of the Project Board shall be: the Project Director, the Senior User, the Senior Supplier and the Financial Lead as described below:

Project Director – is the primary decision maker responsible for the overall governance and direction of the project. The Project Director for this project is Gareth Evans, Director Clinical Services, Therapies, BCUHB.

Senior User – who is responsible for the specification of the needs of all those who will use the final product(s), for user liaison with the project team and for monitoring that the solution will meet those needs within the constraints of the Business Case in terms of quality, functionality and ease of use. The Senior User for this project is Alison Kemp, Assistant Director, Community Services, Central Area, BCUHB

Senior Supplier – who is responsible for ensuring that all of the necessary resources required to deliver the project are provided in a timely manner. The Senior Supplier for this project is John Walker - Project Manager, Gleeds

Finance Lead – the Financial Planning Manager responsible for ensuring robust financial management. The Financial Planning Manager for this project is Nigel McCann, Assistant Director, Finance, Central Area, BCUHB.

7.2.3 Project Director

The Project Director is responsible for the Project, accountable to the SRO, supported by the Senior User and Senior Supplier. The Project Director's role is to ensure that the project is focused throughout its lifecycle on achieving its objectives and delivering a product that will achieve the agreed benefits. The Project Director has to ensure that the Project gives value for money, ensuring a cost-conscious approach to the Project, balancing the demands of business, user and supplier.

Throughout the project, the Project Director 'owns' the Business Case.

7.2.3.1 Specific Responsibilities

• Oversee the development of the Project Brief and Business Case

- Ensure that there is a coherent project organisation structure and logical set of plans
- Authorise User expenditure and set stage tolerances
- Monitor and control the progress of the Project at a strategic level, in particular reviewing the Business Case continually (e.g. at each end stage review)
- Ensure that any proposed changes of scope, cost or timescale are checked against their possible effects on the Business Case
- Ensure that risks are being tracked and mitigated as effectively as possible
- Brief SRO/CPSg about project progress
- Organise and chair Project Board meetings
- Recommend future action on the Project to SRO/CPSg if the project tolerance is exceeded
- Approve the End Project Report and Lessons Learned Report and ensure that any outstanding issues are documented and passed on to the appropriate body
- Approve the sending of the project closure notification to corporate management
- Ensure that the benefits have been realised by holding a post-project review and forward the results of the review to the appropriate stakeholders.

The Project Director is responsible for overall business assurance of the Project – that is, that it remains on target to deliver products that will achieve the expected business benefits, and that the Project will be completed within its agreed tolerances for budget and schedule. Business assurance covers:

- Validation and monitoring of the Business Case against external events and against Project progress
- Keeping the Project in line with User strategies
- Monitoring Project finance on behalf of the User
- Monitoring the business risks to ensure that these are kept under control
- Monitoring any supplier and Contractor payments

- Monitoring changes to the Project Execution Plan to see whether there is any impact on the needs of the business or the Business Case
- Assessing the impact of potential changes on the Business Case and Project Execution Plan
- Constraining User and supplier excesses
- Informing the Project of any changes caused by a programme of which the Project is part (this responsibility may be transferred if there is other programme representation on the project management team)
- Monitoring stage and Project progress against the agreed tolerances

If the Project warrants it, the Project Director may delegate some responsibility for the business assurance functions.

7.2.4 Senior User

The Senior User is responsible for the specification of the needs of all those who will use the final product(s) / facilities, for user liaison with the project team and for monitoring that the solution will meet those needs within the constraints of the Business Case in terms of quality, functionality and ease of use.

The role represents the interests of all those who will use the final product(s) / facilities of the project, those for whom the product will achieve an objective or those who will use the product to deliver the benefits. The Senior User role commits user resources and monitors products against requirements. This role may require more than one person to cover all the user group interests. For the sake of effectiveness the role should not be split between too many people.

7.2.4.1 Specific Responsibilities

- Ensure the desired outcome of the Project is specified
- Make sure that progress towards the outcome required by the users remains consistent from the user perspective
- Promote and maintain focus on the desired project outcome
- Ensure that any User resources required for the Project are made available
- Approve Product Descriptions for those products that act as inputs or outputs (interim or final) from the supplier function or will affect them directly

- Ensure that the products are signed off once completed
- Prioritise and contribute User opinions on Project Board decisions on whether to implement recommendations on proposed changes
- Resolve User requirements and priority conflicts
- Provide the User view on Follow-on Action Recommendations
- Brief and advise User management on all matters concerning the Project

The assurance responsibilities of the Senior User are that:

- Specification of the User's needs is accurate, complete and unambiguous
- Development of the solution at all stages is monitored to ensure that it will meet the User's needs and is progressing towards that target
- Impact of potential changes is evaluated from the User point of view
- Risks to the Users are constantly monitored
- Quality checking of the product at all stages has the appropriate User representation
- Quality control procedures are used correctly to ensure products meet user requirements
- User liaison is functioning effectively.

