NHS FORTH VALLEY AND CLACKMANNANSHIRE COUNCIL

AN INVESTMENT PLAN TO MODERNISE HEALTH SERVICES IN CLACKMANNANSHIRE

OUTLINE BUSINESS CASE

15 April 2003

LIST OF TABLES AND FIGURES

TABLES AND FIGURES

Sauchie Hospital

Alloa Health Centre

Clackmannan County Hospital

EXECUTIVE SUMMARY

Key Issues

1. This Outline Business Case (OBC) presents the need for investment in health services in Clackmannanshire and identifies the preferred solution to deliver modern, fit for purpose, healthcare to the local community

2. The OBC forms part of a wider healthcare investment programme within NHS Forth Valley and is wholly consistent with the local healthcare strategy. Reshaping health services in Clackmannanshire is a primary strategic objective of the NHS Board. The OBC also fulfils the vision for the development of community services, and integrated care, outlined in the recent White Paper "Partnership for Care".

3. The Primary Care Trust has named the project 'An Investment Plan to Modernise Health Services in Clackmannanshire' in order to :-

    - Convey to key stakeholders the essence of the project;

    - Avoid confusion arising from the use of different management terms at varying stages of the project;

    - Identify the project as a distinct part of the overall service modernisation strategy planned for NHS Forth Valley; and,

    - Simplify the communications message – particularly for important stakeholders outside the health professions, including the general public

4. There is a compelling case for change :-

    - there is a need for continued development and modernisation of primary care services in line with the recommendations in "Making the Connections", the report of the Primary Care Modernisation Group;

    - the implementation of the Forth Valley Healthcare Services Strategy and the need to develop community services and provide local access to acute care in partnership with primary care teams;

    - the standard of clinical care and quality is jeopardised by the poor state of the existing accommodation;

    - there is a need to replace outdated and inefficient buildings and estate with modern high quality facilities that support the development of easily accessible patient focused services;

    - the healthcare workforce is currently working under considerable pressure. There is a pressing need to increase the workforce to ensure safe and high quality services are maintained but this will not be possible whilst existing poor working conditions and training / development opportunities remain;

    - the existing service and site configuration acts as a significant barrier to service integration and the development of new models of care;

    - the need to implement a national framework for mental health services and the Joint Future recommendations require the development of community based services and greater integration between agencies; and,

- the need to deliver a change in the balance of care for older people's services and move away from an institutional model of care to a more community based model for services for older people, based on a network of integrated local care services and community hospitals with step down/intermediate facilities.

Service Objectives

5. The service objectives required to be realised through the modernisation and investment strategy are to :-

   - Improve the joint delivery and integration of services across all agencies by 2007/08 so that where appropriate from a patient's perspective referral, assessment and service delivery are seen as one process;

   - Enhance access to services by optimising the range of health and social services provided locally in one easily accessible location by 2007/08;

   - Visibly improve the physical condition of buildings and facilities for primary care, acute outreach, older people's and mental health services to physical condition A by 2007/08; and,

   - Significantly improve the quality of services to meet national clinical and care standards and improve patient outcomes by 2010.

Option Appraisal

6. The option appraisal exercise was undertaken in accordance with the Scottish Executive Health Department (SEHD) Capital Investment Manual, this covered the following areas :-

   - Review and agreement of the scheme objectives, benefits and constraining factors;

   - Development of a long list of options;

   - Selection of a shortlist of options capable of meeting the scheme objectives; and,

   - Selection of a preferred option by scoring the shortlist against the benefits criteria

7. Following a rigorous and transparent process the Trust Management Team agreed that the following options would be shortlisted and subject to the benefits appraisal. Subsequently they would be subject to the rigour of risk assessment, financial and economic appraisal and sensitivity testing.

Table 1 – Summary of Shortlisted Options

Option	Description
Option 1 - Do minimum	This option is included as a baseline option against which the one site option is appraised. The do minimum option would mean no change in the current configuration of services as described in the OBC and with minimal capital investment to up grade/improve facilities and accommodation in the health centre, Clackmannan County Hospital or Sauchie Hospital, as considered appropriate.
Option 2 - Integrated option	In this option the new primary care resource centre/health centre would be provided on the same site as the new community hospital, with the result that all the services described in the OBC would be located in new build accommodation on one site, thus maximising the opportunities for integration.

8. The preferred option selected through the option appraisal process was the integrated option. It delivered a total benefits score of 12,515 compared to only 3,515 for the do minimum option.

Risk Assessment

9. A comprehensive risk analysis was undertaken on the shortlisted options, which identified and quantified the main risks that the project is exposed to.

10. Appropriate risk management strategies have been developed for the main strategic risks identified.

11. The project management structure will ensure an effective process for managing risks.

Financial and Economic Appraisal

12. The table below summarises the results of the financial and economic appraisal.

Table 2 – Results of Financial and Economic Appraisal

Option Appraisal Measure	Option 1 Do minimum	Option 2 Integrated option
Initial Capital Cost – excl equipment (£000)	2,436	14,655
Annual Revenue Cost (£000)	627	1,195
Net Present Cost (NPC £000)	8,244	21,848
Equivalent Annual Cost (EAC £000)	480	1,273
Benefit Point	3,515	12,515
NPC per Benefit Point	**2,345**	**1,745**
VFM Ranking (lowest offers best VFM)	**2nd**	**1st**

Preferred Option

13. The preferred option identified in the business case is the option that provides the best fit with the objectives of the investment whilst demonstrating value for money, achieves the required non-financial benefits and is affordable to commissioners.

14. Option 2, the integrated option, provides the best overall match with all these criteria and emerges as the preferred option.

15. Forth Valley NHS Board has indicated that the revenue implications of the project are within agreed affordability parameters.

Procurement and Project Management

16. A range of funding sources have been identified as potentially available for the scheme including NHS Board formula capital, land sales and private finance. In light of the capital costs associated with the preferred option it is unlikely formula capital would be available to support the project. An initial assessment has been done of the attractiveness of the scheme under the Private Finance Initiative (PFI). The assessment indicates that the scheme is likely to be attractive to a private sector partner in offering a relatively 'clean' construction programme with minimal decanting of patients.

17. A robust project management structure will be established which reflects both the Forth Valley and local nature of the project and will encourage an inclusive approach to the development.

- An experienced project management team will be put in place to ensure the project is delivered and the benefits realised

- The project team will be supported by expert advisors who are experienced in healthcare redevelopment projects

- Project monitoring and Post Project Evaluation (PPE) requirements will be established at an early stage

Approval

18. The conclusion of this business case is that modernisation of health services in Clackmannanshire under an integrated option (Option 2) should be pursued, and it is likely that this will be through the Private Finance Initiative. Approval is sought for the preferred approach in order that the project can proceed to the procurement phase.

