Acute Mental Health and North Ayrshire Community Hospital

Outline Business Case
March 2012

Document Control

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Executive Summary

Introduction - This Outline Business Case (OBC) details NHS Ayrshire and Arran's plans for the provision of a new Acute Mental Health facility and North Ayrshire Community Hospital on the site of the Ayrshire Central Hospital campus in Irvine, North Ayrshire. The programme will be facilitated through a mix of refurbished and new build accommodation. The new build element at Ayrshire Central Hospital will be procured through the NPD route at a cost of £50.954m. The remaining refurbishment work at ACH and Ailsa Hospital will be procured through traditional capital investment of £5.962m.

The previous Outline Business Case (OBC) was considered by the Capital Investment Group at its 8 March 2011 meeting. NHS Ayrshire & Arran then received correspondence from the Acting Director-General Health & Social Care and Chief Executive NHS Scotland dated 15 July 2011. This advised that the project would be supported through the programme of revenue financed investment through the Non Profit Distributing (NPD) model. This letter also advised to update the OBC to reflect this procurement route.

The OBC develops the Initial Agreements for the Community Hospital and Acute Mental Health Services, approved by the Scottish Government in May 2008 and June 2009 respectively.

It adheres to the structure, guidance, and good practice identified in the Scottish Capital Investment Manual (SCIM). This business case clearly defines the need for the development, explains the preferred option and the related benefits that will be realised by the programme of works and demonstrates best value and best service provision.

The Strategic Case - The proposed development is necessary to enable NHS Ayrshire & Arran to fulfil the requirements of both National Strategies and its own Local Delivery Plan. It is an essential and urgent priority to enable the Board to modernise its healthcare services, improve patient pathways, and meet the 21st century needs of the people of Ayrshire and Arran.

Following the Mind your health strategic review of mental health services in Ayrshire and Arran, approved by the Board in November 2008, the need for the new development was identified in the Mind your health implementation strategy. The review and the subsequent implementation strategy involved extensive stakeholder engagement with patients, staff and the public. The community hospital further develops the hub and spoke model, complementing the structure in other parts of the Board's area by providing health care delivery in the heart of the community. The proposed development is a key strand of the Board's Estates Strategy.

The service constraints arising from the current estate, including multiple sites, geographical site locations and inflexible, outdated ward configurations, are clearly illustrated in this OBC, which demonstrates how the proposed development will enable improved service models and help to realise investment objectives. The OBC details the benefits that will be delivered by the development, identifies risks and how they will be managed.

Ayrshire Central Hospital has a total backlog cost of £19M, which is broken down into £13m attributable to the physical condition of the site and £6M attributable to statutory compliance.

The majority of the backlog cost sits within Pavilions 1-9, all of which will be demolished either before (pavilions 4-9) the project starts or after project completion (Pavilions 1-3).

There has been significant investment on the remainder of the site (circa £20M). (see response to Appendix 2C in OBC). Further detail is available within the Clinical Brief (appendix 2B) and the Environmental Quality Report (Appendix 2C in OBC).

Of the £19M attributable to backlog maintenance, the high and significant risks are around 74% o the total cost or £14.1M. The high cost items within the site are as follows:

Electrical System (Physical Condition) -	£2,891,000
Heating System (Physical Condition) -	£2,771,000
Internal Fabric (Physical Condition) -	£2,296,500
DDA (Statutory Compliance) -	£1,816,000
External Fabric (Physical Condition) -	£1,090,500
Roof (Physical Condition) -	£1,061,000
Boilers & Calorifiers (Physical Condition) -	£914,000
Infection Control (Statutory Compliance) -	£803,000

Ayrshire Central Hospital site also has a significant land holding of which 12.38Ha has been deemed by the Board as surplus ground. Currently the Board is working with SFT to devise a marketing strategy to sell the surplus land. It is anticipated that the land sale will realise a Capital receipt of circa £4-5m.

The Clinical Brief was developed as the clinical specification based on robust development of models of care. This OBC describes how NHS A&A will achieve enhancement of the quality of care. The Clinical Brief can be found in Appendix 2B.

The improved models of care that will be made possible by this development will provide enhanced and more efficient services within modern facilities that will also deliver enhanced environmental quality, sustainability and more opportunities for teaching and training and many other benefits.

The Economic Case - The long lists of options identified in the Initial Agreements have been assessed against the critical success factors described in the OBC, through an option appraisal process that resulted in a consolidated short list of three options.

Capital and revenue costs have been established for these short listed options taking into account optimism bias and risk. A benefits analysis has been established and the preferred option identified is:

New Build and Refurbishment at Ayrshire Central Hospital and Refurbishment at Ailsa.

Commercial Case - The procurement method adopted and key contractual arrangements are detailed, together with the programme stages and control mechanisms.

Financial Case – Defines the national and local context for the financial case with the capital costs, cash flow, and revenue impact of the preferred option and demonstrates the revenue impact and affordability.

Management Case – Defines the programme and governance structure; programme timelines and milestone dates; the management, design and communication protocols; roles and responsibilities; change management, benefits realisation, and post programme evaluation planning.

Conclusion – Summarises the OBC, confirms the Boards' readiness to proceed, and seeks support and approval in moving to FBC stage.

1.0 Introduction

1.1 Overview

This Outline Business Case (OBC) presents NHS Ayrshire & Arran's proposals for a new Acute Mental Health and North Ayrshire Community Hospital, to be built on the site of Ayrshire Central Hospital at Irvine.

By setting out these proposals for a Community Hospital for North Ayrshire and for mental health services for the whole of Ayrshire as a programme of works the OBC demonstrates that the proposed programme is robust, affordable and deliverable.

The programme described in the OBC is a major and essential component of the Board's strategy to achieve its mission of delivering the healthiest life possible for the people of Ayrshire and Arran through its vision of services reconfiguration. For NHS Ayrshire & Arran, this means continuously improving health and the quality of its services, especially around patient safety, person centredness and clinical effectiveness, while ensuring value for money. This programme will enable the Board to deliver these key service objectives for the benefit of the people of Ayrshire and Arran.

NHS Ayrshire & Arran needs to build a modern, fit for purpose inpatient facility with 206 beds, for people who require a level of care and rehabilitation that can only be provided by an inpatient stay. The approaches to inpatient care will focus on Recovery, Rights, Rehabilitation and Re-ablement. The facility will support the models of care required to ensure lengths of stay are as short as possible and facilitate prompt return home to family, carers, friends and neighbours.

Rehabilitation and re-ablement are key drivers and will focus the design of the facility to meet the differing needs of all client groups, including the elderly with physical needs, which differ from those who are acutely mentally unwell and who will be accommodated in wards which support activity, reflection and treatment.

Choice of environment, such as spending time as part of the ward community or choosing quieter areas with more privacy will be balanced through a range of activity areas from day spaces to treatment rooms, further enhanced by 100% single occupancy bedrooms with en-suite shower rooms and easy access to a range of outdoor space.

This requirement for current and future health care provision is in stark contrast to the current legacy of wards which are unsuited to the provision of modern and future models of care. Existing wards for both frail elderly and elderly mental health are old fever wards designed around long bed stays and intended for isolation. Rehabilitation and re-ablement takes place through necessity in the corridors, which not only act as the main thoroughfare for wards but are also used to store equipment. This severely limits and delays rehabilitation. This also has potentially significant implications for Infection Control and Health and Safety.

For those with dementia and who are confused; have perception difficulties or who are prone to aggressive behaviour, the lack of alternative day space can result in adverse events, further confusion, disorientation as well as limiting or delaying recovery. Dementia design recommendations are similarly constrained.

The Acute Mental Health wards have similar limitations but here, safety is also a major concern. Care and observation of the most vulnerable and mentally unwell service users is limited. Blind spots, potential ligature risks, and lack of opportunity for evidence based therapeutic care arising from the current built environment have resulted in care models which not only delay recovery but which have the potential to harm. This can significantly lengthen inpatient stays preventing a prompt return to peoples' homes, their community, work and leisure.

There is also a range of dispersed clinics in outdated buildings with limited disabled access, isolated from other clinical services. The development of an integrated general and mental health outpatient department will allow a single point of assessment, prompt access to required services.

The negative psychological impact of the existing ward and clinic environments is well evidenced and attested to by service users' comments and formal complaints. These are held on record and highlight issues of, poor environment, lack of privacy and dignity, safety, and activity.

The community and mental health inpatient development will replace existing inadequate accommodation and enable the development of new models of community care for the population of North Ayrshire.

In preparation for this, a number of the facilities on the retained estate have been refurbished or extended to include a new kitchen/dining facility, extended and refurbished outpatient department, new community dental outpatient suite, new sexual health department, Central Decontamination Unit (CDU) and service infrastructure upgrade.

The new North Ayrshire Community Hospital will feature 206 inpatient beds and supporting clinical service areas which will be funded through NPD. To complete the programme, refurbishments will be taken forward in the horseshoe and Elderly Mental Health Wards at Ailsa Hospital, Ayr under traditional Capital funding.

Current conditions and constraints of existing facilities

There is a lack of natural light, windows above the seated eye line, upstairs accommodation with long walks to reach external areas, no dedicated or private outdoor space, cluttered areas, shared bedrooms, limited sitting area, long walk externally to physiotherapy department, and limited access to therapies.

The poor quality of the current estate in Ayrshire Central Hospital, Ailsa and Crosshouse gives a negative physical and psychological impact to patients. The impacts include delayed or limited recovery, increased aggression and frustration, risk of harm to self and others and loss of ability to self care.

Some of the present conditions are shown below with planned improvements for the development in Figures 1-1 to 1-4.

Figure 1-1: Present and Planned Pictures

Limited IPCU Garden Area, Ailsa Hospital

Aspirational outside recreation area

Figure 1-2: Present and Planned Pictures

Cramped Loudoun House, Addictions 3-bedded Ward, Ailsa Hospital

Aspirational single en-suite room

Figure 1-3: Present and Planned Pictures

Cramped Ward 1D, 6-bedded Ward, Crosshouse Hospital

Artist impression of single ensuite bedroom

Figure 1-4: Present and Planned Pictures

Non compliant toilet cubicles, Ailsa Hospital

Aspirational bathroom area

The existing environment impacts on staff turnover and provides poor job satisfaction.

For the organisation the impact includes:

- Increased length of stay
- Higher bed numbers
- Delay in returning home
- Delay in care provision
- Repeated and additional treatments
- Increased numbers of staff required
- Increased prescribing
- Increased risk, complaints, claims
- Turnover/recruitment costs
- Increased sickness absence resulting in bank and overtime costs.

The opportunities provided by the new purpose built care, rehabilitation and recovery facilities will address the above issues which patients have told us are important to them, and thus serve the needs of the people of Ayrshire and Arran through delivery of the highest possible standards of care.

1.2 Preparation of the Outline Business Case (OBC)

The path to the preparation of the OBC was as follows:

- Key components of the programme were first introduced in the Initial Agreement (IA), *North Ayrshire Community Hospital*, approved in May 2008.
- At its meeting on 19 November 2008, the NHS Ayrshire & Arran Board endorsed a report on the outcome of extensive public consultation, undertaken as part of the Mind your health review of mental health services, together with the ranking and scoring of options for the future location of acute adult mental health inpatient services, and confirmed its preference to locate these in a new build development at the Ayrshire Central site in Irvine.
- Following this, a second Initial Agreement, *Acute Mental Health Services (North Ayrshire Community Hospital)*, encompassing the requirements for mental health services as well as community services was approved by Scottish Government Health Directorates (SGHD) in June 2009.
- The OBC was submitted in December 2010 seeking a Capital Investment.
- The Outline Business Case (OBC) was considered by the Capital Investment Group at its 8 March 2011 meeting. NHS Ayrshire & Arran then received correspondence from the Acting Director-General Health & Social Care and Chief Executive NHS Scotland dated 15 July 2011. This advised that the project would be supported through the programme of revenue financed investment through the Non Profit Distributing (NPD) model. This letter also advised to update the OBC to reflect this procurement route.
- This OBC has been revised to take account of NPD procurement model and refined clinical brief.

Throughout the remainder of this OBC, the programme is referred to as “the programme”, “the development” or “the new facility” as appropriate.

1.3 Purpose and Objectives of the OBC

This OBC identifies the preferred option for taking forward the modernisation and redesign of community hospital services for North Ayrshire, and acute mental health inpatient services for the whole of Ayrshire and Arran. It evidences and justifies the case for investment, including the associated investment required for refurbishment at Ailsa Hospital and at the existing Horseshoe Building at Ayrshire Central Hospital, both of which are essential to successful delivery of the programme. The OBC details the methods used for the selection of options, the options appraisal criteria, and assessment of impacts. An analysis of the costs, benefits and risks of the short listed options is included.

The OBC's objectives are to:

- Develop the assumptions and content of the Initial Agreement in more detail, in particular the strategic case, including the clinical brief and the required bed numbers and departments;
- Explain the process used to develop a short list of options from the full lists identified in the Initial Agreement and from there, identify the preferred option which optimises value for money (VfM);
- Present an analysis of the benefits, costs and risks for the short list of options by:
    - illustrating the benefits to patients, staff and public and
    - providing financial and economic appraisals to demonstrate value for money (VfM) and affordability;
- Consider the implications of sustainability and future flexibility;
- Prepare the project for procurement; and
- Put in place the necessary funding, management and implementation arrangements for the successful delivery of the preferred option.

1.4 Compliance with National Capital Investment Guidelines

The OBC framework allows the investment benefits, costs and risks to be identified and evaluated in a systematic way. It ensures that NHS Ayrshire & Arran can demonstrate convincingly that the investment is economically sound, financially viable, and essential to the provision of effective and efficient Community and Mental Health services in North Ayrshire.

Careful thought has been given to the composition of the existing and future project team given the recommendations made by the Gateway review Team and requirements set out in the Director General's letter to NHS Boards of 22 March 2011 regarding experience and resourcing with regard to revenue finance projects.

The existing project team is led by a Project Director who has extensive experience on the delivery of large, complex NHS capital projects gained through 19 years working within Greater Glasgow and Clyde. Supported by a Capital Planning Team of 3 full time staff who will be entirely dedicated to the project and have a wide range of capital planning experience. In addition the Project Director will be supported by Stuart Sanderson, Assistant Director of Finance who led on the financial aspects of the Maternity PFI project and Allan Gunning, Executive Director who was also involved in the Ayrshire Maternity PFI. Further details of experience of these individuals are included within Appendix 6C of the OBC.

Going into the procurement phase of the project the Project team will be supplemented with Technical, Legal and Financial advisers. In addition to this the Board will appoint a Project Manager with extensive PFI/PPP experience to support through the up to financial close.

In summary the Board has listened to and taken action on the recommendations made by the Gateway review team and acted upon the Director General's letter to NHS Boards of 22 March 2011.

1.5 Structure of the Outline Business Case Document

The structure and content of the OBC is outlined in Figure 1-5 below. This reflects the "5 Case" approach as required by the current Scottish Government Health Directorate's guidance and accepted best practice in business case development and presentation.

Figure 1-5: Summary of Document Structure

Section	Contents
Executive Summary	Provides a summary of the Outline Business Case content and key elements
Section 1:	Introduction Provides the background and the methodology followed in the preparation of this OBC.
Section 2:	The Strategic Case Develops the Initial Agreements, provides an overview of the Board, its investment objectives, current accommodation and circumstances, desired scope, strategic risks and constraints on future service delivery.
Section 3:	The Economic Case Provides details of the costs of each of the shortlisted options, the assessment of options, benefits and programme risks.
Section 4:	The Commercial Case Details the charging mechanisms, key contractual arrangements, implementation timescales and accountancy treatment.
Section 5:	The Financial Case Examines the funding model, impact on balance sheet and Income and Expenditure account and comments on the overall affordability
Section 6:	The Management Case Demonstrates the approach to procurement, programme management, risk management, benefits realisation, post programme evaluation and the programme timetable.
Conclusion	The proposal, considering all the evidence demonstrated, to seek approval to proceed to FBC at the appropriate time.

1.6 Further Information

For further information about this outline business case please contact:

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2.0 The Strategic Case

Introduction

This section of the OBC sets out the strategic context within which the changes proposed in this OBC will take place, and covers the following:

- Organisational Overview
- Profile of Ayrshire and Arran
- Demographics – nationally and locally
- Strategic context for healthcare developments in Scotland and Ayrshire and Arran
- Business Strategy and Aims
- Existing Arrangements
- Current and Future Service needs
- Desired Scope and Service requirements
- Organisational Strategies
- Benefits Criteria
- Constraints and dependencies
- Service Continuity

2.1 Organisational Overview

NHS Ayrshire & Arran employs 10,453 staff (WTE 8477.7) and is responsible for monitoring, protecting and improving the health needs of the population of Ayrshire and Arran. The area is co-terminus with the three local authorities of North, South and East Ayrshire and includes the island communities of Arran and Cumbrae. The Board provides a wide range of specialist services for people across Ayrshire and Arran and invests around £0.6 billion a year in health care services. Services are aimed at actively preventing ill health wherever possible and are provided at a variety of locations, including local health centres, community hospitals and two General Hospitals as shown in Figure 2-1 below.

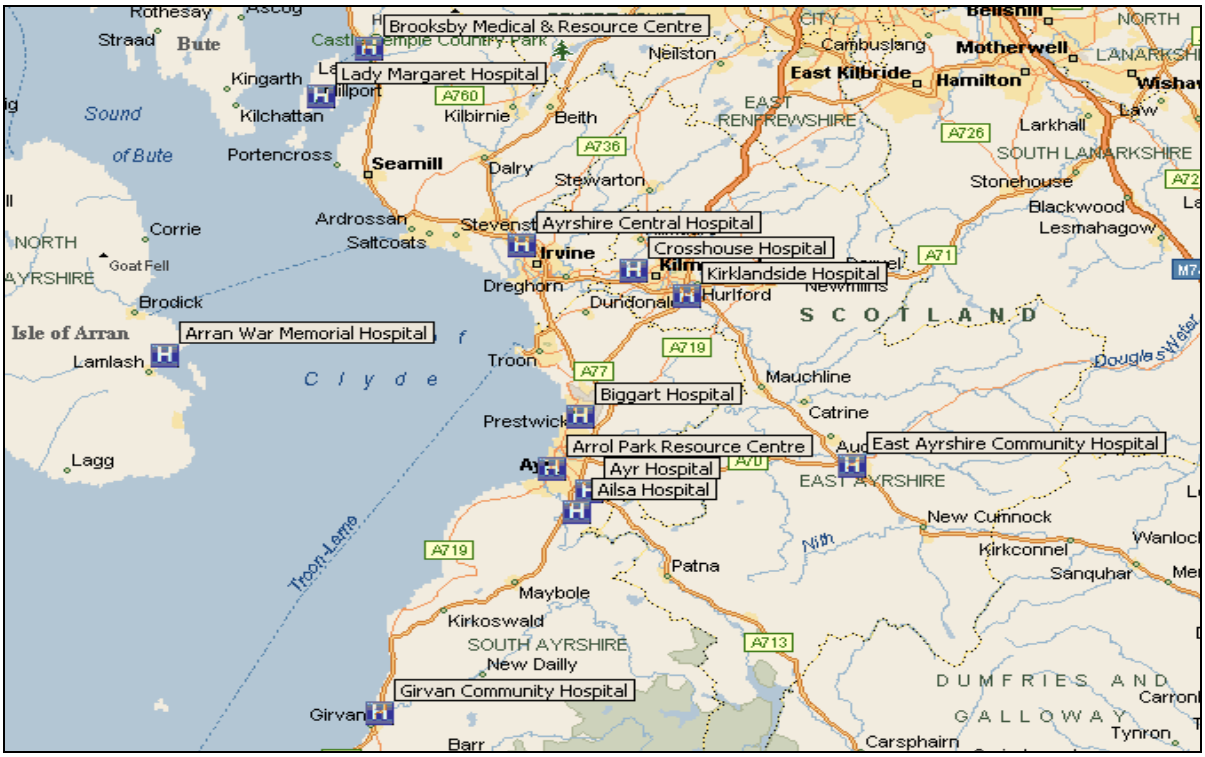
2.1.1 Profile of Ayrshire and Arran

NHS Ayrshire & Arran covers an area of 2,500 square miles and serves a population of some 366,860 (approximately 7.3% of the population of Scotland).

NHS Ayrshire & Arran's vision is:

"The healthiest life possible for the people of Ayrshire & Arran"

Figure 2-1: Locations of Health Facilities in Ayrshire and Arran



2.1.2 Demographics

Introduction

As part of the clinical brief (detailed in Appendix 2B and 2D) process the demographics and projections for an aging population were considered and taken into account assisted in defining the required bed numbers required.

National context

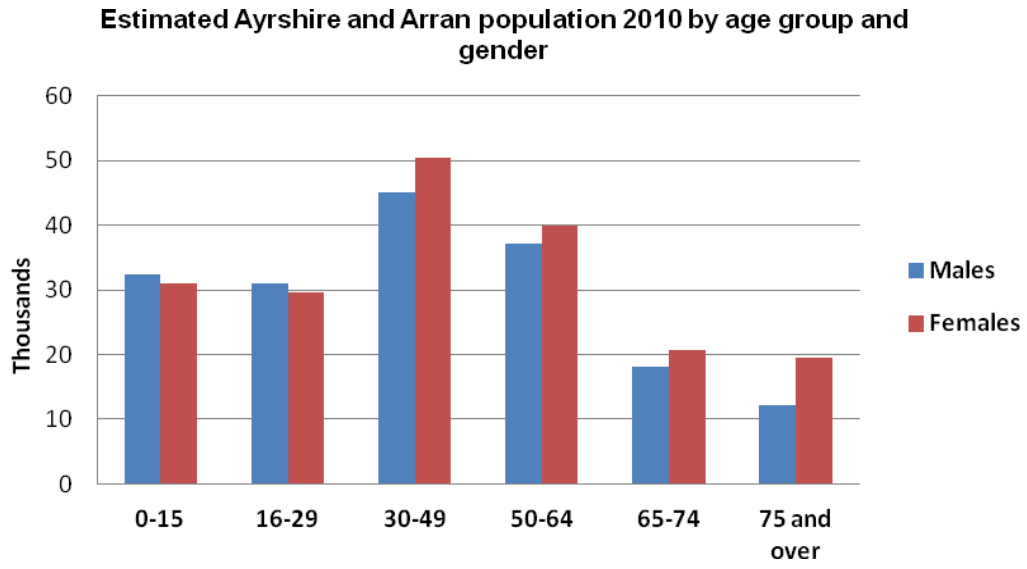
The latest estimate (30 June 2010) of Scotland's population is 5,222,100, the highest since 1979 and an increase of 28,100 people on the previous year. The population of Scotland has increased in each of the eight years to 2010 driven by a combination of changes to mortality, fertility and migration. Scotland's population is ageing more quickly than the rest of the UK with a predicted 50 per cent increase in the number of people over 60 years of age by 2033. (http://www.scotland.gov.uk/Publications/2010/11/24111237/0)

In Scotland between 2000 and 2010 the population increased by 3.1 per cent. During this period there has been a 7 per cent decrease in the number of children under 16, an increase of 14 per cent in the number of people aged 45-59 years, a 13 per cent increase in the number of people aged 60-74 years and an increase of 14 per cent in the 75 years and over age group. http://www.gro-scotland.gov.uk/files2/stats/high-level-summary/j11198/hlss-population-migration.pdf

Local context

The latest available statistics indicate that the estimated total population of Ayrshire and Arran as at 30 June 2010 was 366,860 a decrease of 0.5 per cent since 2000.
http://www.gro-scotland.gov.uk/statistics/theme/population/index.html

Figure 2-2 provides a profile of the Ayrshire and Arran population by age and gender that reflects a similar picture to the national population profile.



The distribution of the population within Ayrshire and Arran between three local authority areas (June 2010) is shown in Figure 2-2 below.

Figure 2-2: Population distribution in East, North and South Ayrshire

Locality	Population	Percentage of Ayrshire and Arran population
Ayrshire & Arran	366,860	100%
East Ayrshire	120,240	32.7%
North Ayrshire	135,180	36.9%
South Ayrshire	111,440	30.4%

Projected changes in Population

Currently 19% of the Ayrshire and Arran population is aged over 65 years. Ayrshire and Arran's population is estimated to decrease by 2% between 2008 and 2033[1]. Between 2009 and 2010 the population of East Ayrshire and South Ayrshire did not change; North Ayrshire saw a decrease of 0.2 per cent. The total population in all three council areas has fallen overall since 1984. In Scotland 23.1 per cent of the population are aged 60 years and over. In East Ayrshire the figure is 24.5 per cent, in North Ayrshire 25.9 per cent and in South Ayrshire those aged over 60 years account for 28.7 per cent of the population[2]. http://www.gro-scotland.gov.uk/statistics/at-a-glance/council-areas-map/index.html

[1] General Register Office for Scotland. Population Projections Scotland (2008-based). A National Statistics Publication for Scotland. (2010).

Figure 2.3 shows that the percentage of the population in Ayrshire and Arran aged 0-15 years will decrease by 2033 and the population aged over 60 years will increase. This will result in a decrease in the working age population; those aged 16 to 64 years. http://www.gro-scotland.gov.uk/statistics/theme/population/projections/index.html

Figure 2-3: Estimated projected population structure for NHS Ayrshire and Arran (2008-2033)

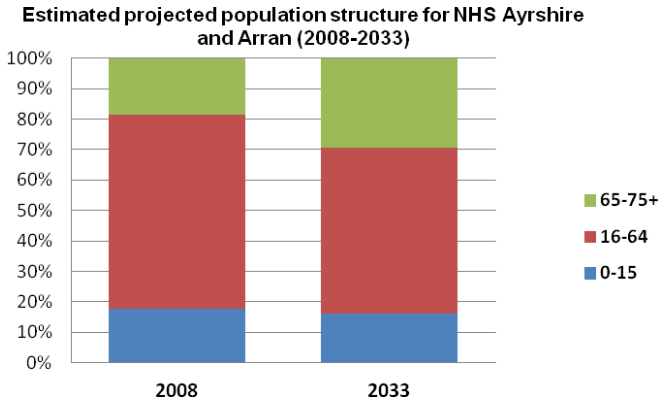


Figure 2-4 below shows the projected population change for each local authority. The decreases in the population within the younger age groups compared to the increases in the older age groups are very clear for each area.

Figure 2-4 Projected population change for each local authority

Age (years)	East Ayrshire	North Ayrshire	South Ayrshire
Under 15	- 7.8%	- 15.3%	- 5.1%
15 - 64	- 6.6%	- 12%	- 9.1%
65 and over	+ 26.6%	+26.6%	+ 20.5%
Total	**0.0%**	**- 4.3%**	**- 1.2%**

[2] Pensionable age is 65 for men, 60 for women until 2010; between 2010 and 2020 pensionable age for women increases to 65. Between 2024 and 2046, state pension age will increase in three stages from 65 years to 68 years for both sexes.

Life Expectancy

Figure 2-5 presents data that shows the improvements in life expectancy between 1997-99 and 2007-09 at the national, health board and council area level. In Ayrshire and Arran, life expectancy at birth has increased by 1.8%, from 75.5 years to 77.2 years. This is lower than the Scottish average of 77.8 years. East and South Ayrshire show a similar percentage increase in life expectancy of 2.6 and 2.7 per cent respectively. North Ayrshire shows an increase of 1.9 per cent over the same period. South Ayrshire has the highest life expectancy, a significantly older population with fewer areas of multiple deprivation than East and North Ayrshire. NHS Ayrshire and Arran's rank position, compared with the 14 NHS Boards has dropped in the time period from 11 to 12. East Ayrshire's rank position compared to all other 32 local authorities remains the same however North Ayrshire has dropped four places to 26th and South Ayrshire has moved down two places to 17th.

Figure 2-5 Life expectancy at birth in Scotland 2007-2009 by administrative area, and comparison with 1997-1999 (persons)

	2007-09 Years	1997-99 Years	2007-09 Rank	1997-99 Rank	Difference in years	% change
Scotland	77.8	75.5	-	-	2.3	3.1
Ayrshire and Arran	77.2	75.5	12	11	1.8	2.4
East Ayrshire	76.7	74.8	25	25	1.9	2.6
North Ayrshire	76.7	75.3	26	22	1.4	1.9
South Ayrshire	78.4	76.4	17	15	2.1	2.7

Ref link http://www.gro-scotland.gov.uk/press/news2008/latest-life-expectancy-figures-announced.html

Scottish Index of Multiple Deprivation (SIMD)

The Scottish Index of Multiple Deprivation (SIMD) provides a relative ranking of 6,505 small areas (datazones) across Scotland from the most deprived (ranked 1) to the least deprived (ranked 6,505). It is a relative measure so there are always datazones within the 15% most deprived list (976 datazones). The measure is made up of seven domains and the health domain accounts for 14% of this. The health domain includes the following indicators:

- Standardised Mortality
- Hospital Episodes related to alcohol use
- Hospital Episodes related to drug use
- Comparative Illness Factor
- Emergency Admissions to Hospital
- Proportion of population being prescribed drugs for anxiety, depression or psychosis (ISD 2007)
- Proportion of live singleton births of low birth weight

SIMD provides data on relative geographic inequalities. Other data are required to provide a more comprehensive profile, for example thirty-six per cent of income deprived people live in the 15% most deprived areas and 64% live out with the 15% most deprived (Scottish Index of Multiple Deprivation, 2009 General Report).

The Scottish Index of Multiple Deprivation (SIMD) presents a picture of multiple deprivation across Scotland. Although the SIMD 2009[3] General Report is based mainly around data from 2008 and whilst the economic situation has changed since then, it remains a valid picture of the distribution of deprivation.

The health domain of the SIMD 2009[4] General Report indicates that since the previous report in 2006, NHS Ayrshire and Arran is the Scottish Health Board that has seen the biggest increase in deprived datazones, increasing from 16.0 per cent of datazones in the most deprived 15% in 2006 to 20.6 per cent in 2008. All of the Ayrshire local authorities have seen increases in the percentage of their datazones in the 15 % most deprived.

A recent (June 2010) report considered by North Ayrshire Council highlighted that publication of the 2009 Scottish Index of Multiple Deprivation figures has indicated that deprivation in North Ayrshire is worsening, and that North Ayrshire is now ranked fifth highest in Scotland in terms of low income and employment opportunities. Recognising this, the Council and its community planning partners are focussing on tackling health inequalities as one of their top three priorities.

General Register Office for Scotland 2006-08

Improvements in life expectancy for Scotland are projected to continue rising to 80.4 years for men and 84.4 years for women by 2031. Mortality rates are shown in Figure 2-6 below.

Figure 2-6: Standardised Mortality Rate

Area	Death per 1000
SCOTLAND	10.8
Ayrshire and Arran	12.0
East Ayrshire	11.6
North Ayrshire	12.0
South Ayrshire	12.4

[3] Scottish Index of Multiple Deprivation. 2009 General Report. The Scottish Government, October 2009.

Care of the Elderly Admissions to Ayrshire Central Hospital site are provided in figure 2-7 below.

Figure 2-7: Care of the Elderly admissions

Year	Care of the Elderly Longstay	Care of the Elderly Rehabilitation	Total
2005/2006	120	343	463
2006/2007	122	340	462
2007/2008	147	382	529
2008/2009	211	365	576
2009/2010	241	415	656

For people with mental health problems, the risk factors of poverty, deprivation and discrimination may be compounded: people with mental health problems have the highest rate of unemployment among people with disabilities[5], can feel excluded from their local community because of their financial situation and experience of stigma and discrimination.

Between 2003 and 2007, the numbers of admissions to acute adult psychiatric admission wards across Ayrshire and Arran was as shown in figure 2-8 below.[6]

The long stay wards provide in-patient accommodation for those patients requiring NHS continuing care or who are awaiting discharge home or to a nursing home.

The increase in patient numbers in 2008-2009 was due to a significant reduction in the length of time patients were having to wait for admission to Care Homes which enabled greater throughput.

[5] Office for National Statistics (1995). Surveys of Psychiatric Morbidity in Great Britain. Report 3: Economic activity and social functioning of adults with psychiatric disorders.
[6] NHS Bed Management Statistics, June 2008

Figure 2-8: Number of Admissions

Hospital	Total	From North Ayrshire	From East Ayrshire	From South Ayrshire	No fixed abode/ out of area
Ailsa	4433	739	1221	2185	288
Crosshouse	3566	1992	1192	257	125
Ayrshire Central	561	325	218	12	6
TOTALS	8560	3056	2631	2454	419
% of Total		35.7%	30.7%	28.6%	5%

As the population gets older and the demand for NHS services increases, it is necessary to continue to consider and change how healthcare is provided in order to respond to the health needs of the population and new national policies. Services need to be developed to anticipate and manage long term illness, reduce the need for patients to attend an acute hospital and avoid unnecessary admissions.

The programme described in this OBC takes account of all of the foregoing population and health issues and is critical to NHS Ayrshire and Arran being able to respond to these demands.

2.2 Strategic Context

2.2.1 National Context

The development of the preferred option will take place in the context of the Scottish Government's five Strategic Objectives that "underpin the Board's Purpose and describe the kind of Scotland we want to live in", a Scotland that is Wealthier and Fairer, Smarter, Healthier, Safer and Stronger and Greener".

Wealthier & Fairer - Enable businesses and people to increase their wealth and more people to share fairly in that wealth.

The development will have a positive impact on the level of unemployment in the area and assist in tackling inequality and social exclusion. It will embed the health service in the local community, ensuring that services are provided safely and effectively at the right time; in the right place; for the right person.

Healthier - Help people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care.

The new facility will deliver better outcomes for patients through the improvement of physical and mental health and wellbeing. Co-location of services which support patient pathways will improve service access times and communication between services. This will enable earlier intervention and treatment within an integrated delivery structure.

Safer & Stronger - Help local communities to flourish, becoming stronger, safer place to live, offering improved opportunities and a better quality of life.

The new facilities will be designed to maximise patient safety whilst promoting physical health and wellbeing. The facility will enhance integrated working with local authorities, voluntary bodies and business partners.

Smarter - Expand opportunities for Scots to succeed from nurture through to life long learning ensuring higher and more widely shared achievements.

The development will provide facilities to promote educational opportunities for patients and staff. There will also be improved access to the Board's training and development centre.

Greener - Improve Scotland's natural and built environment and the sustainable use and enjoyment of it.

Modern, state of the art technologies will be used to ensure more efficient use of energy, lower carbon emissions and more sustainable environmental practices, in line with BREEAM Healthcare principles. The Board will engage with local transport providers to develop a Green Travel Plan to ensure that the development is easily accessible to the community with less car-dependence and greater use of green space to encourage walking and cycling.

2.2.2 National Context – Community Hospitals

The Government's vision for Community Hospitals was set out in 'Developing Community Hospitals – a Strategy for Scotland', published in 2006. This described community hospitals as local community resource centres providing a bridge between home and specialist care and providing a focal point for the delivery of holistic, integrated services from a variety of care providers, aiming to maintain individuals in communities, closer to home.

Better Health Better Care (BHBC) published by the Scottish Government in 2007, identified seven themes to help deliver the Scottish Government's health objectives, namely:

- Patient Experience
- Best Value
- Personal Responsibility
- Health Inequalities
- Proactive Care
- Best Start for Children
- Continuous Improvement

The subsequent Better Health Better Care Action Plan identified three key themes:

- Moving towards a mutual NHS;
- Helping people to sustain their health, particularly in disadvantaged communities; and
- Ensuring better, local and faster access to services.