Where a project's size, complexity or importance warrants it, the Senior User may delegate the responsibility and authority for some of the assurance responsibilities.

7.2.5 Senior Supplier

The Senior Supplier represents the interests of those designing, developing, facilitating, procuring, implementing and possibly operating and maintaining the project procedures. The Senior Supplier is accountable for the quality of products delivered by the supplier(s). The Senior Supplier role must have the authority to commit or acquire supplier resources required.

7.2.5.1 Specific Responsibilities

- Agree objectives for supplier activities
- Make sure that progress towards the outcome remains consistent from the supplier perspective

- Promote and maintain focus on the desired Project outcome from the point of view of supplier management
- Ensure that the supplier resources required for the Project are made available
- Approve Product Descriptions for supplier products.
- Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes
- Resolve supplier requirements and priority conflicts
- Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts
- Brief non-technical management on supplier aspects of the project

The Senior Supplier is responsible for the specialist integrity of the Project. The Supplier assurance role responsibilities are to:

- Advise on the selection of development strategy, design and method
- Ensure that any supplier and operating standards defined for the Project are met and used to good effect
- Monitor potential changes and their impact on the correctness, completeness and integrity of products against their Product Description from a supplier perspective
- Monitor any risks in the production aspects of the Project
- Ensure quality control procedures are used correctly, so that products adhere to requirements.

If warranted, some of this assurance responsibility may be delegated to separate supplier assurance personnel. Depending on the particular customer/supplier environment of a Project, the customer may also wish to appoint people to carry out assurance on supplier products.

7.2.6 Project Manager

The Project Manager has the authority to run the Project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the board.

The Project Manager's prime responsibility is to ensure that the Project produces the required products, to the required standard of quality and within the specified

constraints of time and cost. The Project Manager is also responsible for the Project producing a result that is capable of achieving the benefits defined in the Business Case.

7.2.6.1 Specific Responsibilities

- Manage the production of the required products
- Direct and motivate the Project Team
- Plan and monitor the Project
- Agree any delegation and use of Project Assurance roles required by the Project Board
- Produce the Project Execution Plan
- Prepare Project, Stage and, if necessary, Exception Plans in conjunction with Team Managers and appointed Project Assurance roles and agree them with the Project Board
- Manage the risks, including the development of contingency plans
- Liaise with the related projects to ensure that work is neither overlooked nor duplicated
- Take responsibility for overall progress and use of resources and initiate corrective action where necessary
- Be responsible for change control and any required configuration management
- Prepare and report to the Project Board through Highlight Reports and End Stage Reports
- Liaise with the Project Board or its appointed Project Assurance roles to assure the overall direction and integrity of the Project
- Agree technical and quality strategy with appropriate members of the Project Board
- Prepare the Lessons Learned Report
- Prepare any Follow-on Action Recommendations required
- Prepare the End Project Report
- Identify and obtain any support and advice required for the management,
 planning and control of the project

- Be responsible for Project administration
- Liaise with any suppliers or account managers

7.3 Project Plan

The project plan is the document which describes how, when and by whom a specific milestone or set of targets will be achieved. It is the detailed analysis of how identified targets, milestones, deliverables and products will be delivered to timescales, costs and quality. A copy of the project plan is attached as an appendix. The project programme is attached. It is anticipated that the implementation milestones will be as follows:

Milestones	Key Dates
Submission of Outline Business Case	November 2018
WG Approval of Outline Business Case	January 2019
Submission of Full Business Case	March 2020
Approval of Final Business Case	June 2020
Commencement of Construction Works	September 2020
Completion of Construction Works – new clinical build	March 2022
Commissioning – new clinical build	April 2022
Complete refurbishment of RAH	December 2022

Table 54: Schedule of Key Dates

7.4 Use of Special Advisors

7.4.1 Asbestos

Due to the age and condition of the existing hospital building, the site was identified as having a high potential for containing asbestos. Environmental Essentials (EEL) has been appointed to survey the existing building fabric for the presence of asbestos.

7.5 Change Management Strategy and Plan

The main aim here is to assess the potential impact of the proposed change on the culture, systems, processes and people working within the investing organisation.

The strategy, framework and plan for dealing with change management are as follows:

- Based on the principle of involvement and inclusion: service managers and user representation have been fully involved in the process of achieving shortlisted options and the design development.
- Any HR implications that are a result of preferred options will be managed in accordance with the BCUHB's' Organisational Change policy.
- A detailed change management plan will form part of the strategy for implementing any service changes: the next stage in the overall process of change. This will be documented in the Full Business Case.
- The arrangements for contract management are as set out within the Designed for Life: Building for Wales Framework agreement and these arrangements are as per the JCT Design & Build Contract (2011)

The procurement process is described within Section 3: The Commercial Case.