1 INTRODUCTION

1.1 Overview

1.1.1 The purpose of this report is to present proposals for the development of:

- a new health centre for Alloa; and,
- a new community hospital for Clackmannanshire.

1.1.2 Together these proposals add up to the largest investment in health services in Clackmannanshire for a generation, and the second biggest capital project in Forth Valley (after proposals for area wide acute hospital services). This report therefore represents a significant step in developing modern health services designed to meet the health care needs of the people of Clackmannanshire both now and in the future. NHS Forth Valley and Clackmannanshire Council have developed these proposals in partnership, and now seek the necessary approval to proceed to the next and final stage.

1.1.3 NHS Forth Valley and Clackmannanshire Council recognise the mutual benefits to be gained from working in partnership, and re-designing services to further improve quality and access to services for the local population. This recognition has been articulated in plans jointly developed such as:

- the Joint Implementation Plan for Clackmannanshire 2002-2005;
- Future Forth Valley - Forth Valley Healthcare Strategy 2002;
- Forth Valley Local Health Plan 2003/04-2006/07; and,
- joint service strategies for primary care, mental health, learning disabilities, physical disabilities and older people's services.

1.1.4 These plans highlight the potential to develop a community hospital to be a focus for integrated community care services for the people of Clackmannanshire, and extend the range of primary care and acute out patient services provided locally in Clackmannanshire. These plans are entirely consistent with plans for area wide acute hospital services outlined in the Forth Valley Healthcare Strategy, and also the subject of a separate Outline Business Case to be completed later this year.

1.1.5 The proposals are presented in the form of an Outline Business Case (OBC) consistent with the Interim Capital Planning Guidance for capital investment (HDL (2002) 87) issued in December 2002. This is the second key step in a three-stage process. The first step involved the preparation of an Initial Agreement, which was agreed by Forth Valley Health Board and the Scottish Executive in December 2000 (reference number: 02/25). The final step will be the preparation of a full business case that presents the preferred option in more detail, for approval by the Scottish Executive.

1.1.6 The aims of the Outline Business Case are to:

- present the objectives of the proposed investment;
- appraise the potential options; and,
- outline the preferred option for approval by the Scottish Executive so that more detailed work can begin.

1.2 Business Case Process

1.2.1 This framework allows the investment benefits, costs and risks to be identified and evaluated in a systematic way. It ensures the Trust can demonstrate convincingly that the investment is economically sound and financially viable.

1.3 Business Case Structure

1.3.1 The approach adopted at each stage of the business case process and the results of detailed analysis and discussions are shown in the following sections of the report.

- **Section 2 – Background:** summarises the strategic aims, health trends and service profile and sets the OBC in its national and local strategic context;
- **Section 3 – Case for Change and Project Objectives:** summarises the case for change and explains the rationale for the requirement to modernise health services in Clackmannanshire;
- **Section 4 – Service Specification:** describes the services and develops the models of care that will underpin their future delivery including the role of e-Health;
- **Section 5 – Capacity Plan:** translates the services and projected activity that will be provided into tangible outputs used to size the facility;
- **Section 6 – Options:** summarises the long-list and short-list of options developed by the Trust;
- **Section 7 – Benefits Appraisal:** identifies the anticipated non-financial benefits of each of the short-listed options, measured against weighted criteria;
- **Section 8 – Financial & Economic Appraisal:** presents the capital and revenue costs of each short-listed option, along with Net Present Cost (NPC) and Equivalent Annual Cost (EAC);
- **Section 9 – Risk Assessment:** sets out the probability and impact of the projected risks of each option and a strategy for managing the key risks;
- **Section 10 – Consultation:** describes the process of public engagement in the project and sets out proposed approach to formal public consultation;
- **Section 11 – Preferred Option:** sets out the details of the Trust's preferred option, together with a reasoned justification of the choice;
- **Section 12 – Human Resource Issues:** summarises the key staffing issues resulting from the proposed service strategy including the likely future staffing requirements, change management policies and supporting training and development needs;
- **Section 13 – Procurement Strategy:** explores options for the procurement of the preferred option including the use of alternative sources of finance;
- **Section 14 – Project Management & Timetable:** describes how the Trust intends to manage the various phases of the project and includes an outline timetable for the scheme(s).
- **Volume 2 – Appendices –** available as a separate document covering :-
  - A1 Detailed service profile
  - B1 Site Plans
  - B2 Extended Sauchie Hospital site
  - C1 Assessment of long-listed options
  - D1 Analysis of benefits appraisal scores

- E1 Indicative Feasibility Cost Plan
- E2 OB forms (breakdown of capital costs)
- E3 Analysis of baseline costs
- E4 Impact on capital charges
- E5 Service based revenue costs analysis
- E6 Details of economic appraisal
- F1 Risk assessment and scoring
- F2 Design and construction risk quantification
- G1 Assessment of project PFI ability
- H1 Sample OJEC advertisement

1.3.2 This structure reflects current Scottish Executive Health Department guidance and accepted 'best practice' in business case presentation.

1.4 Key Issues

1.4.1 The report begins by presenting an overview of the proposals and outlining the strategic context within which these plans have been developed. The report then goes on to appraise the various options for achieving the plans against agreed criteria, and describes the preferred option.

2 BACKGROUND

2.1 Overview

2.1.1 The purpose of this section is to set the scene for the proposals that follow. In this section we cover information on:

- the Clackmannanshire population, including health trends;
- the national and local strategic context;
- the aims of NHS Forth Valley; and,
- the current health services and resources available;

2.1.2 The next section outlines the case for change and the project objectives.

2.2 Clackmannanshire Population

2.2.1 Clackmannanshire is the smallest mainland Council in Scotland. The latest published information from the Register General's Office indicates that the current population is 48,460, and represents 17.4% of the Forth Valley population of 278,000 (see Figure 2-1).

Figure 2-1- Forth Valley Population

Age	Forth Valley		Clacks		Falkirk		Stirling	
0-4	16,003	5.8%	2,858	5.9%	8,349	5.8%	4,796	5.6%
5-9	52,790	19.0%	9,515	19.6%	26,751	18.5%	16,524	19.4%
20-29	35,555	12.8%	5,423	11.2%	18,198	12.6%	11,934	14.0%
30-44	64,092	23.1%	11,370	23.5%	34,342	23.8%	18,380	21.6%
45-64	67,903	24.4%	12,172	25.1%	35,073	24.3%	20,658	24.2%
65-74	23,297	8.4%	3,876	8.0%	12,449	8.6%	6,972	8.2%
75+	18,186	6.5%	3,246	6.7%	8,984	6.2%	5,956	7.0%
All ages	278,000	100%	48,460	100%	144,320	100%	85,220	100%

Source: Register General Office (Scotland) 2000 based projections

2.2.2 Future projections for Clackmannanshire to 2016 show a decline in the total population by -3.5% compared to the population of Scotland as a whole which shows a decline over the same period of -2.0% (see Figure 2-2). By contrast the population of the Forth Valley NHS Board area shows a projected increase over the same period of 3%.