In responding to these key national drivers, in 2008 NHS Ayrshire & Arran reconfigured its services to promote the development of Integrated Care Pathways, involving professionals from a range of disciplines working together across traditional organisational boundaries between primary, secondary and tertiary care to plan and provide care for patients with specific conditions.

In the same year, new Local Community Health Partnership (CHP) arrangements in Ayrshire and Arran were approved by the Scottish Government.

The CHP arrangements in North Ayrshire are unique within the Scottish Health Service as they have not been established using a traditional organisational structure but are based on partnerships working to a common set of shared outcomes to achieve the best outcomes for local communities.

The CHPs in Ayrshire have a clearly defined vision:

"CHPs will unite all stakeholders in a locality partnership with the aim of improving the health and wellbeing, social care and health care of the local population."

Key Priorities

- Shifting the balance of care
- Tackling inequalities
- Improving health and wellbeing

In 2008, NHS Ayrshire & Arran agreed the future strategic direction for Acute Services and identified the need for the development of a clear, complementary vision for the future provision of local Community and Primary Care Services that would radically shift the balance of care, to provide an even greater proportion of healthcare in primary and community care settings.

In December 2009, the Board approved the Primary Care Strategy **'Your Health: We're In It Together'** following one of the most extensive public engagement programmes undertaken by the Board. The strategy envisages a strong local health service supporting people in their day to day lives to get the best from their health. The overall theme is one of partnership between the individual and the community with the NHS and its public sector partners. The new service model is based on Shifting the Balance of Care, substituting traditional service models with more services delivered in the community and is very much in keeping with the Board's overall strategic drive for service integration and continuity.

The development of a community hospital based in North Ayrshire is entirely in accordance with the Board's strategic vision for service change and improvement. There are already successful community hospitals in operation in Cumnock, East Ayrshire and Girvan in South Ayrshire, where staff are working together to deliver integrated, effective and efficient services for local patients. The North Ayrshire Community Hospital will provide a geographical and organisational hub for local health service delivery in the north of the region, enabling residents to benefit from convenient, accessible services. The hospital will benefit patients living in urban settings such as Irvine and the Three Towns area of Ardrossan, Saltcoats and Stevenson in addition to those in rural communities.

The development of the community hospital in North Ayrshire also supports the Board's commitment to retaining healthcare services on the Ayrshire Central Hospital site, which was given in the NHS Ayrshire & Arran Local Health Plan, 2004-07, and retained to the present day.

In summary we face considerable challenges including increased pressure on budgets, increased expectations from our service users and our communities, together with the rising demands coming from demographic change. The following strategies are fully considered and are at the heart of our business case.

- The NHS Quality Strategy aims to put people at the heart of the health service. Related policies on self-management and person-centred care work to achieve the same set of outcomes as self-directed support.

- The NHS links to *self-directed* support are clear assist people to design and control their own support, often in flexible, innovative ways, this can help to prevent or delay crisis interventions further down the line.

- Reshaping Care makes clear, services for older people should focus on the outcomes that people want to achieve, they should provide personalised care and support and they should be designed to optimise independent living and well-being. Where older people and their carers want to have greater choice and control, they should be empowered to do so. Building on this, the closer integration of health and social care will help to ensure better, integrated support for those who come into contact with both sectors.

- Carers are equal partners in the planning and delivery of care and support. A key focus for the national Carers and Young Carers Strategies is to identify, assess and support carers in a personalised and outcome-focused way.

- The Dementia Strategy recognises that there is an increasing demand for the extension of self-directed support for people with dementia. The new standards of care for dementia state that statutory bodies will ensure that people with dementia and their carers are given information about self-directed support, such as direct payments, and are given assistance to access this.

2.2.3 National Context – Mental Health Services

National policies clearly require that people should be treated in a manner and environment that will best support their recovery. Where people are obliged to comply with a programme of inpatient treatment and care, it is also incumbent on the health authorities to ensure that they are provided with an environment no less appropriate than that which they would enjoy in the community.

National policy and legislation also requires that people with a mental disorder should, wherever possible, retain the same rights and entitlements as those with other health needs.

The location of acute adult mental health inpatient facilities must therefore ensure that people are able to access services according to need, regardless of where in Ayrshire and Arran they live.

Given the need to respond to changes in legislation, care standards, clinical practice and workforce pressures and taking into account the population changes outlined above, services have been designed with these requirements in mind.

The proposed Mental Health Strategy for 2012-2017 identifies the key priorities which the new facility will support in delivering these includes, improvement access to CAMHS and psychological services both of these are supported by the facilities and improving access to these clinical services.

It is widely accepted that improvement will be best delivered through the development of an integrated model of care, capable of delivering national policy goals, whilst balancing this and being sensitive to the needs of the people of Ayrshire and Arran.

The Figure 2-9 below shows the linkages between National and Local Policies for mental health services:

Figure 2-9: National and Local Policies Linkages

National Policy		Local Policy
A Framework for Mental Health Services in Scotland (The Scottish Office (1997)) Delivering for Health Building a Health Service Fit for the Future (Scottish Executive (2005)) Delivering for Mental Health Rights Relationships and Recovery, The Report of the National Review of Mental Health Nursing in Scotland (Scottish Executive (2006)) Revised Mental Health Strategy 2012-2017	⇨	Mind your health (strategic review of mental health services in Ayrshire and Arran) December 2008
Towards a mentally flourishing Scotland (Scottish Government 2009-2011))	⇨	Towards a mentally flourishing Ayrshire & Arran

In 2006, NHS Ayrshire & Arran initiated a comprehensive strategic review of mental health services in Ayrshire and Arran entitled ‘Mind your health’. Its emphasis was on removing artificial barriers between agencies, between primary and secondary care and individual services, ensuring that people have access to a modern mental health service that meets their holistic needs and aspirations.

The Clinical brief was further tested by a detailed bed modelling exercise in 2011 which scrutinised the bed numbers proposed by both the mental Health Strategy ‘Mind your Health’ and the Older Peoples Strategy. The bed numbers required by both these strategies had been determined a number of years previously. The detailed paper on this exercise is included within Appendix 2D in the OBC and reduced the total beds required from 253 to 206.

The ‘Mind your health’ review involved extensive stakeholder engagement and was commended by the Scottish Health Council. Full details of this are included at Appendix 2A. Staff across NHS Ayrshire & Arran, partners in Local Authority and other services, representatives of voluntary organisations, service users and carers all contributed to the development of the model of care. It was a comprehensive review of services for adults, older people, children and young people as well as forensic, addiction and liaison specialist services. The outcome of the review, which included the proposal for a new, fit for purpose acute mental health inpatient facility at the Ayrshire Central Hospital site in Irvine, was endorsed by the Board in November 2008.

NHS Ayrshire & Arran has since developed the Mind your health implementation strategy which lays out the Board’s strategic objectives for improving mental healthcare and service delivery. The strategy determined the need for a new facility, which will deliver inpatient Mental Health Services and is a key element of the service strategy to improve patient pathways between primary, acute and specialist care.

2.2.4 National Context – Older Peoples Services

Re-shaping Care for Older People Programme

The principal policy goal of the Reshaping Care for Older People Programme is to "optimize independence and wellbeing for older people at home or in a homely setting". The vision for the future delivery of Services for Older People on the new Ayrshire Central site reflects this overarching goal and is based on an integrated pathway approach that encourages multi-disciplinary and multi-agency working model across health and social care and which allows the patient a seamless journey between primary care, secondary care and the community.

In conjunction with the national Joint Improvement Team. NHS Ayrshire & Arran and North Ayrshire Council produced a Joint Commissioning Strategy for Older People in 2009 which includes and supports the revised model of care. This will be updated in 2012 – 2013 as part of the Scottish Government's requirement that all Partnerships produce a Joint Commissioning Plan for Older People by April 2013 to support their Change Fund Plans as part of the Reshaping Care for Older People Programme.

2.2.5 Investment Objectives

To ensure that the investment objectives set out in the Initial Agreements are still valid, SMART and in line with recent guidance set out in SCIM, a review was undertaken by the Programme Steering Group at their meeting on 10 June 2010. Also, to ensure consistency, it was felt by the Group that the investment objectives should be closely aligned with the critical success factors for the programme and that the ranking of the investment objectives will help inform the development of the benefit criteria and their subsequent ranking and scoring. The group therefore decided that the investment objectives for the project in order of importance is detailed in Figure 2-10.

Figure 2-10: Key Investment Objectives

Key Investment Objective	Ranking
Clinical Quality: To ensure that the proposed facilities provides clinical services that are efficient and effective over the long term	1
Environmental Quality: To meet the standards and expectations of patients, relatives, carers and staff in relation to single rooms, mixed sex accommodation, flexibility and integration	2
Strategic Fit/Sustainability: To provide the Board with a flexible, adaptable and sustainable property portfolio that can respond to the inevitable growth and changes in service delivery and changes in ways of working in the future	3

Affordability/Value for Money: To provide a development that is affordable both in terms of capital and revenue	4
Effectiveness and Efficiency: Maximise the use of all available resources – property, staff and financial	5
Access: To maximise access to community services for the local population	6

2.3 Business Strategy and Aims

Key strategic clinical and environmental improvements are detailed in the following sections.

2.3.1 Clinical Brief

The Clinical Brief (Appendix 2B) was developed to meet the national quality strategy which sets of the six dimensions of quality as shown in Figure 2-11 below.

Figure 2-11: Better Health, Better Care: 6 Dimensions of Quality

Patient Centred	providing care that is responsive to individual patient preferences, needs and values and assuring that patient values guide all clinical decisions
Safe	avoiding injuries to patients from care that is intended to help them
Effective	providing services based on scientific knowledge
Efficient	avoiding waste, including waste of equipment, supplies, ideas and energy
Equitable	providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location or socio-economic status
Timely	reducing waits and sometimes harmful delays for both those who receive care and those who give care

Development of the brief commenced with NHS Ayrshire & Arran identifying a high level vision for the future direction of all of those clinical services that will comprise the new facility or be impacted by it. It then described the enhanced amenity, functionality and efficiency that could be realised by the development. This has allowed the Board to ensure that the essential investment associated with the development of North Ayrshire Community Hospital (NACH) can effect real, measurable improvements in service delivery that extend far beyond the planned facility.

The strategic vision for the facility is also based on an underlying model that will facilitate an increasing shift of services from the Acute Hospitals to community settings (including community hospitals, community treatment centres, GP services and the home) wherever safe and practical to do so and has recovery, re-ablement, self directed care and carers at the heart of every model.

The following services will be transferred from the acute hospitals.

- Adult Acute Mental Health Services (Crosshouse Hospital)
- Adult Acute Mental Health Services (Ailsa Hospital)
- Non Acute Mental Health (Ailsa Hospital)
- Mental Health Rehab (Ailsa Hospital)
- Forensic Rehab/low secure (Ailsa Hospital)
- Intensive Psychiatric Care Unit (Ailsa Hospital)
- Addiction Services (Ailsa Hospital)

ADOC Service for North Ayrshire will continue to be located on retained estate on the Ayrshire Central site.

The rehabilitation services located on the new facility will work closely in partnership with local GP practices within North Ayrshire to assess patients and prevent admissions.

Work began in January 2009, supported by the appointed Healthcare Planners, and continued to October 2009. The brief has been established as a dynamic document being reassessed six monthly, the most recent being in August/September 2011 During this time over 200 staff were directly involved in the development of the service models.

Two groups were established to take forward the development of the service templates, Mental Health Services @ ACH Group (43 members) and Ayrshire Community Hospital Services Group (40 members). Both these groups met monthly and had the authority to and were responsible for driving the development of the clinical brief through service templates.

The following task groups were established and each met weekly during the development period, with each producing a service template.

- Mental Health Acute Inpatient
- Elderly Mental Health Inpatient
- Addictions Inpatient
- Low Secure
- Adult Mental Health Continuing Care
- Rehabilitation (including Stroke, Care of the Elderly, Ortho-geriatric)
- Neuro-rehab
- Long stay Care of the Elderly
- Outpatients (including General medical, Surgical, Dermatology)
- GP inpatient beds
- Primary Care
- Voluntary Organisations

Service templates comprised three sections:

- Introduction and outline of current services (where we are now?)
- Service trends (how will services change?)
- Clinical/Service Model & Philosophy of Care (how should things be in the future?)

In June 2009, following the first draft of the service templates, two crosscheck workshops were held for mental health services and community hospital services. Their purpose was to widen discussion around the developing models of care, review the interfaces between key clinical pathways and to identify any outstanding issues that needed to be addressed in order to ensure service-wide continuity and fitness for purpose in the new development. Over 40 members of NHS staff attended each workshop. Service Managers from each of the above task groups were asked to describe a “day in the life” of the new facility for their specific service. Following the presentation, delegates were actively encouraged to question the proposed new service and raise issues for further discussion at future meetings. These workshops provided an excellent opportunity to hear first hand the proposals for future services.

Following the development of the service templates, the task groups continued development of their service templates into the clinical brief, schedule of accommodation and adjacencies matrix.

The two groups were merged in late 2009, when a Design User Group was established to take forward the design development proposals from January 2010.

This structured process included undertaking a review of existing service models and accommodation before identifying how these should change to reflect current and future thinking in the context of national and local strategic considerations, policy and objectives. The key change to be implemented as a result of this review process will be fundamental improvements to the way that care will be delivered. These changes are all documented within the clinical brief which is included as Appendix 2B.

The Clinical brief was further tested by a detailed bed modelling exercise which scrutinised the bed numbers proposed by both the mental Health Strategy 'Mind your Health' and the Older Peoples Strategy. The bed numbers required by both these strategies had been determined a number of years previously. The detailed paper on this exercise is included at Appendix 2D and reduced the total beds required from 253 to 206.

Key service elements outlined in the clinical brief (Appendix 2B) include:

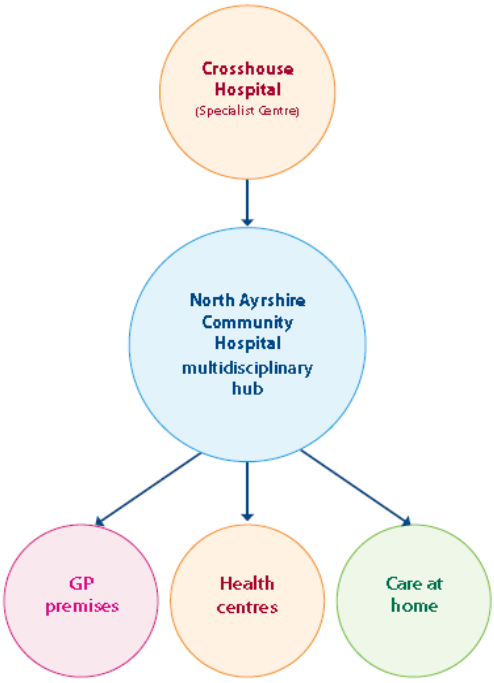
- The provision of a range of health services
- The realisation of a critical mass of services on the site that supports economies of scale in key areas such as, hospital at night, medical staffing rotas, etc.
- The provision of intensive and active intervention to all patient groups to ensure that time spent within the facility is reduced overall but optimally adding value. This is demonstrated by configuring all the new build wards around support clusters which are designed to support intensive local intervention / rehabilitation.
- Supporting better management and maintenance of patients in their own homes but also, when necessary, ensuring that the transition between home and inpatient care where required is as seamless as possible.
- The provision of accommodation consisting of single rooms with en-suite bathrooms.
- Significant flexibility to meet future needs.
- Reducing the amount of space utilised by administration accommodation.
- The provision of generic flexible and shared outpatient consultation spaces that can be used by the full range of health, social and voluntary groups/organisations as appropriate.

These underlying themes are further considered through the benefits realisation criteria developed for the programme, described in later sections. They have also helped to develop a clear understanding of current and future requirements, resulting in a robust Schedule of Accommodation which is also detailed later in this OBC.

2.3.2 New Services and Models of Care – Community Hospital

This programme will deliver an integrated development consistent with NHS Ayrshire & Arran's strategic objectives. This is based on a hub and spoke model that operates with specialist centres (Ayr and Crosshouse District General Hospitals and regional and national centres) supported by local community hospitals which link with a network of community, Primary Care and social care staff working in local resource centres, health centres and community clinics throughout Ayrshire and Arran (Figure 2-12).

Figure 2-12: Hub and Spoke Model (Community Hospital North Ayrshire)



Co-locating the community hospital and acute mental health services provides an opportunity to further develop NHS Ayrshire & Arran's approach to health and wellbeing in partnership with other stakeholders and the community at large.

NHS Ayrshire and Arran has approved the submission of a business case for major redesign 'front door' projects at Ayr and Crosshouse hospitals which will revolutionise the way in which patients are assessed and treated as hospital emergency patients. Services will be reconfigured to facilitate rapid assessment and diagnosis of patients, with a shift away from inpatient admission as the norm, to day treatment and much shorter inpatient stays in hospital. This redesign is part of a whole system review including development of integrated pathways of care, seamless links between hospital and community and GP services, and patients being active partners in their care, rather than passive recipients of care. This vision requires a strong local health service supporting people in their day to day lives to get the best from their health and health care. It requires effective alternatives to acute care.

The North Ayrshire Community Hospital will play a key part in the success of the Board's front door strategy by:

- Receiving elderly patients direct from assessment at A&E at Crosshouse, into an environment more conducive to re-ablement and independence;
- Supporting an assessment and treatment process aimed at enabling people to return to live independently in their own homes rather than be admitted to institutional care;
- Providing continuity of care for patients with long term conditions who have an exacerbation in their condition, including use of telehealthcare solutions;
- Providing a base for community rehabilitation services run by the North Ayrshire Community Health Partnership;
- Providing outpatient services close to patients' homes, with expanded facilities which support a multidisciplinary one stop shop approach;
- Continuing to offer direct access to plain film X-Ray and, through time, enabling direct access to cross-sectional imaging, Echo Cardiogram and 24-Hour ECG to improve community-based diagnostics and enable the treatment of a wider range of conditions in Primary Care;
- Developing dental surgery capacity on-site, enabling not only the development of shared facilities and joint working with Orthodontics but also the rollout of a third Emergency Dental facility in line with the NHS QIS recommendations; and
- Providing a community base in the retained estate for staff working in the North Ayrshire locality.

The vision for the community hospital service can be summarised as:

- A service which is owned by the local community to support health and wellbeing, with a focus on health improvement as well as care delivery;
- A service which is a hub for local community health and social care; and
- A flexible service which enables and encourages local staff to make continual improvements to local service delivery.

2.3.3 New Services and Models of Care – Mental Health Services

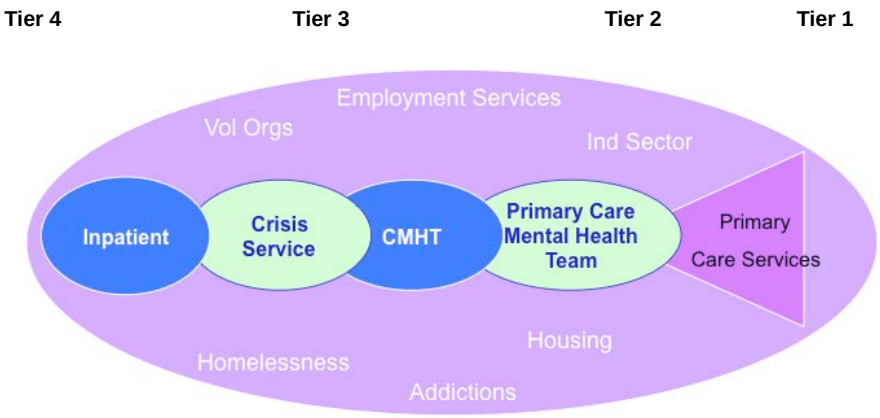
Mental health promotion, the prevention of mental illness and promotion of physical wellbeing amongst those who have a mental health problem are integral components of NHS Ayrshire & Arran's Mental Health Services (MHS). The Scottish Government has described its vision for Scotland where *'our flourishing mental health and mental wellbeing contributes to a healthier, wealthier, fairer, smarter, greener and safer Scotland*.'

Following the strategic review of local mental health services, a tiered model of care was introduced and is illustrated in Figure 2-13 below.

Figure 2-13: Mental Health Services Directly Interfacing with the New Facility

The bed modelling work undertaken in conjunction with Buchan + Associates and attached in Appendices B and C, outlines in detail the consideration of a range of potential influences on the requirements for inpatient beds. Recognising that there will always be factors over time which are unanticipated (such as technological, or policy changes). We have sought to ensure a high level of flexibility in the design specification to facilitate future care group changes. eg.1: Should adult acute bed occupancy rise, addiction beds could be commissioned privately and those beds be used for adult acute admission. Eg 2 Should the requirement for frail elderly continuing care beds reduce further, EMI continuing care beds currently provided by a third party in North Ayrshire, could be returned to NHS provision at NACH. Eg 3: The Low Secure Forensic Facility will have a flexible function to ensure that it can be utilised for Forensic Rehabilitation where there is any interim change in requirements for low secure care.

Figure 2-14: Tiered Model of Care – Mental Health Services



The 4 tier model illustrates the relationship of the components of a mental health system with each other in terms of likely population need (Figure 2-14). Many more people will need the services of tier 1 compared to tier 4. The inter-linkages between the service components represents the new service models' capacity to function as an integrated network. By ensuring a whole system approach to supporting mental health, wellbeing and recovery, the majority of patients requiring a service will be seen and supported in their local community.

On those occasions where in-patient admission is the best option for the patient, NHS Ayrshire & Arran aims to provide an effective high-quality inpatient experience. It is essential that in-patient care is embedded as part of the integrated mental healthcare network. The new facility will ensure a world class inpatient setting that is fit for purpose, meets all regulatory standards and provides a therapeutic environment. The design will be based on single sex rooms with en-suite facilities, to provide maximum flexibility.

Ensuring a focus on recovery from the point of admission, inpatient care in the new facility will be provided in a safe and supportive and engaging environment.

Admission to an acute inpatient ward will be limited to those whose care and treatment needs are assessed to necessitate an inpatient stay, and after a comprehensive assessment of all community and home based options.

The new model of care will focus on rehabilitation from the point of admission, to eliminate stays beyond what is clinically required and to have inpatient services that enable recovery and enhance personal well being whilst also reducing levels of institutionalisation.

Discharge planning will begin at admission and be supported by a network of community based services and social and independent sector services, ensuring people are able to take advantage of a range of services to meet their individual needs. Accessing social, leisure and employment opportunities will be a distinct part of every discharge plan.

The Intensive Psychiatric Care Unit (IPCU) will be part of the development for people who, due to risk to self and/or others, require to be in a secure environment.

The model of rehabilitation for patients requiring more intensive support will be significantly improved within the new facility. Patients will be supported in an environment which enables a graduated recovery, building on their strengths in managing their activities of daily living. Easy access to the activity areas and safe external grounds will promote quicker recovery and improved opportunities to engage with the community. As an outcome patient length of stay in rehabilitation will reduce and this will further impact on the improved wellbeing of patients.

The development has been the subject of extensive and involved bed and capacity modelling exercise that makes a wide range of assumptions related to future activity and models of care. A copy of the report from this exercise is attached in Appendices 2B & 2C. This shows the nature and depth of those variables identified that will have an impact on future capacity requirements.

In line with the recently published National Dementia Strategy, inpatient services for older people will be included in the development in homely settings incorporating dementia friendly design recommendations compiled by the Dementia Services Development Centre. An older people's liaison service is being developed to support people with dementia receiving inpatient or day case general medical services. The Audit Tool designed by Dementia Services Development Centre at the University of Stirling will be incorporated within the design development.

Low secure /forensic rehabilitation care will be designed to support safe medium term in-patient care and step down support. This will be closely supported by the Community Forensic Team and form part of an integrated community service approach to Forensic Care.

Palliative and end of life care will be developed as a core element of support provided by inpatient services, community based services and primary care teams, in consultation with partners from the Local Authorities and the voluntary sector.

2.3.4 Patient Environmental

Introduction

The new buildings and physical environment will reflect a positive vision of community mental health services as a normal part of the life of the Ayrshire and Arran community that they serve. The Royal College of Psychiatrists report "*Not Just Bricks and Mortar*" recommends the need for new, smaller, more domestic inpatient psychiatric units which must reflect current practice and be of a standard acceptable to patients and staff through the 21st century. The facility's design will reflect this and will enable the service to promote safety, dignity, comfort and privacy as well as provide therapeutic opportunities for recovery and rehabilitation.

The following paragraphs summarise how the environmental quality of the new development will enable NHS Ayrshire & Arran to deliver its services in terms of the six dimensions of quality outlined in "*Better Health, Better Care*", and the National Quality Strategy.

A report entitled "Environmental Quality" details issues arising from the elements of the National Quality Strategy on current sites and planned improvements outlined in the OBC will address these. The report is included as Appendix 2C.

Six dimensions of quality

The six dimensions of quality under which the impact of the development is described are:

- Patient Centred
- Safe
- Effective
- Efficient
- Equitable
- Timely

Patient Centred

NHS Ayrshire & Arran's commitment to patient centred care which is respectful, compassionate and responsive to individual patient preferences is severely compromised by the quality of our current built environment. In particular:

- Only 64% of rooms are single en-suite rooms;
- Existing single rooms are not compliant with current standards;
- Inaccessible diagnostic and therapeutic environment;
- Inappropriate mixed sex accommodation;
- Inadequate quiet areas for patients;
- Lack of visitor facilities and private space;
- Very poor IPCU facilities;
- Inaccessibility of many ward based toilets; and
- Lack of scope for flexible use of accommodation.

These are examples only. The list is not exhaustive.

The new build component of the programme will address these issues and will have further positive impacts on the environmental quality by provision of:

- Inpatient wards of 100% single, en-suite bedrooms, arranged in three clinically appropriate clusters around shared support areas;
- A discrete inpatient entrance to enable specific admissions to be made avoiding main public thoroughfares;
- Simplification of the patient journey through efficient and effective design of the new facility;
- Fit for purpose outpatient clinic/consultation areas in inter-connected but self contained "modules";
- ECT/minor surgical/outpatient area, with treatment and recovery spaces;
- Pharmacy/dispensary;
- Easily accessible meeting/tribunal area;
- Each ward with adequate private and communal space, designed for effective staff/patient interaction and observation;
- IPCU designed specifically for the purpose it is meant to serve; and
- Outdoors, grounds will be landscaped and each ward will have access to a private and secure courtyard/garden/terrace.

Safe

Safety issues currently constrain environmental quality as follows:

- Observing and engaging with patients is hampered by the design and layout of the wards;
- Health and safety concerns for patients and staff associated with movement in lifting and handling;
- Infection control risks associated with domestic services facilities; and
- Patients have to walk through busy corridors or be transferred by ambulance to access services or therapies.

The new development will impact on all of these issues in many ways, including:

- Overall design and layout will reduce the risk of harm to patients and staff and provide a safe environment;
- Ligature points will be avoided in all clinical and common areas;
- Domestic service rooms will be adequately located and designed to facilitate control of infection;
- Purpose built facilities will ensure a high level of safety measures incorporated into the build;
- Interconnection of ward/therapy areas;
- Ample quiet areas will reduce potential for tension; and
- Improved safety at night.

Effective

Staff currently strive to deliver the best possible clinical care in environments that do not lend themselves to individual therapeutic rehabilitative function. Limitations were recently highlighted in a report from the Mental Welfare Commission, following an inspection visit to the Elderly Mental Health Wards at Ayrshire Central Hospital. Amongst the issues highlighted were:

- “Despite some refurbishment these wards remain unfit for the care of people with dementia”; and
- “The physical environment is poor and unfit for purpose”.

Other parts of the current estate have received similar critical comments.

This programme will overcome these issues by providing a new build environment that will support future capacity requirements and approved clinical strategies. It will enable the development of new services and models of care including:

- Reduced length of stay
- Utilise staff time more effectively
- Helping patients to sustain and improve their health
- Support new pathways of care

Efficient

The current proposals will facilitate the application of an Environment Management System. This is in accord with the mandatory requirements set out within the Environment Management Policy for NHS Scotland (HDL (2006)21) and NHS Ayrshire & Arran's own Environmental Management Policy and Sustainable Development Statement. NHS Ayrshire & Arran will also take cognisance of NHS Scotland's Sustainable Development Strategy document CEL 15 (2009).

Equitable

The standard of facilities will assist the promotion of services to all sectors of the community. As the majority of inpatient admissions for mental health issues have been shown to be from North and East Ayrshire, the location of the development will be of overall benefit to them.

The development will be complemented by a travel plan, and its design will facilitate the access and circulation of traffic. Pedestrian and cycle access will, where possible, be segregated from vehicular movement, and there will be shared pedestrian/cycle paths throughout the site.

The development will ensure equity of access to people with disabilities of ethnic groups and with other specific requirements have equity of access to services through, for example:

- provision of single room accommodation
- appropriate signage
- parking facilities
- improved access to public transport etc

Timely

The provision of facilities under one roof will promote timely service and delivery, reduced delays and speed diagnosis treatment and discharge.

At present there are delays associated with wards being located in isolation from other services and from difficulty in accessing accommodation.

Acute mental health and IPCU is currently located on the Ailsa campus, which is a large disparate site. Transfer of patients is neither timely nor dignified at the moment due to the disparate nature of the Ailsa campus. In addition those patients being transferred from 1D/1E at Crosshouse Hospital are required to undertake a 19 mile ambulance journey with the associated risks for patients and staff.

Within the current estate, accommodation constraints mean there is little opportunity to cater for specific diagnosis or presentation in any area with associated impact on most efficient care delivery and patient experience leading to longer episodes of care than may be achievable. Often, admitting patients to wards that have concerns regarding anti-ligature provision and the ability to observe “at risk” patients, leads to delays in admission as additional staffing is required. This in turn often leads to individuals having to remain in the acute care setting for longer periods or requiring to be transferred to the Acute Admissions or IPCU setting if their presentation is no longer felt manageable within the non-acute setting.

Elderly Mental Health and Elderly patients at Ayrshire Central will benefit from more rapid access to therapies and more co-ordinated patient centred care.

2.4 Existing Arrangements

Adult Mental Health acute admissions are provided at Ailsa and Crosshouse Hospitals and older people’s acute admissions are provided at Ailsa and Ayrshire Central Hospitals. The Intensive Psychiatric Care Unit (IPCU), rehabilitation beds and continuing care beds are currently all based at Ailsa Hospital. None of these facilities is fit for purpose.

Condition Surveys have been carried out on Ailsa and the horseshoe at Ayrshire Central. These surveys can be found in Appendix 2H.

Crosshouse Hospital

The accommodation at Crosshouse is located within a District General Hospital, with little opportunity for patients to enjoy recreational facilities or to access reasonable outdoor areas with privacy or dignity (Figure 2-15). The ground floor accommodation has land immediately outside the ward which is often used for essential temporary storage or as builders’ compounds and as a thoroughfare; overall this external area is in a very poor state of repair and has no garden. Refurbishment will be undertaken to address immediate health and safety matters, but this will not provide the long term solution. Further refurbishment works is outwith the scope of NACH project, however Health & Safety matters will continue to be addressed through Estates Formula Allocation.

Figure 2-15: Crosshouse Hospital

Mental Health Wards external area, Crosshouse Hospital

Crosshouse Hospital has the following:

- Two acute adult inpatient wards (1D &1E), each with 23 beds. The wards have a geographical focus:
- Children and Adolescent patients are admitted to Ayrshire adult or paediatric wards when there is not a bed available in the regional unit;
- 1E provides beds for inpatient detoxification in collaboration with Addiction Services; and
- Perinatal mental health patients (mother only, with conditions such as antenatal depression, postnatal depression and birth trauma) are admitted to 1E when there is not a bed available in the regional unit.

Crosshouse Hospital has a total backlog of £31.5M, this will not be addressed through this project. The breakdown is; £16.9m attributable to the physical condition of the site; £14.6M attributable to statutory compliance. Within the total backlog cost there are high and significant risks, which equates to 34% or £10.7M of the total backlog. The high cost items within the site are as follows:

- Internal Fabric (Physical Condition) - £6,230,456
- Internal Fittings & Fixtures (Physical Condition) - £2,600,800
- Electrical Services (Statutory Compliance) - £2,479,000
- Ventilation in Healthcare Premises (Statutory Compliance) - £2,328,000
- Electrical Systems (Physical Condition) - £2,195,000
- Workplace (Health, Safety & Welfare) (Statutory Compliance) - £1,238,000
- Legionellae (Statutory Compliance) - £1,219,000
- Heating Systems (Physical Condition) - £1,143,000
- External Fabric (Physical Condition) - £1,008,500

Ailsa Hospital

The Victorian estate at Ailsa Hospital offers no flexibility on configuration, ward sizes etc, and the physical spread of wards does not support an integrated approach to care delivery. In particular the Intensive Psychiatric Care Unit (IPCU) is of such unsuitable accommodation it will fail any environmental audit or standards (Figure 2-16). It constrains the Millan principles demanded by legislation and houses an unsuitable mix of forensic and acutely unwell patients.

Figure 2-16: Ailsa Hospital

IPCU Treatment Room, Ailsa Hospital

IPCU Multi-displinary room, Ailsa Hospital

IPCU Laundry Room, Ailsa Hospital

Ailsa Hospital has the following:

Two adult acute inpatient wards (Kyle and Park), each with 23 beds, with a geographical focus:

- Four adult continuing care wards, with a total of 41 beds, covering all of Ayrshire;
- One adult rehabilitation ward with 12 beds, covering all of Ayrshire;
- One 7 bedded Intensive psychiatric care unit covering all of Ayrshire;
- A recreation therapy service that provides drop-in support, a programme of social activity and outings for inpatients and is provided by qualified nursing staff. Additional activity is provided by other professional groups such as Occupational Therapy working with other local educational establishments;
- An industrial therapy unit which provides access to French polishing, picture framing, woodwork, joinery, gardening and dressmaking. The unit also supports service users' work placement on the campus within the hairdressers, coffee shop, recreation therapy and hotel services. The majority of people using the services are no longer inpatients;
- Occupational Therapy and Physiotherapy Departments.

<u>Ailsa</u>

Ailsa Hospital has a total backlog of £5.8M. This is broken down into £3.1m, which is attributable to the physical condition of the site and £2.7M which is attributable to statutory compliance. Within the total backlog cost there are high and significant risks, which equates to 36% or £2.1M of the total backlog. The high cost items within the site are as follows:

- Internal Fabric (Physical Condition) - £871,805
- DDA (Statutory Compliance) - £751,389
- Firecode (Statutory Compliance) - £555,053
- External Ground & Gardens (Physical Condition) - £545,600
- Roof (Physical Condition) - £469,755
- External Fabric (Physical Condition) - £461,520
- Infection Control (Statutory Compliance) - £376,805
- Ventilation in Healthcare Premises (Statutory Compliance) - £315,478

Occupational Therapy
Store Cupboard, Ailsa Hospital

External Physiotherapy Shed,
Ailsa Hospital

Ayrshire Central Hospital

Ayrshire Central Hospital was opened in 1941 in Irvine and currently provides young/disabled/rehabilitation services and a number of assessment beds for elderly mental health services, older people and vulnerable adults.