7.6 Benefits Realisation Strategy

This action is concerned with putting in place the management arrangements required to ensure that the project delivers its anticipated benefit or required rate of return.

It will set out arrangements for the identification of potential benefits, their planning, modelling and tracking. It also includes a framework that assigns responsibilities for the actual realisation of those benefits throughout the key phases of project.

The strategy, framework and plan for dealing with the management and delivery of the project benefits will be detailed within the Benefits Realisation Plan as part of the FBC. The plan provides details of who is responsible for delivery of the specific benefits, how and when they will be delivered and what activity needs to be undertaken to deliver them.

7.6.1 Benefits Realisation Plan

The Benefits Realisation Plan states the benefits of the project, the category of each benefit (in economic terms), how they will be measured and quantified, and who is responsible for their realisation.

The benefits are also closely linked with the scheme's six core Investment Objectives, as the delivery of those objectives should result in the range of benefits associated with them.

As outlined in Welsh Government guidance, an evaluation will be undertaken to review and evaluate the success of the project against its original objectives and success criteria. The achievement of these benefits will form the basis of that review. The initial review will be undertaken within fifteen months of the completion and handover of the project. The assurance review framework will be discussed and agreed with Welsh Government as the project progresses.

7.7 Risk Management Strategy

The Health Board is required to undertake a comprehensive assessment of the risks associated with the Preferred Option. The approach is shown in the diagram below:

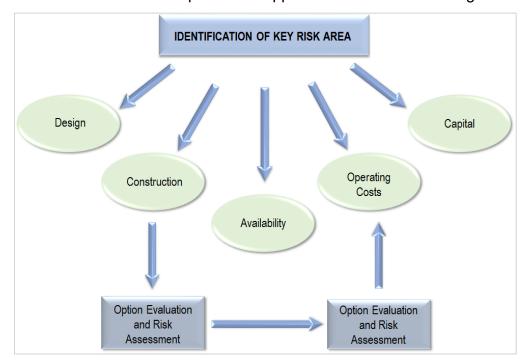


Figure 8: Risk Management Approach

The risk management strategy is based upon the following principles:

- Identifying the possible risk in advance, putting in place mechanisms to minimise the likelihood of risks occurring and their associated adverse effects
- Having processes in place to ensure up to date, reliable information about risks is available, and establishing an ability to effectively monitor risks
- Establishing the right balance of control is in place to mitigate the adverse consequences of risks, should they materialise
- Setting up decision-making processes, supported by a framework of risk analysis and evaluation

The Project Board has identified and quantified the key risks associated with the preferred option. All identified risks have been apportioned to either the Health Board or SCP and mitigating strategies identified in the risk register. This will be monitored on a monthly basis by the Project Board for the life of the project. It is the project manager's responsibility to manage the risk register.

A copy of the Project Risk Register is attached.

7.8 Post Project Evaluation Arrangements

The purpose of post project evaluation (PPE) is twofold:

- Firstly, to improve project appraisal at all stages of a project from preparation
 of the business case through to the design, management and implementation
 of the scheme. This is often referred to as the 'project evaluation review'
 (PER)
- Secondly, to appraise whether the project has delivered its anticipated improvements and benefits. This is often referred to as the 'post implementation review' (PIR)

The outline arrangements for Post Implementation Review (PIR) and Project Evaluation Review (PER) have been established in accordance with best practice guidelines.

7.8.1 Introduction

All NHS organisations have a duty to evaluate Capital projects where they cost more than £1m, to duly learn from them and to report the findings of the evaluation to the

Welsh Government. Guidance has been produced for undertaking Post Project Evaluation (PPE) as part of the Capital Investment Manual, and subsequent to that, a toolkit for evaluating design proposals has been produced.

The project will be evaluated by undertaking the following investigations:

- Review of the strategic case made for the project to confirm that it is still relevant
- Review of the benefits detailed in the Benefits Realisation Plan and confirmation that they have been met
- Review of the Business Case capital costs to confirm that the capital costs were robust
- Review of the Project Programme and adherence to it throughout the life of the project

These investigations will focus on the following stakeholder groups:

- Clinical Users / Staff: for their views on whether they were sufficiently involved in the planning of the scheme, to confirm that the design met their clinical needs, and to confirm that project plans ensured minimum disruption to clinical services.
- Health Board Project Board: for their views on the overall project from planning through the building phase and ultimately to commissioning and handover.
- Patients: for their perspective on the new services

7.8.2 Framework for Post-Project Evaluation

The Health Board is fully committed to ensuring that a thorough and robust postproject evaluation 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:

- The 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 effective

NHS guidance on PPE has been published and the key stages which are applicable for this project are:

- Evaluation of the project procurement stage
- Evaluation of the various processes put in place during implementation
- Evaluation of the project in use shortly after the new unit is opened
- Evaluation of the project once the new unit is well established

The detailed plans for evaluation at each of these 4 stages will be drawn up by Health Board in consultation with its key stakeholders. This section will also set out how these arrangements will be managed, how information will be disseminated and in what timescale.