Figure 2-2 - Population Projections 2001 to 2016

	Total Population				Absolute change 2000-2016	% change 2000-2016
	2000	**2006**	**2011**	**2016**		
Scotland	5,114,600	5,077,784	5,046,519	5,013,831	-100,769	-1.9%
Forth Valley	278,000	281,318	283,831	286,376	+8,376	+3%
Clacks	48,460	47,967	47,389	46,745	-1,715	-3.5

Source: Register General Office (Scotland) 2000 based projections

2.2.3 These figures, however, mask significant changes within the profile of the Clackmannanshire population that will have a marked impact on health and social care services. Between 2006 and 2016 it is projected that (see Figure 2-3):

- the population aged under 14 will reduce by 26%;
- the population aged between 30 and 44 will reduce by 32%;
- the number of people aged between 60 and 74 will increase by 37%; and,
- the number of people aged over 75 will increase by 27%.

2.2.4 These figures suggest that the population of Clackmannanshire will age at a much faster rate than that of Scotland as a whole. This will mean that health and social services will have to be much more sensitive and responsive to the needs of older people than other parts of Scotland.

Figure 2-3 - Clackmannanshire Population Projections by Age Group 2006-2016

Age bands	2006 % change	2011 % change	2016 % change
0-4	-15.2	-19.9	-12.1
5-14	-7.1	-19.7	-26.6
15-29	-5.1	-0.5	-4.0
30-44	-7.7	-22.4	-32.8
45-59	7.4	9.7	14.9
60-74	12.5	29.9	37.3
75 and over	5.8	14.1	27.4
All ages	**-1.0**	**-2.2**	**-3.5**
Forth Valley	1.2	2.1	3.0
Scotland	-0.7	-1.3	-2.0

Source: Register General Office (Scotland) 2000 based projections

2.2.5 Information from two national reports (*Adding Years to Life*, report of the Expert Group on Healthcare of Older People, and *The Health & Well-being of Older People in Scotland*, insights from national data) highlight some key issues of relevance to the proposals in this report:

- Clackmannanshire will have (proportionally) one of the largest elderly populations of any local authority area in Scotland (20.5% of the Clackmannanshire population will be aged over 65 by 2016);
- Forth Valley Health Board area (there is no data at local authority level) records one of the highest levels of limiting long-standing illness among the 65-85+ age group (it is fair to assume from this that because Clackmannanshire will have one of the largest elderly populations in Scotland this will be a particular characteristic of the Clackmannanshire population).

2.3 Health Trends and Inequalities

2.3.1 The available information on the health of the Clackmannanshire population shows some of the greatest need in Forth Valley. For example, Clackmannanshire has:

- the highest rate of deaths from coronary heart disease;
- the highest level of potential life years lost for accidents;
- the highest level of potential life years lost for suicides;
- the highest rate for infant deaths;
- the highest equal rate of low birth weight;

- the highest smoking prevalence rate; and
- the highest breast cancer detection rate.

2.3.2 This position is summed up in the standardised mortality ratios for all deaths in Forth Valley (Figure 2-4). These figures show that while there has been improvement in recent years, the figures for Clackmannanshire show a decline from 1996 (99) to 2001 (96).

Figure 2-4 - Standard Mortality Ratios for all deaths in Forth Valley 1996-2001

	1996	1997	1998	1999	2000	2001
Forth Valley	100	97	95	95	93	99
Clackmannanshire	99	94	92	89	94	96
Falkirk	104	103	97	97	96	103
Stirling	95	92	94	95	87	95

Source: Registrar General Office (Scotland) 2000

2.3.3 Clackmannanshire also has some of the highest levels of health inequality in Forth Valley (see Director of Public Health's annual report for 2001/02). This is illustrated by a Jarman deprivation score of 7.75%. The range for Forth Valley is 0% to 8.6%.

2.3.4 In Forth Valley, Clackmannanshire also has:

- the lowest GDP;
- the highest unemployment rate; and,
- the lowest proportion of school leavers going on to higher or further education

2.4 Strategic Context

2.4.1 Having described the population and health characteristics of Clackmannanshire, this next section describes the national and local strategic context for the proposals that follow. Together these make up the planning framework within which the proposals to modernise health services in Clackmannanshire have been developed.

2.5 National Context

2.5.1 Our thinking has been influenced by a number of national policies and strategies, all of which emphasise the need for joint working among agencies to achieve better services, better use of resources and improvements in people's quality of life. The main policies and strategies that set the national context for these proposals are:

- Framework for Mental Health Services in Scotland, 1997;
- The Acute Services Review report, 1998;
- 'Modernising Community Care: An Action Plan', 1998;
- The White Paper 'Towards a Healthier Scotland', 1999;
- 'Community Care – A Joint Future', 2000;
- 'Our National Health – a plan for action, a plan for change', 2000;
- An Action Plan for Dental Services in Scotland, 2000;
- 'Nursing for Health: a review of the contribution of nurses, midwives and health visitors to improving the public's health', 2001;
- 'Adding Years to Life', 2002;
- 'The Right Medicine: a strategy for pharmaceutical care in Scotland', 2002;
- 'The Health and Well Being of Older People in Scotland', 2002;

- 'Delayed Discharges in Scotland', report to the Minister for Health & Community Care, 2002;
- 'Making the Connections: developing best practice into common practice' report of the Primary Care Modernisation Group, 2002;
- 'Building on Success - future directions for Allied Health professionals in Scotland', 2002; and,
- 'Future Practice', 2002.

2.5.2 The recent White Paper "Partnership for Care" provides further impetus to the proposals in this OBC. The White Paper places a strong emphasis on developing services in the community, and support for primary care. It also promotes greater service integration between primary and specialist care, and between the NHS and local authorities. The proposals in this OBC are closely in tune with the thrust of "Partnership for Care", and will make a reality of the vision outlined in the White Paper in Clackmannanshire. Specific areas that the OBC addresses within the White Paper proposals are :

- developing primary care services;
- service integration across the care spectrum - community through to acute care;
- redesigning community based mental health services; and
- responding to the e-health agenda.

2.5.3 In summary, the national strategic context promotes the development of accessible patient centred services that are integrated so that referral, assessment and service delivery are seen as one process. National policy also supports the provision of services in modern settings as close as possible to where people live. Local agencies are encouraged to work together to share skills and resources and to plan services that respond to the needs of local communities. It is the needs of communities and patients that should drive the planning process, and agencies should engage with local communities to ensure there is wide spread ownership of service plans and strategies. The local strategies in Forth Valley have been developed within this national context.