Rehabilitation of patients is constrained (Figure 2-17). Continuing Care/Non acute mental health care is institutional and lacking in privacy and dignity. Ayrshire Central Hospital has the following:

- Older people's acute admissions in Pavilion 1 and Pavilion 2, each with 18 beds;
- Frail Elderly rehabilitation in Pavilion 3, with 30 beds;
- Frail elderly long stay wards in Pavilions 5 and 6, each with 30 beds.
- The majority of buildings on the Ayrshire Central Hospital site where clinical care is currently provided are ageing, functionally unsuitable and in poor physical condition. In the Board's Estates Strategy, Ayrshire Central Hospital is listed as EstateCode category C (below acceptable standards) for functional suitability and category 3 (adequate) for space utilisation.

Ayrshire Central Hospital

Ayrshire Central Hospital has a total backlog of £19M. This is broken down into £13m attributable to the physical condition of the site and £6M attributable to statutory compliance. Within the total backlog cost there are high and significant risks, which equates to 74% or £14.1M of the total backlog. The high cost items within the site are as follows:

- Electrical System (Physical Condition) - £2,891,000
- Heating System (Physical Condition) - £2,771,000
- Internal Fabric (Physical Condition) - £2,296,500
- DDA (Statutory Compliance) - £1,816,000
- External Fabric (Physical Condition) - £1,090,500
- Roof (Physical Condition) - £1,061,000
- Boilers & Calorifiers (Physical Condition) - £914,000
- Infection Control (Statutory Compliance) - £803,000

Figure 2-17: Ayrshire Central Hospital

Frail Elderly 4-bedded ward, Ayrshire Central

Pavilion 1 (Elderly mental Health) Ayrshire Central

2.5 Service Needs Current and Future

Rationalisation of Estate

Background

Estate rationalisation is a critical component to the delivery of the programme. The implementation of the plan as it relates to the development will be undertaken in 3 phases.

Phase 1 will involve releasing accommodation through the reconfiguration and development of existing services on the Ailsa Hospital site to match the approximate functions and staff complements being provided in the new facility. Surplus property will be reviewed and disposed of as per the Clinical Strategy Plan. Phase 1 is complete.

Phase 2 is the planned demolition of six pavilions and Garnock Day Hospital at the Ayrshire Central site to free up ground/space for site development. Staff within existing facilities will also be relocated as part of the Site Continuity Plan.

Phase 3 the relocation of services onto the North Ayrshire Community Hospital site will release accommodation in both Ailsa and Crosshouse Hospitals. A review of existing mental health and community properties will be carried out as part of the NHS Board's Estates Development Strategy. At the end of the construction period pavilions 1-3 will be demolished and the remaining car park will be complete.

Properties associated with Capital Receipts

The NHS Board's capital allocation will be supplemented to include planned capital receipts of £9.32m from the following estate rationalisation measures:-

- £1.675m sale proceeds from phase 1 estate rationalisation measures (Nightingale House / Strathdoon / Hartfield House / Westmount)
- £5m sale proceeds from phase 2 estate rationalisation measures (sale of land already declared as surplus to requirements at Ayrshire Central, Irvine)
- £2.65m sale proceeds from Other former hospital sites already declared as surplus to requirements in the NHS Board's Local Delivery Plan (Holmhead / Seafield / Davidson Cottage Hospital & Girvan Health Centre)

The £9.32m relates to the open market valuation of expected receipts rather than the net book value.

2.6 Desired Scope and Service Requirements

2.6.1 Planned Scope

The programme will deliver the following accommodation for mental health and community services.

There are two component parts to the development:

a. new build of mental health and community hospital inpatient and outpatient facilities
b. refurbishment of elderly mental health wards at Ailsa Hospital and Outpatient Area

a. New build

- Three twenty bedded Acute admission wards for mental health services. They provide assessment, treatment and intervention services for patients over 18 years of age who require short term admission for crisis or a breakdown in their current treatment plan, or significant intensive treatment that can only be carried out on an inpatient basis.

- Eight bedded IPCU provides intensive treatment and interventions to patients who present an increased level of clinical risk and require and increased level of observation. A multidisciplinary team with specialised training; the ratio of nursing will be greater than a general psychiatric ward.

- Thirty bedded Rehabilitation Unit consisting of three 10 bedded wings to ensure that the individual has the necessary skills in self care and social integration to be able to return to successful living in the community. Rehabilitation is provided by a multidisciplinary service for patients whose condition requires rehabilitation prior to discharge. This Unit also incorporates Continuing care/ long stay patients require hospitalisation for care that cannot be provided in the community. Care packages will be developed in conjunction with all agencies involved to create a seamless transition for discharge.

- Two 15 Bedded Elderly Mental health Inpatient Services include acute admission wards they provide assessment, treatment and intervention services for patients over 65 years of age who require short term admission for crisis or a breakdown in their current treatment plan, or significant intensive treatment that can only be carried out on an inpatient basis.

- Ten bedded Addiction Unit with Day Services are aimed at preventing and reducing the complications of alcohol use and will also be available in the community. These services are complemented by a range of teams who offer:

    - Home and community based detoxification
    - Dual diagnosis (inpatient and community based) for people
    - with addiction and mental health problems
    - Drug treatment and testing orders
    - Needle exchange programmes
    - Support and screening for hepatitis and HIV
    - Specialist clinics along with the substitute prescribing programme

- Eight bedded Forensic rehabilitation Unit/Low Secure Unit provides specialist rehabilitation in a secure or open environment usually following reduction of security from high or medium secure care.

- Two 60 bedded Continuing Care/Frail Elderly Inpatients wards will include admission wards for patients over 65 years of age who will be admitted to a Frail Elderly Hospital when the Hospital Consultant, in conjunction with the multidisciplinary team from the discharging area, has decided that the patient requires ongoing and regular specialist clinical care due to the complex nature or intensity of his or her health care needs.

- Clinical Consultation and Intervention Area for Children & Adolescent Mental Health Services (CAMHS) and Clinical Consultation and Intervention Area for Adults. **NB** There are no beds associated with CAMHS. This area will service outpatients only.

- Pharmacy Department to provide a full range of mental health clinical pharmacy and dispensing services (including area clozapine service). Clinical pharmacy and dispensing services for the community hospital will also be provided from this department.

- Supporting clinical facilities, such as Café/Retail area, ECT suite, Tribunal Accommodation, Spiritual Care Area, Admin offices, Consultation and Interventional Areas

The service requirements for the new build are detailed in the Clinical Brief (Appendix 2B).

b. Refurbishment programme

Ailsa Hospital

Much of the existing estate at Ailsa Hospital will be retained, including the following ward areas:

- Lewis, a 9 bed dementia care ward
- Iona, a 12 bed dementia care ward
- Jura, a 22 bed dementia care ward
- Dunure, a 22 bed organic assessment ward
- Clonbeith, a 16 bed continuing care (functional) ward
- Croy, a 14 bed functional assessment ward, and
- Croy day hospital

Work is required to improve the clinical functionality of the ward areas including:

- The conversion of identified existing en-suites within each ward area into fully dual accessible “wet room type” en-suites that are in line with those specified for the NACH development and HBN 00-02 that are equipped with overhead hoists capable of supporting travel between bed, WC and shower. Specifically:
    - Within Lewis/Iona, the conversion of 4 en-suites
    - Within Jura, the conversion of 4 en-suites
    - Within Dunuir, the conversion of 4 en-suites
    - Within Clonbeith, the conversion of 2 en-suites
    - Within Croy, the conversion of 2 en-suites
- The creation of a distinct accessible bathroom in Iona ward. (The existing bathroom shared with Lewis to be retained for the exclusive use of Lewis).
- The creation of a distinct sluice room (dirty utility: bedpan disposal and urine test) in Lewis. (The existing dirty utility which is shared with Iona should be retained for the exclusive use of Iona).
- The installation of appropriate durable, anti-slip floor coverings in all ward areas that do not currently have them.
- The creation of an accessible bathroom in Croy ward.
- The creation of additional clinical equipment storage areas – outwith existing building footprints but ideally accessible from ward areas – in order to provide much needed general equipment storage. These store areas need to be wind/water tight and have access to electricity for lighting and electrical sockets to support equipment charging, but may be regarded as being external to the main building envelope
- The construction of simple conservatory areas on all wards where appropriate.
- The above works are in addition to work needed to address existing specific building or service issues.

Following the works at Ailsa all remaining wards will have 100% single room provision, in line with those being developed within North Ayrshire Community Hospital (NACH) project and that comply with current best practice guidance SHPN 04-01 and HBN 00-02.

A clinical brief including proposed works has been developed for any potential PSCP partners and is available.

The Service Continuity Plan is detailed in 2L and in Section 2.11.

Figure 2-18 illustrates the existing and new bed numbers including:

a) The current inpatient services on the ACH site; and

b) The new total inpatients on site, occupying new and existing buildings.

Figure 2-18: existing and new bed numbers

NACH	Current		Amended OBC	
	Existing	Dec 2010 OBC	Breakdown of beds	**Total number of beds in new development for OBC Dec 2011**
Adult Mental Health (AMH) – Ailsa/Crosshouse	92	88	60	60
Non Acute Mental Health (NAMH) – Ailsa	30	30	21	30
Mental Health Rehab – Ailsa	12	12	9	
Forensic Rehabilitation/low secure (FR) – Ailsa	10	10	8	8
Intensive Psychiatric Care Unit – Ailsa	7	8	8	8
Elderly Mental Health (EMH) - Pavilion 1 - Ayrshire Central	18	15	15	15
Elderly Mental Health (EMH) - Pavilion 2 - Ayrshire Central	18	15	15	15
Addictions - Loudon House – Ailsa	12	15	10	10
TOTAL (NACH Elements Less Frail Elderly)	199	193	146	146
FRAIL ELDERLY – Ayrshire Central	90	60	60	60
TOTALS	289	253	206	**206**
BED REDUCTION PROPOSED IN OBC SUBMISSION			47	47

2.7 Other Organisational Strategies

2.7.1 Property and Asset Management Strategy

The Property and Asset Management Strategy document for NHS Ayrshire and Arran has been developed to reflect the changing demands on the estate. The Board is committed to constantly reviewing the services that are needed and planning for the future needs of the local population. This Strategy sets out how the estate will be developed to meet those challenges to provide the most appropriate buildings and estate at the right time and to the right standard.

Driven by the clinical service strategies, the Board has developed a strategy and outline plan to enable and support the safe, effective and efficient delivery of patient care. The Strategy is a high-level document that sets out how the estate currently performs, the future requirements for capital assets and the fulfilment and delivery of those requirements. The overall aim of the document to produce a simple and concise summary of the existing estate and outline the strategic changes and developments being considered for the next ten years. As part of its continued clinical service development and infrastructure investment the Board is committed to a range of clinical service developments across acute, community and primary care all of which will impact on the future shape and configuration of the estate. Many of these are in the advance stages of planning and are incorporated into the Capital Plan.

The hub and spoke model essentially describes how the community hospital aspect of the development links into the wider acute and primary care services. It ties into the Hub and spoke model by describing how NACH interacts with the proposed front door developments at Crosshouse and the wider links to primary care. PAMS will reflect these changes and bring consistency to the wider programme.

The development of the Acute Mental Health and North Ayrshire Community Hospital will address two of the key service developments:-

- Re-provision of Mental Health services currently provided from Ailsa, Ayrshire Central and Crosshouse Hospitals
- Enhancements to Community hospital services for North Ayrshire

This project and associated estate rationalisation measures are key elements of the Strategy and as such are the Board's number one priority in the Local Development Plan.

The consequences for the other sites in the long list of options are contained within sections 2.5 and 2.6 of the OBC, that said the consequences for the long list would be:

- Strathlea Resource Centre – closed and due for sale
- Kirklandside – 5 year life, then disposal
- East Ayrshire Community Hospital – Status quo will remain
- Ailsa – Elderly cohort of beds will remain on site and be refurbished to current standards (refurbishment details available)
- Crosshouse Hospital – Wards 1D & E relocate and space to be utilised under “build for Better Care”

In summary the consequences for the other sites are recognised within NHS Ayrshire & Arran’s new Estates Strategy, and consequently reflected within PAM’s.

2.7.2 Facilities Management (FM) Brief

The FM Brief (Appendix 2E) has been developed to ensure that:

- Facilities management issues are considered fully and appropriately during design and construction of the new facility;
- The new facility addresses existing FM servicing problems and risks
- The design team have a full understanding of how the new facility will be serviced; and
- FM output service specifications are considered in the same manner as all other output specifications.

To clearly identify how FM services should influence facility design/ configuration the FM Brief highlights a wide range of relevant issues/implications related to each individual service under a range of headings that include:

- Service contact information;
- An overview of the existing service;
- Service delivery times/information;
- Service delivery staffing information;
- Current service delivery locations;
- Maps of key processes supported;
- Current risks to be addressed/considered;
- A summary of what will change in the new facility;
- In reflection of all of the above, a summary of the specific influences that each service should have on facility design/configuration; and
- Key regulations/guidance that impact upon the service that the new facility must be able to support.

In addition, the programme's FM Brief includes a range of contextual information and data that is relevant to facility design including transport / delivery information, vehicle/trolley sizes, and specific service specification technical issues.

2.7.3 e-health Strategy

Since the NHS Ayrshire & Arran eHealth & Information Services Strategy was approved the national eHealth Strategy has been issued. A local eHealth Delivery Plan has been developed and includes updates to the NHS Ayrshire & Arran eHealth Delivery Plan within the approved strategy. In addition the new eHealth Delivery Plan links to the agreed Strategic Outcomes within the national strategy and includes targets and measurable benefits. The eHealth Delivery Plan has been reviewed by the Scottish Government eHealth Department.

The local strategy brings together the shared goals of eHealth, Health Records and Information Services, providing a cohesive set of deliverables and a shared vision which will support the organisation in the delivery of integrated care within a contemporary health care setting. A key feature of the strategy is the development of an integrated Electronic Patient Record (EPR), replacing the paper record. This will allow enhanced information sharing based on a "capture once, share many" approach.

In addition the strategy sets out deliverables which will use technology to enable remote working and secure wireless solutions which will enable hot – desking, mobile working and shared access. (Figure 2-19)

Figure 2-19: Specific key e-Health Benefits

Specific key e-Health benefits include:

- wireless technology leading to more effective use of accommodation
- access to information and electronic patient records
- "hot desking" for staff sharing technology with local authority partners, providing access to clinical and administrative systems and resources
- security and confidentiality of patient information.

2.7.4 Training and Teaching

NHS Ayrshire & Arran has an underlying principle to be a life long learning organisation which supports its workforce to continuously learn and has embedded a culture of continuous clinical improvement in the way it works.

The new facility will ensure we optimise the opportunity for clinical staff in training to spend time with service users in an environment that promotes and enhances therapeutic engagement. The accommodation will provide appropriate areas for learning and teaching on clinical skills interventions e.g. to undertake psychological intervention, on recovery focussed groups as well as diversion / vocational opportunities, which will support learning in de-escalation as opposed to control and restraint. Having high quality clinical facilities on one site will ensure training, at under graduate and post graduate levels, is able to focus on the whole person in their journey of recovery by sharing the opportunities for learning and multidisciplinary skills development. Clinical simulation training will also be possible within the new development within the therapeutic space that is available on site. The new facility will also support our continuous learning and development of eHealth solutions to maximise efficiency and release time to care.

NHS Ayrshire & Arran actively promotes the Ten Essential Shared Capabilities for Mental Health Practice, and initiatives are already underway including an annual lecture day for all nurses and allied health professionals (AHP) working within Mental Health Services. Colleagues working in Clinical Governance, Organisation & Human Resource Development and Practice Development are key supporters in driving this forward.

Ayrshire & Arran has rolled out the 10 Essential Shared Capabilities training to over 800 staff across all disciplines in our service. We continue to roll the training out on a twice yearly basis. In addition the Realising Recovery training programme will also be rolled out twice yearly on a rolling programme.

Supported by Clinical Improvement Unit colleagues we continue to roll out specific training initiatives related to clinical skills e.g. Safe and Supportive Clinical Observation, Care Planning, Risk assessment/management.

Ayrshire & Arran have implemented a Patient Safety programme, ahead of any national MH SPSP programme, as a way to promote a person centred approach within our services. This initiative includes – safety briefs, SBAR communication tool, medicines reconciliation, multi-disciplinary risk assessment/management approach. This is on top of our approach related HAI compliance.

Ayrshire & Arran continue to roll out Clinical Supervision training as an underpinning clinical skill to enhance care provision. A database of supervisors has been created.

2.7.5 Sustainability

Like all public sector bodies in Scotland, NHS Ayrshire & Arran is committed to the Scottish Government's purpose: "*to create a more successful country where all of Scotland can flourish through increasing sustainable economic growth*".

The design of the new development will promote NHS Ayrshire & Arran's commitment to providing a sustainable estate that meets the needs of the present without compromising the ability of future generations to meet their needs in all of its activities. To this end the new North Ayrshire Community Hospital is working to obtain a BREEAM 'Excellent' rating. The current BREEAM pre-assessment is attached as Appendix 2F. The pre-assessment indicates that an anticipated potential score of 70.03% (an excellent rating) is achievable. The figure 2-20 provides a summary of the scoring in each category.

Figure 2-20: Total Predicted BREEAM Credits Achieved

BREEAM Sections	Indicative Weighted Section Score %
Management	10.00
Health & Wellbeing	14.17
Energy	13.15
Transport	5.14
Water	4.00
Materials	7.50
Waste	4.69
Land Use & Ecology	6.00
Pollution	5.38
Innovation	0.00
Total	70.04

The Programme team engaged fully with the BREEAM Assessor at an early stage in the project in order to maximise the opportunity of attaining a BREEAM Excellent rating. This was achieved whilst recognising that certain BREEAM Credits are just not possible to achieve in a healthcare environment.

BREEAM Assessments are carried out every two months to monitor progress towards attaining the best score that is achievable, with regular interim feedback and updates from all designers and client team stakeholders. Where necessary the Programme team have also sought guidance from supporting NHS Scotland bodies such as Health Facilities Scotland.

NHS Ayrshire & Arran has taken cognisance of the principles laid down both locally and nationally for the promotion of sustainability. Due regard is given to the framework set out in “A Sustainable Development Strategy for NHS Scotland”.

Promoting Sustainability

The programme team has given careful consideration to the ongoing sustainability of the new facility following completion and this is detailed in Appendix 2G. After procuring a building that is designed and constructed with sustainability as one of the key priorities, it will be essential for the ongoing management of the facility to continue to develop these principles. Operational policies are already being developed to ensure resources are utilised to their maximum and waste is minimised. A Building Management System installed in the building will also help the management of lighting, ventilation, temperature and monitor energy usage and allow targets to be set regarding reducing consumption.

Further developments in promoting sustainability and low carbon design include the recently updated Technical Standards October 2010 version, which will also have to be adopted within the scheme.

2.7.6 Human Resource

Adherence to the Staff Governance Standard will be implicit for the current and future North Ayrshire Community Hospital workforce, with the expectation that positive benefits will be realised from the development in ensuring staff are:

- Well informed;
- Appropriately trained;
- Involved in decisions which affect them;
- Treated fairly and consistently; and
- Provided with an improved and safe working environment.

As the development will involve the transfer of services from both Crosshouse and Ailsa Hospital sites, the retention of services on the Ailsa site and merging with existing services currently retained on the Ayrshire Central site the 'Framework for Managing Workforce Change' and TUPE regulations if required as part of the NPD Framework will be applied.

Staff side representatives are involved in the planning mechanisms for the development and are responsible for updating the North Locality Partnership Forum and Area Partnership Forum respectively.

The programme of work has been progressed in an inclusive style to date, maximising the involvement of staff, their representatives, and Trades Unions throughout, whilst still ensuring the delivery of safe and appropriate care to patients. Frequent updates were delivered by the Director of Primary Care and Mental Health Services at each APF and staff briefing sessions. Formal engagement also took place in relation to all structural changes impacting on staff.

2.7.7 Workforce Planning and Development

"*Better Health, Better Care: Planning Tomorrow's Workforce Today"* provides the context against which all workforce planning within NHS Ayrshire & Arran is undertaken. It details the challenges that the NHS in Scotland will need to address in the short, medium and long term in relation to:

- Tackling health inequalities;
- Shifting the balance of care;
- Ensuring a quality workforce;
- Delivering best value across the workforce; and
- Moving towards an integrated workforce.

A number of specific regulatory and policy drivers will also have an impact on both the shape and size of the workforce such as the European Working Time Directive and the impact of Modernising Medical Careers. These coupled with implementation of the quality strategy and ensuring the efficiency and effectiveness of the services we will deliver will directly influence our workforce.

The overall vision is to ensure we have the right staff in the right place with the right skills and competences to deliver high quality care and services to the people of Ayrshire and Arran.

In order to realise this vision the workforce needs to be aligned with both service and financial plans to ensure affordability and sustainability over the long term. NHS Ayrshire & Arran will utilise the *6 steps methodology*, the common workforce planning framework for the NHS in Scotland.

The review and redesign of models of care, coupled with the development of existing and new roles, will be a benefit arising from the North Ayrshire development.

The specific benefit from service and role development should be improvement in service accessibility and realising a shift in the balance of care towards more local, community focused care.

Some of this has already been articulated, for example the outcomes of 'Mind your health', and work is ongoing in detailing and refining the workforce profile for all staff groups – clinical, administrative and support roles - that will provide services from the North Ayrshire Community Hospital.

Impact on Current Staffing Position

The environmental deficits of the older wards and departments have constrained the models of care provided. For instance, elements of containment and loss of opportunity for recovery and rehabilitation have emerged in the current delivery models due to these constraints.

NHS Ayrshire & Arran's commitment to improved models of care requires staff to have developed skills and practice which support and underpin these new models. Patient safety is enhanced with the current clinical staff and managers' participation in the Scottish Patient Safety Programme. Nevertheless, this requires a greater focus on staff's knowledge, practices and competencies .

Assessing Future Staffing Requirements

Future models based on a reduced bed number than currently in place have rehabilitation, re-ablement, and recovery at the centre. The development of the clinical and support services workforce in line with this is key. Staffing numbers and skill mix will be adjusted and adapted in the years leading up to the facility being opened. Numbers of staff and skill mix will change in line with NHS Ayrshire & Arran's workforce plans but in a cohesive, complementary and efficient way.

Alongside staff numbers a safe and effective workforce will be supported by training, retraining, development and by organisational development. The emphasis and philosophy is delivering new models of care made possible by the new facility.

Planning the workforce
All clinical and support services have considered the workforce implications of the new facility and each are summarised below.

Current Support Staffing Position - Service Scope

The Clinical Support Services Department delivers a full range of support services which support and underpin the clinical services in the delivery of services to patients.

The services will include:-

- Catering Services for patients and staff
- Domestic Services to provide beverage services to patients.
- Portering services including transport, car park management.
- Linen Services
- Sewing Room Services
- Patient personal clothing laundry service
- Ground maintenance
- Cashier Services
- Portering Services
- Security Services

In addition, there is a requirement to ensure that contracts are in place for:-

- Window Cleaning
- Pest Control Services
- Clinical Waste Uplifts
- Municipal Waste Uplifts

Figure 2-21 below summarises the workforce framework.

Figure 2-21: Summary Workforce Framework

Summary Workforce Framework Detailed in Appendix 2J

Staff group	Current WTE	Proposed Future WTE	Difference (+/-)
Domestic			
Clerical B2	0.53	0.82	+0.29
Uniform Officer B3	0.53	0.82	+0.29
Domestic Asst/Hair Dress/HK	36.25	60.10	+23.85
Sewing Linen	1.93	2.97	+1.04
PPCL Asst	2.80	4.28	+1.48
PPCL Supervisor	1.00	1.21	+0.21
Domestic Supervisor	3.81	5.84	+2.03
Porter			
Porter/Driver		27.62	
Waste Porter		1.43	
Security		4.18	
Gardeners		3.07	
Supervisor		1.21	
Head Porter		1.21	
Catering			
Band 1	15.0	20	+5.00
Band 2	0.66	1.1	+0.44
Band 3 cooks	4.8	6.8	+2.0
Band 3 Supervisors	2.3	2.3	0
Band 4	1.0	2	+1.0
Band 5	1.0	1	0
Band 7	1.0	1	0
On Floor	25.76	34.2	+8.44
Annual leave/sick	5.25	6.8	+1.55
Cashier			
Band 4	1.0	1.0	0
Band 3	1.0	1.0	0
Estates			
Estates Officer	1	7	-3
Maintenance Supervisor	1		
Fitter	1		
Electrician	1		
Joiners	2		
General Builder	1		
Plumber	1		
Assistants	2		
Administration			
Medical Records Officer band 2	2.48	2.48	

Staff group	Current WTE	Proposed Future WTE	Difference (+/-)
Ward Clerk band 2	1.03	1.00	
Ward Secretary band 3	0.50		
Recruitment Officers band 3	1.61	1.50	
Secretarial / Out-Patients band 3	2.80	2.80	
Secretary band 3	1.00	1.00	
Secretary band 4	1.00	1.00	
Supervisor band 4	2.00	2.00	
Mental Health Act Co-ordinator band 5	0.80	0.80	
Operations Co-ordinator band 5	1.00	1.00	
Total	14.22	13.58	-0.64
Clinical Services			
EMH Nursing - organic			
Band 7	1.0	1.0	
Band 6	2.0	2.0	
Band 5	8.40	8.14	-0.26
Band 2	11.67	9.11	-2.56
EMH Nursing – Functional			
Band 7	1.0	1.0	
Band 6	2.0	2.0	
Band 5	8.75	8.14	-0.61
Band 2	10.93	9.11	-1.82
Older Peoples services			
Nursing Rehabilitation			
Registered	11.48	14.1	+2.62
Non registered	13.21	17.6	+4.39
Nursing Continuing Care			
Registered	20.7	12.2	-8.5
Non registered	35.2	17.6	-17.6
Adult Mental Health			
Acute Admission	110.10	87.10	-23.0
IPCU	23.14	25.70	+2.56
Rehabilitation/Non Acute CC	55.23	44.23	-11.00
Forensic Rehab' Service (low secure)	21.30	22.95	+1.65
ECT	2.00	2.00	0
Advanced Nurse Practitioners	6	10	+4.00
Operational Management Team (including Bed Management & Night C/N)	8.00	8.00	0
	225.77	199.98	-25.79
Addictions			
Band 7 Charge Nurse	1	1	
Band 6 depute Charge Nurse	1	1	
Band 5 staff nurses	10	8	-2
Band 2 nursing assistants	4	5	+1
Total	16	15	-1

Staff group	Current WTE	Proposed Future WTE	Difference (+/-)
AHP's			
Physiotherapy – • 1 band 7 • 1 band 3		1 1	
Dietician • Band 5/6		2.5	
Speech and Language-no clinicians dedicated to the wards			
Occupational Therapy • band 5/6, • band 3. (Based on the NACH site covering solely mental health in-patient areas).		3 0.5	
Medical Staff			
General Adult Psychiatry			
junior trainees		13	
higher trainees		5 - 7	
Consultants			No change
Elderly Psychiatry			No change
Care of the Elderly			
Consultants		7	No change
Junior trainees		5	No change

Further information on workforce can be found in Appendix 2J.

This workforce section read with its appendix indicates a commitment to plan both by individual services but also collectively in advance of the new hospital opening.

The clinical, support and managerial services have also committed to maintaining an affordable, effective workforce in line with policy and to regularly review the workforce requirements.

2.8 Benefits Criteria

A Review of the OBC Benefit Criteria

The non financial benefit criteria developed as part of the OBC always represent the starting point in terms of the development of the Benefits Realisation Plan (BRP). It is however necessary to review these listed below to ensure that they remain valid.

- Clinical Quality
- Environmental Quality
- Strategic Fit / Sustainability
- Affordability / Value for Money
- Effectiveness / Efficiency
- Access

The benefit criteria have been developed with specific reference to the investment objectives as set out in this OBC and the appropriate linkages are set out in the table below:

17 Clinical staff representing all clinical areas included a range of professional, operational, management and non clinical support services (for example, IT, finance, Health & Safety, etc) were asked to consider the Initial Agreements and draft benefits criteria at the commencement of the OBC development. This was to be considered and compared to current policy and legislation. The result was 6 high level benefits criteria. This ensured the new criteria were valid.

Further details of the OBC benefit criteria linkages with the ranked investment objectives is provided in Figure 2-22.

Figure 2-22: Benefit Criteria Linkages with Ranked Investment Objectives

Benefit Criteria Links	Ranked Investment Objectives					
	Clinical Quality	Environmental Quality	Strategic Fit/ Sustainability	Affordability/ Value for money	Effectiveness/ Efficiency	Access
Safe services for all	✓	✓			✓	
Appropriate pathways of care	✓	✓			✓	
Positive physical environment		✓	✓	✓	✓	
Appropriate recruitment and retention	✓			✓	✓	
Sustainable and integrated services			✓		✓	✓
Accessible and adaptable services	✓	✓			✓	✓
Improved quality of clinical care	✓				✓	
Meet local health needs			✓			✓
Effective use of resources				✓	✓	
Improved strategic fit			✓	✓		
Deliverability	✓	✓	✓			

Benefits realised by New Models of Care

The model of care contained within the clinical brief at Appendix 2B, sets out how services will be delivered and incorporates specific initiatives focused on redesigning services for the benefit of patients, staff and other key client groups. The clinical brief also details the current deficits to clearly demonstrate what improvement will look like.

Clinical and operational staff have played a leading role in developing models of care and have been in lead roles in defining the benefits expected to be realised through their successful implementation. These include streamlining care processes, improving the effectiveness of interventions and improving the patient and staff experience.

The model of care is the key component in realising the clinical benefits associated with the project and as such is central to the benefits realisation process.

Benefits Management

A Benefits Realisation Plan has been established to monitor and manage the above key benefits and is included in Appendix 2K.

2.9 Implication of the Programme not going ahead

There are significant implications for the Board's ability to deliver safe and sustainable services should the programme not proceed. These implications are summarised below (Figure 2-23) against the 6 dimensions of quality and the level of organisational risk indicated by RAG.

Green = No organisational risk
Amber = Moderate Organisational Risk
Red = Significant Organisational Risk

Figure 2-23: Implications of not delivering the Programme

Patient Centred	The existing estate does not support the delivery of patient centred care. The poor environments will continue to have a detrimental effect on patient's mood and well being. There is no access to safe external space for patients in admission wards at Crosshouse Hospital and poor quality living and outdoor space in the remainder of the estate undermines the ability to deliver personalised care. The in patient facilities will not meet the guidance outlined in CEL 27 (2010) for the provision of single room accommodation and bed spacing. The Pavilions at Ayrshire Central are not fit for purpose and have been heavily criticised by the Mental Welfare Commission who agree that very little can be done to improve the environment. Replacement is the only viable option to improve the patient experience. The least restrictive option is not always provided due to constraints of the building.	Amber
Safe	Current environment presents a heightened risk in terms of patient safety. They are inadequately designed for patient observation, minimisation of ligature points and general patient safety. Patient absconding and related observation by dedicated staff are higher than in those hospitals that have purpose built design. As a consequence we are not always providing the least restrictive option as required by mental health legislation. It is also related to a higher risk to patient safety. We would continue to have to transfer acutely ill patients between sites to access IPCU beds at Ailsa Hospital with all the associated risks to patients and staff.	Red

	Current Design of Frail Elderly continuing care and rehabilitation wards attracts high numbers of complaints about the limitations of the environment from patients, relatives and carers. Rehabilitation is limited by the fabric and design of the building and corridors pose risk of trips and falls due to lack of storage for equipment now common place in these environments such as hoists. The cost of medical locums to provide cover over a number of sites is significantly higher than permanent staff which is not good value for money to the public purse and may provide a less appropriate level of service Sustaining appropriate medical cover out-of-hours for all admission services would remain an issue with the status quo	
Effective	Impairments to effective clinical care inherent to the existing estate would be impossible to overcome. Patient observation would remain sub-optimal due to the design of bedrooms / living spaces etc. This is critical to safe delivery of care particularly in acute areas. Improvements in patient length of stay linked to new models of care in rehabilitation and acute care would be severely curtailed due to the lack of access to rehabilitation facilities at ward level. Patients requiring low secure care would continue to be provided with expensive private sector care as we continue to have no local facility. Revenue savings from in-house provision of low secure care would not be realised.	Amber
Efficient	Delivering mental health services over three disparate sites will place a burden on NHS Ayrshire & Arran that is not sustainable or effective in the future. Dealing with two ageing sites; one pre-Victorian and one that is pre–war presents ongoing barriers to effective and efficient care delivery. There will be a significant backlog maintenance cost to maintain the existing facilities with little or no clinical gain for this investment. The opportunity to rationalise estate would be confined to phase 1 of the estate rationalisation plan.	Amber

	Quality of the hospital environment would continue to have a negative effect on attracting new staff. (The role of the hospital design in the recruitment, retention and performance of NHS nurses in England. July 2004, CABE, PWC LLP) We would have difficulty recruiting from outside the area and to promoted posts. There would be little scope to improve staff support and to look at more flexible working rotas to enhance family friendly work patterns. The increasing costs associated with trying to deliver current services and mitigate risks to patients would constitute a significant risk to NHS Ayrshire & Arran The physical design and layout of the facilities have little or no flexibility to respond to changing health care needs	
Equitable	The development of the North Ayrshire Community Hospital represents the 3rd phase of community hospital development for the main population areas of Ayrshire & Arran (i.e. East Ayrshire Community Hospital, Girvan Community Hospital and North Ayrshire Community Hospital being the third element of the strategy). Failure to deliver this facility would sustain an iniquitous service to an area already significantly impacted by health inequalities. The current facilities do not support gender sensitive care as living space is restricted and generally mixed sex. Ensuring equitable care for patients with physical disability will remain challenging in the current environment.	Amber
Timely	The status quo presents continuous challenges to the provision of care which is timely and responsive. This is primarily related to the geographic dispersion of acute services on 3 sites, with access to IPCU services on only one site. The main hospital site at Ailsa is geographically misaligned to the main centres of population in the North & East. This will continue to skew access to services. Acutely ill patients in Crosshouse requiring access to IPCU will continue to have to be transported to Ailsa with the inherent risks that this poses. Access to frail elderly rehabilitation would not be as rapid due to the poor quality of estate and rehabilitation function.	Amber

2.10 Constraints and Dependencies

As with any new facility being constructed on a live hospital site, the Programme Team has had to address several constraints and dependencies when undertaking the design and in planning the delivery strategy. Figure 2-24 below highlights those constraints and dependencies that currently could have the most significant impact on the programme:

Figure 2-24: Constraints and Dependencies

Constraints and Dependencies

Service Continuity
It is critical that the existing clinical services remain fully operational throughout the construction period. They must continue do so in a safe and secure environment.

A detailed service continuity plan (Appendix 2L) has been developed and this has identified the decant requirements together with associated costs. Pavilions 1, 2 & 3 will remain occupied for the duration of the build and this is a constraint to the build area.

Clinical Brief
The adjacency matrix has been pivotal to the emerging layouts. The Board has worked closely with the Project Team together with Architecture & Design Scotland (A+DS) to explore ways in which the design may be optimised whilst still meeting critical requirements within the Clinical Brief. For more information please see Appendix 2B.

Planning Permission
Following the change in procurement route to Non Profit Distribution (NPD) and a full review of project risks, the North Ayrshire Community Hospital Programme Board took the decision to obtain Planning in Principle for the proposed development and as such negate the risk to potential bidders.

An initial approach to North Ayrshire Council's planners to discuss fully the requirements of the Pre – Application Consultation and NHS Ayrshire & Arran's proposals for 12 week process met with very positive feedback from the Planners.