The methods used will include the following:

7.8.2.1 Stage 1: Evaluation – Project Procurement

The objective of the evaluation at this stage is to assess how well and effectively the project was managed from time of Business Case approval. This would include evaluation of the financial objectives in terms of capital projections.

It is planned that this evaluation will be undertaken within six months of Business Case approval and will examine:

- The effectiveness of the project management of the scheme
- The quality of the documentation prepared by the Health Board
- Communications and involvement during procurement
- The effectiveness of advisers utilised on the scheme
- The efficacy of NHS guidance in delivering the scheme
- Perceptions of advice, guidance and support from Welsh Government, the Region, and NHS Shared Services Partnership

7.8.2.2 Stage 2: Evaluation – Implementation

The objective of this stage is to assess how well and effectively the project was managed from the time of Business Case approval through to the commencement of operational commissioning.

It is considered that this should be undertaken six months following operational commissioning of the unit.

- The effectiveness of the Health Board project management of the scheme
- The effectiveness of the project management of the scheme
- Communications and involvement during construction
- The effectiveness of the joint working arrangements established by the project partner and the Health Board project team
- Support during this stage from other stakeholder organisations including Welsh Government, Region, NHS Shared Services Partnership and any others as appropriate

7.8.2.3 Stage 3: Evaluation – Project in Use

Evaluation of the project once services are well established, considering the benefits achieved by the Health Board as indicated in the business case objectives, and set out in the Benefits Realisation Plan, at 12 months after opening.

It is proposed that this stage of the evaluation be undertaken up to 12 months after the completion of operational commissioning of the scheme in order that as many of the lessons learnt are still fresh in the minds of the project team and other key stakeholder. The evaluation at this stage will examine:

- The effectiveness of the Health Board project management of the scheme
- The effectiveness of the project management of the scheme
- Communications and involvement during commissioning and into operations
- The effectiveness of the joint working arrangements established by the partner and the Health Board project team
- Support during this stage from other stakeholder organisations Welsh Government, Region, NHS Shared Services Partnership and any others as appropriate
- Overall success factors for the project in terms of cost and time etc
- Extent to which it is felt the design meets users' needs from the viewpoint of patients / carers and staff

7.8.2.4 Stage 4: Evaluation – Project is Well- Established

- It is proposed that this evaluation is undertaken about two to three years following completion of commissioning. The evaluation at this stage will examine:
- The effectiveness of the joint working arrangements established by the partner and the BCUHB team
- Extent to which it is felt the design meets users' needs from the viewpoint of patients / carers and staff

7.8.2.5 Management of the Evaluation Process

The process will be managed by the Health Board Project Team. All evaluation reports will be made available to all participants in each stage of the evaluation once the report has been endorsed by the Health Board. The majority of the work will be undertaken by the BCUHB project team.

The BCUHB project team will seek to ensure that they keep abreast of projects which have been fully evaluated when in use and which have utilised the latest PPE guidance. The Health Board will then take a view of the extent to which external support is required and make a submission to local commissioners based on the evidence which is available with regard to costs.

7.8.2.6 Gateway Review Arrangements

The OGC Gateway Process examines programmes and projects at key decision points in their lifecycle. It looks ahead to provide assurance that the programme and projects can progress successfully to the next stage; the Process is seen as best practice by public sector bodies. The value of the OGC Gateway Review is recognised by Health Board and we intend to utilise the *peer reviews* in which independent practitioners from outside the project use their experience and expertise to examine the project post commissioning.

8. Conclusion and Recommendation

This OBC builds on the case outlined in the SOC. The strategic case for change has been updated to reflect the latest thinking in terms of models of care to support care closer to home. The economic case provides a robust assessment of both the service model options and the physical build solutions and reaches a clear preferred option in which the appropriate range and scale of services are provided through a combination of a new-build clinical facility and office accommodation in a refurbished RAH. The analysis outlined in the case gives robust capital and revenue costs, and demonstrates affordability. The management case provides assurance that the project is achievable, and that the known risks and issues are being robustly managed. This business case is recommended for approval.

- 9 Appendices
- 9.1 Appendix A: Risk Register
- 9.2 Appendix B: Sensitivity Analysis
- 9.3 Appendix C: Economic Appraisals
- 9.4 Appendix D: Financial Analysis
- 9.5 Appendix E: Programme
- 9.6 Appendix F: Benefits Realisation Plan
- 9.7 Appendix G: Estates Annex
- 9.8 Appendix H: Equality Impact Assessment