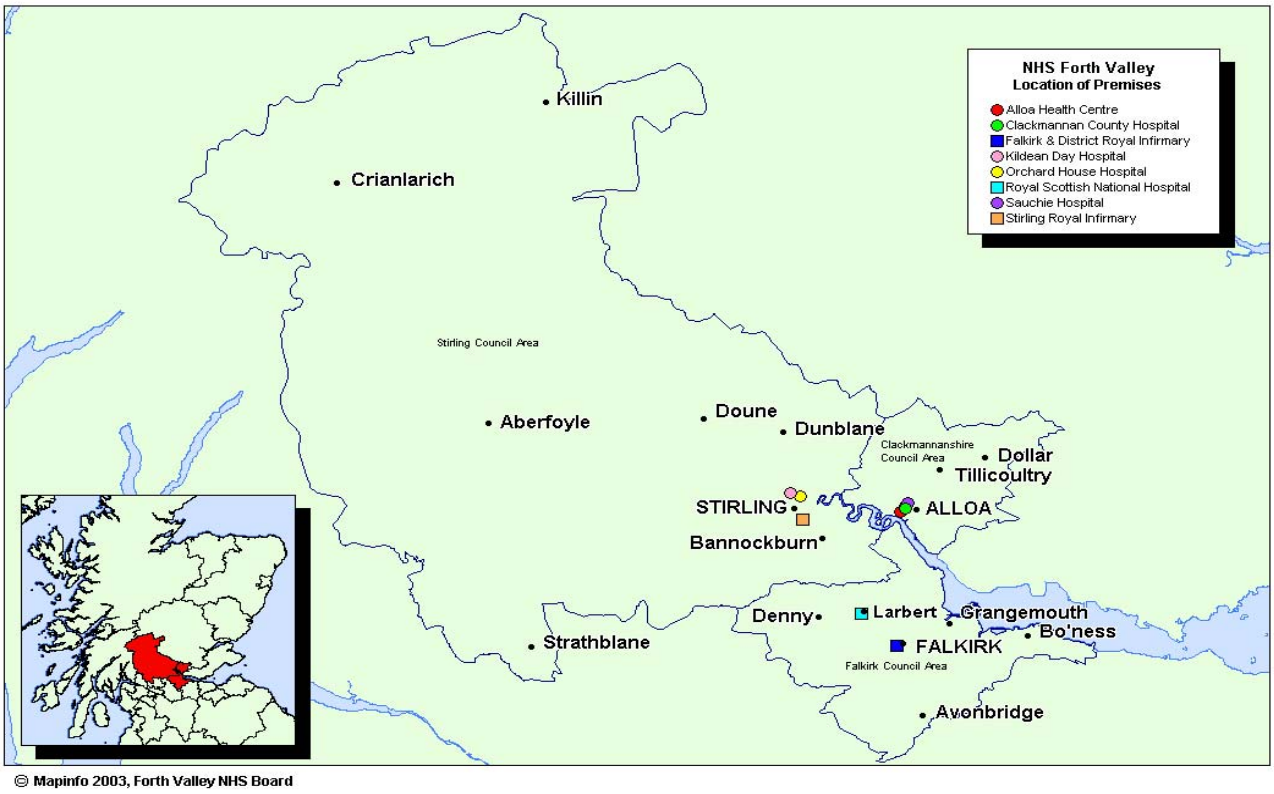
2.6 Forth Valley Context

2.6.1 A map of the Forth Valley NHS Board area is provided in Figure 2-5. There are two NHS Trusts in Forth Valley responsible for providing health services to Clackmannanshire, namely :-

- Forth Valley Primary Care NHS Trust providing all community health services, mental health services, learning disability services, child health services and services for older people; and,
- Forth Valley Acute Hospitals NHS Trust providing a range of acute out patient services, and all other acute inpatient and outpatient services from Stirling Royal Infirmary and Falkirk & District Royal Infirmary

2.6.2 In addition, in Clackmannanshire there are seven GP practices providing primary care services, and an out of hour's service for Clackmannanshire (CEDOC). A detailed service profile for the Primary Care Trust and the services within this business case is included in **Appendix A1**. More detail on acute services can be found in the acute services Outline Business Case.

Figure 2-5 - Forth Valley NHS Board Area



2.6.3 In 2002/03 NHS Forth Valley had a total revenue allocation of £260.6m of which Forth Valley Primary Care NHS Trust received £99.9m and Forth Valley Acute Hospitals NHS Trust received £89.3m.

2.7 Forth Valley Strategic Aims

2.7.1 The strategic aims of NHS Forth Valley as outlined in the Local Health Plan for 2003/04 are to:

- improve Forth Valley's health, and reduce the health gap between rich and poor
- ensure Forth Valley NHS meets national standards of care to be delivered locally across Scotland
- improve access to services - reduce waiting and making the patients 'journey of care' easier, quicker and safer
- give patients, public and communities a real voice on the way the Forth Valley NHS is run
- provide better care for the residents of Forth Valley
- tackle the 'big three' priorities: heart disease, cancer and mental health
- improve care and standards in the NHS by valuing and empowering staff and working in partnership with them to work in new, more collaborative, flexible and effective ways
- ensure a considered approach to planning and delivery of the whole health agenda

2.7.2 In Forth Valley the main components that make up the strategic context for this business case are:

- primary care development/modernisation;
- Future Forth Valley - the Forth Valley Healthcare Strategy; and,
- implementation of A Joint Future

2.8 Primary Care Development

2.8.1 The vision for primary care in Forth Valley is one in which people should be supported to help stay well and if ill, cared for in or near their home. Primary care services have their roots in local communities. Planning primary care services for the future should therefore start with the needs of local communities. Communities should also be involved in identifying what those needs are, and developing the plans to tackle them.

2.8.2 The Trust has followed this approach in developing its strategy for primary care, and has held a number of Open Space events to identify the issues for primary care in each locality. An Open Space event was held in Clackmannanshire in June 2001 and the key issues to emerge were:

- scope for facilities for children's services;
- consideration of design solutions/ideas to support access to services and promote health;
- what can be provided locally within primary care or a community hospital setting should be provided locally;
- facilities should promote improved communication between agencies and services and improve care co-ordination;
- there should be continued involvement of the public, community groups and voluntary organisations in the development of the community hospital, and
- the opportunities presented by information communications technology should be exploited.

2.8.3 Primary care is also a key part of the health and social care system, and should work in partnership with others so that from a patient's perspective referral, assessment and treatment are one smooth process. Primary care is often referred to as the first port of call for most patients. Consequently primary care will be the first to face the challenges from:

- changes in demographics, health needs and health inequalities (see sections 2.2 and 2.3);
- changes in patient's expectations;
- changes in the way services are delivered (e.g. new drug treatments); and,
- the introduction of new services (e.g. NHS 24);

2.8.4 The proposals in this Outline Business Case are about developing and modernising primary care services in one of Forth Valley's major centres of population so that services can respond to the future challenges outlined above.