The following is NHS Ayrshire & Arran's indicative programme to obtain Planning in Principle:

Date	Action	% Complete
7th October 2011	Meet with North Ayrshire Planners to discuss Pre-application Consultation (PAC)	100%
8th October 2011 – 9th January 2012	Draft Communication & Consultation Plan for Planning in Principle	100%
10th February 2012	Meeting with North Ayrshire Council Planners to formally submit communication and consultation plan for PAC	100%
7th May 2012	Start formal PAC process	50%

Constraints and Dependencies

20th August 2012	Submit formal Report on PAC and Planning in Principle Application	0%
20th August 2012 – 3rd September 2012	North Ayrshire Council Planner's Validation	0%
28th September 2012	Determination and Approval	0%

In summary, given the advice that NHS Ayrshire & Arran have received from the Gateway Review Team regarding Planning in Principle the project team have started the process with a view to starting formal consultation during May to August on the 7th May 2012.

The Risk Register (Appendix 3D) describes in more detail the mitigation for key risks associated with constraints and dependencies.

2.11 Service Continuity

Due to the complexity of maintaining services and the impact of the programme on services already provided from the site, the programme team developed various decant options. The preparation and evaluation process concluded on 27th January 2010 with the selection of the preferred decant option at an Options Appraisal workshop.

A decant group was established in 2009, however following the option appraisal exercise in 2010 it was decided to rename the group the Service Continuity Group and revisit the membership. Regular meetings take place with key stakeholders from the current pavilions, horseshoe and wider site. Stakeholders include staff from Clinical Support Services, Elderly Mental Health Services, Older People's Services, Estates, Hotel Services Capital Planning, Psychology services, Child & Adolescent Mental Health Services.

The service continuity group is responsible for developing a plan for the safe transfer of patients and staff to temporary or permanent accommodation that will allow the safe construction of the new Community hospital.

- Providing assurance for operational stability and effectiveness through programme delivery cycle;
- Developing and implementing a robust decanting action plan;
- Developing a robust cost plan; and
- Implementation of the decant strategy.

To allow an informed decision to be taken around the placement of the new Community hospital, Decant Option Appraisal workshops were held on the 8th and 27th January 2010.

The process concluded that the preferred site build option for the new facility was option D. (Demolish pavilions 4-9, the central pavilions but keep pavilions 1-3 during the build process).

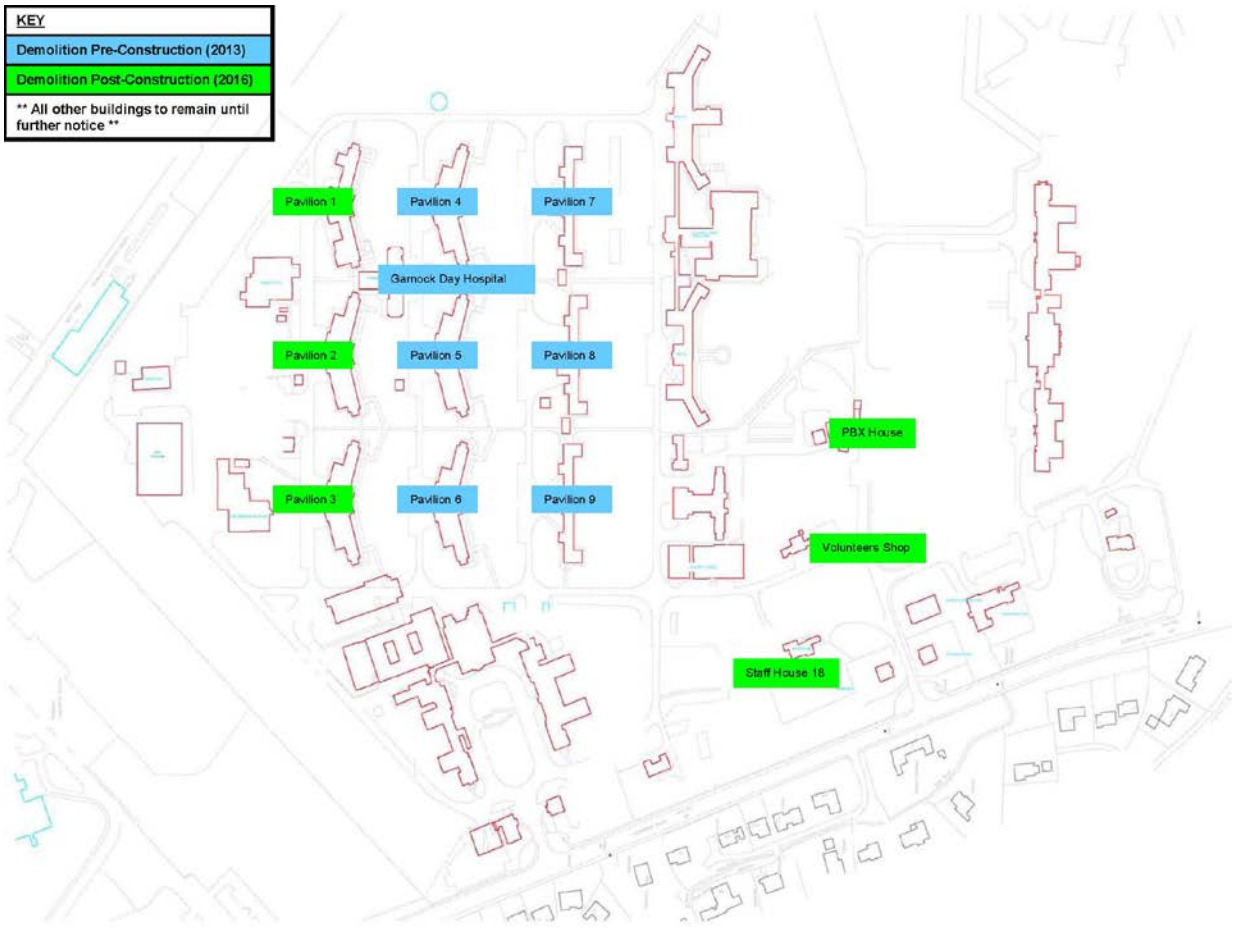
The Service Continuity plan is constantly reviewed and ratified at Steering group and project team level to ensure the plan remains current and affordable. Implementation of part of the plan is due to start December 2011.

Figure 2-25 below details the Service Continuity Demolition Plan.

The following services are currently provided from the Pavilions:

Pavilion 1	Elderly Mental Health Services
Pavilion 2	Elderly Mental Health Services
Pavilion 3	Geriatric Rehab
Pavilion 4	Carepoint (North Ayrshire Council (NAC) Learning Disabilities Service CAMHS Learning Disability Services (LDS) Physio Gym
Pavilion 5	Geriatric Long Stay
Pavilion 6	Geriatric Long Stay
Pavilion 7	Clinical Psychology Speech and Language Therapy
Pavilion 8	District Nursing North Ayrshire Community Health Partnership (CHP) Public Health Health Promotion Older People and Vulnerable Adults Pharmacy
Pavilion 9	Voluntary Organisations

Figure 2-25: Service Continuity Demolition Plan



3.0 The Economic Case

Introduction

The outcome of the United Kingdom Comprehensive Spending Review has resulted in a reduction in the overall reduction in available capital resource available to the Scottish Government; however to maintain investment in infrastructure projects £250m of annual revenue funding is to be made available by the Scottish Government to fund infrastructure investment with a capital value totalling £2.5bn.

Discussions held between key members of NHS Ayrshire & Arran's project team and Scottish Government's Capital & Facilities Division resulted in Non Profit Distribution being the preferred revenue procurement solution for this programme.

This section of the OBC sets out the criteria used to confirm the objectives and scope of the project and the preferred option. The content of this section includes:

- The development of critical success factors
- The main business options considered
- Shortlisted options
- Capital costs
- Strategic Risks
- Risk Strategy
- Preferred option

3.1 Critical Success Factors

Critical Success Factors were formulated as part of the Initial Agreements for the programme. These were Clinical Quality, Strategic Fit, Effectiveness & Efficiency, Affordability, Timescale for Implementation, and Value for Money.

These critical success factors were revisited on publication of the NHS Quality strategy during the preparation of the OBC to confirm their continuing validity and alignment to national strategy. This process indicated that the use of these factors to date was valid and that the use of the Quality Strategy definitions should be adopted and required no review or change to the OBC development to date.

NHS Ayrshire & Arran will seek proof of success of this programme through monitoring and performance management of a Benefits Plan aligned to these factors.

3.2 Main Business Options

3.2.1 Options considered

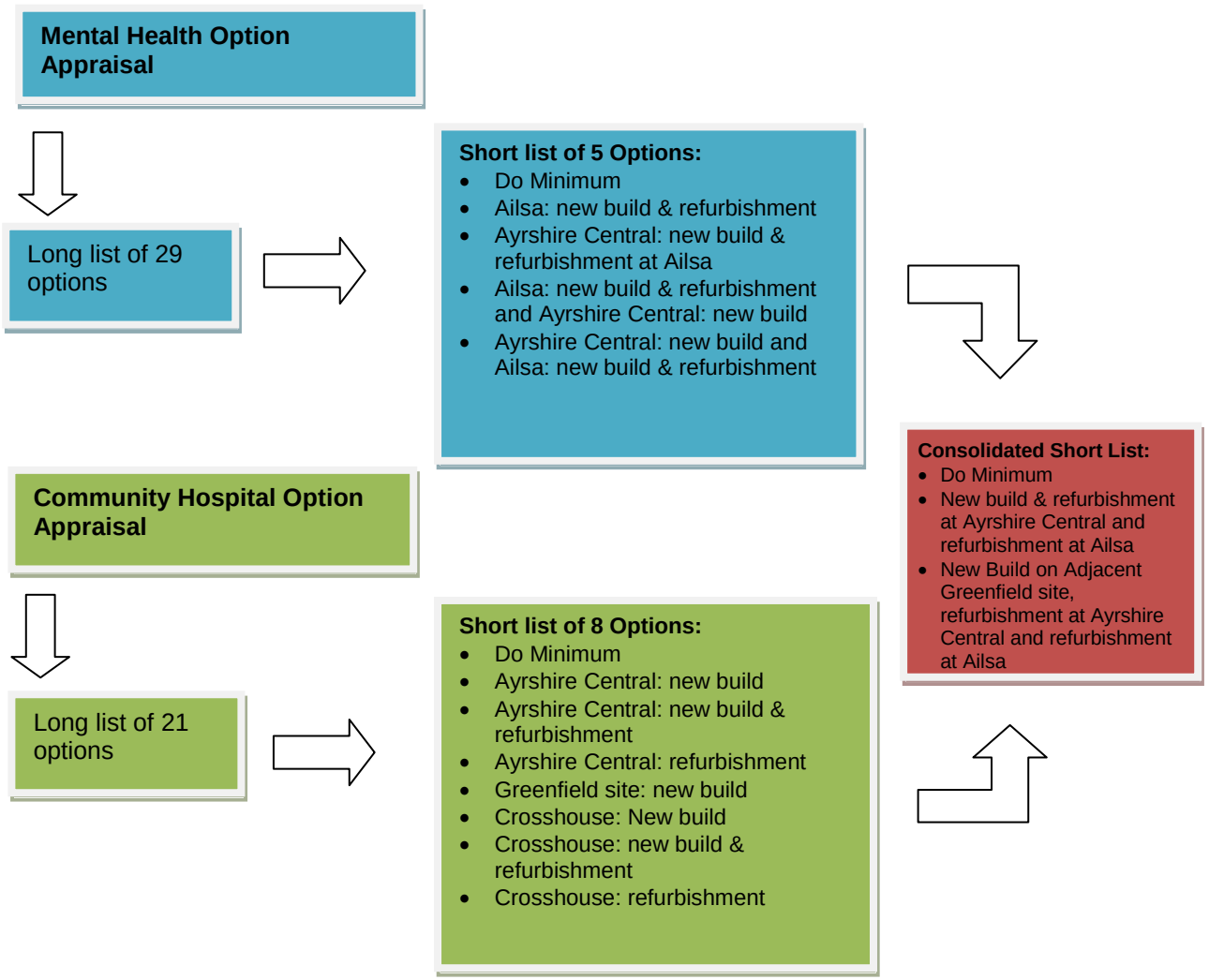
The long lists of options identified in the Initial Agreements were each evaluated to test the robustness of the proposed way forward for the overall programme. Further ongoing development by the programme team and stakeholders, has led to the establishment of a consolidated shortlist of three options described in more detail in Section 3.8 – The Preferred Option.

The Option Appraisals determined the preferred option as being:

New Build and Refurbishment at Ayrshire Central Hospital and Refurbishment at Ailsa.

Figure 3-1 Below illustrates the process undertaken for selecting the preferred option.

Figure 3-1: Selection Process:



3.2.2 Long list of Options – North Ayrshire Community Hospital

1. Do nothing
2. Do minimum
3. New build on Kirklandside Hospital site
4. Refurbishment on Kirklandside Hospital site
5. Combination of new build and refurbishment on Kirklandside Hospital site
6. New build on Strathlea Resource Centre site
7. Refurbishment on Strathlea Resource Centre site
8. Combination of new build and refurbishment on Strathlea Resource Centre site
9. New build on East Ayrshire Community Hospital site
10. Refurbishment on East Ayrshire Community Hospital site
11. Combination of new build and refurbishment on East Ayrshire Community Hospital site
12. New build on Ailsa Hospital site
13. Refurbishment on Ailsa Hospital site
14. Combination of new build and refurbishment on Ailsa Hospital site
15. New build on Crosshouse Hospital site
16. Refurbishment on Crosshouse Hospital site
17. Combination of new build and refurbishment on Crosshouse Hospital site
18. New build on the Ayrshire Central Hospital site
19. Refurbishment on the Ayrshire Central Hospital site
20. Combination of new build and refurbishment on the Ayrshire Central Hospital site
21. Use of a non-NHS site (Local Authority/Private Sector)
    - Riverside Business Park, Irvine
    - Former NACCO Site, Portman Road, Irvine
    - Annickburn Business Park, Annickburn
    - Former Volvo site, Kilwinning Road, Irvine
    - 3 Crompton Way, Stanecastle, Irvine
    - Land at Ardeer

3.2.3 Long list of Options – Acute Mental Health Inpatient Facility

Current Service (benchmark for other options)

1. Ailsa and Crosshouse (Status Quo);

Single Site Options

2. Refurbished Ailsa;
3. New build Ailsa;
4. Combined new build and refurbishment of Ailsa;
5. New build Ayrshire Central Hospital;
6. New build Kirklandside;

Two Site Options (main site, second site)

7. Refurbished Ailsa, new build Ayrshire Central Hospital;
8. Refurbished Ailsa, new build Kirklandside;
9. New build Ailsa, new build Ayrshire Central;
10. New build Ailsa, new build Kirklandside;
11. Combined new build and refurbishment of Ailsa, new Build Ayrshire Central Hospital;
12. Combined new build and refurbishment of Ailsa, new build Kirklandside;
13. New build Kirklandside, new build Ayrshire Central;

Two Site Options (main site, second site)

14. New build Ayrshire Central Hospital, refurbished Ailsa;
15. New build Kirklandside, refurbished Ailsa;
16. New build Ayrshire Central, new build Ailsa;
17. New build Kirklandside, new build Ailsa;
18. New build Ayrshire Central Hospital, combined new build and refurbishment of Ailsa;
19. New build Kirklandside, combined new build and refurbishment of Ailsa;
20. New build Ayrshire Central, new build Kirklandside;

Three Site Options (main site, second site & third site – Ailsa as main site)

21. Refurbished Ailsa, new build Ayrshire Central Hospital & new build Kirklandside
22. New build Ailsa, new build Ayrshire Central & new build Kirklandside;
23. Combined new build and refurbishment of Ailsa, new Build Ayrshire Central Hospital & new build Kirklandside;

Three Site Options (main site, second site & third site – ACH as main site)

24. New build Ayrshire Central Hospital, refurbished Ailsa & new build Kirklandside
25. New build Ayrshire Central Hospital, new build Ailsa, & new build Kirklandside;
26. New build Ayrshire Central Hospital, combined new build and refurbishment of Ailsa & new build Kirklandside;

Three Site Options (main site, second site & third site – Kirklandside as main site)

27. New build Kirklandside, refurbished Ailsa & new build Ayrshire Central Hospital;
28. New build Kirklandside, new build Ailsa & new build Ayrshire Central Hospital;
29. New build Kirklandside, combined new build and refurbishment of Ailsa, new build Ayrshire Central Hospital.

3.2.4 Short list of Options – North Ayrshire Community Hospital

A site options appraisal workshop was held on 18th December 2009. This workshop validated the process that had been followed to date. The workshop resulted in confirmation that the preferred option is to deliver the desired services and benefits to the North Ayrshire Community via a new build at Ayrshire Central. This further confirmed the need to integrate selected community health elements into this OBC and programme as the entire Ayrshire Central Hospital site is a complete environment in which Community Health Services are offered. The long list of 21 options was evaluated and a short list of 8 options compiled.

The following options were shortlisted during the above site options appraisal workshop and are provided in Figure 3-2: Shortlisted Options. Appendix 3A provides further details on site option appraisal report and weightings.

Figure 3-2: Shortlisted Options - North Ayrshire Community Hospital

- Ayrshire Central: New Build
- Ayrshire Central: New Build & Refurbishment
- Ayrshire Central: Refurbishment
- Former Volvo Site: New Build
- Do Minimum
- Crosshouse Hospital: New Build
- Crosshouse: New Build & Refurbishment
- Crosshouse: Refurbishment

The preferred option for North Ayrshire Community Hospital was to develop on the Ayrshire Central site. This was subsequently endorsed by NHS Ayrshire & Arran Board as part of the consideration of the Mind your health proposals detailed in the following section.

3.2.5 Short list of Options – Acute Mental Health Facility

Four reference groups, comprising service users, carers, voluntary organisations, NHS staff, partner agencies and members of the public, were involved in the identification of a long list of options for the future location of acute adult mental health services. The same four groups also determined and weighted the criteria against which they would consider each option.

Five options were shortlisted in the approved Initial Agreement for Acute Mental Health Services. These were:

- Option 1: Do Minimum
- Option 2: A combination of new build and refurbishment on a single site at Ailsa Hospital for all adult services
- Option 3: A new build facility on a single site at Ayrshire Central Hospital for all adult services
- Option 4: A combination of new build and refurbishment of existing buildings at Ailsa Hospital with a second, smaller new build facility at Ayrshire Central Hospital
- Option 5: A combination of new build at Ayrshire Central Hospital with a second smaller unit at Ailsa which would comprise of new build and refurbishment

Ranking and scoring events were held in October 2008, at which members of the four reference groups scored the options against the previously agreed criteria. For the base case analysis, the scores obtained from everyone who took part in the scoring exercise were aggregated and a weighted benefit score for each option was calculated. This information was combined with the capital and revenue costs of each option which were projected over a fifty year period.

The options were ranked by their weighted benefit score and the cost of each option was also detailed. This enabled Option 3 – a two site option with the main site at Ailsa – to be eliminated from the analysis since it provided fewer benefit points than Option 4, but at a higher cost. A marginal analysis was then undertaken to establish whether there was a willingness to pay for the additional benefits that other options offer. Proceeding through each option, the analysis indicated that **Option 2, a combination of new build and refurbishment on a single site at Ayrshire Central, was the preferred option**.

Supporting Paper 4, Mind Your Health Project Option Appraisal Report confirming this option is included at Appendix 3B

3.3 Short Listed Options

Further development of the shortlisted site options led the programme team and stakeholders to evaluate the shortlisted options and develop a consolidated short list of 3 options for the programme as shown in Figure 3-2.

3.3.1 Key Selection Factors

In order to adequately service and exceed the expectations of the population of Ayrshire and Arran's needs, the options were assessed and a SWOT analysis of the three shortlisted options is set out below in Figure 3-3.

Figure 3-3: Key Selection Factors

Option 1: Do Minimum	
Strengths	• Ailsa and Ayrshire Central enjoy well established and maintained grounds. • Good catering facilities on all sites
Weaknesses	• Observing and engaging with patients is often hampered by the design and layout of the wards. • Inadequate space in all ward areas to provide quiet areas for patients. • Limited scope within existing accommodation to fully address clinical equality and diversity issues. • Lack of en suite facilities to maintain patients' privacy and dignity. • Inadequate space in all ward areas to provide a range of therapeutic recreational activities. • Inadequate private visiting facilities. • Specific specialist staff back-up and functions available on one site only (Ailsa). These include IPCU, rehabilitation, gym and other recreational, day support and activities. • Limited scope to locate multi-disciplinary team members and other partners more closely together. • More difficult to change outdated "custom and practice". • Limited space at Crosshouse for staff education and training. • Standard of accommodation and availability of administrative support staff varies across different sites. • Visible leadership more difficult to maintain across numerous sites. • Adequate staffing levels that allow for scheduling of more attractive rosters and rotas hard to achieve over multiple sites. • Level of stigma already attached to Ailsa Hospital. • Limited scope within all existing accommodation to cater for increasingly complex clinical need, develop services and new ways of working. • Dispersed sites reduce the scope for staff to initiate and share service improvements. • Main sites close to acute General Hospitals. • Established services will continue to deliver service, albeit under constraints.

Option 1: Do Minimum	
Opportunities	• None identified
Threats	• Transfer of acutely ill patients to Intensive Psychiatric Care Unit (IPCU) on another site can pose increased risks. • Accommodation is spread across Ailsa and Ayrshire Central, compromising staff safety at night. • Acutely ill patients would continue to be transferred between sites (for example, to IPCU) • Poor quality of working environment affects our ability to recruit. • Difficulties in sustaining or accessing medical cover over two sites 24 hours a day, seven days a week and particularly out of hours (after 5pm and overnight) • Limited scope at Crosshouse for immediate additional staff back-up in emergency situations • Ageing accommodation and site layout in Ailsa, Ayrshire Central and Crosshouse creates increasing health and safety concerns for patients and staff. • The complex layout and design of some of the old buildings at Ailsa can have an impact on emergency response times. • Lack of opportunity to develop services can lead to difficultly in recruiting staff. • Staff groups split across different sites may lead to inconsistent practice. • More than one site makes professional support/supervision more difficult. • Future workforce figures show increasing difficulties in sustaining adequate staff cover over several sites. • Not possible for smaller sites to make more creative and flexible use of support services. • Mental Health Welfare Commission continues to raise concerns about the appropriateness of care environments.

Option 2: New build & refurbishment at Ayrshire Central and refurbishment at Ailsa	
Strengths	• Assurance of safe level of medical cover 24 hours a day, seven days a week. • Purpose-built facilities will ensure high level safety measures are incorporated into building standards, including good observation and engagement features. • New build accommodation will allow for ward and therapy areas to be inter-connected. • New purpose-built ground floor accommodation should ensure ample quiet areas to help reduce tension for individuals and groups. • Location in North Ayrshire means the majority of emergency admissions having less distance to travel from North and East Ayrshire. • Will attract a wider pool of staff. • Less travelling for clinical staff involved in multidisciplinary meetings. • Accommodation will be designed to ensure it will be possible to develop it in the future to adapt to changes in how and where care is provided; and to the changing needs of the population over the longer term. • New build will permit high level of energy efficiency measures to be incorporated into the design and construction. • No history/stigma attached to new building. • Patient transfers to other mental health specialities will be reduced and be less disruptive.
Weaknesses	• Location in North Ayrshire means some residents in South Ayrshire would have further to travel. • Some disruption to existing staff groups as they will be changing their place of work. • Travel difficulties may be experienced for some staff, patients and relatives.
Opportunities	• Improved safety at night for patients and staff on new built site. • More staff available to call upon in emergency situations. • Will provide scope for a wide range of patient groups, whose needs may fluctuate, to access treatment and care, with least disruption to these individuals. • New build will enable us to build on existing mental health services at Ayrshire Central. • Specialist support staff and facilities on site. • Improved access to range of acute care and treatment options and no need for long distance transfers for IPCU care. • More attractive rostering and rotation opportunities for staff based on one site. • More attractive work environment with increased staff

Option 2: New build & refurbishment at Ayrshire Central and refurbishment at Ailsa	
	support infrastructure. • More sharing of good practice. • Scope to use additional space for new areas of mental health services as required. • Consistent standards of care more easily maintained. • Increased scope for staff groups to work more flexibly and try out new ways of working. • With future potential development on Ayrshire Central site, increased scope for integration with partners. • Potentially quicker to get expert advice, assessment and second opinion due to proximity of departments. • Improved opportunities for shared learning between disciplines sharing facilities. • May improve accessibility for some patients, visitors and staff
Threats	• Capital funding may not become available

Option 3: New Build on Adjacent Greenfield site, refurbishment at Ayrshire Central and refurbishment at Ailsa	
Strengths	• Assurance of safe level of medical cover 24 hours a day, seven days a week. • Purpose-built facilities will ensure high level safety measures are incorporated into building standards, including good observation and engagement features. • New build accommodation will allow for ward and therapy areas to be inter-connected. • Accommodation will be designed to ensure it will be possible to develop it in the future to adapt to changes in how and where care is provided; and to the changing needs of the population over the longer term. • New build will permit high level of energy efficiency measures to be incorporated into the design and construction. • No history/stigma attached to new building. • Patient transfers to other mental health specialities will be reduced and be less disruptive.
Weaknesses	• Some disruption to existing staff groups as they will be changing their place of work. • Travel difficulties may be experienced for some staff, patients and relatives. • Remaining ward areas on Ayrshire Central Hospital site may feel isolated and medical cover 24 hours a day would be difficult to sustain.
Opportunities	• Location in North Ayrshire means the majority of emergency admissions having less distance to travel from North and East Ayrshire. • Less travelling for clinical staff involved in multi-disciplinary meetings. • New purpose-built ground floor accommodation should ensure ample quiet areas to help reduce tension for individuals and groups. • Improved safety at night for patients and staff on new built site. • More staff available to call upon in emergency situations. • Will provide scope for a wide range of patient groups, whose needs may fluctuate, to access treatment and care, with least disruption to these individuals. • New build will enable the development of existing mental health services at Ayrshire Central. • Specialist support staff and facilities on site. • Improved access to range of acute care and treatment options and no need for long distance transfers for IPCU care. • More attractive rostering and rotation opportunities for staff based on one site. • More attractive work environment with increased staff

Option 3: New Build on Adjacent Greenfield site, refurbishment at Ayrshire Central and refurbishment at Ailsa	
	support infrastructure. • More sharing of good practice. • Will attract a wider pool of staff. • Scope to use additional space for new areas of mental health services as required. • Consistent standards of care more easily maintained. • Increased scope for staff groups to work more flexibly and try out new ways of working. • Future potential development on adjacent site, may provide increased scope for integration with partners. • Potentially quicker to get expert advice, assessment and second opinion due to proximity of departments. • Improved opportunities for shared learning between disciplines sharing facilities. • May improve accessibility for some patients, visitors and staff
Threats	• Location in North Ayrshire means some residents in South Ayrshire would have further to travel.

The shortlisted options are detailed in Figure 3-4.

Figure 3-4: Option Descriptions

Option Descriptions
Do Minimum NHS Ayrshire & Arran currently provide acute adult mental health inpatient services across three sites: **Ailsa Hospital; Crosshouse Hospital and Ayrshire Central Hospital**. Within these facilities they provide Adult Acute Admissions at Ailsa and Crosshouse Hospitals and Older People's Acute Admissions at Ailsa and Ayrshire Central. The intensive Psychiatric Care Unit rehabilitation and continuing care beds are all currently based at Ailsa Hospital. Carry out backlog maintenance on the estate and some refurbishment at Ayrshire Central or Ailsa Hospitals. This will address service risk and improve the environment but will not address any functional or statutory standards.
New build & refurbishment at Ayrshire Central and refurbishment at Ailsa Acute Adult Mental Health Inpatient Services on a single site If NHS Ayrshire & Arran provide most of the services on a single site they plan to include the following services:

Option Descriptions
• Adult services would have an acute admission and assessment unit with rehabilitation and continuing care provision • For older people services would include an acute admission and assessment unit. However, for local provision, a second acute admission and assessment unit would be retained at Ailsa Hospital • An intensive Psychiatric Care Unit and low secure facility • Addictions service • Occupational Therapy and Physiotherapy would be available including facilities such as group rooms, kitchens, craft room, gym and equipment space
New Build on Adjacent Greenfield site, refurbishment at Ayrshire Central and refurbishment at Ailsa Adult services on a single site If NHS Ayrshire & Arran will provide all of the services on a single site it is planned to include the following services: Adult services would have an acute admission and assessment unit with rehabilitation and continuing care provision. For older people there would be an acute admission and assessment unit. However, for local provision, a second acute admission and assessment unit would be retained at Ailsa Hospital An intensive Psychiatric Care Unit and low secure facility Addictions service Occupational Therapy and Physiotherapy would be available including facilities such as group rooms, kitchens, craft room, gym and equipment space

3.4 Capital costs

The capital cost estimates for the three options short listed via the re-validation of options are summarised below figure 3-5 and detailed in the following figures 3-5 to 3-8.

Figure 3-5: Summary of Initial Capital Cost Estimates

Option	Initial Capital Cost Estimates
Option 1: Do Minimum	£24,839,100
Option 2: New build & refurbishment at Ayrshire Central and refurbishment at Ailsa	£68,481,717
Option 3: New Build on Adjacent Greenfield site refurbishment at Ayrshire Central and refurbishment at Ailsa	£118,803,981

Figure 3-6: Option 1: Do Minimum Cost Estimate

Project component	Backlog Maintenance	Refurbish Ayrshire Central (3,296 m^2)	Refurbish Ailsa (5,439 m^2)
Backlog Maintenance	£9,360,000	£0	£0
Refurbished Accommodation (ACH and Ailsa)	£0	£2,000,000	£3,000,000
Oncosts (allow 25% of Refurbishment)	£0	£500,000	£750,000
Construction Total:	£9,360,000	£2,500,000	£3,750,000
Design and Project management fees (12% per Option 2)	£1,123,200	£300,000	£450,000
Inflation from current prices to 2014/15	£1,572,480	£420,000	£630,000
Planning and Building Warrant fees	Incl. above	Incl. above	Incl. above
Furniture, Fixtures and Equipment (allow 6%)	£561,600	£150,000	£225,000
Project Total:	£12,617,280	£3,370,000	£5,055,000
VAT (20%) adjusted for uplifted “rebate”	£966,420	£258,125	£387,188
Factor in Optimism Bias @ 24%	£2,882,693	£769,950	£1,154,925
Land Purchase	N/A	N/A	N/A
Total Project Costs at OBC:	£16,466,393	£4,398,075	£6,597,113
DEDUCT	Non Value-Adding Element of Capital Cost	New Build (5%) Refurbishment (15%)	-£2,622,480
			£24,839,100

The level of Optimism Bias reflects that the works are of a minor/backlog multi trade nature within an operational environment. It is possible that the mitigation could be improved as the detail is developed.

Assumptions

- Includes elements of Refurbishment at Ayrshire Central and Ailsa hospital.
- Backlog Maintenance based on current prices from documents listed immediately hereunder.
- Six Facet Summary used pro rata for Ailsa.
- Capital Business Plan 2010-11 (for ACH).
- Equipment allowance of 6% used in calculation.
- VAT rebate allowed per VAT Advisor calculations

Figure 3-7: Option 2: New build & refurbishment at Ayrshire Central and refurbishment at Ailsa Cost Estimate

Project component	Capital Cost Estimate (New Build)	Refurbish Ayrshire Central (3,796 m^2)	Refurbish Ailsa (5,439 m^2)
New Build Accommodation (17,000 m^2)	£34,586,240	£0	£0
Refurbished Accommodation (ACH and Ailsa)	£0	£782,092	£2,400,000
Oncosts including Decant (approx 23.4%)	£8,646,560	195,523	600,000
Construction Total:	£43,232,800	£977,615	£3,000,000
Design and Project management fees (approx 12%)	£4,256,768	£117,314	£360,000
Allowance for inflation from 2012 up to 2014/15	£3,324,270	76,645	235,200
Planning and Building Warrant fees	140,000	5,000	5,000
Furniture, Fixtures and Equipment (approx 6%)	£833,333	£0	£0
Project Total:	£51,787,171	£1,176,574	£3,600,200
VAT (20%) adjusted for “rebate”	£8,955,895	£167,368	£513,600
Factor in Optimism Bias @ 8.7%	£5,013,918	£201,591	£617,070
Land Purchase	**See note on Opportunity Cost below (Exclusions)	N/A	N/A
Total Project Costs at OBC:	£65,756,984	£1,545,533	£4,730,870
DEDUCT	Non Value-Adding Element of Capital Cost		-£3,551,670
			£68,481,717

Assumptions

- Uses Schedule of Accommodation from Buchan + Associates - (Final OBC (as drawn))
- Existing “Horseshoe” part utilised for new accommodation.
- VAT rebate allowed per VAT Advisor calculations.

No specific issues for cost estimate were raised in Key Stage Review other than the proposed size of the single rooms. This issue is currently being taken forward through detailed discussions with SFT.

The only other financial aspect raised in the Key Stage Review related to confirmation on outcome from benchmarking undertaken on new build costs allowed for. Relevant information is contained within section 5.2 of the Financial Case and OB Forms 1-4.

Please refer to Appendices F, G, H and I.

Figure 3-8: Option 3: New Build on Adjacent Greenfield site, refurbishment at Ayrshire Central and refurbishment at Ailsa Cost Estimate

Project component	Capital Cost Estimate	Refurbish Ayrshire Central (3,296 m^2)	Refurbish Ailsa (5,439 m^2)
New Build Accommodation (16,800 m^2)	£39,245,000	£0	£0
Refurbished Accommodation (assume ACH and Ailsa as Option 1)	£0	£2,000,000	£3,000,000
Oncosts (allow 48%)	£18,837,600	0	0
Oncosts (refurbished areas 23.4% as per Option 2)	0	£468,000	£702,000
Construction Total:	£58,082,600	£2,468,00	£3,702,000
Design and Project management fees (allow 15%)	£8,712,390	£370,200	£555,300
Allowance for inflation from 2012 up to 2014/15	£3,994,723	£169,741	£254,611
Planning and Building Warrant fees	Incl. above	Incl. above	Incl. above
Furniture, Fixtures and Equipment (allow 6% new build)	£2,354,700	£120,000	£180,000
Project Total:	£73,144,413	£3,127,941	£4,691,911
VAT (20%) adjusted for “rebate”	£9,438,933	£403,794	£605,691
Factor in Optimism Bias @ 20%	£15,717,725	0	0
Factor in Optimism Bias @ 13% as per Option 2	0	£437,059	£655,589
Land Purchase (Estimated 20 acres @ £750k)	£15,000,000	N/A	N/A
Total Project Costs at OBC:	£113,301,071	£3,968,794	£5,953,191
DEDUCT	Non Value-Adding Element of Capital Cost	New Build (5%) Refurbishment (15%)	-£4,419,075
			£118,803,981

Assumptions

- Built adjacent to Ayrshire Central site.
- Common services retained at ACH (e.g. Dining etc.).
- Includes Refurbishment at ACH and Ailsa as above.
- £15m cost of land purchase advised by Board.
- No major Planning issues encountered.

3.4.1 Revenue Operating Costs

For the purposes of the OBC, the revenue cost analysis focuses on the additional costs that would be incurred under the different short listed options.

3.4.2 Capital Charges

The NHS Scotland Capital Accounting Manual has been followed throughout the calculations. The computations for assets are based on the following lives:

- New build: 50 years
- Upgrade: 25 years
- Equipment: 10 years

The new build elements have been assumed to be depreciated over 50 years as an average of the expected life in line with the new asset lifeing policy introduced with effect from 1st April 2010.