2.9 Healthcare Services Strategy

2.9.1 Forth Valley NHS Board has recently approved proposals for future provision of healthcare services following an extensive programme of public consultation. The NHS Board sought the public's views on options for the centralisation of acute hospital services on a one site, and the proposal within this Outline Business Case for a new health centre for Alloa and a new community hospital for Clackmannanshire. The development of community based services is seen as an integral part of the wider Forth Valley healthcare strategy. A significant part of this approach focuses on the development of local community hospitals and the range of services that should be provided as close as possible to the patient's home. The proposals for a single site acute hospital for Forth Valley, and a new Community Hospital for Clackmannanshire and replacement health centre for Alloa were supported by the general public and subsequently confirmed by the NHS Board in January 2003. Further information on the public consultation exercise is included in section ten.

2.9.2 The Forth Valley Healthcare Strategy promotes community hospitals as a resource for local communities, and a link between acute hospital services and care at home. Community hospitals should be fully integrated with local community services, and provide additional support for rehabilitation and palliative care. The proposals for a new community hospital in Clackmannanshire are seen as the potential forerunner of a similar approach for developing local community services in Falkirk and Stirling, including opportunities for primary care modernisation.

2.9.3 The strategy envisages that community hospital services will provide the following functions:

- provide appropriate care for patients as near as possible to their homes;
- provide care for patients with irrecoverable disease requiring palliative care;
- provide patients requiring enabling facilities which support the maintenance and restoration of function while recovering from major illness;
- support older people with chronic illness requiring nursing care but not intensive investigation or medical care;
- support patients ill at home requiring respite care;
- support patients requiring periods of treatment under overall specialist care e.g. chemotherapy; and,
- prevent ‘unnecessary admission to acute hospitals’.

2.9.4 In addition, as part of the Forth Valley Healthcare Strategy, and the decision by the NHS Board to move to a single site for the provision of all acute hospital services, the current mental health strategy is being reviewed to take full account of the recent White Paper "Partnership for Care", and the impact of Joint Future. This review process will be comprehensive involve all key stakeholders, and be informed by:

- a Forth Valley wide mental health needs assessment;
- completion of the adult mental health redesign project which has assessed potential models for community based alternatives to inpatient care;
- an area-wide capacity modelling exercise to determine future bed requirements; and,
- work on the option appraisal process as part of the acute services OBC.

2.9.5 This review will result in a clearer vision for the future pattern of adult mental health services in Forth Valley. A key part of this vision is the wide spread agreement that all acute mental health beds should be located on the acute hospital site. The factors that have influenced this future direction include:

- the need to ensure a high quality clinically safe inpatient service; and,
- the risks inherent in maintaining junior medical cover across three dispersed acute sites.

2.9.6 It follows therefore that services in Clackmannanshire will change to a community-based model of care supported by local step down intermediate beds, with access to acute inpatient services on the new acute hospital site.

2.9.7 The Trust and Clackmannanshire Council will, within this Forth Valley framework, work together with users and carers to redesign the way mental health services are delivered in Clackmannanshire. The focus of this redesign will be to:

- improve the care pathway;
- promote better use of shared resources;
- develop a network of integrated community services focused on meeting the needs of the local population; and,
- integrated community based services and specialist healthcare services through clinical and care networks

2.10 A Joint Future in Clackmannanshire

2.10.1 The implementation of the Joint Future Group's recommendations provides significant opportunities to improve the joint provision of services for people with specific needs. In Clackmannanshire the arrangements for joint management and joint resourcing included services for older people, services for people with mental health problems, people with learning disabilities and people with physical disabilities from the outset. The proposals in this report must therefore be considered as part of the implementation of a Joint Future in Clackmannanshire.

2.10.2 In Clackmannanshire joint management arrangements covering all main client groups were introduced from April 2002. The proposals in this Outline Business Case are seen very much as a key part of the joint future agenda for change in Clackmannanshire. The opportunity to develop an integrated community hospital and primary care resource centre will enhance the move towards more joined up working, and will assist in the change of culture and ethos required to ensure better outcomes for patients.

2.11 Key Issues

2.11.1 In developing plans for services in Clackmannanshire, it was recognised by all key agencies that there were considerable benefits to be gained by looking widely at all primary care, community care and secondary care services serving the population of Clackmannanshire, exploring the scope for service integration, and the pooling of resources.

2.11.2 The aim was to develop an integrated proposal to modernise local services within the framework of existing national and Forth valley strategies and policies.

3 CASE FOR CHANGE AND PROJECT OBJECTIVES

3.1 Overview

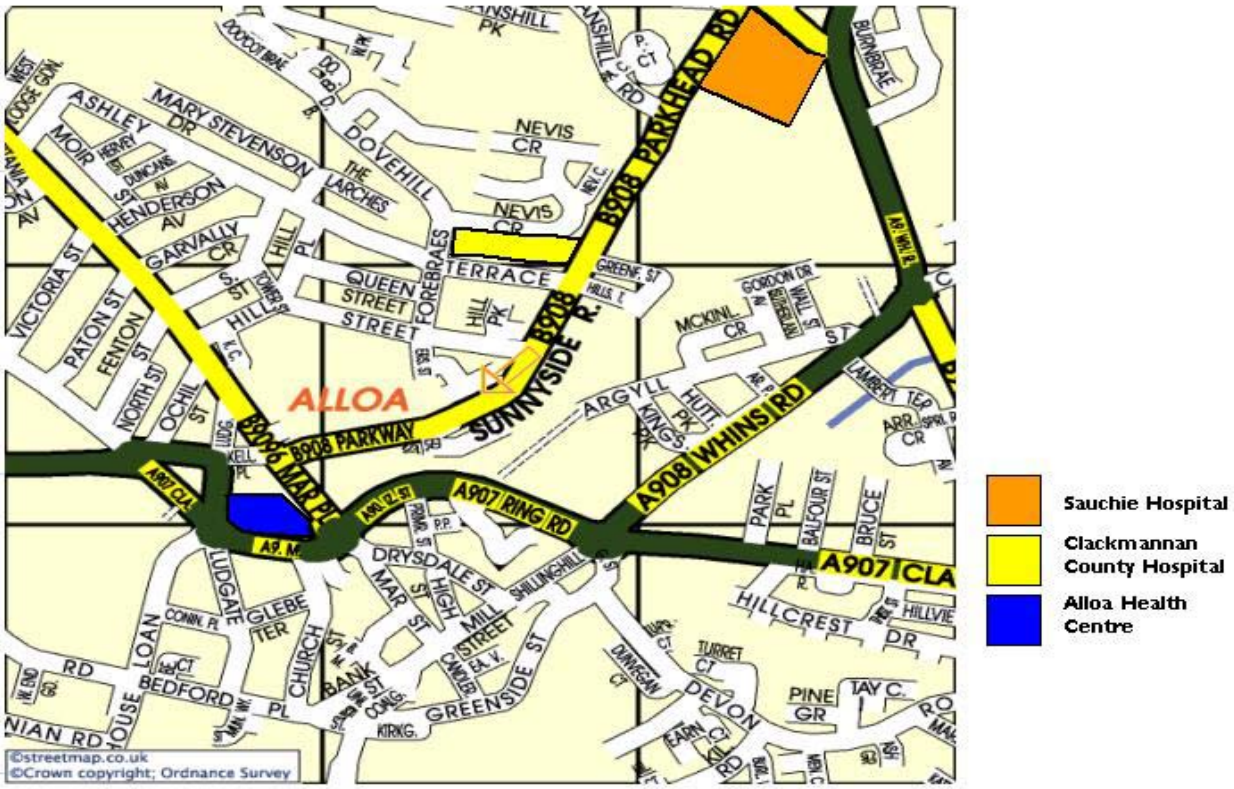
3.1.1 We have so far described the background to the proposals and the strategic framework within which they are set. In this section we explain the case for change, the need for modernisation and the investment objectives we intend to pursue. We go on to outline the proposed new service and model of care in the next section. We then go on to explain the options available and the option appraisal process by which we have arrived at our preferred option.

3.2 Need for Modernisation

3.2.1 This business case focuses on the need to modernise services currently provided from three key facilities (see Figure 3-1) so that we can meet the challenges outlined above from the demographic and health inequalities in Clackmannanshire:

- Alloa Health Centre where primary care services are provided to a registered population of about 25,000 (the largest primary care facility in Forth Valley and one of the largest in Scotland);
- Clackmannanshire County Hospital where hospital and community adult mental health services are based serving the whole of Clackmannanshire; and,
- Sauchie Hospital where hospital services for older people in Clackmannanshire are based.

Figure 3-1- Location of Alloa Health Centre, Clackmannan County Hospital and Sauchie Hospital



3.2.2 The modernisation and further development of services to improve the health and well being of the Clackmannanshire population is severely hampered by the limitations of these three facilities. All three facilities have significant problems that constrain both the provision of current services and future service development to respond to changes in need and the way needs are met (described below - see also site plans at **Appendix B1**).

3.3 Alloa Health Centre

3.3.1 Alloa Health Centre provides accommodation for three GP practices, community health care staff and dental staff. The building was constructed in 1978, with an extension being added in the 1980's to enable acute outreach services to be provided from Stirling Royal Infirmary.

3.3.2 The building is located close to the main town centre of Alloa. The building requires investment of £262K (excluding VAT and fees) to achieve the estate performance standards required by national guidance. The main requirement is to replace the roof and windows, however the building is functionally unsuitable for its current purpose. Space utilisation is poor, with statutory standards and energy conservation standards also below an acceptable level.

3.3.3 The health centre has been the subject of many reviews in recent years including the Health & Safety Executive, Central Scotland Police, 3E Consultants on behalf of the previous Trust (Central Scotland Healthcare NHS Trust), and Forth Valley Local Health Council. These reports highlighted the need for improvements in:

- working conditions for staff, especially in record/reception areas;
- fire safety standards;
- energy performance and conservation;
- security arrangements;
- patient waiting areas and toilet facilities.

3.3.4 The Trust has taken action to comply with the issues arising from these reports, however, the continued demand on primary care and other patient services has led to significant space problems. GPs and other staff have raised the following areas of concern about the adequacy of existing facilities:

- a lack of surgery space which prohibits provision of extra surgeries and clinics;
- lack of reception space for ease of movement of staff, housing of records, and for front desk facilities such as appointment books, telephones, and computer terminals;
- lack of privacy for patients at reception which compromises patient confidentiality;
- inadequate patient waiting areas for the number of patients attending surgeries, and which are also not visible to receptionists;
- lack of adequate office space;
- a chronic lack of car parking space for patients, disabled drivers, staff working at the health centre and visiting professionals;
- lack of additional space for associated services such as social work, community psychiatric nurse etc.;
- lack of library space and storage space for equipment;
- inadequate ventilation, heating and lighting;
- poor security; and,
- inadequate toilet facilities, and no baby changing area.

3.3.5 In response to these concerns the Trust commissioned an audit of the health centre in 1999 as part of an audit of all primary care premises in Forth Valley. The audit was based on an audit tool developed by the Scottish Executive and piloted by the Trust. The audit report concluded that:

- accommodation provision was well below standard and required either major reconfiguration and extension, or relocation and complete redevelopment;
- functional suitability (i.e. room relationships and circulation patterns) was unsatisfactory and required substantial re-appraisal; and,
- the quality of the environment for delivering patient care services was below an acceptable standard.

3.4 Clackmannan County Hospital

3.4.1 Clackmannan County Hospital provides acute psychiatric inpatient (15 beds) and day patient care, continuing in-patient healthcare for older people (17 beds) and bases for community mental health teams. The building was constructed in 1899, and comprises two stories in the main building with a single storey extension. The building was refurbished in 1988, however as it is located within a residential area the opportunity for further development is limited. The building requires approximately £213K (excluding VAT and fees) to achieve the estate performance standards with space utilisation and statutory standards below acceptable levels.

3.4.2 The current model of care, especially inpatient care is outdated, as some patients are accommodated in a dormitory, with temporary partitions separating the living spaces of individual patients, and offering little to patients by way of privacy and dignity. Overall, the ward area offers very poor levels of staff observation, which given the nature of the service, can be detrimental to the quality of care.

3.5 Sauchie Hospital

3.5.1 Sauchie Hospital was constructed in 1895 with a number of additional wards being added over the years. The hospital currently provides continuing in-patient care for older people (30 beds) in traditional ward style accommodation. The current ward accommodation, although of fairly recent build (early 1980s), is based on an acute model of healthcare provision and does not now meet best practice standards for the provision of long stay care for older people. Other buildings on the site are occupied on a temporary basis by community based services, including a voluntary organisation.

3.5.2 Approximately £948k (excluding VAT and fees) is required to achieve the estates performance standards adopted by the Trust. This investment would improve the physical condition of the buildings, but significant ongoing investment would be required to maintain the buildings in an acceptable condition. Investment in the buildings would not achieve the required standards in functional suitability or space utilisation.

3.6 Site Plans

3.6.1 Detailed site plans for Alloa Health Centre, Clackmannanshire County Hospital and Sauchie Hospital are provided at **Appendix B1**.