Capital charges are made up of depreciation and 0% cost of capital (as at 1st April 2010).

The discount factor is 3.5% (as per the Treasury Book) and this has been calculated based upon the total capital cost of each option. The capital cost for the capital charges calculation excludes the optimism bias factor for each option.

Figure 3-9 sets out the capital charges associated with each option.

Figure 3-9: Capital Charges per Short Listed Option

Option	Gross Capital Charge £000s	Savings on Capital Charges £000s	Net Capital Charge £000s
Do Minimum	1,441	581	860
New Build & refurbishment at Ayrshire Central and refurbishment at Ailsa	1,569	581	988
New Build on adjacent Greenfield site, refurbishment at Ayrshire Central and refurbishment at Ailsa	2,835	581	2,254

3.4.3 Other Revenue Costs

The figure 3-10 below sets out the potential impact on revenue budgets of the short listed options.

Figure 3-10: Revenue Impact of the Short Listed Options

Full year effect £000's			
Option	**Facility Running Costs £000s**	**Revenue Contributions £000s**	**Net Revenue Costs/ (Savings) £000s**
Do Minimum	24,059	24,525	(466)
New Build & refurbishment at Ayrshire Central and refurbishment at Ailsa	23,484	24,525	(1,041)
New Build on adjacent Greenfield site, refurbishment at Ayrshire Central and refurbishment at Ailsa	23,642	24,525	(883)

The do minimum option is assumed to have no impact on existing revenue running costs.

Summary

The figure below sets out the forecast revenue impact of the capital charges and the running costs for the short listed options:

Figure 3-11: Revenue Impact and Running Costs for the Short Listed Options

Option	Net Capital Charge £000s	Add Revenue Costs £000s	Total Revenue Costs £000s	Revenue Cont. £000s	Net Revenue Impact £000s
Do Minimum	860	24,059	24,919	24,525	394
New Build & refurbishment at Ayrshire Central and refurbishment at Ailsa	988	23,484	24,472	24,525	(53)
New Build on adjacent Greenfield site, refurbishment at Ayrshire Central and refurbishment at Ailsa	2,254	23,642	25,896	24,525	1,371

Assumptions and Exclusions

The basis of the calculations used in the figure above is:

- Salary costs are based on rates applying in 2011/12.
- Depreciation costs reflect the current net book value at 31 March 2011
- Energy costs are based on the current budgets which reflect the national procurement arrangements for fuel
- Rates costs are net of the Disabled rates relief
- It is assumed that funded nursing establishments are adequate within the current service provision and therefore there will be no increase in nurse staffing levels to provide services in single room accommodation
- The need to effect Resource Transfer to the Local Authorities has been factored into the costs
- In option 1 the costs are higher reflecting the need to provide Electro Convulsive Therapy on two sites

3.4.4 NPC/NPV Findings

The short-listed options were subjected to investment appraisal using the Discounted Cash Flow (DCF) technique. The DCF calculation takes account of:

- Capital development costs and other non-recurrent expenditure.
- Annual revenue costs.
- The economic performance of each short listed option was assessed using the model at 3.5% per annum over the life of the new facility.

Cash flows were calculated using the capital and revenue costs referred to above net of VAT and capital charges. In the discounting it was assumed that:

- All new build elements would have a life of 50 years
- All refurbished areas would have a life of 25 years
- All general equipment would have a life of 10 years
- For all options it has been assumed that the capital costs will be incurred in Year 1.

Although the “do minimum” option bears no significant capital cost compared to the other two options within the shortlist, it was not excluded from this assessment to allow it to be compared with the other options.

The results of the discounted cash flow calculations, shown as Equivalent Annual Cost (EAC), are summarised in the Figure 3-12 below.

Figure 3-12: Equivalent Annual Costs

Option	Net Present Cost £ 000s	Equivalent Annual Cost £ 000s	Economic Ranking
Do Minimum*	14,665	293	1
New Build & refurbishment at Ayrshire Central and refurbishment at Ailsa	39,717	794	2
New Build on adjacent Greenfield site, refurbishment at Ayrshire Central and refurbishment at Ailsa	92,129	1,843	3

*The Do Minimum option allowed for action on those backlog elements assessed as high priority. Further information on the level of backlog for each hospital site can be found in the Strategic Case 2.4 Existing Arrangements.

3.4.5 Optimism Bias for the shortlisted Options

In line with HM Treasury guidance and the Scottish Capital Investment Manual (SCIM) the Board has assessed the level of Optimism Bias associated with each of the short listed options along with the project team, the design team and the business case advisors.

In assessing optimism bias, the Board has sought to base its assessment on evidence from other NHS schemes. It has therefore adopted the optimism bias tool that has been tailored by the Department of Health in England and consistent with the requirements of the Scottish Capital Investment Manual (SCIM), to reflect the key contributions to optimism bias in health build projects. The spreadsheets and assessments applied to identify the upper bound and the level of mitigation are included in Appendix 3C.

3.4.6 Upper Bound Assessment

The following factors were consistent in the upper bound assessments of the short-listed options:

- Facilities Management (0%) – The procurement of the scheme will involve Hard FM only. Soft FM services will continue to be provided by the Board and therefore are excluded from the procurement

- External Stakeholders (1%) – The number of external NHS or other organisations involved in the scheme is limited, with only 1-2 local NHS organisations involved. This reduces the optimism bias upper bound

- Gateway Score (2%) The project is expected to be medium risk if taken forward under all options

The following contributors to the upper bound varied across the options:

- Length of Build: Option 1 has duration over 4 years with a value of 5%. Options 2 and 3 are likely to take less at 2-4 years with reduced value of 2%

- Phases: Option 1 (do minimum) is expected to have more than 4 phases. The adjustment for this is 5%. In contrast, options 2 and 3 are expected to have 3-4 phases resulting in an upper bound adjustment of 2%

- Location: Option 1 is over 50% refurbishment with a value of 16%; Option 2 is mixture of new build and between 15-50% refurbishment with a value of 10% and option 3 is new build on a new Greenfield site with a value of 3%

- Equipment: Options 1 and 2 include only groups 1 & 2 with an adjustment of 0.5%. Option 3 includes all equipment (incl major medical) with an adjustment of 5%

- Number of Sites Involved: Options 1 and 2 will involve 2 sites (at Ailsa and Ayrshire Central) with a value of 2%. Option 3 will involve 3 sites with an increased value of 5%

- Information Technology: Options 1 and 2 cover only IT infrastructure with a 1.5% value, but option 3 includes infrastructure and systems with an increased value of 5%.

- Service Changes: Option 3 potentially incurs longer time frame service changes valued at 20%, but option 1 relates to a more stable environment with reduced value of 5%. Option 2 has been assessed at the middle ground with a value of 10%.

3.4.7 Mitigation of Optimism Bias

The Board has assessed the mitigation of optimism bias that can be applied, at this stage in the design development process, to the short listed options. As the project progresses through the procurement stage, the level of optimism bias will diminish, as key features of the project become more defined and agreed.

The level of mitigation for the short listed options is shown in the Figure 3-13 below. This reflects the anticipated level of residual optimism bias remaining after the mitigation factors have been applied.

Figure 3-13: Mitigation of Optimism Bias

Area	Contribution to Optimism Bias	Option 1	Option 2	Option 3
Robustness of Output Specification	25	20	7	8
Stable Policy Environment	20	12	5	5
Client Capability and Capacity	6	3	3	3
Involvement of Stakeholders	5	3	1	3
Agreement to Output Specification	5	3	2	3
Progress with Planning Approval	4	3	1	4
Other Regulatory	4	3	2	4
Detail of Design	4	2	2	2
Design Complexity	4	1	1	2
Other Factors (9 nr - see Appendix 3C)	23	13	4	11
Total	100	63	28	45

Further details of the rationale behind these levels of mitigation are included within Appendix 3C and the figure below shows the resultant level of optimism bias within Figure 3-14.

Figure 3-14: Optimism bias of Short-Listed Options

Option	Upper Bound Assessment	Percentage Remaining After Mitigation	Residual Optimism Bias
Do Minimum	38%	63%	23.94%
New Build & refurbishment at Ayrshire Central and refurbishment at Ailsa	31%	28%	8.68%
New Build on adjacent Greenfield site, refurbishment at Ayrshire Central and refurbishment at Ailsa	45%	45%	20.25%

3.4.8 Benefits Appraisal

To evaluate the site options, the benefits criteria required to be established. Nineteen stakeholders attended a Benefits Realisation Workshop on 12 February 2010. This workshop reviewed the benefits that had been identified from previous documentation and applied three questions:

1. Are the benefits identified still valid?
2. Is the list complete?
3. What stakeholders will benefit from these?

Having confirmed these issues, the workshop went on to explore:

- What SMART (specific, measurable, achievable, relevant, time-bound) measures can be used to monitor benefits realisation?
- Whose responsibility is it to ensure that the identified benefits are realised?
- What is the timescale for delivery
- Are there any identifiable costs to realise these benefits?

The workshop concluded by agreeing a list of agreed benefits, the criteria by which they would be assessed and a method of evaluating their realisation through staff and patient surveys.

The list of agreed benefits is shown below and the Benefits Realisation Plan emerging from the workshop is attached as Appendix 2K.

The key benefits identified for the development, together with their relationship to the dimensions of the National Quality Strategy, are shown in Figure 3.15.

Figure 3-15: List of Identified Benefits

Benefit	Description	Quality Dimension
Improved quality of clinical care including standards and clinical outcomes, helping NHS Ayrshire & Arran's healthcare services to go from good to great	Although there is a shift to providing more services in the community, inpatient care remains an essential component of mental health services. This development will ensure that inpatient settings are fit for purpose, meet all regulatory standards and provide a therapeutic environment.	Patient centred Safe Equitable Timely
Implementation of current and new models of health care and the wider clinical strategy	Developing new ways of working and recognising the changing needs of the population over the longer term, should enable optimal and efficient deployment of all types of resources.	Effective Efficient
Improved access to area wide and local health services for an increased proportion the people of Ayrshire and Arran	The relocation of Mental Health In-patient Services brings these services closer to the larger population clusters in Ayrshire, and significantly closer to the majority of those people who currently use these in-patient facilities. The development offers access to improved public transport services making it easily accessible.	Equitable Effective Efficient
Maximised opportunities for partnership working and wider public involvement / engagement	Service users, carers, the public and partner organisations have been involved in the development of proposals for this site. The grouping of services on one site maximises the opportunity for volunteer involvement and for co-location of interagency staff.	Patient Centred Efficient
Supporting an improved and safer working and clinical environment	The development should provide a safe service for all patients, carers, visitors and staff. Clinical risks will be assessed, managed and minimised. The provision of services should do no harm and aim to avoid preventable adverse events.	Safe
Delivering future flexibility and functionality	Current physical estate encompasses a wide range of buildings some over 100 years old. Many of these buildings are used to deliver services / fulfil functions which they were not designed for. The nature of the older buildings is such that they do not lend themselves to financially viable physical alteration and therefore	Effective Efficient

Benefit	Description	Quality Dimension
	service development and advancement is at risk of being repressed by these limitations. Moving to a new facility which has “future-proofing” and flexibility as a key built in function will significantly reduce obstacles and barriers to progress.	
Making more efficient and effective use of resources	The consolidation of the majority of In-patient services on one site offers the opportunity to make more efficient use of resources in several ways. For Nursing and Medical Staff economies may be achieved through the increased flexibility of a larger staff group on a single site allowing opportunities for redeployment of staff on a shift by shift basis without reducing the number of staff on duty on site at any one time, further reducing the need for bank or overtime. Purpose built, fit for purpose modern buildings will allow for more efficient and effective cleaning regimes improving hygiene standards without increasing expenditure. Other services and partners will gain by reducing the need, time and expense currently encountered whilst delivering their services over multiple, geographically distant sites. For example the delivery of Social Work and associated services for Mental Health Adult Inpatients will be focused on a single site.	Effective Efficient
Supporting the delivery of all current national local and future strategies, policies and targets e.g. “having the right care in the right place at the right time”	The new development will take into account where applicable, the national, local and future strategies.	Effective
Assisting in the delivery/ provision of NHS Ayrshire & Arran published values	The sustainable future - mission, vision, values and objectives for NHS Ayrshire & Arran will drive continuous improvements in health and the quality of services, especially around patient safety, person centredness and	Patient centred Effectiveness Sustainable Equitable

Benefit	Description	Quality Dimension
	clinical effectiveness, while controlling costs within the development.	
Minimising the risk of healthcare acquired infections (HAI)	Services are currently provided in a variety of settings, many in older building, the fabric of which is deteriorating and is difficult and costly to maintain. Many of these buildings used for clinical care present significant challenges to housekeeping and cleanliness (High Ceilings, exposed pipework, unsealed floors etc). The provision of a new, purpose built facility, built to modern standards, would allow for significant improvements in cleanliness standards. Current in-patient care is often delivered in multi occupant bedrooms, the new build would provide single bed accommodation for all patients, a standard which cannot be realistically or financially achieved within the current estate.	Safe
Supporting the aims and objectives of the Capital Plan/Estates Strategy and wider environmental agenda	The requirement to achieve a BREEAM Healthcare excellent rating is integral to the business case process. The new development will reduce heating consumption/volume and carbon emissions.	Effective Efficient
Bringing an end to institutional living and ensuring that the mental health stigma associated with existing facilities does not transfer to the new development	The provision of modern accommodation and facilities coupled with a move from multiple occupancy to single occupancy will assist in completing the move away from institutional living. In tandem with national campaigns (See Me) the relocation of inpatient services to a new purpose built hospital will reduce stigma by allowing the focus of mental Health Care in Ayrshire to move away from Ailsa Hospital and the negative historical associations it has within Ayrshire.	Patient centred Safe
Improving physical and mental wellbeing	The new facility will deliver better outcomes for patients through the improvement of physical and mental health and wellbeing. Co-location of services which support patient pathways will improve service access times and communication between	Patient centred Equitable Effective Timely

Benefit	Description	Quality Dimension
	services. This will enable earlier intervention and treatment within an integrated delivery structure.	

For each benefit criteria considered, each group was tasked with identifying and documenting:

- What specific actions are required to realise the benefits?
- Areas to consider include skills, structures, information, culture, systems, staff, stakeholders, patients.

Measurement and Monitoring

Measuring and then monitoring the delivery of benefits is key in assessing the extent to which they are being delivered against the plan.

In some cases measurement can be achieved through existing systems and information sources. However, in many cases this requires the establishment of new arrangements. It is therefore important that where new mechanisms are required, these are identified by the end of 2011.

Additionally it is recognised that only a proportion of the benefits will be ‘hard’ or quantifiable (e.g. additional activity delivered or reduction in costs) with many requiring ‘soft’ or qualitative measures to assess their delivery. These qualitative measures are often the areas requiring the greatest level of bespoke development and will be explored in further detail on an ongoing basis.

Finally, the frequency of benefit monitoring will be established as part of this process.

For each benefit criteria considered, each group was tasked with identifying and documenting:

- How would you know that the benefit has been achieved?
- Both qualitative and quantitative measures could be used?
- How will the Board monitor the achievement of the benefit?

Each benefit is described in S.M.A.R.T. terms to ensure this.

Summary of Outputs

The outputs of the three stages of group work were documented and used as the basis for populating the Benefit Realisation Plan.

3.5 Strategic Risks

Prior to producing the OBC, a number of risk workshops were held. The first risk workshop (June 2009) was attended by a total of 44 attendees from the development partners. To date a total number of 11 workshops have been held to date with the last workshop taking place on 26 October 2011.

Following a change in procurement route to Non Profit Distributing (NPD) a further workshop was held to review and revise strategic risks for the programme. Several risks were identified that were of a strategic or operational nature and therefore needed to be addressed by the Board as those risks could affect the viability of either key elements of the programme or the programme on the whole. These are listed in the Risk Register in Appendix 3D. Figure 3-16 contains a summary of strategic risks.

Figure 3-16: Summary of Strategic Risks

Risk Description	Mitigating Actions
Revenue and Capital Allocation from SGHD falls below planned assumptions impacting on Boards Capital Plan	▪ Ensure close engagement with SGHD on any variance to funding assumptions. ▪ Develop options for amendments to Capital Plan should funding assumptions have to be amended.
Organisational support for the programme diminishes (e.g. in light of leadership changes in strategic posts / changes to composition of Board / Political influence outwith Board).	▪ Ensure that key stakeholders engagement is maintained through Business Case process. ▪ Ensure that programme drivers are articulated in any discussion regarding reprioritisation of Capital Programme priorities.
Loss of key personnel / expertise driving the programme, e.g. Programme Director.	▪ Ensure timely recruitment to any key posts over the course of the development. ▪ Ensure full engagement of teams, not just individuals in the delivery of the programme so that there is no significant impact on business continuity from staff turnover.

The programme's risk register has been revised in accordance with the Scottish Capital Investment guidance on PPP Technical and Commercial issues, specifically Section 2 of the guidance.

3.6 Risk Strategy

In keeping with best practice for risk management in privately funded projects the Board has taken the approach that risks should be borne by the party best able to manage them effectively. The objective of this approach and performing a risk assessment is to:

- Allow the Board to understand the project risks and put in place mitigation measures to manage those risks
- Assess the likely total outturn cost to the public sector of the preferred option
- Ensure that the allocation of risks between the Board and Project Company is clearly established and demonstrated within the contractual structure.

Following a change in procurement route to Non Profit Distribution (NPD) the risk register has been reconfigured and updated to reflect current guidance. The risk register is attached as Appendix 3D. The risk register is a live document and is reviewed at Programme team level by.

- SRO (Senior Responsible Owner)
- Programme Director
- Programme Manager
- Finance
- Clinical Managers

Advisors (Technical, Financial& Legal) will be invited to attend future risk register reviews when appointed.

The risk register, which is appended to this document, identifies risk under the following headings recommended by Scottish Futures Trust (SFT):

- Design risks.
- Construction and Development risks.
- Availability and Performance risks.
- Operating Cost risks.
- Variability of Revenue risks.
- Technology and Obsolescence risks.
- Control risks.
- Residual Value risks.
- Other Project risks

Each risk identified under the headings noted above will be assigned a management action that will be discussed, agreed, recorded and classified as:

- Accept – no management required, however the risk will still be monitored;
- Mitigate – this risk will require to be managed to reduce probability or impact;
- Transfer – provide insurance against the risk or contract out;
- Avoid – change the scope of either the package or the project.

3.6.1 Risk Rating Matrix

A five by five probability and impact matrix must be used in association with the Joint Risk Register on all Frameworks Scotland Programmes as this is the basis of assessing seriousness of the risk exposure within the NHS and Public Sector as a whole. The matrix is illustrated below in Figure 3-17.

Figure 3-17: Probability and impact risk matrix

Impact						
	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
Likelihood						

A traffic light system as noted in Figure 3-18 below is used to illustrate the priority of risks.

Figure 3-18: Traffic Light System

Likelihood			Impact	
Almost Certain	5	x	5	Catastrophic
Likely	4	x	4	Major
Possible	3	x	3	Moderate
Remote	2	x	2	Minor
Rare	1	x	1	Insignificant

Risk Rating
High
Medium
Low

3.6.2 Key Risks associated with the Options on the short list

Figure 3-19: Key Risks for Short Listed Options

Option 1: Do Minimum		
Increasing backlog maintenance		
Accommodation not fit for purpose		
Declining staff morale		
Legislative compliance issues		
Not able to deliver clinical model		
Cannot deliver single bedded rooms		
Option 2 : New build and Refurbishment at Ayrshire Central and Refurbishment at Ailsa (based on risk reg. Rev 10 dated 27 October 2010)		
Risk Description	Pre-mitigation	Post-mitigation
Planning Approvals may be delayed	16	9
Boards may not have the experience to manage the Project	16	6
There may be a lack of Clarity in the Clinical Brief	16	2
Suppliers and sub-contractors may suffer insolvency or other constraints.	16	12
The utilities may provide sub-standard service	16	9
Existing ground conditions – e.g. rock, contaminated land, methane, soft ground.	16	12
Volatile market conditions	16	9
Lack of clarity in Technical brief with resultant implication on FM strategy	16	4
Potential discovery of existing asbestos on the site or existing Pavilions to be demolished	16	8
Change in policies resulting from new Government may impact capital funding	16	12
Project requires to be revenue neutral	16	12

Additional costs associated with achieving BREEAM excellent	15	9
Change to Board Capital Allocation	15	12
Option 3: Newbuild on Adjacent Greenfield Site, Refurbishment at Ayrshire Central and Refurbishment at Ailsa		
Suitable land not available		
Costs of land underestimated		
Does not support the clinical model		

The detailed risk matrix is included in Appendix 3D

3.6.3 Reporting on Risk

The Risk Register is a dynamic document that is reviewed and updated by the Programme Team on a weekly basis. Any new risks are introduced through the Programme Steering Group and ratified at the North Ayrshire Community Hospital Programme Board.

3.7 Description of Preferred Option

There are two main elements to the preferred option:

- The refurbishment of Ailsa and the Ayrshire Central component is detailed in Appendix 2H (Ailsa and Horseshoe Scope of Works)
- New build at Ayrshire Central

The Clinical Brief (Appendix 2B) supported by the Schedule of Accommodation (in section 3.7.3) outlines the facilities in the new build.

The following section describes the key elements of the design process.

- Clinical Brief (Appendix 2B)
- Schedule of Accommodation (contained in Appendix 2B, Appendix D)
- Design Statement (Appendix 3E)
- Design Development Process
- Adjacency Matrix
- Massing Diagram
- Stage C Design Report Extract (Exemplar Design) (Appendix 3F)

3.7.1 Design Development Process

Fundamental to the success of any healthcare programme is the involvement of the facility users and other relevant stakeholders. In line with good practice, the design process has been focussed around engagement with user groups from as early a stage as possible. The Public Reference Group has been involved in developing the design from day one. The design programme has been developed by NHS Ayrshire & Arran with its external advisors, to allow appropriate periods for design development, presentation of proposals and evaluation and feedback.

Conceptual design work was based on the Clinical Brief and examined high level options for development of the preferred site to a target affordable floor area. The designs have been developed on a holistic basis with sustainability as a key driver. The requirement to achieve a BREEAM Healthcare excellent rating is integral to the business case process. A series of meetings has taken place to allocate responsibility for relevant credits and a pre-assessment process has been carried out by DSSR as the registered BREEAM assessor. This process will continue through the lifespan of the programme up to post programme evaluation.

As part of the incorporation of the design process in the various business case stages, the Scottish Government has, in addition to BREEAM assessments, advocated a formalised design process facilitated by Architecture + Design Scotland (A+DS) and Health Facilities Scotland (HFS) together with the application of AEDET (Achieving Excellence in Design Evaluation Toolkit) reviews. The design process facilitated by A+DS and HFS is new and the North Ayrshire Community Hospital is one of the pilot programmes for roll out of this initiative.

Following the review of the Clinical Brief, associated changes to the schedule of accommodation and a change in the procurement route, the Programme Board took the opportunity to develop an exemplar design with the aim of improving efficiency and effectiveness within the design.

With the shift in the proposed procurement route, the PSCP were stood down from the project and subsequent design development has been progressed with the objective of addressing comments made through the NHS Scotland Design Assessment Process (NDAP) and in conjunction with the ongoing stakeholder consultation process.

To ensure that the proposals complied with current modern standards with regard to single room provision and to bed spacing a robust and comprehensive project bibliography has been developed that references all essential and desirable facility standards including dementia friendly design.

In addition, the Board has taken the informed decision to increase bedroom and en-suite sizes beyond the minimum required in order to ensure medium-long-term flexibility in all clinical environs.

In addition, Key Features of the Dementia friendly design embodied in the Exemplar proposal are:

- WCs within en-suites are able to be seen from bed.
- Potential for "touch down" at staff base areas for wall and floor finishes that are unique to that area to form landmarks within the ward to assist orientation. This will also reduce the perception of bedroom corridors being interpreted as tunnels for those with reduced visual acuity.
- 15 Bed MH Ward bedrooms have been split into smaller clusters to further reduce corridor length, improve staff supervision and have a more domestic scale.
- Potential for informal "landmark" areas to sit with views to external areas around wander routes.
- Wall decoration and interior features to assist in distinguishing different areas.
- Potential for other inclusive design such as signage and memory boxes to be incorporated into the detail design
- Staff bases and offices are strategically placed to give good unobtrusive observation to patient living areas and external spaces.
- The design of patient living areas is intended to be as open plan as possible and generously sized to accommodate wandering. Patient WC's are also immediately adjacent to these areas.
- Individual reception rooms available for patient visiting allow families with young children to meet their relatives without the need to enter patient living areas, which can be potentially frightening for those who do not understand patient behaviour caused by dementia.
- External areas will be formed by boundaries appropriate to the security required for each patient type. Landscaping should assist in making these boundaries as unobtrusive as possible.

The current design is supported by A+DS and HFS through the NDAP report dated 14th October 2011 (Appendix 3G).

The OBC aligns with sign-off of the 1:200 scale Departmental Relationship design and associated deliverables and is also effectively the conclusion of the Stage C Report (Appendix 3F).

Section 3.7.5 fully illustrates the robustness of the proposed Exemplar Design and design development.

3.7.2 Clinical Brief

The purpose of the Clinical Brief is the primary reference document which fully sets out the requirements of the development in response to the clinical and demographic needs of the patients / service users and the services which aim to meet this need.

The care and intervention that services users will receive will require to be greatly supported and enhanced by the building. Therefore its' ultimate design, its standard of accommodation and décor are just as important as the relationship to public space and private space.

The Clinical Brief also sets out the requirement of both the internal building but also its gardens, terraces or courtyards and provides a wider focus on the site as a whole including all available outdoor space as a means of promoting recovery, reablement and rehabilitation.

The brief provides details of the models, philosophy and principles of care for all the services at an early point to ensure the support services, design process which are the outputs within this OBC and its appendices are continuously benchmarked against the brief.

Brief Development

The brief for the project is extensive (see Appendix 2B) and includes Clinical briefs for whole hospital requirements and specifications for each separate department, an adjacency matrix and relationship diagrams and a co-ordinated Schedule of Accommodation which encapsulates all space requirements for the project. In addition a project data base has been developed and includes room data sheets linked to the Schedule of Accommodation and also layouts for all the repetitive room types – some of these room types have already effectively been signed-off through the user group consultation process.

The brief has been developed over a period of time and the methodology included significant challenge to any assumptions or plans for clinical practices allied to space utilization. This has also extended into extensive reviews of the utilization of office space and rationalization of this to maximize the potential of capital spend on new build clinical accommodation.

The process to deliver a brief which is clear and unambiguous has included wide consultation with key stakeholders, service level review, departmental reviews and consultation with user groups and individuals.

The consultation process has been iterative and has included a thorough review of bed modelling for the mental health component of the proposed facility and this has resulted in ongoing reductions in overall bed requirements from 253 beds to 206 beds.

The brief has also been further refined via the design development process in order that both the brief and Exemplar Design reflect a fully co-ordinated position at OBC conclusion.

3.7.3 Schedule of Accommodation

The Schedule of Accommodation has been developed during the compilation of the Clinical Brief.

The Schedule of Accommodation details all of the required rooms/spaces with room details/specifications in line with current SGHD and HFS Guidance and has been developed and agreed by NHS Ayrshire & Arran Clinical Services who are in agreement that it delivers the clinical brief.

The current version is included in an Appendix 2B to the OBC and shown below in Figure 3-20.

Figure 3-20: Schedule of Accommodation

North Ayrshire Community Hospital

BUCHAN ASSOCIATES LTD

Schedule of Accomodation

MASTER SHEET

Accommodation	Type	Net m2 m^2	Gross m^2	Comments
Central (Walk-in) Entrance	Admin	517	722.0	
Consultation & Inverventional Area	OP	521.5	744.7	
Ambulance Entrance	Admin/Circ	55.25	77.2	
20 Bed AMH Wards (MH)	Clinical		3027.7	3 x 20 bed wards
30 Bed Rehab' Unit (MH)	Clinical	1045.75	1526.3	1 x 30 bed unit
8 Bed Forensic Rehab' Unit (MH)	Clinical	464.25	677.6	1 x 8 bed ward
8 Bed IPCU (MH)	Clinical	444.25	657.7	1 x 8 bed ward
10 Bed Addictions Ward (MH)	Clinical	463.75	676.8	1 x 10 bed ward
15 Bed Elderly Wards (MH)	Clinical		1725.9	2 x 15 bed wards
ECT/AHP/Minor Surgery Suite	Clinical	183.25	255.9	
Support Cluster 1 (AMH)	Clinical/Admin	219.75	313.8	
Support Cluster 2 (Rehab)	Clinical/Admin	112	163.5	
Support Cluster 3 (Elderly)	Clinical/Admin	193.75	282.8	
30 Bed Elderly Rehab Ward	Clinical	985.75	1438.7	
30 Bed Long Term Care Ward	Clinical	985.75	1438.7	
Pharmacy	Admin/Clin	115.25	154.9	
Tribunal & Meeting Area	Admin	110.25	154.0	
Total			**14038.0**	

ADD PLANT	**737.0**
ADD COMMUNICATIONS	**1825.0**
TOTAL	**16600.0**

	Mental Health ward areas		General Accommodation and Support Clusters		Frail Elderly ward areas

3.7.4 Design Statement

The Design Statement sets down the aspirations of NHS Ayrshire & Arran and their stakeholders' for the development. The key criteria identified will be tested through design review at every stage of the business case process and associated reports will be submitted as part of both the outline and full business case submissions. The full Design Statement can be found in Appendix 3E.

3.7.5 Adjacency Matrix

The adjacency matrix describes the key adjacencies and on each floor services will be provided. This was developed and agreed with the Clinical Teams in the design user groups.

Figure 3-21: Adjacency Matrix

North Ayrshire Community Hospital Adjacencies Matrix

	Acute Mental Health (AMH) Wards	Addictions Ward	"Ambulance" Entrance	Central (Walk-in) Entrance	Consultation & Interventional Area	ECT/Minor Surgery/Therapy Area	Elderly Mental Health Wards	Forensic Rehab' (8 bed, mental health)	IPCU	Long Term Care Ward (30 bed frail elderly	Pharmacy	Public Transport Pick Up/Drop Off	Rehabilitation Unit (30 bed, mental health)	Rehabilitation Ward (30 bed frail elderly ward)	Tribunal Suite/Meeting Area	Dining Room (Existing Facility)	Staff changing (In Horseshoe)	Spiritual Care Area	Existing general outpatients (In Horseshoe)
Acute Mental Health (AMH) Wards	-																		
Addictions Ward	E	-																	
"Ambulance" Entrance	D	D	-																
Central (Walk-in) Entrance	D	D		-															
Consultation & Interventional Area	D	D	D	E	-														
ECT/Minor Surgery/Therapy Area	D		E		D	-													
Elderly Mental Health Wards			D	D		D	-												
Forensic Rehab' (8 bed, mental health)			D					-											
IPCU	E		E					E	-										
Long Term Care Ward (30 bed frail elderly ward)			D	D			E			-									
Pharmacy	D	D	D		D						-								
Public Transport Pick Up/Drop Off	D	D		E	E		D	D	D	D		-							
Rehabilitation Unit (30 bed, mental health)			D					D				D	-						
Rehabilitation Ward (30 bed frail elderly ward)			D	D	D		E			E		D		-					
Tribunal Suite/Meeting Area	D		D		D			D	D			D	D		-				
Dining Room (Existing Facility)	D	D			D	D	D	D	D	D	D	D	D	D		-			
Staff changing (In Horseshoe)	D	D			D	D	D	D	D	D	D	D	D	D			-		
Spiritual Care Area				D														-	
Existing general outpatients (In Horseshoe)			D	D	D					D		D		D					-

Notes:

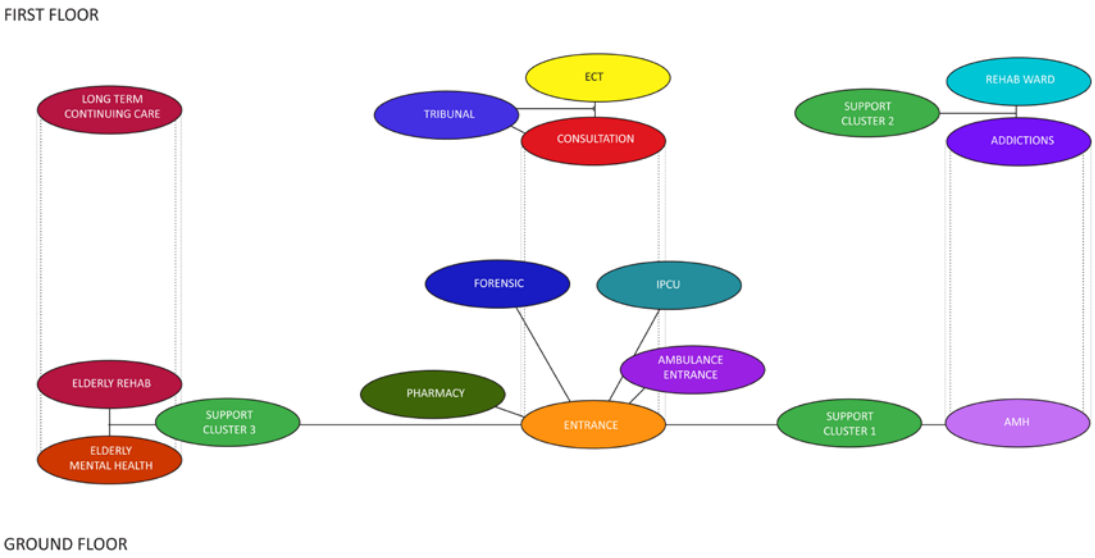
E = "Essential" adjacency. There is a definite clinical/operational rationale for these areas to be easily accessible from/between each other that must be a feature of the design

D = "Desirable" adjacency. Although not essential, there is a clear advantage associated with these areas being closely aligned if this can be achieved through the design

3.7.6 Adjacency Diagram

The adjacency diagram shows a dimensional representation of the proposed building development.

Figure 3-22: Adjacency Diagram



3.7.7 Exemplar Design

Developing an Exemplar Design In Support of NACH OBC Submission

Background

Purpose of the Exemplar Design

Due to the proposed procurement of the project being via the NPD route, the original intent for the Exemplar Design was that it would be developed to RIBA Design Stage C to function as a basic demonstration that the brief could be successfully delivered as a facility and that it would form the basis for initial thoughts on design by alternative bidders and such designs to then be developed by them throughout the competitive dialogue process.

The Exemplar Design has now been developed to Stage C and will fully demonstrate compliance with the brief and the real potential to deliver the project within the briefed area requirements. The process has involved the development of the design to effectively room relationship (1:200 scale) level and including alternative solutions for ward design together with an associated review of additional area implications via building envelope design. This information is included within the Stage C Design Report Extract and will be made available to shortlisted bidders. (Appendix 3F)

The design development has been done with the involvement of the relevant project stakeholders through the consultation process which was set down in the programme for the development of the Exemplar Design.

The Exemplar Design provides a benchmark for the development of bidders solutions through the competitive dialogue process. This process should be effectively managed utilising an agreed scoring methodology that is clear, transparent and provides appropriate, fair and equitable feedback to all bidders as regards their developing designs in the context of all briefing materials (including improvement on the exemplar design).