3.7 Case for Change

3.7.1 The case for change can be summarised as follows:

Case for change
• the need for continued development and modernisation of primary care services in line with recommendations in the report of the Primary Care Modernisation Group; • the implementation of the Forth Valley Healthcare Services Strategy and the need to develop community services and provide local access to acute care in partnership

with primary care teams;

- a change in the balance of care for older people's services from an institutional model to a more community based model for services for older people, based on a network of integrated local care services and community hospitals with step down/intermediate facilities;
- the healthcare workforce is currently working under considerable pressure. There is an urgent need to develop and expand the workforce to ensure safe and high quality services are maintained - this is not possible whilst existing poor working conditions exist.
- the existing service and site configuration acts as a significant barrier to service integration and the development of new models of care;
- implementation of the national framework for mental health services including the development of the concept of a community mental health resource centre with an integrated CMHT, day hospital, rehabilitation and acute assessment service all with close links to primary care and social services;
- implementation of the Joint Future recommendations and proposals for the joint management and joint resourcing of community care services to ensure closer working and co-operation between health services and social work services to provide a seamless and integrated service for users and carers; and,
- the need to replace outdated and inefficient buildings and estate with modern high quality facilities that support the development of easily accessible patient focused services.

3.8 Investment Opportunities

3.8.1 Opportunities for capital investment arise from:

- the retraction of services from Sauchie Hospital and the potential for development on the site;
- the potential to develop services on other sites in the Alloa area; and,
- the potential to dispose of the Clackmannan County Hospital site, the Sauchie Hospital site and the Alloa Health Centre site to contribute to capital investment.

3.8.2 Timing is a crucial factor in taking capital investment decisions. We consider the timing is as right as it is ever going to be for making an initial capital investment of £14.7 million in modernising services in Clackmannanshire. Sites do not readily become available to suit planning timescales. Nor is the NHS often in the position to be able to offer sites to support new developments.

3.8.3 At the present time opportunities are available to NHS Forth Valley and its planning partners to achieve the desired service aims and objectives. The proposals in this business case need to be considered within this window of opportunity.

3.9 Project Objectives

3.9.1 In developing these proposals, the key stakeholders have agreed a number of objectives. It is the aim of the agencies involved to work closely together to achieve these objectives through the proposals contained in this report.

3.9.2 The proposed objectives are:

Project objectives

- improve the joint delivery and integration of services across all agencies by 2007/08 so that where appropriate from a patient's perspective referral, assessment and service delivery are seen as one process;
- enhance access to services by optimising the range of health and social services provided locally in one easily accessible location by 2007/08;
- visibly improve the physical condition of buildings and facilities for primary care, acute outreach, older people's and mental health services to physical condition A by 2007/08;
- significantly improve the quality of services to meet national clinical and care standards and improve patient outcomes by 2010 as evaluated by NHS Quality Improvement Scotland

3.9.3 Delivering these objectives will mean significant benefits for patients through:

- smoothing and streamlining the patient's journey;
- enhancing the services currently available and instilling a patient focused approach;
- meeting recognised service standards; and,
- maximising the opportunities for service integration.

3.9.4 It will be clear from the description given earlier in section 3 that these objectives cannot be realised within the current facilities and service configuration.

3.10 Constraints

3.10.1 We have also identified a number of potential constraints on the proposals contained in this report; these are as follows:

- lack of available sites in suitable locations;
- the preferred option must be affordable with in the overall financial strategy for Forth Valley;
- the proposals must be compatible with the strategic direction for health care services as outlined within the Forth Valley Healthcare Strategy;
- as the proposals involve many stakeholders, the proposals must have widespread support among staff, clinicians and the communities in Clackmannanshire; and,
- the proposals must enable services to meet national clinical standards.

3.11 Key Issues

3.11.1 It will be clear there is a compelling case for change across a range of services and facilities. Buildings and facilities are particularly in need of modernisation and restrict the provision of services to meet the health needs of the local population.

3.11.2 Investment opportunities are available to redesign and modernise services so that buildings and facilities are fit for purpose, and the Trust and its planning partners can deliver lasting improvements in the health and well being of the people of Alloa and Clackmannanshire.

4 SERVICE SPECIFICATION

4.1 Overview

4.1.1 The purpose of this section is to outline the proposed service specification for the business case.

4.1.2 It will be clear from the previous sections that this business case is concerned with a wide range of services from primary to acute care. The Trust considers this business case represents in effect an integrated service plan for the provision of health and social care services in Clackmannanshire, within the framework of the wider Healthcare Strategy for Forth Valley.

4.1.3 There is a need to explain in some detail the overall model of care envisaged, and how the services involved relate to each other. While integration is a key theme, it is also important to recognise that current services will need to change to meet the challenges identified in the previous sections e.g. a growing elderly population. Here we describe the model of care we consider will be required to meet these changes. Proposed changes to existing services are presented as either ***core developments*** that are required to deliver the new models of care and are therefore included within the revenue requirements of the Outline Business Case, or potential additional ***service developments*** that would only be funded should resources be available and these are agreed as part of the Local Health Plan in future years.

4.2 Integrated Service Model

4.2.1 To address the issues highlighted in sections two and three, and achieve the investment objectives identified, a model of care is proposed that integrates services to maximise the opportunities for joint working, shared resources and improved access to services for patients. The model has three main components:

primary care services
a wide range of ***primary care services*** provided from an appropriate location sufficient to serve the registered population of 25,000 people in Alloa and the surrounding areas. The aim would be to focus primary care services in one easily accessible location thus maximising patient access and joint working within primary care teams and between primary care and other services. In addition, there are benefits in co-locating allied health professionals and other community services that work closely with primary care and serve the wider Clackmannanshire population to maximise opportunities for ease of patient access and greater service integration.

community hospital services
a range of ***community hospital services*** to serve the wider Clackmannanshire population and delivered jointly with primary care services. Such services include community outreach services, day services and inpatient services. Here the aim is to provide streamlined services for a number of care groups tailored to meet the needs of individuals, and thus maximise the benefits of team working across care agencies to provide high quality modern services in appropriate settings.

local acute services
a range of ***local acute services***, including outpatient and ambulatory care, rehabilitation and intermediate care. The aim would be to provide those services that can appropriately be delivered locally while recognising that the majority of specialist care, including emergency services, will require to be provided from an acute hospital site.

4.2.2 The prime objective of this overall integrated model would be to develop local care and treatment services designed to meet peoples' needs and thus contribute towards tackling inequalities, and improving health and well being in Clackmannanshire. The service specification for each component of the integrated model is described below.