The relevant sections of the Invitation to Participate in Dialogue (ITPD) documentation for the future bid stage of the project will include a synopsis of the key design features which the stakeholders would wish to see retained and alongside a list of issues which should be considered for further development and all with the objective of achieving the most innovative solution which may be feasible through the Competitive Dialogue process.

The Exemplar Design was developed from the standpoint of a team well conversant in the briefed requirement and with the benefit of longer term experience of the project in its previous gestation. Key building blocks such as the single bedroom and en-suite design (which had previously achieved user group sign-off) for example were utilized at all stages in the development of the Exemplar Design.

The design was reviewed and approved in the context of all relevant national and local briefing documentation and in line with an agreed design programme that identified key requirements and relevant outputs together with an integral approval process and “sign off” at all appropriate stages, thereby ensuring that it has the support of all relevant project stakeholders.

The design and associated consultation process had to be particularly focused to achieve sign-off within a very short timescale and therefore there had to be stakeholder buy – in to achieve tangible results at every consultation and design intervention point.

In the first design meeting there was the opportunity to offer a blank canvas approach to the development of a new design by offering the stakeholders the opportunity to participate in a departmental relationship block planning exercise and with the perspective of key site constraints and opportunities. This meeting achieved an understanding of what key adjacencies should be both horizontally and vertically.

The second design meeting was used as the platform to illustrate the key options which had been developed in more detail with the feedback from meeting no.1 and also strategic options for ward design.

A preferred way forwards was agreed at meeting no. 2 and the design was further progressed for presentation at meeting number 3.

A preferred option was agreed, subject to some further refinement, at meeting no. 3 and this was taken forwards to sign-off at meeting no. 4.

The design was also subject to Architecture and Design Scotland (A+DS) review and SFT design review prior to the OBC submission being made. A+DS, through Health Facilities Scotland have endorsed the design as supported with a number of recommendations for further design focus and development through subsequent stages of the project.

Figure 3-23: Ground Floor Plan

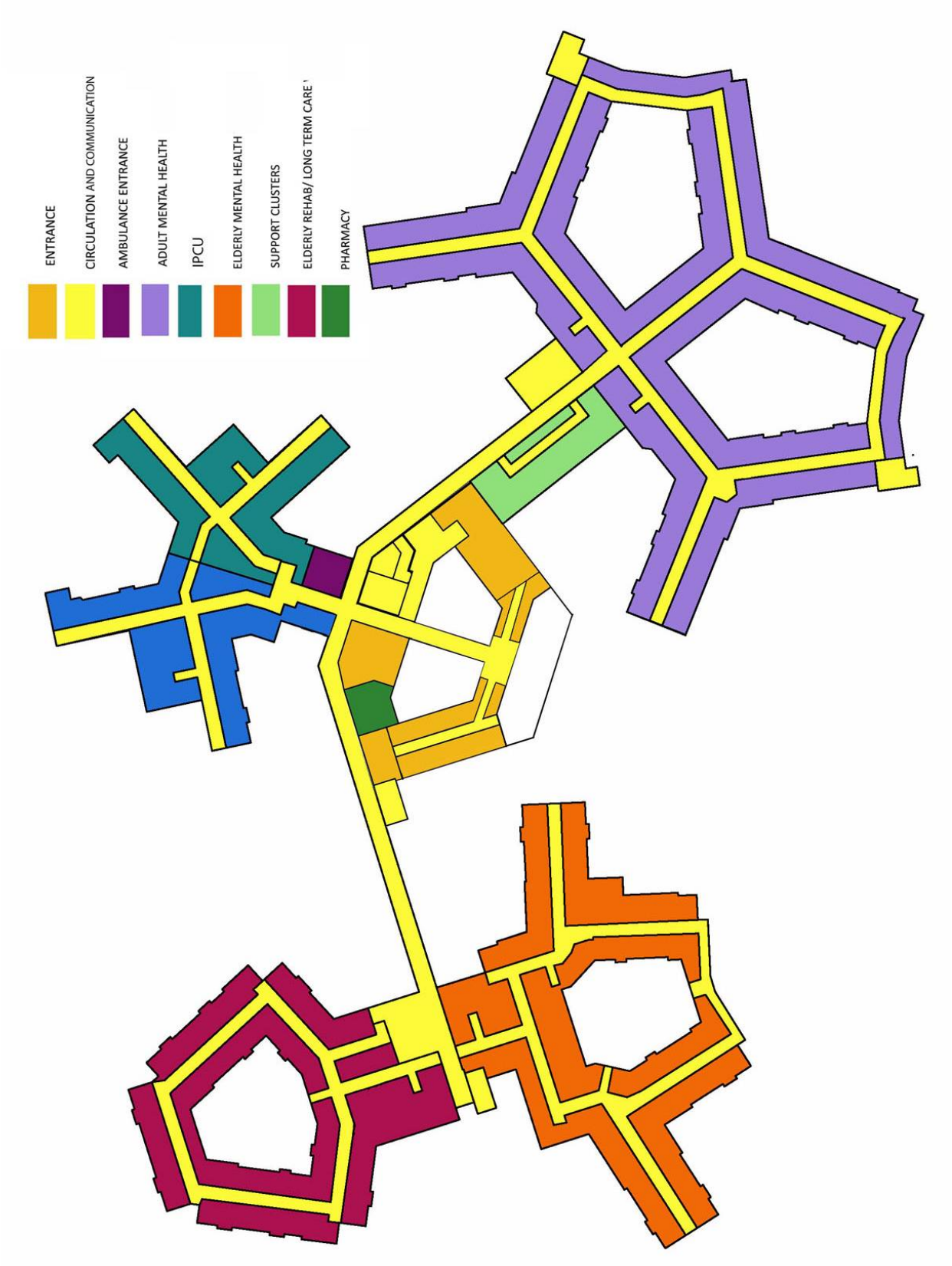
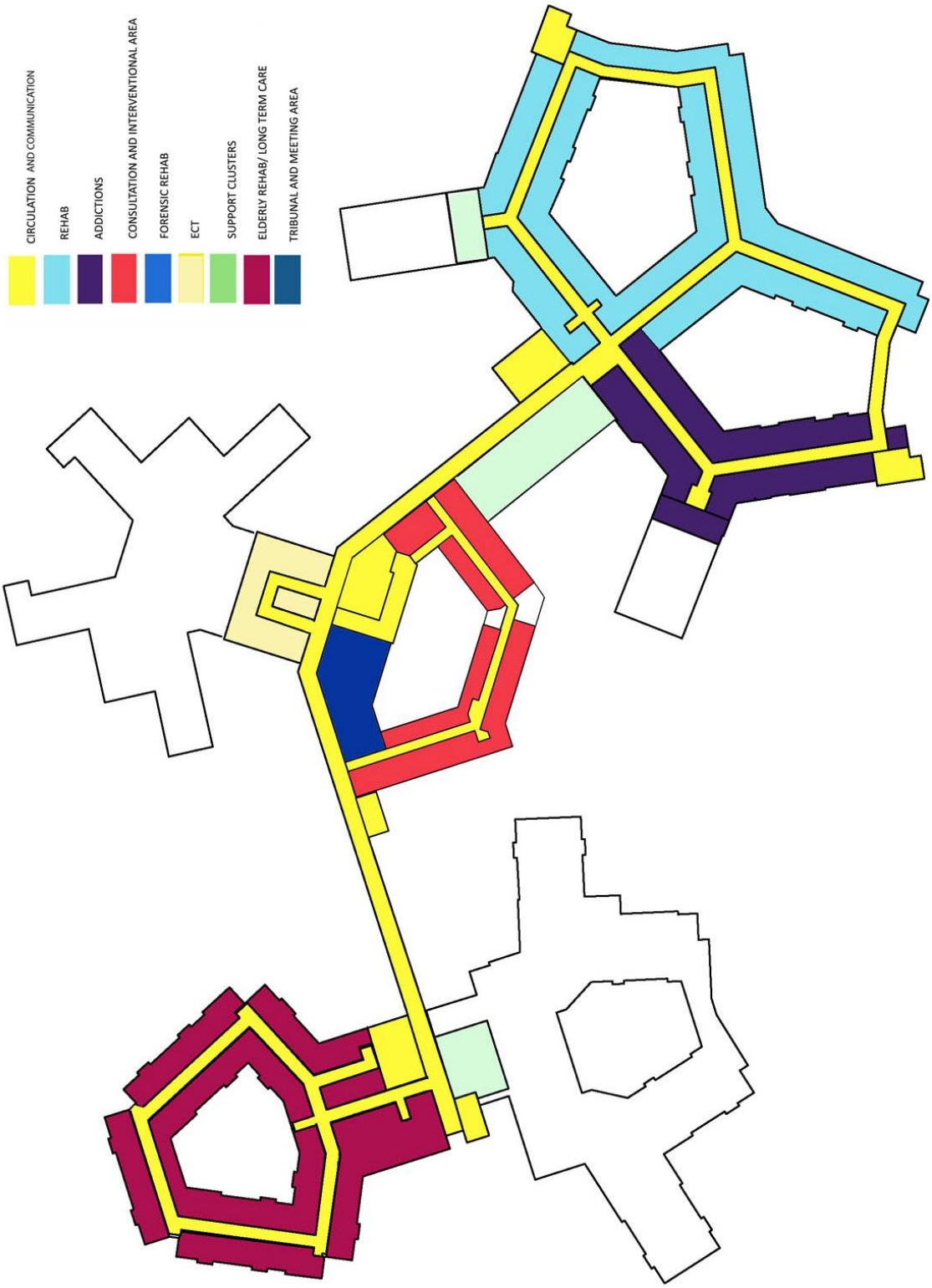


Figure 3-24: First Floor Plan



3.7.8 Stage C Design Report

An RIBA Work Stage C Design Report has been prepared which includes more detail on the design process, design features and descriptions of the design of each of the departments together with relevant illustrations. (Appendix 3F).

4.0 The Commercial Case

The Commercial Case will consider the procurement strategy for the preferred option and will include:

- Required Advisor Services
- Contractual arrangements
- Approval Gateways
- Payment philosophy
- Risk and commercial framework
- Junior Investment
- Change control mechanisms
- Refinancing

4.1 Required Advisor Services

NHS Ayrshire & Arran will make the following key appointments for the provision of advisor support for the Revenue Funded Accommodation Non-Profit Distributing (NPD) project. This team will advise on the project from procurement of the Project Company through to completion of construction works and commissioning:

- Technical (Including all design disciplines)
- Legal
- Financial

Procurement Methodology

The preferred option is being procured the through the Revenue Funded Accommodation Non-Profit Distributing (NPD) procurement route. The Board will appoint its advisors and the private sector Project Company that will design, finance, build, and operate (in regard to Hard Facilities Management) the new development.

To maximise the value of the development work already undertaken during the Frameworks Scotland and to achieve the programme timetable, the Board maintained the Healthcare Planner and Cost Advisor appointments. These appointments ensured the delivery of the Exemplar Design and associated costs for this OBC. The Programme Team will ensure that this work will align and be adopted by the subsequent Technical Advisor when appointed.

The NPD model was developed and introduced as an alternative to, and has since superseded, the traditional private finance initiative or “PFI” model in Scotland and is defined by the broad core principles of:

- Enhanced stakeholder involvement in the management of projects
- No dividend bearing equity

- Capped private sector returns

The NPD model retains the benefits of traditional PFI structures, such as:

- Optimum risk allocation
- Whole-life costing
- Maximised design efficiencies
- Robust programming of lifecycle maintenance and facilities management
- Performance-based payments to the private sector
- Single point delivery system, reducing interface risk for the public sector client
- Improved service provision

and also produces the following additional benefits:

- Capped returns ensure that a “normal” level of investment return is made by the private sector and that these returns are transparent
- Excess profits or surpluses generated by the Project Company are returned at the discretion of the Public Interest Director
- The public interest is represented in the governance of the NPD structure, which increases transparency and accountability and facilitates a more pro-active and stable partnership between public and private sector parties

Following appointment of Technical, Legal, and Financial Advisors the Project Team will carry out the procurement of the private sector provider Project Company. A high level initial programme to Financial Close has been compiled and is included at Appendix 6A. The key stages are:

- Official Journal of the European Union (OJEU) Notice
- Pre-Qualification Questionnaire (PQQ) and Memorandum of Information (MOI)
- Select Participants
- Invitation to Participate in Dialogue (ITPD)
- Final Tender Submission
- Evaluation of Tenders
- Selection of Preferred Bidder (PB) (10 Day Alcatel period)
- Award of Contract
- Complete Full Business Case (FBC)

The selection process will adhere to fair and equitable treatment of bidders and will realise the Most Economically Advantageous Tender.

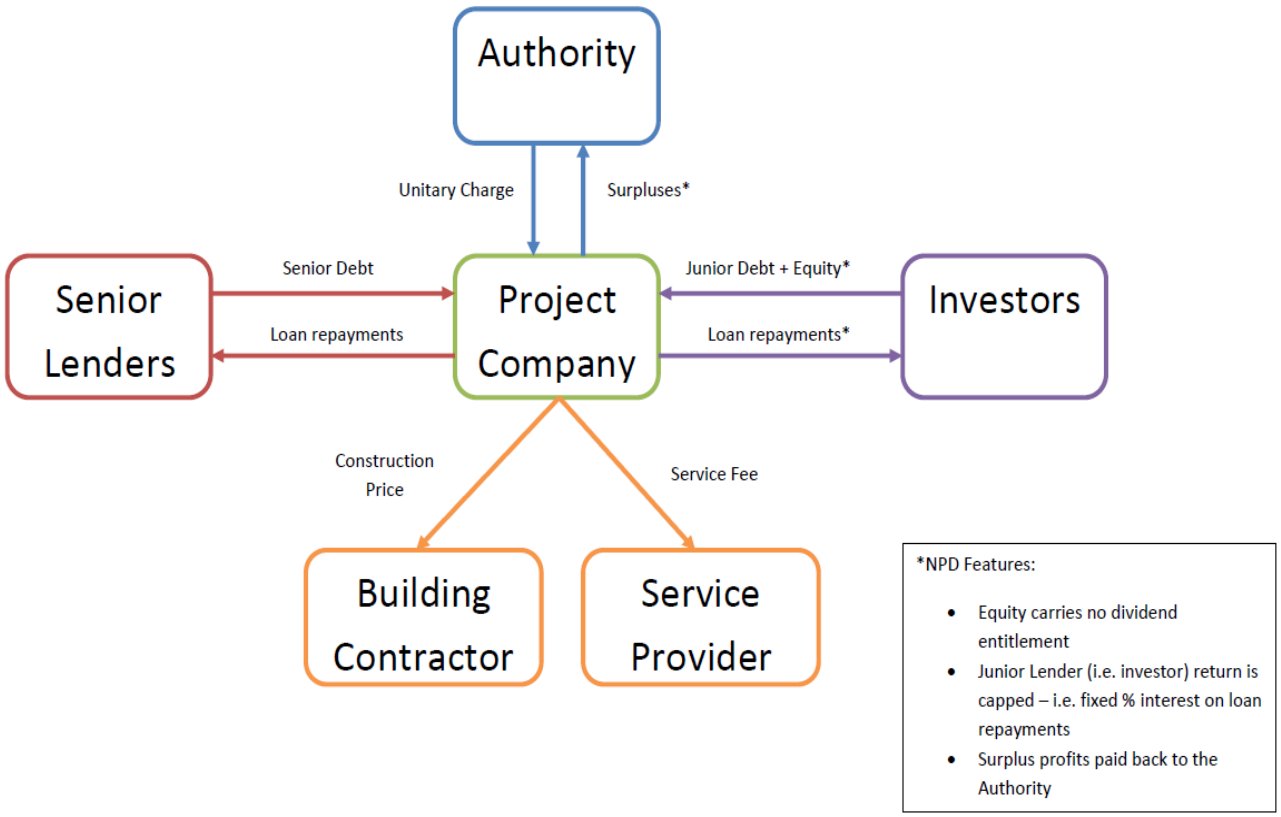
Unitary Charge Payments to Project Company will only commence when the facility is made operational and will be managed and regulated by means of the payment mechanism that will protect the Board (by deductions form payment) if there failures in availability or performance.

In regard to the existing retained estate, refurbishment work are not appropriate to be included in and will not form part of the NPD procurement but will be procured separately as capital works.

4.2 Contractual Arrangements

NHS Ayrshire and Arran will engage in separate appointments with Technical, Legal, and Financial advisors to support them through to project completion and to contract with the private sector provider Project Company under a Project Agreement. The provider will enter into separate construction and facilities management contracts with their sub-contractors as well as Design Disciplines to take forward the exemplar design through constructive challenge during the competitive dialogue period to completion of detail design for construction. Scottish Futures Trust will provide procurement and commercial support to NHS Ayrshire & Arran.

We have attached a paper from SFT explaining their role in Appendix D. The structure of an NPD project is illustrated as follows:



Project Company

Whilst there has been no specific company structure requirement, all NPD projects to date have adopted a structure where the Project Company is a special purpose company limited by (non-dividend bearing) shares. The shares are held by the private sector investors with the exception of one "golden share" held by the Authority. This means that the Project Company is controlled by the private sector but the "golden share" gives the Authority certain controls that ensure that the core NPD principles, and governance structure, are protected. These controls are set out in the Project Company's articles of association.

Funding

There are no stipulations regarding private sector funding solutions provided the "no dividend-bearing equity" principle is upheld. The capital structure on NPD projects to date has comprised senior and junior funding and, although junior funding has been provided exclusively by way of subordinated debt, alternatives would include mezzanine debt, preference shares or a single tranche of blended rate debt.

Role of the Junior Lenders

One of the cornerstones of the NPD model is the principle that the Project Company should at all times be managed by the parties whose lending is at risk. It follows that, in the absence of dividend-bearing equity, the ownership and control of the Project Company lies with the junior lenders (subject to senior lenders' step-in rights).

In the absence of equity returns, the junior lenders are incentivised to manage the "equity risk" to protect their investment and secure their forecast return. The junior lenders appoint the majority of the Project Company's directors (pro rata to their investments of junior debt) to give them the control needed to manage this risk. To preserve this link between investment risk and control, the shares in the Project Company are "stapled" to the junior debt investment so that the ownership and control of the Project Company always transfers with the investment (and vice versa).

Junior funding may come from sub-contractors, senior lenders or third party funds and institutions. When it comes to managing the affairs of the Project Company conflicts of interest may arise, depending on the nature of the junior lenders, around issues such as:

- Changes to senior and/or junior debt terms, particularly where junior lenders are also senior lenders
- Changes to sub-contracts if junior lenders are also sub-contractors
- Application and enforcement of penalties
- Levels of insurance cover
- Conflict is perhaps best avoided if the investor structure is a mixture of both contractors and funders, although this may not always be

possible. The potential for conflicts of interest must be dealt with up-front through the Project Company's articles of association. The standard suite of documentation produced by SFT contains standard conflict of interest provisions.

Rate of Return

The investor rate of return, bid in competition, should reflect the level of risk transfer negotiated. It is important that the risk transfer is sustainable and so the risks passed to the Project Company should be evaluated against the cash flows in the NPD model to ensure that, in the absence of equity, these risks can be managed effectively. The sustainability of the proposed risk transfer should be evaluated in a sector-specific context and procuring authorities should seek advice in carrying out such an assessment.

Contract

The NPD model retains the efficient risk transfer achieved through the traditional PFI model and the contracts for NPD models therefore generally follow HMT's Standardisation of PFI Contracts Version 4 Guidance.

With a view to the NPD project pipeline, and building on existing standard form contracts and precedent, SFT has produced a standard form NPD project agreement for use on accommodation projects in the health sector.

4.3 Key Approval

There will be five forms of approval in relation to OBC including Planning in Principal, which is a key statutory approval for the project. All the approvals are detailed on the Programme Plan to Financial Close (Appendix 6A) as key milestones. The approvals process is an important control measure, ensuring that the project only proceeds to the next stage when ready. The five forms are:

- Gateway Review 2 was carried out on 1 and 2 December 2011. Gateway 3 will be planned at an appropriate stage in the project.
- Engagement with A+DS will continue through prescribed points of the bidding process (Appendix 3G – provides a report on the Exemplar Design developed);
- SFT Key Stage Review was carried out early December 2011 following completion of the exemplar design as a two stage workshop exercise; (Appendix 3H – EC Harris report on Key Stage 1);
- Gateway Review 2+ will be planned during Summer 2012;
- Key Stage Reviews. Key Stage Review 2 is due before the OJEU notice for bidders.
- Planning in Principle. The PAC process will start 7th May, leading to proposed approval by end September 2012.

4.4 Payment Philosophy

A key principle of the NPD model is that the Project Company is paid over the duration of the concession period by means of the Unitary Charge. This payment is subject to payment deductions in the event that there is a failure in availability and/or performance. This is clearly defined in the Payment Mechanism Model as compiled by the Technical and Financial Advisors.

Surpluses

The likelihood of surpluses being realised (for distribution back to the public sector) depends on the funding structure. It may be that the base case financial model for the project does not forecast the generation of any surpluses other than towards the end of the project once the senior funders are repaid and they release the project from their cash reserving requirements. In this case surpluses will only arise naturally during the life of the project if the Project Company performs more efficiently than expected.

NHS Ayrshire & Arran will expect bidders to submit their best priced bids which fall within the affordability envelope for the project and surpluses should be viewed as a consequence of the structure rather than an up-front requirement. Care needs to be taken in assessing the optimum solution for a particular project as the actual realisation of surpluses is not something that can be controlled by NHS Ayrshire & Arran or guaranteed by the Project Company. The level of surpluses proposed by a bidder could be undeliverable or could be eroded if the Project Company runs into operational difficulties.

The realisation of regular surplus cash within the project is in turn likely to depend on higher unitary charge payments being charged to NHS Ayrshire & Arran and so a bid that assumes no surpluses (other than at the end of the project) will be likely (all other things being equal) to be more economic and better value for money than one that assumes regular distribution of surpluses throughout.

The suite of standard form documentation produced by SFT will define surpluses in cash terms as this ensures greater transparency than, for example, an accounting measure of distributable profit. The financial commitments of the Project Company will have the following order of precedence:

- Normal project expenditure (e.g. payments to sub-contractors)
- Payments to senior funders
- Cash reserve requirements under the funding agreements
- Payments to junior funders
- A cash buffer
- Payment of surpluses
- The Project Company will be entitled to retain a level of cash (over and above funders' reserves) and will be required only to pay out surpluses above that buffer. This gives the Project Company a contingency for

dealing with any unexpected events that may arise during the life of the project.

Surpluses (if there are any) will be payable every 6 months provided that payment would not put the Project Company in breach of any legal or contractual obligations or the directors in breach of any of their legal duties.

The Project Company's share of any Refinancing Gain and of any savings generated by a Project Company Change will not be caught by the surplus payment provisions but will be payable to the investors.

Early NPD projects provided for the surpluses to be paid to a charity rather than back into the public sector. Changes in accounting and budgeting rules have, however, opened up the possibility for the surpluses to be channelled back to NHS Ayrshire & Arran and it is assumed that most projects will adopt this position. The surpluses will be paid to NHS Ayrshire & Arran as a rebate against previous unitary charge payments.

4.5 Risk and the Commercial Framework

The risk register has been reconfigured and updated to reflect current guidance on revenue funded non profit distributing (NPD) programmes. Risk is a standing agenda item and reviewed regularly at Programme team meetings where the risk register is treated as a live document. The risk register is reviewed by.

- Programme Director
- Programme Manager
- Cost Advisor
- Finance
- Clinical Managers

Advisors (Technical, Financial & Legal) will be invited to attend Risk Workshops when appointed.

NHS Ayrshire & Arran will act as sole owners of the Programme Risk Register until such time as professional advisors have been appointed and will ensure that there is an recommended allocation of risks between the Board and private sector partners. Risks will be allocated to the party best able to manage the risk. Figure 4-1 shows the risk allocation matrix.

The key principles of risk management adopted by the programme team is that:

- All parties are encouraged to work together as partners in an open and transparent approach and to ensure that this partnering ethos is maintained
- NPD allow risk which is most able to be managed by the private sector, to be transferred to them, however the Board also need to accept their share and to help mitigate those risks allocated to the private sector in mutual support where it is appropriate and best value

to do so.

- A clear and transparent system is has been developed to identify, assess, and manage risks with clear allocation and ownership stated. The risk schedule includes the standard NPD risks as well as project specific risks where necessary.
- All price thresholds are set using quantitative risk analysis

Figure 4-1: Potential Risk Allocation

Risk Category	Potential allocation of risk		
	NHS Ayrshire & Arran	Private Sector	Shared
Design		√	
Development and Construction		√	
Transition and Implementation			√
Performance			√
Operating		√	
Revenue	√		
Termination	√		
Technology and Obsolescence	√		
Control			√
Financing	√		
Legislative	√		

4.6 Junior Investment

On NPD projects banked to date, junior finance has only been provided by way of subordinated debt. It is for the bidders on each project to present solutions that best fit the individual project circumstances. These solutions may include alternative finance structures such as mezzanine debt.

Subordinated debt solutions create an “equity-like” structure. The subordinated debt is not counted as debt in the calculation of lenders’ ratios (e.g. the debt service cover ratio) which results in lower levels of cash reserve requirements in the financial model. It is priced akin to equity and is therefore likely to have a higher coupon than other forms of junior debt, leading to a higher weighted average cost of capital.

Mezzanine debt may in some structures be treated as a “debt-like” instrument and therefore be included as debt in the calculation of lenders’ ratios (e.g. the total debt service cover ratio). A financing structure such as this may lead to a lower weighted average cost of capital but may have greater reserving requirements.

Which solution results in a lower unitary charge will depend on whether the impact of any inclusion/exclusion from lenders' ratios and cash reserve requirements outweighs any higher/lower cost of capital.

4.7 Change Control Mechanisms

Changes will follow a clearly defined process which will be detailed in the Contract Specification.

While the ideal is to have no change following financial close, Change Control is not intended to prevent change but to ensure that all parties are in a position to make informed decisions based upon a position of certainty of commitment at all times and with a high degree of predictability of outcome.

The change control process will manage the issuing, approving or rejecting of changes. This process will be managed by the Technical Advisor in accordance with the contract terms.

Level of Authority

The NHS Ayrshire & Arran Programme Director will be responsible for reviewing and accepting all technical, legal, and financial information relating to the project. The Programme Director will be the link that brings NHS Ayrshire & Arran and the Project Company together.

Public Interest Director

The traditional PFI/PPP model gives little visibility for the public sector over the governance and management of the Project Company. The appointment of an independently nominated Public Interest Director (known on the early NPD projects as the "Independent Director") to the Project Company's board is a feature that is specific to the NPD model. The principal roles of the Public Interest Director are:

- Monitoring the Project Company's compliance with the core NPD principles
- Bringing an independent and broad view to the Project Company's board
- Monitoring conflict of interest situations and managing board decisions where there is a conflict of interest for the other directors
- Reviewing opportunities for, and instigating, refinancing
- Reviewing opportunities for, and instigating, opportunities for realising cost efficiencies and other improvements in the Project Company's performance (on the basis that in the absence of equity return there is a potential lack of incentive for the other directors to explore or promote these)
- It is anticipated that SFT will nominate a Public Interest Director for each NPD project.

NHS Ayrshire & Arran may appoint an "Observer" to attend and participate

(but not vote) at the Project Company's board meetings. The Observer role has been a feature of traditional PFI/PPP projects in Scotland to date and has been retained in the NPD model.

4.8 Refinancing

The SoPC4 form of contract now gives NHS Ayrshire & Arran the authority to request a senior debt refinancing once every 2 years in circumstances where it believes that the funding terms available in the market are more favourable than those to which the Project Company is held at the time.

On NPD projects this right has always existed, exercisable by the Public Interest Director. Under SFT's suite of standard documents and guidance, using powers given to him in the Project Company's articles of association, the Public Interest Director can direct the Project Company to pursue a debt refinancing.

The relevant drafting is set out in the standard form articles of association that sit alongside the standard NPD project agreement.

4.9 Dispute Resolution Process

A dispute resolution procedure has been drafted and is attached in Appendix 4A. This document will be fully detailed within the standard contract specification for advisors and Project Company.

5.0 The Financial Case

The Financial Case considers the affordability analysis for the preferred option based on the overall capital and revenue costs of the preferred option. It also presents the anticipated impact on the proposals on the Board's income and expenditure and balance sheet.

5.1 Financial Case

The business case provides the opportunity for long lasting/sustainable improvement in clinical services to be introduced at "minimal" additional cost to the NHS Board.

The financial case for the North Ayrshire Community Hospital investment envisages significant improvement in Community Hospital/Mental Health Services from new state-of-the-art/environmentally friendly facilities with 100% single room provision, introduced at "no" additional cost the NHS Board through mixture of better use of existing resources and estate rationalisation measures in line with the NHS Board's Estates Development Strategy.

The foundation of this outcome has been derived from significant staff/stakeholder participation in the planning for the new hospital, planned reduction in bed requirements as part of the move to more effective care in the community/social care partnership, improvements in staff utilisation through more productive/contented workforce (from new "state-of-the-art"/environmentally friendly premises) with improved work flow (and reduction in non-productive time), plus savings from associated estate rationalisation measures being introduced on a phased basis in line with the Board's Property Management Strategy (phase one short term rationalisation of property in Ayr and surrounding area/phase two demolition of existing buildings being replaced at Ayrshire Central site/phase three longer term opportunities for further rationalisation of property through re-use or demolition of vacated premises on Ailsa site).

5.2 Capital Costs and Funding

The initial Capital Cost estimates have determined that the capital requirement to complete this development is £68.482m for the traditional funding route or £59.116m capital value for mixture of Non Profit Distribution (NPD) model for new build elements / traditional public funding for equipment replacement and refurbishment elements at Ayrshire Central / Ailsa hospitals. Figures 5-1 and 5-2 below provide a summary breakdown of costs for both these alternatives. The desired scope and services has been reviewed in addition to the required space, expectations as well as affordability during the preparation of this document.

Figure 5-1: Traditional Public Capital Funding for all Elements

Element	Costs
Building Costs: New Build ACH	50,953,838
Building Costs: Alterations/Refurbishment ACH/Ailsa	4,776,774
Furniture, Fixtures and Equipment	833,333
Legal/Technical/Financial Advisors	0
VAT	9,636,863
Optimism Bias	5,832,579
Assumed Non Value Adding Element of Capital Costs	(3,551,670)
Total Capital Investment	**68,481,717**

Further details are included in the attached OB forms 1-4 in Appendix 5A. Which provide a breakdown of the estimated construction costs, floor area and costs per sq m. The Capital Costs of £2,600/m2 for the new build construction costs have been benchmarked against other appropriate new build projects. A summary of the results from the benchmarking is provided in the schedule attached to Appendix 5A. The cost per m2 GIFA was assessed with help of previous data from NHS projects where average of £2,395 was updated to current price level using BCIS indices (+7%).

Assumptions

- Uses Schedule of Accommodation from Buchan + Associates - (Final OBC (as drawn))
- Existing “Horseshoe” part utilised for new accommodation.
- VAT rebate allowed per VAT Advisors calculations.
- Optimism Bias (see Appendix 5B).
- External works and “communications” links are value engineered.

Exclusions

Any requirement for sprinklers.

Figure 5-2 : Non Profit Distribution Model / Public Capital Funding

	Option 2A Hybrid			
Element	**NPD New Build** **£**	**SGHD Public Capital Funding Refurb** **£**	**A&A NHS Public Capital Funding Equipment/ Fees** **£**	**Total** **£**
Building Costs: New Build ACH	50,953,838	0	0	50,953,838
Building Costs: Alterations/Refurbishment ACH/Ailsa	0	4,776,774	0	4,776,774
Furniture, Fixtures and Equipment	0	0	833,333	833,333
Legal/Technical/Financial Advisors	0	0	1,200,000	1,200,000
VAT	0	680,967	166,667	847,634
Optimism Bias	0	818,661	0	818,661
Assumed Non Value Adding Element of Capital Costs	0	(313,820)	0	(313,820)
Total Capital Investment	**50,953,838**	**5,962,582**	**2,200,000**	**59,116,420**

Uses Schedule of Accommodation from Buchan + Associates - (Final OBC (as drawn)).

The capital value of the construction costs for the NPD new build elements will be agreed with the SFT/SG following completion of the design review process.

Assumptions

1. Construction Cost Indices – assumed construction period 2 years summer 2013 to summer 2015 with average price base set at September 2014 using BCIS Index. Any change in BCIS Index to be set at Financial Close.

2. Optimism Bias – evaluated at 8.68% at Outline Business Case stage. The NHS Board will take all reasonable steps to mitigate the remaining risks as far as possible at Full Business Case stage. Scottish Government Health Department will cover any residual optimism bias remaining at Financial Close.

3. Value Added Tax – all elements fully recoverable under the NPD model with no change in current regulations up to Financial Close.

4. Unitary Charge / Financing Rate – set at Financial Close taking account of construction cost adjustments for any movement in BCIS Index / residual optimism bias and current assumed financing rate of 6.5% (Sterling SWAP rate 3.75% + assumed margin 2.75%).

5. Funding Contributions for Unitary Charge – The NHS Board will meet 100% Hard FM element plus 50% of Lifecycle element. Funding for the balance of unitary charge costs including Lifecycle costs, SPV costs, Development costs etc, will be capped following approval of this OBC.

6. NPD Works Scope – to cover all costs associated with the New Build elements excluding cost of Refurbishment works at Ayrshire Central and Ailsa sites, financed by traditional public capital funding provided by Scottish Government Health Department to NHS Board.

7. With regard to the Refurbishment element at Ailsa Hospital, the scope and cost of the refurbishment work at Ailsa Hospital was fully defined with RD Health our PSCP under Framework Scotland, however, since the change in procurement route to NPD, the contract under Framework Scotland has been terminated.

   Framework Scotland will be one of the options considered which will be reviewed to determine best way forward.

8. It is planned that utilities cost will be procured through the NPD contract as a flow through arrangement with the Project Company being reimbursed for these costs.

Funding Model and Board Participation

The capital investment plan identifies the need for a capital funding contribution from the Scottish Government Health Department of just under £57m for both the public funding route (new build £50.954m and refurbishment £5.963m), or capital value for the alternative funding route involving Non Profit Distribution for new building element and public funding for the refurbishment elements.

The balance on the £68.482m capital cost of the public funding route is intended to be funded from the NHS Board's capital allocation including planned capital receipts of £9.32m from the following estate rationalisation measures:-

- £1.675m sale proceeds from phase 1 estate rationalisation measures (Nightingale House / Strathdoon / Hartfield House / Westmount)
- £5m sale proceeds from phase 2 estate rationalisation measures (sale of land already declared as surplus to requirements at Ayrshire Central, Irvine)
- £2.65m sale proceeds from Other former hospital sites already declared as surplus to requirements in the NHS Board's Local Delivery Plan (Holmhead / Seafield / Davidson Cottage Hospital & Girvan Health Centre)

The projected capital expenditure cash flow is shown in Figure 5-3 below.

Figure 5-3: Anticipated Annual Capital Spend

Year	Spend	New Build	Refurbishment	Equipment
2009/10	£2,356,000	2,155.000	201,000	
2010/11	£832,000	761,000	71,000	
2011/12	£330,000	302,000	28,000	
2012/13	£2,774,000	2,553,000	221,000	
2013/14	£23,517,000	21,069,000	2,448,000	
2014/15	£28,070,000	25,171,000	2,899,000	
2015/16	£10,603,000	9,508,000	95,000	1,000,000
Total	**£68,482,000**	**61,519,000**	**5,963,000**	**1,000,000**

The cash flow for the alternative Non Profit Distribution funding route, requiring the NHS Board to fund all planning fees costs up to approval of the Full Business Case (including Legal / Technical / Financial Advisor fees), is highlighted in the Capital Investment Plan.

A copy of the NHS Board's latest Capital Investment Plan highlighting the position for both investment procurement routes is included at Appendix 5C. Two versions have been provided for both the traditional public capital procurement and the NPD procurement. These outline funding for the capital costs (both new build/refurbishment elements) and the assumed capital receipts from the asset disposal programme.

Non Profit Distribution (NPD)

The preferred option from the economic case (new build / refurbishment Ayrshire Central Hospital and refurbishment Ailsa) has been subject to a shadow unitary charge assessment under the Non Profit Distribution (NPD) model, meeting the requirements outlined in NHS letter dated 22nd March 2011 from the Acting Director-General Health & Social Care and Chief Executive NHS Scotland.

This financial assessment has been carried out in conjunction with the Scottish Futures Trust (SFT) using the Treasury Model. The updated capital costs for the new build elements for this assessment have been provided by the NHS Board's Advisors (Currie & Brown and Core Associates) using the outcome from the due diligence review on the bed model and the design exemplar review.

The following table provides a summary of the estimated annual NPD unitary charge and the elements funded by the NHS Board and Scottish Government in accordance with the SG funding letter dated 22 March 2011.

Unitary Charge	**SGHD Funded £**	**A&A Board Funded £**	**TOTAL £**
Unitary Charge	5,119,300	-	5,119,300
Lifecycle	207,850	207,850	415,700
Hard FM	-	665,000	665,000
TOTAL per Treasury Model	5,327,150	872,850	6,200,000

Some scenario planning on assumptions agreed with SFT have been evaluated through Treasury Model to determine impact on the shadow unitary charge assessment. Results are attached in Appendices 5E – H.

Outcome does not have any material affect on the NHS Board affordability assessment because of gearing of funding contributions between Board and SGHD, assuming a successful ESA 95 assessment under the European Accounting Standards (which should apply because of use of NPD Standard Form Agreement – the supporting case for this initial ESA 95 assessment is highlighted in section 5.3 below).

The results from this financial assessment are highlighted in schedules 1 to 6 at the end of the Financial Case. This has confirmed that the NPD funding route should provide a cost effective / affordable alternative to the traditional public funding procurement route, if the national economic situation and limitation on public capital funds requires this action. Based on the outcome from this shadow assessment of the NPD funding route (unitary charge and associated funding contributions / risk sharing by Board and Scottish Government Health Department), the NHS Board is prepared to support the detailed plans for this being progressed in the Full Business Case to achieve Financial Close.

No formal market engagement has as yet taken place. It is planned that an open day for potential bidders will be held in 2012.

5.3 Initial ESA 95 Assessment

Revenue Funding

Introduction

The new Mental Health facility and development of North Ayrshire Community Hospital ("NACH") will be procured within the Scottish Government's programme of revenue funded investment through the Non Profit Distributing (NPD) model. The NPD model follows the traditional "PPP" structure and the HM Treasury UK-wide standard contract known as SOPC4, except that returns to the private sector are capped. The contract structure requires that the private sector design, build, finance and maintain an asset. The private sector receive any returns due on any sub-debt investment they make however, any profits or surpluses made in the PPP project (at SPV level) over the duration of the concession are returned to the project sponsor.

Scottish Government Revenue Funding

The Scottish Government reports on two bases – departmental resource accounts which treat contracts according to International Financial Reporting Standards ("IFRS") and National Accounts which treat contracts according to the European System of Accounts 1995 ("ESA95") standards.
In most circumstances the treatment of contracts is consistent under the two reporting mechanisms. However, for long term projects which require the provision of public services through the creation of dedicated assets there is a requirement for dual reporting as different accounting treatments apply under the two bases. Under the two bases, it is possible for assets procured under long term contracts to be classified as "on balance sheet" for Departmental Resource Accounts and as "non-government assets" for National Accounts purposes.

The allocation of budgets follows the National Accounts classification, thus an asset which is classified as a "government" asset requires to be met from capital budgets and an asset that is classified as "non-government" can be paid for from revenue budgets.

National Accounts Classification

For an infrastructure asset to be classified as non-government for national accounts purposes it:

needs to be classified as within the scope of IFRIC 12 which provides guidance on the accounting for Service Concession Arrangements. IFRIC 12 was originally designed to provide guidance to PPP partners in the private sector on how to account for assets constructed for the public sector under long term contracts. This has been used as the basis to establish the principles of how public sector procuring authorities should account for assets acquired under NPD or DBFM contracts (i.e. the mirror image of the private sector guidance). For an asset to be within the scope of IFRIC 12, the following two conditions must be met:

i. the Procuring Authority (or grantor) controls or regulates what services the operator must provide with the infrastructure, to whom it must provide them and at what cost; and

ii. the Procuring Authority ("grantor") controls (through beneficial entitlement or otherwise) any significant residual interest in the infrastructure at the term of the arrangement.[7] This second test is considered to have been met if the concession is for the whole of the useful economic life of the assets created.

Contracts that do not involve the transfer or creation of an infrastructure asset or do not involve the delivery of services fall outwith the scope of IFRIC 12[8].

The NHS Ayrshire & Arran development falls within the scope of IFRIC 12 as it meets the two conditions noted above.

[7] Financial Reporting Manual, Chapter 6, Para 6.2.35
[8] Financial Reporting Manual, Chapter 6, Para 6.2.34

If the concession is deemed to be within the scope of IFRIC 12, then ESA95 requires that an assessment is made to "consider if there is strong evidence that the partner is bearing most of the risks attached to the asset (directly and linked to its use)[9]."It requires that the following three risks are assessed:

i. Construction risk: covering events like late delivery, respect of specifications and additional costs;

ii. Availability Risk: covering volume and quality of output (i.e. performance of the partner); and

iii. Demand risk: covering variability of demand.

This assessment is made on the basis of the contract after excluding any separable elements. Separable elements relate to items of the contract which can be separated for example, on the basis of market testing or benchmarking.

For assets to be classified as non-government, the private sector partner must bear construction risk and at least one of availability or demand risk. If the sharing of risks is deemed to be borderline then consideration is given to what happens to the asset at the end of the concession.[10] This is known as residual value risk and assesses who bears the risk of fluctuations in the value of the asset at the end of the concession. This is normally a procuring authority risk as under the standard contracts the assets revert to the procurer at nil cost.

Conclusion – NACH Classification

NHS Ayrshire & Arran will adopt the NPD Project Agreement developed by Scottish Futures Trust. The Project Agreement follows the principles of SOPC4 and transfers construction risk to the private sector partner. Availability risk is also transferred primarily through the operation of the payment mechanism. Following approval of the Outline Business Case, NHS Ayrshire & Arran will progress with the calibration of the payment mechanism to ensure that sufficient availability risk transfers to the private sector partner. NHS Ayrshire & Arran will retain demand risk.

As NHS Ayrshire & Arran intend to transfer construction and availability risk the assets should be classified as non-government with the annual expenditure being recognised as an expense in the national accounts i.e. being met from revenue budgets rather than requiring to be met from capital budgets.

[9] Manual on Government Debt and Deficit, Implementation of ESA95, 2010 Edition. Part VI.5.1, para 4
[10] Manual on Government Debt and Deficit, Implementation of ESA95, 2010 Edition. Part VI.5.1, para 9

5.4 Impairment

This investment will require the following estimated capital impairments agreed in outline form with the Valuers, to be funded by the Scottish Government Health Department as annually managed expenditure (AME)

1. Non-value adding element of capital build - £3.552m
2. Write-down of existing buildings earmarked for demolition - £5.470m

Under International Financial Reporting Standards (IFRS), these impairments will require to be accounted for on approval of the outline business case / completion of construction works.

5.5 Revenue Impact and Affordability

The projected recurring revenue implications resulting from this investment is highlighted in Figure 5-4 below.

Figure 5-4: Project Recurring Revenue Implications resulting from Investment

		Traditional Public Capital/New Build ACH / Refurb Option 2 £	NPD (New Build) Traditional Public Capital (refurb/ Equipment & Fees) Option 2A £
A	Direct Costs of Re-provision of service		
1	Capital Investment (Schedule 1)	68,481,717	59,116,420
2	Non Clinical Running Costs (Schedule 2)	5,572,801	10,725,278
	Direct Care Costs (Schedule 5)	19,631,453	19,631,453
	Less Current Non Clinical Running Costs (Schedule 3)	4,885,363	4,885,363
	Current Direct Care Costs (Schedule 5)	20,220,657	20,220,657
3	Savings identified from Estate Rationalisation (Schedule 6)	(151,733)	(151,733)
	Additional (Reduced) Running Costs of Mental Health	**(53,498)**	**5,098,979**
	Less NPD Funding provided by SGHD		
	Unitary Charge	n/a	(5,119,300)
	50% Lifecycle Costs	n/a	(207,850)
	Board Net Revenue Costs/(Savings)	**(53,498)**	**(228,171)**

In making this financial assessment of affordability, similar accounting standards have been applied in evaluating both investment funding routes. The traditional public capital procurement route has therefore been assessed on similar requirements for Lifecycle and Hard FM (Estates Maintenance) as applying to the NPD procurement route. This more rigorous assessment of affordability has ensured a better and more valid comparison between both investment funding routes.
Overall the recurring revenue impact on the NHS Board is cost neutral for both investment funding routes (overall revenue saving of £53k per annum for traditional public capital procurement / overall revenue saving of £228k per annum for NPD procurement route) net of the savings from the associated estate rationalisation measures.

The NHS Board will also require to fund the following non-recurring costs resulting from the investment:-

1. Excess travel costs (annual costs up to 4 years) - £34k
2. Running costs of vacated property at Ailsa/Crosshouse (property related running costs prior to re-use or demolition as appropriate) - £726k

5.6 Impact on Balance Sheet

The Valuers have reviewed the proposed plans and have identified that the life expectancy for new build elements will be 50 years with 25 years for refurbished elements.

In terms of the traditional public capital funding route, the Valuers have determined that the vast majority of the investment will be value adding in terms of the asset valuation, with non-value adding estimated at circa 5% of the capital costs (£3.552m) see District Valuer letter Appendix 5D.

As regards the NPD funding route, it has been assumed with the Valuers that the fair valuation for the On-Balance Sheet NPD solution under IFRS will equate to the £50.954m overall capital costs identified for the new build element. The £3.552m non-value adding elements identified above will also apply (mainly fees from previous Framework Scotland contract £3.238m + non-value adding elements totalling £0.314m in respect of the refurbishment elements at Ayrshire Central and Ailsa sites being procured using traditional capital funding).

Other asset impairments totalling £5.470m associated with the write-down of net book values of existing buildings zoned for demolition at the Irvine site. Under IFRS these impairments will require to be recognised on approval of outline business case.

5.7 Conclusion

The preferred option 2A using the NPD (for new build elements) / traditional public capital funds (for refurbishment elements) is progressed to next stage of detailed planning for production of full business case.

See below details of Total Financial Costs and Schedules 1-6.

Total Financial Costs

NHS AYRSHIRE AND ARRAN

NORTH AYRSHIRE COMMUNITY HOSPITAL

TOTAL FINANCIAL COSTS			**Traditional Public Capital New Build ACH/ Refurbishment Option 2 £**	**NPD (New Build) Public Capital (Refurb) New Build ACH/Refurb Option 2A £**
A.	**DIRECT COSTS OF RE-PROVISION OF SERVICE**			
1		CAPITAL INVESTMENT (Schedule 1)	**68,481,717**	**59,116,420**
2		NON CLINICAL RUNNING COSTS (Schedule 2)	5,572,801	10,725,278
		DIRECT CARE COSTS (Schedule 5)	19,631,453	19,631,453
Less:		CURRENT NON CLINICAL RUNNING COSTS (Schedule 3)	4,885,363	4,885.363
		CURRENT DIRECT CARE COSTS (Schedule 5)	20,220,657	20,220,657
3		SAVINGS IDENTIFIED FROM ESTATE RATIONALISATION (Schedule 6)	(151,733)	(151,733)
		ADDITIONAL/(REDUCED) RUNNING COSTS	**(53,498)**	**5,098,979**
Less:		NPD Funding provided by SGHD		
		Unitary Charge	n/a	(5,119,300)
		50% Lifecycle Costs	n/a	(207,850)
		BOARD NET REVENUE COSTS/(SAVINGS)	**(53,498)**	**(228,171)**
4		**OTHER NON RECURRING COSTS**		
FUNDED BY NHS BOARD				
RUNNING COSTS OF VACANT PROPERTIES (Schedule 4)			725,802	725,802
EXCESS TRAVEL COSTS (Schedule 5)			34,291	34,291

FUNDED BY SGHD		
NON VALUE ADDING ELEMENT OF CAPITAL COSTS	3,551,670	313,820
WRITE DOWN OF ACH BUILDINGS EARMARKED FOR DEMOLITION	5,469,562	5,469.562
(as per IFRS write down 100% of NBV in year declared surplus-funded by SGHD)		
TOTAL OF OTHER CONSEQUENTIAL COSTS	**9,781,325**	**6,543,475**

Schedule 1

NORTH AYRSHIRE COMMUNITY HOSPITAL

SCHEDULE 1 - DIRECT CAPITAL COSTS FOR RE-PROVISION OF SERVICES

			Option 2	Option 2A - Hybrid			
			Traditional Public Capital New Build ACH/ Refurb.	NPD New Build	SGHD Public Capital Funding Refurbishments	AANHS Public Capital Funding Equipment/Fees	TOTAL
			£	£	£	£	£
CAPITAL COST ANALYSIS							
Building Costs	New Build	ACH	46,259,096	46,259,096	0	0	46,259,096
	Alter./Refurb.	ACH/Ailsa	4,256,048	0	4,256,048	0	4,256,048
Design/Project Management Fees including Planning and Building Warrants			5,215,468	4,694,742	520,726	0	5,215,468
Furniture, Fixtures and Equipment			833,333	0	0	833,333	833,333
Legal/Technical/Financial Advisers			0	0	0	1,200,000	1,200,000
VAT			9,636,863	0	680,967	166,667	847,634
Optimism Bias			5,832,579	0	818,661	0	818,661
Assumed Non Value Adding Element of Capital Costs			(3,551,670)	0	(313,820)	0	(313,820)
TOTAL CAPITAL INVESTMENT			**68,481,717**	**50,953,838**	**5,962,582**	**2,200,000**	**59,116,420**
New Build			61,519,135	50,953,838	0	0	50,953,838
Alter./Refurb.			5,962,582	0	5,962,582	0	5,962,582
Design/Legal/Financial Adviser Fees			0	0	0	1,200,000	1,200,000
F&E			1,000,000	0	0	1,000,000	1,000,000
			68,481,717	**50,953,838**	**5,962,582**	**2,200,000**	**59,116,420**

Schedule 2

NHS AYRSHIRE AND ARRAN

NORTH AYRSHIRE COMMUNITY HOSPITAL

SCHEDULE 2 - NON CLINICAL RUNNING COSTS FOR RE-PROVISION OF SERVICES

		Traditional Public Capital New Build ACH/Refurb Option 2 £	NPD (New Build) Traditional Public Capital Refurb/Equipment & Fees Option 2A £	
ANALYSIS OF NON-CLINICAL COSTS				
Catering		808,457	808,457	
Rates	£24 per m² New/£20 per m² Refurb (factored for DRR@50%)	275,606	275,606	
Energy	£30 per m² New/£36 per m² Refurb	772,692	772,692	
Domestic	£44 per m²	1,066,340	1,066,340	
Maintenance	£25 per m² New/£29 per m² Refurb	665,120	220,603	((Refurb elements outwith Unitary Charge)
Lifecycle Costs to maintain building		415,700	n/a	
NPD Costs (from Treasury Model)				
Unitary Charge for New Build under NPD		n/a	5,119,300	
Lifecycle Costs to maintain Building		n/a	415,700	
Hard FM		n/a	665,000	
Capital Charges Depreciation (based on 50 years new/25 year refurb, 10 years equipment)		1,568,886	1,381,580	
TOTAL RUNNING COSTS		**5,572,801**	**10,725,278**	

Schedule 3

NHS AYRSHIRE AND ARRAN

NORTH AYRSHIRE COMMUNITY HOSPITAL

SCHEDULE 3 - EXISTING NON CLINICAL RUNNING COSTS

		Ailsa Wards	ACH Pav 1 & 2	ACH Pav 3, 5 & 6	ACH Pav 4, 7, 8, 9 Others	Xhouse 1D/1E	TOTAL
		£	£	£	£	£	£
ANALYSIS OF EXISTING NON-CLINICAL RUNNING COSTS							
Catering		834,722	137,000	204,298	0	127,000	1,303,020
Rates		72,250	12,186	18,417	32,500	34,000	169,353
Energy		567,350	57,343	85,511	158,550	78,015	946,769
Domestic		666,247	98,272	146,546	250,000	82,025	1,243,090
Maintenance		360,778	44,105	65,770	120,000	51,388	642,041
Capital Charges	Cost Of Capital	0	0	0	0	0	0
	Depreciation	365,203	35,282	39,478	73,654	67,474	581,090
TOTAL RUNNING COSTS		**2,866,550**	**384,187**	**560,020**	**634,704**	**439,901**	**4,885,363**

Schedule 4

NHS AYRSHIRE AND ARRAN

NORTH AYRSHIRE COMMUNITY HOSPITAL

SCHEDULE 4 - NON CLINICAL RUNNING COSTS OF RETAINING VACANT BUILDINGS ON EXISTING SITES

		Ailsa Option 1	Ailsa Option 2	Ailsa Option 3	Xhouse Options 2 & 3	TOTAL Option 1	TOTAL Option 2	TOTAL Option 3
		£	£	£	£	£	£	£
RUNNING COST OF RETAINING VACANT PROPERTY								
Rates	Apply for Empty Rates Relief (50% due)	0	53,316	53,316	17,000	0	70,316	70,316
Energy	20% of current	0	74,335	74,335	14,860	0	89,195	89,195
Maintenance	10% of current	0	24,908	24,908	5,139	0	30,047	30,047
	Depreciation (based on 33 years)	0	430,832	430,832	105,412	0	536,244	536,244
	TOTAL RUNNING COSTS	**0**	**583,391**	**583,391**	**142,411**	**0**	**725,802**	**725,802**

Schedule 5

NHS AYRSHIRE AND ARRAN

NORTH AYRSHIRE COMMUNITY HOSPITAL

SCHEDULE 5 - SUMMARY OF DIRECT CARE COSTS

	Current Costs £	Both Options New Build ACH/Refurb Option 2 £
Recurring Costs		
Nursing Salaries	15,146,432	14,728,458
Nursing Supplies	264,395	234,732
Senior Medical	1,565,259	1,549,259
Junior Medical	1,203,250	1,103,250
Pharmacy Supplies	524,629	490,686
Pharmacy/AHP	1,516,692	1,525,068
TOTAL RECURRING COSTS	**20,220,657**	**19,631,453**
Excess Travel		**34,291**

Schedule 6

NHS AYRSHIRE AND ARRAN

NORTH AYRSHIRE COMMUNITY HOSPITAL

SCHEDULE 6 - ESTATE RATIONALISATION IDENTIFIED FROM NACH BUSINESS CASE

	Strathdoon £	Hartfield £	Nightingale £	Westmount £	TOTAL £
SAVINGS PERTAINING FROM ESTATES RATIONALISATION					
Depreciation	20,426	26,438	6,905	8,889	62,658
Energy	14,333	12,241	2,661	3,000	32,235
Maintenance	2,000	1,600	1,600	1,000	6,200
Rates	14,591	11,076	19,392	5,581	50,640
TOTAL SAVINGS FROM ESTATES RATIONALISATION	**51,350**	**51,355**	**30,558**	**18,470**	**151,733**

6.0 The Management Case

Introduction

This section of the OBC sets out the arrangements in place to manage the project to successful delivery. The areas covered include:

- Programme Structure
- Programme Timetable and Milestones
- Programme Management Approach
- Communication
- Client and Supplier Relationship
- Key Programme Appointments
- Consultation and Engagement
- Change Management
- Managing Benefits Realisation
- Health & Safety
- Post Programme Evaluation

6.1 Programme Structure

6.1.1 Management and Governance Structure for Capital Programme

NHS Ayrshire & Arran has a governance structure in place which ensures that there is a dedicated management focus and capacity for the programme, visibility and accountability at the highest levels in the organisation and the involvement of a wide range of stakeholders in the programme process. The Board's Capital and Operating Procedures are attached as Appendix 6B.

6.1.2 Figure 6.1 outlines the link between the Programme Structure and the Board's existing governance arrangements for capital projects.

The NHS Board has responsibility for approving capital investments. It fulfils the role of investment decision maker and exercises this at key points such as the approval of OBC and FBC in advance of submission to the Scottish Government. It will also approve the appointment of the Private Sector Partner at the conclusion of the bidding process.

The Chief Executive of the NHS Board is the project owner and has responsibility at a strategic level for the successful delivery of the project. Their role is to provide strategic leadership and to manage the political dimensions associated with the project.

The Finance Committee is a formal committee of the NHS Board chaired by the Board Chairman. It has a key scrutiny role on behalf of the NHS Board in relation to all aspects of the financial case for capital projects and related matters.

The Capital Planning Steering Group is chaired by the Chief Executive and is responsible for ensuring cohesive strategic alignment and prioritisation of capital programmes. The CPSG comprises a number of senior Executive Directors (Finance/ Planning and Performance/ Nurse Director) who provide robust and independent scrutiny of the programme. The North Ayrshire Community Hospital Project forms a standing item on the agenda of the CPSG and the report is provided by the SRO.

The Capital Programme Board is chaired by the Director for Information & Clinical Support Services. It is responsible for overseeing the delivery of all approved capital projects on the Board's Capital Plan including NACH. The SRO for NACH reports to the CPB as part of the standing agenda.

The NACH Programme Board is chaired by the Programme SRO. The SRO has the role of Programme Sponsor. They will ensure that the Programme realises the specified benefits. The Programme Board provides a key element of governance for the programme ensuring that it is running to time, cost and quality. Core membership includes the Programme Director (who provides the report to the Programme Board), the Assistant Director of Finance, the Health Care Managers (in the role of business change managers), the Programme Manager. In attendance are the Scottish Futures Trust, a SGHD representative. The NACH Programme Board reviews and endorses key decisions as proposed by the Programme Director and the Steering Group For example, the sign off of OBC; the Programme Risk Register; the response to gateway reviews; the design; the workforce plan etc.

The NACH Steering Group is chaired by the Programme Director. The Programme Director has responsibility for driving the programme forward on a day to day basis. They are the conduit to all of the supporting programme structures such as the interface with the advisors / SFT / The Project Company etc. The Steering Group supports the Programme Director to drive the programme forward, ensuring rapid decision making on issues of detail rather than strategy. Associated work streams such as clinical engagement / public engagement have identified leads who sit on the Steering Group.

Careful thought has been given to the composition of the existing and future project team given the recommendations made by the Gateway Review Team and requirements set out in the Director General's letter to NHS Boards of 22 March 2011 regarding experience and resourcing with regard to revenue finance projects.

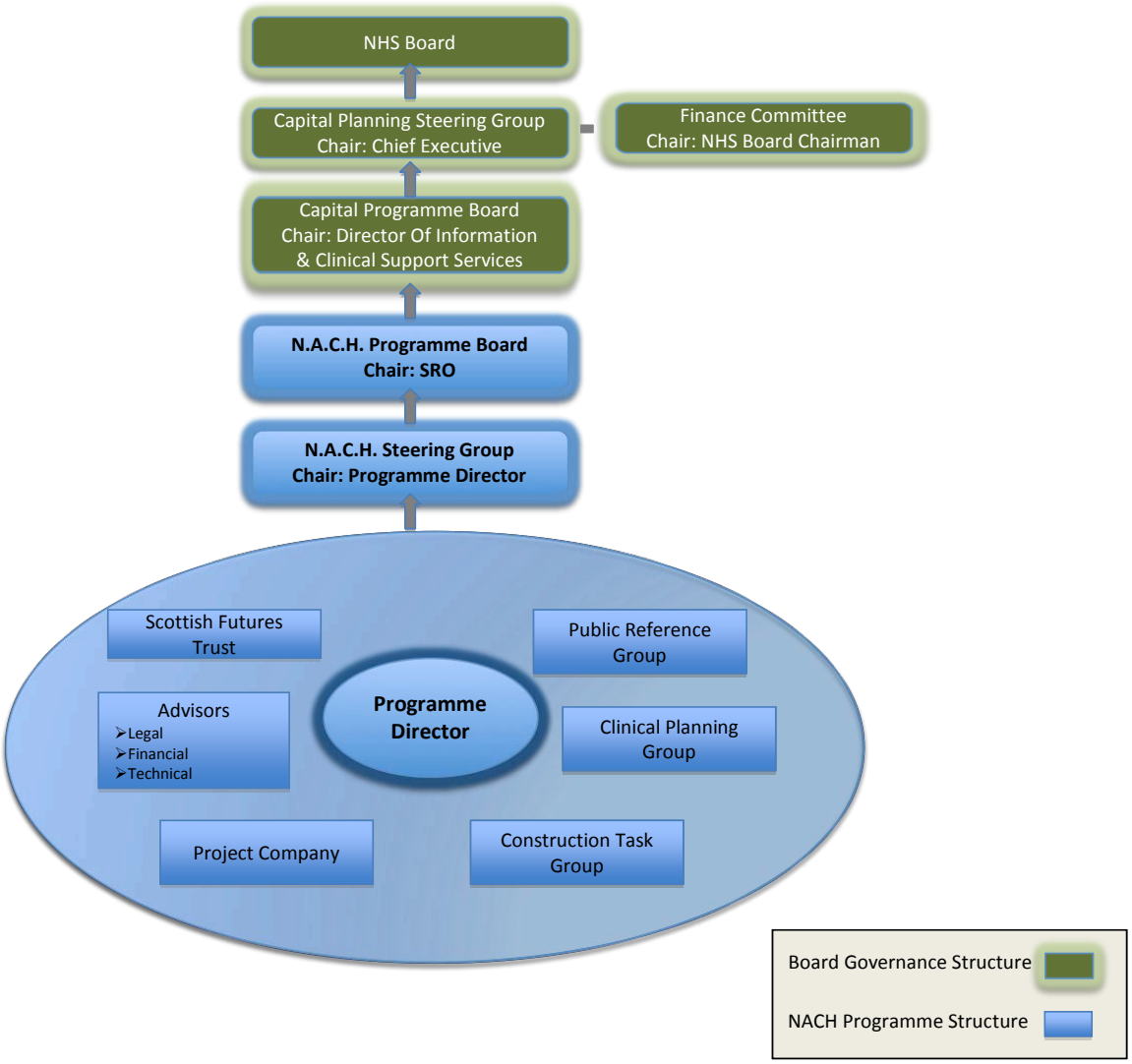
The existing project team is led by a Project Director who has extensive experience on the delivery of large, complex NHS capital projects gained through 19 years working within Greater Glasgow and Clyde. Supported by a Capital Planning Team of 3 full time staff who will be entirely dedicated to the project and have a wide range of capital planning experience. In addition the Project Director will be supported by Stuart Sanderson, Assistant Director of Finance who led on the financial aspects of the Maternity PFI project and Allan Gunning, Executive Director who was also involved in the Ayrshire Maternity PFI. Further details of experience of these individuals are included within Appendix 6C.

Going into the procurement phase of the project the Project team will be supplemented with Technical, Legal and Financial advisers. In addition to this the Board will appoint a Project Manager with extensive PFI/PPP experience to support through the up to financial close.

In summary the Board has listened to and taken action on the recommendations made by the Gateway review team and acted upon the Director General's letter to NHS Boards of 22 March 2011.

A profile of the Programme Team experience and time input to the development is attached as Appendix 6C.

Figure 6-1 North Ayrshire Community Hospital Programme Structure



6.2 Programme Timeline and Milestones

6.2.1 OBC Approval Programme

The OBC approvals programme has been revised as detailed in Figure 6-2.

Figure 6-2: Revised OBC Approval Programme

Activity	Date
Capital Programme Board	08/11/11
Capital Planning Steering Group	23/11/11
Finance Committee	05/12/11
NHS Ayrshire & Arran Board	07/12/11
Submission to SGHD CIG	28/12/11
Anticipated CIG consideration at meeting	31/01/12

6.2.2 The Project Team has developed an extended programme that has taken into account the time taken to revise the Outline Business Case.

The extended programme also includes a detailed review of the Clinical Brief with the following outcomes that includes:

- A Revised adjacencies matrix and massing diagram which included confirmation of the accommodation that may go on an upper floor
- Identified accommodation/services that could be removed from the Schedule of Accommodation
- A Revised Schedule of Accommodation

These reviews and the associated review of the procurement route to explore the viability of the proposed revenue based solution, has resulted in the recommended programme and 1:500 plans that reflect the outcome from the changes made to the Clinical Brief and the recommendations from the NHS Scotland Design Assessment Process (NDAP) and SFT Design Exemplar Review.

The outcome is shown in Figure 6-3.

Figure 6-3: Extended OBC Programme

Activity	Start Date	End Date
Review of Clinical Brief	01.11.10	30.05.11
Review of 1:500 design options	12.09.11	04.10.11
Sign off of 1:500 design	12.10.11	12.10.11
Issue design pack to A+DS	13.10.11	14.10.11
A+DS formal design review procedure	14.10.11	20.10.11
SFT review of Design Exemplar	01.10.11	15.01.12

6.2.3 Full Business Case Programme

Following the UK Comprehensive Spending review the board were advised by Scottish Government's Health Department to review the proposed NPD procurement route as the proposed way forward for the programme.

Having discussed matters with Scottish Futures Trust (SFT), the Programme Board concluded that the appointment of advisors necessary for NPD can be made after approval is gained for Outline Business Case. NHS Ayrshire & Arran will take advantage of SFT's framework for advisors.

In addition the Board and its current advisors also examined the implications of the revised programme and while the project team recognise that this brings challenges it believes that any risks can be managed with control measures instigated under the risk management system.

The project team believe that this revised timescale also brings the opportunity to apply additional affirmation of the programme scope and more due diligence than would normally be possible.

Following consultation with SFT the following key Milestone dates are highlighted in Figure 6-4.

Figure 6-4: Stage 3 Milestone Dates

Activity	Start Date	End Date
Appointment of Legal, Financial & Technical advisors using SFT framework	09.01.12	21.03.12
Start of Public Consultation for Pre-Planning Application (12 weeks)	07.05.12	03.08.12
Planning In Principal Application	20.08.12	20.08.12
Planning In Principal Application Granted	28.09.12	
FBC to NHS Board	12.03.12	April 13
FBC to SGHD CIG		Aug 13
FBC addendum Financial Close		Aug 13

6.2.4 Construction Programme

OJEU process would be around 3-4 months, competitive dialogue around 6-8 months, and close around 2 months. Overall we would consider a year to 14 months to be reasonable.

The overall programme will be reviewed when the Advisors are appointed in March 2012.

It is estimated that the build duration will be approximately 120 weeks. The current assessment of the construction programme as detailed in Figure 6-5.

Figure 6-5: Stage 4 Programme

Activity	Start Date	End Date
Mobilisation	Start Oct 2013	End Oct 2013
Construction	Nov 2013	Dec 2015

6.2.5 Summary

The Programme Plan to Financial Close has been updated in line with the above and is included as Appendix 6A.

6.3 Programme Management Approach

The programme management approach is therefore guided by the principles of Programme and Project Management and will apply the following principles that will support a clear management process within a collaborative environment :-

- Complete clarity and detail on the scope of work;
- Complete clarity and detail on the financial framework;
- Efficient and effective communication;
- Early establishment of clear guidelines in terms of programme structure and documentation, communication arrangements and administrative processes;
- Identification of core competencies and agreement of roles and responsibilities;
- Management of programme plan and associated risks; and
- Concise planning and subsequent execution.

An integrated approach will be adopted for the delivery of the Programme incorporating the following:

- A team structure which facilitates capability in all project requirements including Technical, Legal, and Financial;
- Collaborative working;
- Informed and effective decision making;
- A defined communication plan with structured programme of meetings;
- Ability to make decisions within clear delegated limits authority levels; and
- Clear roles and responsibilities.

The Project Execution Plan sets out the procedures and systems, which will be used by the Project Team to manage and control the project at each stage. The PEP is a dynamic document that will continue to be kept up to date as the project moves into and through procurement stages. This will be developed in conjunction with Technical/Legal and Financial Advisors.

6.3.1 Programme Framework

In order to align the principles outlined for this programmed approach, the following framework (Figure 6-6) has been created to ensure understanding and manage expectations.

Figure 6-6: Programme Framework

SCIM	OGC Gate	Non Profit Distribution "NPD"
Determining the Strategic Context	Gate 0: Strategic Fit	Programme Brief
Initial Agreement	Gate 1: Business justification	Initial Agreement
Outline Business Case	Gate 2: Procurement Strategy	Outline Business Case
Full Business Case	Gate 3: Investment Decision	Full Business Case
Implementation	Gate 4: "Go Live"	Construction
Post Project Evaluation	Gate 5: "Benefits Realisation"	Post Project Evaluation

This framework will be used by the programme team to prepare for and manage this programme. In addition to the above process the project will undertake SFT's design value for money review and Architecture and Design Scotland's (A+DS) review.

6.3.2 Gateway Review 2 recommendations

The OBC has been fully refreshed in terms of the financial case which now reflects the preferred option of procurement through the NPD route. It also reflects due diligence on the proposed scope of the project which has been subject to rigorous clinical and health care planning review.

The OBC has been subject to review by Scottish Futures Trust and OGC Gateway Review. We have developed the case further in light of that feedback.

The following recommendations were made by the Gateway Review Team and we have developed an action plan to address these.

Recommendation R 1: **Assessment of the Delivery Approach**

The Project Director should gather information and lessons learned from similar recent Competitive Dialogue procurements in the Health sector to inform plans for the next phase.

Project Director will ensure thorough knowledge is gained on the Competitive Dialogue approach through engagement with other health board projects. Detailed Project plan included as Appendix 6A and will be continually refined and updated on a regular basis. On Advisor appointment the plan will be further developed.

Recommendation R 2: **Risk Management**

Review the Risk management process to ensure an appropriate methodology that will support management of the project as a whole.

- Project risk register has been prepared and provided in Appendix 3D. This register will be continually updated. On Advisor appointment the risk register will be further developed.
- Revisit the risk ratings in light of feedback from Gateway Review Team to ensure they remain robust.
- Following appointment of Advisors, there will be further development of an appropriate risk management process that will become a key component to the successful project.

Recommendation R 3: **Current Phase**

Ensure that the Board's Soft FM management team are fully integrated with the work of the Programme.

- Ensure knowledge from other health board projects influences the programme development.
- Agree appropriate representation from Soft FM colleagues at all development meetings.
- Organise an awareness raising workshop with Soft FM colleagues

Recommendation R 4: **Readiness for Next Phase**

Make early arrangements to develop plans and strategies for the procurement phase. Identify and discuss experiences with recent projects who have undertaken a mini competition exercise.

- Review OGC Guidance on Achieving Excellence in Construction
- Develop a Procurement Strategy to include:
- Clear vision of specialist skills required
- Ways of working together
- Selection process interviewees
- Evaluation of proposals
- Lessons learned from previous PFI experience to avoid recurrence
- Agree Project Team location and expectations of Advisors to co-locate
- Carry out soft market testing
- Inform the Project Team on what companies could be bidding and discuss the needs and expectations
- Consider what work can be progressed now

The average time input into the project by the Assistant Director of Finance has been mis-stated in Appendix 6C. This input is assessed on average at up to 2 days per week. The percentage time input show in Appendix 6C should be in the range 20% to 40% (not the 10% to 20% as shown).

6.3.3 Design Development and Approvals

The primary contact for briefing matters is the NHS Ayrshire & Arran Programme Director.

The key programme briefing documentation is:

- The Schedule of Accommodation from Buchan + Associates - (Final OBC (as drawn))
- The exemplar design pack
- All existing available Health & Safety information
- The Clinical Brief
- The Technical Brief
- The FM Brief
- The Contractual documents

Programme Team members have a detailed knowledge and understanding of the programme brief and the relevant documentation for the design and delivery of the programme plans.

The Technical Advisors will work with NHS Ayrshire & Arran throughout the procurement in conjunction with the Financial and Legal advisors. In particular the Technical Advisors will support NHS Ayrshire & Arran during the competitive dialogue stage, work with the Financial Advisor in developing the payment mechanism, and with the team in achieving Commercial and Financial Close.

6.3.4 Programme Team Experience

The Programme Team have the following experience and skills:

- Capital Investment Experience
- Large Complex Building Development
- MSP and Prince 2 Methodology
- PFI Experience
- Knowledge of the NPD Model
- Major project delivery

Further information on the experience of the Programme Team can be found in Appendix 6C.

6.4 Communication

Effective communication between all parties is vital to the success of the Programme and to ensure the continuity of service, time, cost and quality objectives. It is the responsibility of each and every member of the programme team to ensure that information is clearly co-ordinated and communicated to all relevant members of the team.

In order to guide parties on the appropriate communication and information distribution links Figure 6-7 has been included within the Programme Execution Plan to ensure that important information is communicated in a controlled way. In general the Technical Advisors are included in all communications. If there is any doubt as to the importance, urgency, or to whom information is relevant, this is referred to the Programme Director.

Figure 6-7: Communication Links

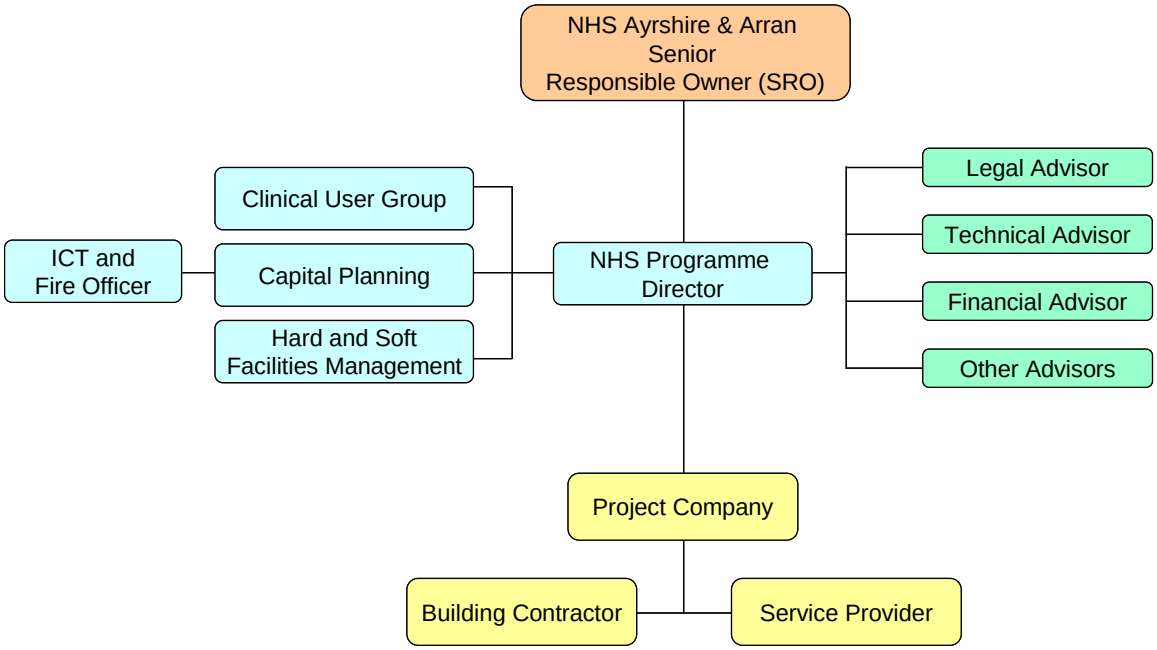
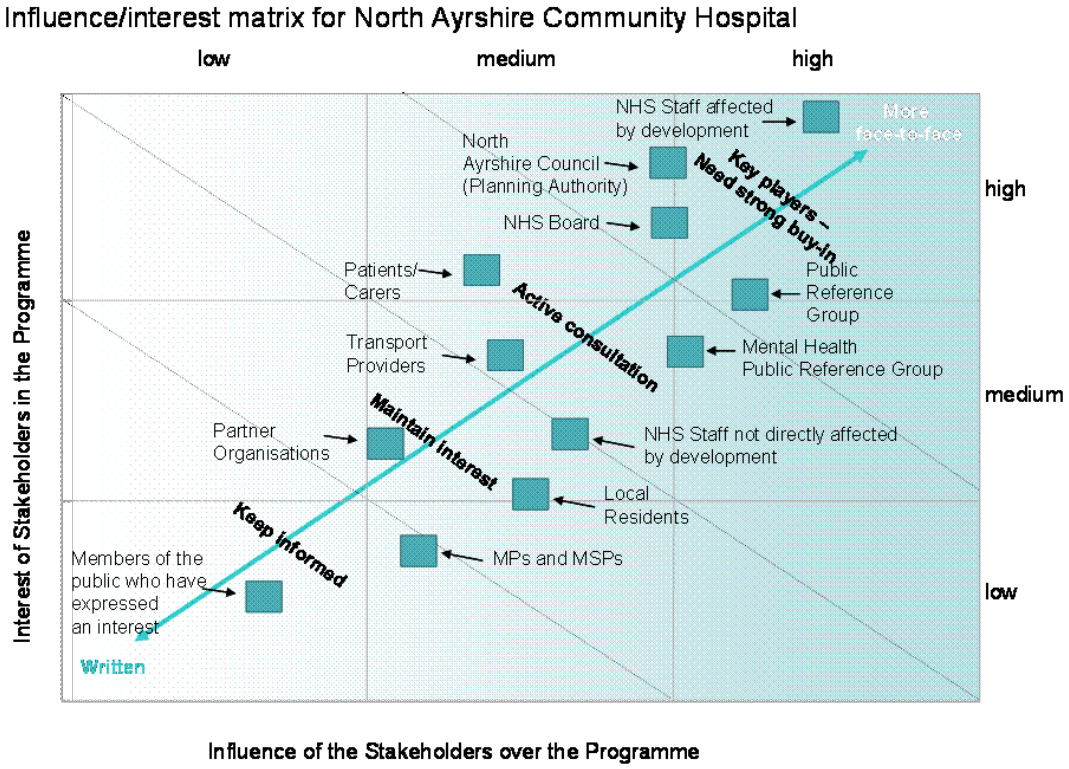


Figure 6-8 below, illustrates the range and status of stakeholders' involvement at key points in the programme.

Figure 6-8: Influence/interest matrix



6.5 Key Programme Appointments

The NHS Ayrshire & Arran Programme team comprises key stakeholders from the NHS and several external Advisors. There are a number of roles that will be vital to the successful delivery and implementation of the North Ayrshire Community Hospital programmes. These are listed below in Figure 6-9 along with a brief description of their roles and responsibilities. A description of the role of the Programme Director is included. The Programme Director is directly accountable to the Board and responsible for building a team with the required skills and experience to suit the programme.

The Board has identified a Programme Director, who in turn will appoint the various advisors, namely:

- Technical Advisor (TA)
- Legal Advisor (LA)
- Financial Advisor (FA)
- Healthcare Planners
- Construction Design Management (CDM) co-ordinator

Figure 6-9: Roles and Responsibilities of the core programme team

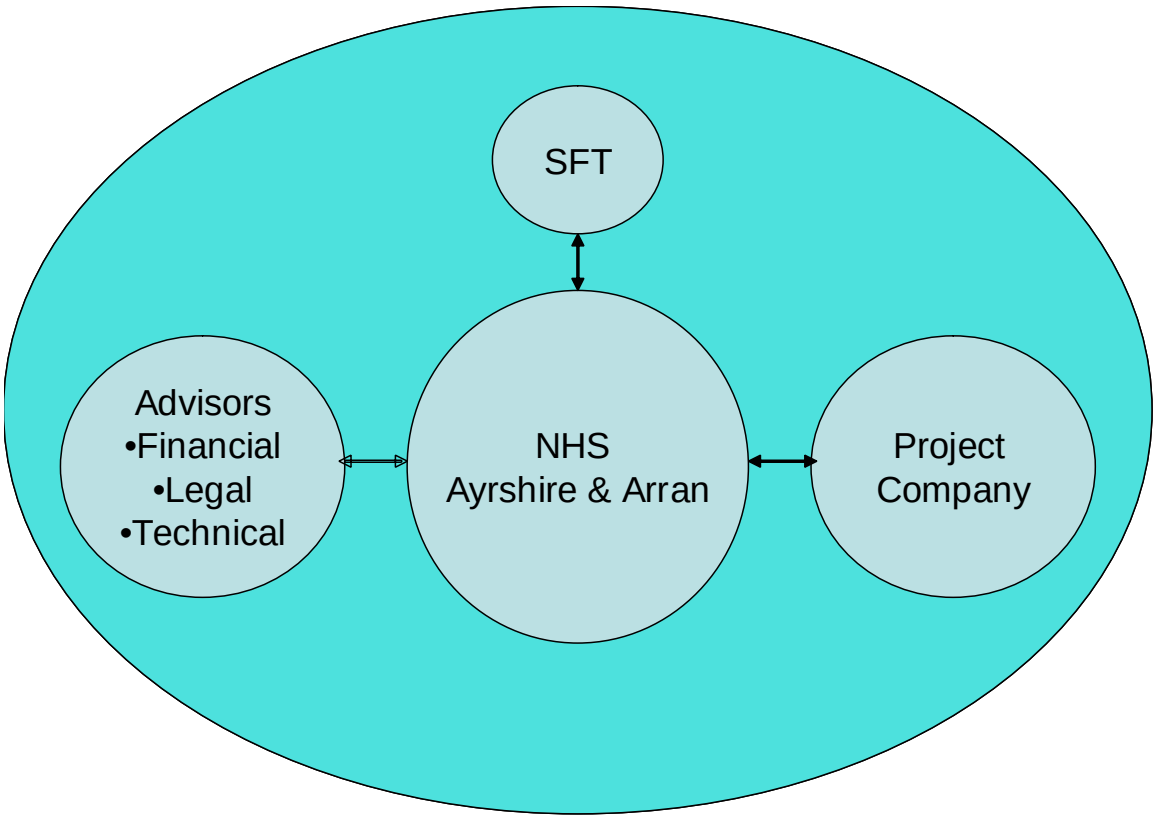
Programme Director (NHS Ayrshire & Arran)	Represents and has the authority of the Board to act on their behalf in respect of the delivery the programme. The Programme Director will lead the whole process from the outset of the programme acting with and in support of other key stakeholders and the Board's Advisors. He is accountable directly to the North Ayrshire Community Hospital Programme board and provides strategic direction, leadership and ensures the business case reflects the views of all stakeholders. The Programme director will also ensure that: ▪ Realistic aspirations, budgets and timescales are set; ▪ the right resource and expertise exists and is available to represent NHS Ayrshire & Arran; ▪ he is engaged in all key decisions; ▪ he agrees financial order limits and make all members of the team aware of standing financial instructions; ▪ senior personnel are aware of the impact e.g. cash flow on the Finance Directorate and more proactive involvement of user groups; ▪ appropriate Professional Advisors are appointed that can demonstrate experience, understanding and the willingness to work in a collaborative environment ▪ he considers training to ensure that all key staff have the appropriate levels of awareness and skills;

	▪ he ensures that NHS Ayrshire & Arran's Capital Planning and Estates department has adequate resource and skills in place – ideally with an accredited Programme Director; ▪ That clinical staff and stakeholders are engaged at an early stage in the process, without this the design will be unable to incorporate their requirements. ▪ All personnel are clear about their roles and responsibilities.
Technical Advisor (to be appointed)	The appointment of advisors will be through Scottish Futures Trust framework. The technical advisor will be required to support and supplement the Board's in-house skills, experience and resources. In addition to specialist inputs, the Technical Advisor role will include all necessary Project and Cost Management, Design Disciples, and Medical Planning requirements. The Primary role of the technical advisor will to be to give appropriate advice in their areas of expertise. For the technical advisor this will include: ▪ Supporting the development of the technical aspects of the Full Business Case; ▪ drafting the Output Specification; ▪ developing the payment Mechanism in conjunction with Financial Advisors; ▪ developing the risk process in conjunction with Financial and Legal Advisors ▪ ensuring that all technical aspects of the project meet, in full the programme objectives; ▪ evaluating and advising on all technical solutions throughout the procurement, including bidders' Method Statements; ▪ scrutinising costs of the bidders' solutions throughout the procurement; ▪ undertaking technical due diligence on bidders' solutions; ▪ site condition work, planning and design work; ▪ supporting the Project Director in clarification and fine – tuning of technical issues.
Financial Advisor (to be appointed)	The Primary role of the financial advisor will to be to give appropriate advice in their areas of expertise. For the financial advisor this will include: ▪ Supporting the development of the financial aspects of the Full Business Case; ▪ developing the payment mechanism in conjunction with the technical advisors; ▪ developing the risk process in conjunction with the technical advisors; ▪ preparing the financial submission requirements; ▪ ensuring that all financial aspects of the bidders' solutions meet the financial submission requirements; ▪ optimising and scrutinising the financial models submitted by bidders';

	▪ evaluating and advising on all financial proposals throughout the procurement; ▪ reviewing funding and taxation aspects of the solutions; ▪ preparing the accounting opinion for the Director of Finance; ▪ undertaking financial due diligence on bidders' solutions; ▪ supporting the Project Director in clarification and fine – tuning of financial and commercial issues.
Legal Advisor (to be appointed)	The Primary role of the legal advisor will to be to give appropriate advice in their areas of expertise. For the legal advisor this will include: ▪ Developing the contract documentation for the programme using SFT specific standard documentation where appropriate; ▪ developing the risk process in conjunction with the technical advisors; ▪ developing other legal aspects of programme bid documents; ▪ preparing the legal and contractual submission requirements; ▪ ensuring all bidders' solutions meet the legal and contractual submission requirements; ▪ evaluating and advising on all legal and contractual solutions throughout the procurement; ▪ undertaking legal due diligence on bidders' solutions; ▪ supporting the Project Director in clarification and fine tuning of legal aspects.

The Capital Programmes Advisor from Scottish Futures Trust Framework will play a significant role in the programme in terms of implementing the principles of Non Profit Distribution procurement as they will provide support to the Board in the implementation and ongoing application of the required NPD principles and procedures. Post programme, the Capital Planning Department will capture lessons learned during the programme and this information will be added to the best practice and lessons learned database from other programmes.

Figure 6-10: Contractual Links



6.6 Consultation and Engagement

The Board recognises the need for efficient, timely and relevant communication across a broad range of stakeholders.

Stakeholder Engagement

Two Communication Plans (Appendix 6D and E) are included. These plans outline the actions to be taken by NHS Ayrshire & Arran to ensure swift and effective communication with staff, partners, patients and public to ensure they are engaged, informed and involved in the developments at the Ayrshire Central Hospital site. These plans describe communications required from inception and also focuses on the period when the new hospital is being built and specifically targets:

- Target groups
- Methods of communication
- Messages
- Timing
- Estimated costs

6.7 Managing Benefits Realisation

Using MSP Managing Benefits Realisation plan has been developed and will continue to be reviewed and managed via this process.

Overview

NHS Ayrshire & Arran will be undertaking thorough and robust evaluations at key stages of the programme to ensure that positive lessons can be learned and fully embedded in the ongoing management of the programme. A full post-programme evaluation will also be undertaken to ensure that the range of benefits anticipated to be realised, are achieved.

To facilitate this, a Benefits Realisation Plan (BRP) has been developed with the structure and through the process described below:

Benefits Realisation – structure

The assessment of benefits realisation is structured as outlined below:

- An overview of the Benefits Realisation Process setting out the key principles in its development and linkages to other aspects of the planning process;
- Description of the approach adopted in developing the BRP including details of the stakeholder workshop and a summary of the Benefits Realisation Plan developed; and
- A summary of the recommended next steps in finalising the BRP.

Background to the Benefits Realisation Process

The purpose of developing a BRP is to organise and manage the identified benefits during implementation, to ensure that the potential benefits arising from the planned investment are actually realised.

This BRP is explicit, and will be proactively managed to enable NHS Ayrshire & Arran to be capable of realising the wide range of potential benefits of the programme, as well as avoiding possible negative impacts or disbenefits.

The Role of Stakeholders in Benefits Realisation

On 12 February 2010, 23 delegates attended a benefits realisation workshop. Delegates included NHS staff from Mental Health Services, Frail Elderly, Pharmacy, Bed Managers, AHPs, Estates, Infection control, Workforce, Finance, Partnership, representatives from the Public Reference Group and PSCP at that time. The workshop was facilitated by the PSC appointed Healthcare Planner.

At the workshop, the benefits criteria was discussed in terms of what are benefits and why do we need them. The group then went on to clarify the benefits already identified.

Once clarified, the benefits were reviewed in terms of the following:

1. Are the benefits identified still valid?
2. Is the benefits list complete? (Is anything missing?)
3. What stakeholders will benefit from these?

The next session of the workshop focussed on SMART measures (Specific, Measurable, Achievable, Relevant, Time-bound) and the following was discussed and captured:

1. What SMART measures can be used to monitor benefits realisation?
2. Whose responsibility is it to ensure that the identified benefits are realised?
3. What is the timescale for delivery?
4. Are there any identifiable costs to realise these benefits?

Following the workshop the Policy, Planning and Performance Department provided comments on the benefits list highlighting areas for further clarification and refinement. This evolved into a Benefits Realisation Plan and was circulated around the delegates for further comment.

At this time, members of the Public Reference Group who had participated in the benefits realisation workshop discussed and took comments on the benefits realisation plan.

A further iteration was then discussed at a Steering Group meeting where benefits realisation managers were identified. Co-ordination of the Benefits Realisation Plan was then designated to a Healthcare Manager and confirmation of the benefits descriptions was requested from the Benefits Realisation Managers. The current Benefits Realisation Plan can be found in Appendix 2K.

It is recognised that this Benefits Realisation Plan will remain live and will be revised during the development of the OBC/FBC, with approval up to the commission of the facility to ensure the benefits remain valid and relevant.

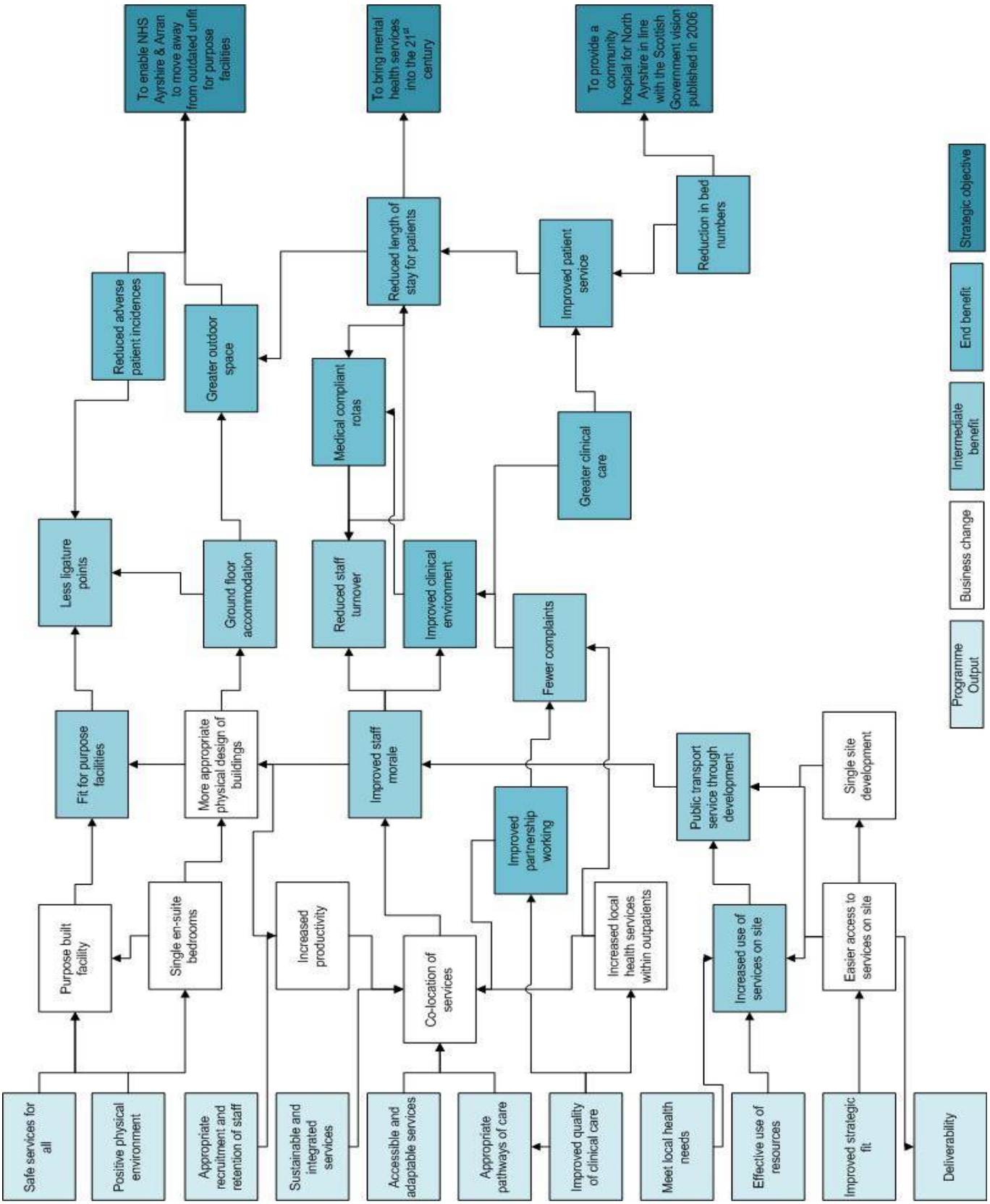
How the Benefits Realisation Process works

The benefits realisation process incorporates a series of linked stages, all of which contribute to the development of the BRP. This is demonstrated in Figure 6-11.

The benefits map is a key element of the benefits realisation plan, showing the realisation sequence through a chain of benefits.

- There are three Strategic Objectives on the right
- Four end benefits lead into the three Strategic Objectives
- Other Intermediate Benefits are shown with their Business Changes and Programme outputs/enablers
- Some Business Changes are dependent on Programme outputs, some are not, and could be initiated by the Business Change Managers at appropriate moments.

Figure 6-11: Benefits Realisation Process



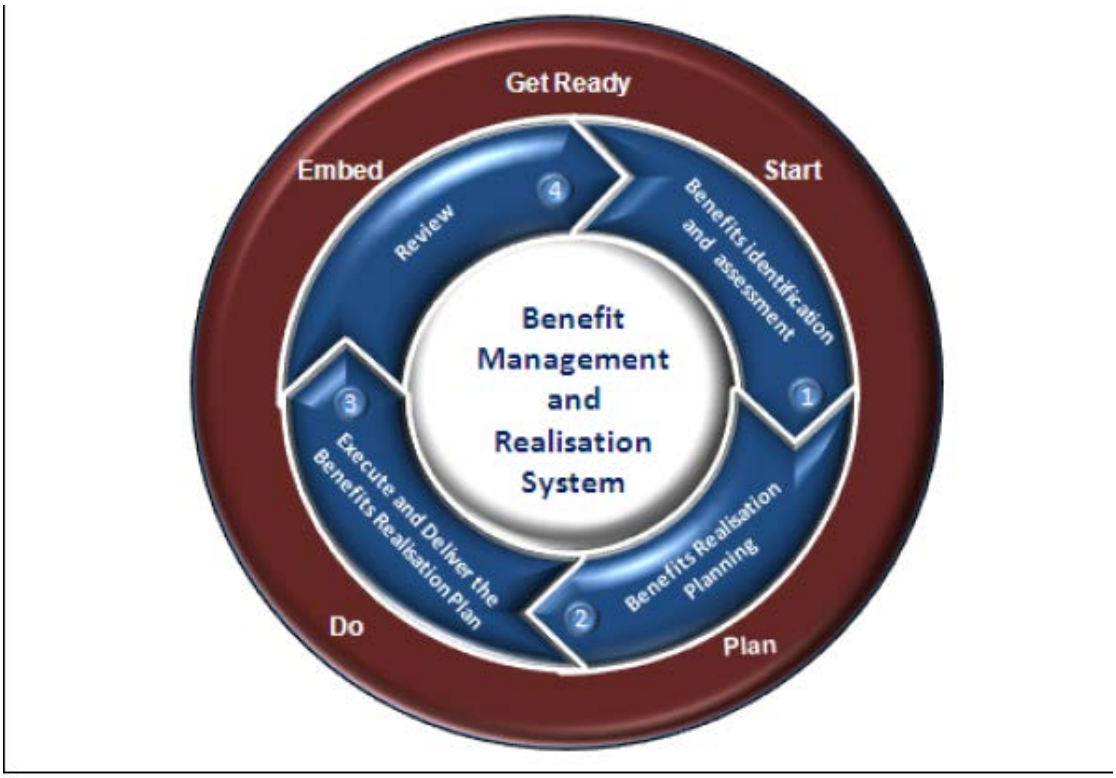
Further details of each stage are as follows:

OBC Benefit Criteria

The starting point for benefits realisation was a workshop to define the benefits criteria. Those benefits established at Initial Agreement, were further enhanced by cross referencing to the draft NHS Quality Strategy, and other current national policy. This produced an explicit set of 6 high level criteria and 14 non financial criteria which have been used at all stages of preparation of this OBC.

Whilst the identified objectives should remain valid throughout the procurement process, they will be regularly assessed throughout the programme to ensure ongoing validity (Figure 6-12).

Figure 6-12: Benefits Management Approach



Benefits realisation - Next Steps

Having developed key elements of the benefits realisation process and incorporated these within the BRP, the remaining tasks required to finalise the benefits management process are as follows:

- Establishment of a baseline position for quantitative benefits
- Timescale over which it is expected the benefits be realised
- Identification of the most appropriate benefit sponsor and owner
- Identification of mechanisms to be established to ensure effective monitoring

Baselines

For those benefit areas where a quantitative measure has been identified as a means of gauging the delivery of benefits, it is important that an assessment of the baseline position is undertaken to establish the starting point against which progress can be measured.

Timescales

Benefits will normally accrue over different timescales. Some may be realised as soon as the facility becomes operational (e.g. where benefits require physical aspects of the project to be in place and operational) and others may incorporate a lead time before they materialise (e.g. staff development).

Likewise some benefits may be in place for a fixed period of time and then cease or change (e.g. initial staff recruitment), whereas other can be expected to be in place throughout the entire life of the project (e.g. improved patient environment).

Benefits will be profiled in a manner which establishes the expected start date, the date when measurement will commence, and if relevant the expected end date.

Additionally it is important to establish details of any handover activities, beyond the mere implementation of a deliverable or output, to sustain the process of benefits realisation after the programme is closed.

Benefit Sponsors and Owners

Evidence suggests that failure to deliver benefits or an inability to fully realise the expected level of benefits arises as a direct result of failure to identify a suitable benefit sponsor and owner.

Benefit sponsors will normally be at Director level within the organisation and will carry the appropriate authority to authorise changes to the project deliverables so that benefits are secured in line with the BRP.

Benefit owners will typically be Senior Managers who will take initial responsibility for managing and monitoring the BRP and identify areas of non compliance. Where actions required fall outwith the manager's delegated authority they will be raised with the sponsor.

Each benefit area requires a clearly identified benefit sponsor and owner who will take lead responsibility for ensuring benefits are realised and identify corrective action in the event that either benefits are not being realised or are progressing slower than anticipated.

Benefits Monitoring

All benefits will need to be formalised as part of the BRP process. This is best undertaken by means of a benefit register which acts as the means for capturing and monitoring benefits delivery over the life of the project.

6.8 Health and Safety

All work will be carried out in accordance with the relevant statutory provisions and all practicable measures will be taken to avoid risk to those who may be affected by the works.

All consultants, contractors and suppliers are required to co-operate with NHS Ayrshire & Arran in carrying out this Policy and must ensure that their own work is carried out without risk to themselves or others.

Both the Board and the appointed Project Company will ensure that appropriate provision for health and safety of contractors, staff and patients will be one of the main objectives for the delivery of the project. This is of particular importance as the work is taking place in a live operational site.

The Board is committed to meeting the statutory requirements for health, safety and welfare as a minimum and all regulations; approved codes of practices including the CDM 2007 Regulations will be put into force and regularly monitored by their site management teams.

The Board will ensure that the Project Company reports formally, in writing, on Health and Safety matters at each Project Team Meeting. Internal health and safety representatives will provide representation to a Project Team and will advise on any impact to the Board's Health & Safety accountability as a result of the Project Company actions.

All projects have a developed Site Specific Construction Phase Safety Plan which is produced by the company's Health and Safety Manager in conjunction with the project's Contracts/Project manager and is further developed by the projects site management on a daily/weekly basis throughout the entire length of the project.

Furthermore, the appointed Project Company shall ensure the designers carry out their duties as required under the CDM Regulations 2007 as follows:

- Make sure that they are competent and adequately resourced to address the health and safety issues likely to be involved in the design;
- Check that clients are aware of their duties;
- When carrying out design work, avoid foreseeable risks to those involved in the construction and future use of the structure and in doing so, they should eliminate hazards (so far as is reasonably practicable, taking account of other design considerations) and reduce risk associated with those hazards which remain;
- Provide adequate information about any significant risks associated with the design;
- Co-ordinate their work with that of others in order to improve the way in which risks is managed and controlled.

6.8.1 HAI Scribe

Healthcare Acquired Infection (HAI) Scribe reviews will require to be undertaken at each of the Development Stages outlined in SHFM 30 and local Estates Policies and Procedures.

The appointed Project Company will require to satisfy the HAI Scribe Team, which includes members of the NHS Ayrshire & Arran Infection Control Team. Method statements will be prepared and must demonstrate to the organisation that any infection control risks have been identified. The necessary risk assessments must be carried out in relation to working in a live or adjacent clinical environment. The project team including the appointed Project Company will work with the HAI Scribe Team to ensure that their method statements for the development are adhered to.

6.9 Post Programme Evaluation (PPE)

NHS Ayrshire & Arran is aware that in order to assess the impact of the project, an evaluation of activity and performance must be carried out post completion. This is an essential aid to improving future project performance, achieving best value for money from public resources, improving decision-making and learning lessons for both the Board and others. Furthermore, sponsors of capital projects in the NHS are required by the Department of Health, HM Treasury and the National Audit Office to evaluate and learn from projects. Post project evaluation is mandatory for projects with a cost in excess of £1.5M

NHS Ayrshire & Arran currently carries out Post Programme Evaluation on other projects and will build on this process for the development as per the SCIM requirements.

6.9.1 Purpose of Evaluation

NHS Ayrshire & Arran has an evaluation framework in place as follows:

- A post programme evaluation will be carried out based on the SCIM report format, no later than 12 months after occupation
- The benefit realisation plan detailed in this OBC will be used to assess programme achievement
- Clinical benefits through staff and patient surveys will be carried out and prescribing trends will be assessed

7.0 Conclusion

This OBC sets out a robust case for transforming the existing Ayrshire Central Hospital site into a health hub for the 21st century by providing a new acute mental health inpatient facility for the population of Ayrshire and Arran and a new community hospital for people living in North Ayrshire.

The capital investment reflects NHS Ayrshire & Arran's Local Plan in responding to national strategies. It will transform the way in which health care will be delivered and address major deficiencies in the current estate. The development will provide enhanced services and quality for patients and enable staff to work more efficiently and effectively, in modern, safe and sustainable facilities located in the heart of the community.

The OBC describes the management planning and the governance structure established by the Board to take the programme forward on an affordable basis, monitored at every stage. In submitting the OBC, approval and support is sought to move to the FBC stage of this essential development.

NHS Ayrshire & Arran would like to acknowledge the effort, energy and enthusiasm of everyone who has been involved in the development of this OBC.

Appendices

Please note that the appendices are contained within a separate document entitled “NHS Ayrshire & Arran Acute Mental Health and North Ayrshire Community Hospital Outline Business Case Appendices”

Glossary of Abbreviations

ACH	Ayrshire Central Hospital
ADOC	NHS Ayrshire Doctors On Call
A+DS	Architectural + Design Scotland
AEDET	Achieving Excellence Design Evaluation Toolkit
AHP	Allied Health Professional
AME	Annually Managed Expenditure
AMH	Acute Mental Health
BCIS	Building Cost Information Service
BHBC	Better Health Better Care
BREEAM	Building Research Establishment Environmental Assessment Method
BRP	Benefits Realisation Plan
CAMHS	Child and Adolescent Mental Health Services
CDM	Construction Design Management
CDU	Central Decontamination Unit
CEL	Chief Executives Letter
CHP	Community Health Partnership
CIG	Capital Investment Group
CSF	Critical Success Factors
DCF	Discounted Cash Flow
EAC	Equivalent Annual Cost
EMH	Elderly Mental Health
EPR	Electronic Patient Record

FA	Financial Advisor
FBC	Full Business Base
FR	Forensic Rehabilitation
FM	Facilities Management
HAI	Healthcare Acquired Infection
HDL	Health Department Letter
HFS	Health Facilities Scotland
HR	Human Resource
IA	Initial Agreement
IFRS	International Financial Reporting Standards
IPCU	Intensive Psychiatric Care Unit
ISD	Information Services Division
LA	Legal Advisor
LDP	Local Delivery Plan
LDS	Learning Disability Service
MHS	Mental Health Services
MOI	Memorandum of Information
NAC	North Ayrshire Council
NACH	North Ayrshire Community Hospital
NAMH	Non Acute Mental Health
NDP	Non Profit Distributing
NDAP	NHS Scotland Design Assessment Process
NPC	Net Present Cost
NPV	Net Present Value

OBC	Outline Business Case
OJEU	Official Journal of the European Union
OPD	Outpatient Department
PB	Preferred Bidder
PAS	Patient Administration Systems
POE	Post Occupancy Evaluation
PPE	Post-Project Evaluation
PPP	Public Private Partnership
PQQ	Pre-Qualification Questionnaire
SCIM	Scottish Capital Investment Manual
SIMD	Scottish Index of Multiple Deprivation
SFT	Scottish Futures Trust
SGHD	Scottish Government Health Directorates
SoA	Schedule of Accommodation
SRO	Senior Responsible Owner
TA	Technical Advisor
VAT	Value Added Tax
VFM	Value For Money
WBS	Weighted Benefit Score
WTE	Whole Time Equivalent