4.3 Primary Care

4.3.1 Most patient "journeys" start and end in primary care. An objective of the NHS in Forth Valley is to make this "journey" as smooth as possible by focusing services around patients and primary care in particular. In the model of care for this business case the aim is to do just that, so that a patient attending the new health centre can access as many other appropriate services as possible within one setting. The information flows, supported by information and communications technology, between health care professionals should be such that the patient's journey from one part of the NHS to another is a smooth and continuous process.

4.3.2 The outcome of this approach would be one in which:

- access to primary care services and other community based services to be provided within the facility is more flexible and quicker, with support to those who face barriers in accessing services;
- there is a more effective partnership with secondary care, in delivering chronic disease management programmes in particular;
- the development of nursing services to promote easier and quicker access to services, for example, developing nursing roles including public health and extending nurse prescribing; and,
- closer joint working including integration with other parts of the NHS and social services to improve services for children, older people and people with mental health problems.

4.3.3 In addition, there is an opportunity to enhance and expand the current treatment room service in order to meet increased demand from service users. An enhanced treatment room would allow the service to be more responsive and flexible by extending its hours of operation to early evening and Saturday mornings, while at the same time be more effective, with patients seeing a nurse directly without in some cases being seen first by a GP. The enhanced service would reduce the amount of return visits that a patient would make, and result in a more autonomous service. It would also provide the opportunity to develop a nurse led minor injuries service in the future. The enhanced service complements the model for area wide emergency services. The additional revenue for this service development would only be funded should resources become available and it is agreed as a service priority as part of the Local Health Plan planning process in future years.

4.3.4 It is also envisaged that all allied health professionals (AHPs) will be based together and working from the same site, and that as result further integration and collaboration will develop. Better communication will occur between AHPs and services for patients will be streamlined. AHP out patient appointments could be co-ordinated through the introduction of one-stop multi disciplinary clinics. This will save both time and unnecessary travel for patients who will be able to attend one appointment to see for example, a dietician, physiotherapist and podiatrist.

4.3.5 Multi-disciplinary AHP teams will also support in-patient care. With the CARE team and Area Rehabilitation services having a base in the new facility, patient discharges will be facilitated. There would also be an opportunity for closer working in paediatric services, speech and language therapy, occupational therapy and physiotherapy. These services have been constrained by lack of space and facilities, and long waiting times for treatment; by closer working between AHPs, innovative ways of effectively treating patients will be developed.

4.4 Community Hospital Services

4.4.1 The Community Hospital model is also focused around smoothing the patient's journey through a spectrum of care and treatment services. The model includes community based services supporting people within their own homes at one end of the spectrum, through to more specialised acute hospital care. The overall aim is to maintain and support people within their own homes for as long as possible and thus prevent the need to access to hospital services .

4.4.2 There are three main components to the model for community hospital services:

- community based services;
- day services; and,
- inpatient services.

4.4.3 Each component will be tailored to meet the needs of specific client groups. Specific consideration is also given in this section to the model for adult mental health services.

Community Based Services

4.4.4 The model for community services integrates health and social care services in line with the Joint Future agenda. The community hospital will provide a focus for older people's services in particular and the opportunity to integrate services across the spectrum of care so that services are person centred. Service integration and placing the older person at the centre of planning and service provision is a strong theme of the Joint Future agenda. The services covered within this part of the business case, and the community hospital itself, will be a key part of the partnership agreement underpinning implementation of joint management and joint resourcing of older people's services in Clackmannanshire.

4.4.5 In Clackmannanshire the Joint Future agenda is already applied across all community care groups and social care systems are in place to ensure work is prioritised on a daily basis. This has resulted in:

- reduced waiting lists and waiting times;
- faster hospital discharges; and,
- the ability to cope with an increase in referrals.

4.4.6 As a result delays in discharge are kept to minimum levels and services respond rapidly to need in line with published eligibility criteria. The introduction of single shared assessment process is built round the assessment tool currently used by Clackmannanshire social services underpin the joint working already in place. Procedures are currently being formalised to ensure good standards of integrated assessments and inter agency information sharing are established. It is intended that the social work assessment teams for Clackmannanshire will be based in the new facility.

4.4.7 The model for community health services includes:

- a satellite team base for the Community Mental Health Services (Elderly); and,
- a base for two multi-disciplinary Community Mental Health Teams one for the Alloa and Clackmannan area, and another serving the Hillfoots area. Teams involve CPNs, psychology, AHPs and social work services and there is a well-established link between the CMHTs and primary care.

4.4.8 The model for community based adult mental health services is currently under further development. The outcome of a major redesign project in Forth Valley has proposed a range of community based alternatives to inpatient care, and these are being evaluated by the Forth Valley Mental Health Strategic Planning Group. The outcome of this work will affect the model for inpatient services described below.

Day Services

4.4.9 The model for day services also reflects the move towards integration promoted by the Joint Future agenda, while maintaining a focus on meeting the needs of specific client groups. Day services will include:

- day care facilities for older people, focused on supporting and monitoring, with intensive levels of therapy input. This will also provide a satellite team base for the CARE team;
- day care services for older people with mental health needs to improve access and lessen journey times (this service is currently provided in Stirling), and assist in the prevention of admission to hospital services; and,
- an integrated day service for adults with mental health problems offering clinical care, structured activity, therapeutic intervention, social care, skills training and support groups to people with mental health problems in hospital and the community. Staff will not be restricted to their current locations but will provide services wherever a need is identified. The service will be closely linked to the CMHTs and integrate treatment programmes and resources of both the ward and day hospital.

4.4.10 The estimated revenue costs for the integrated option in this Business case includes provision for an enhanced mental health day service model which includes extending to an out of hours service, which will be required should the inpatient service reduce from 15 beds (see 2.9.4, 2.9.7 and 4.4.9 above and 4.4.13 and 5.3.3 below). As with mental health inpatient services, the model of care for day services and community based mental health services in Clackmannanshire is currently the subject of further discussion, and clarification will be reached for the Full Business Case for this scheme and the Outline Business Case for area wide acute services. At present the additional costs for an enhanced day hospital service are presented as a service development rather than a core element of the additional revenue costs of delivering the Outline Business Case. Should it be agreed that this development will proceed, a funding source will also be identified either through the Local Health Plan process or more likely within the resource envelope for area wide mental health services.

Inpatient Services

4.4.11 Community hospital inpatient services will be designed to allow a more flexible use over time to support provision for patients with complex needs, including palliative care, for patients undergoing rehabilitation, but medically stable, and for those requiring other intermediate care following an acute episode. The key issues in the model for community hospital services are:

- flexibility in the use of inpatient resources with no age barrier to accessing services, although normally people will be over the age of 65 years;
- inpatient services that support a range of uses including continuing care for older people with complex needs, intermediate rehabilitation (currently consideration is being given to pilot orthopaedic rehabilitation), palliative care the continuing care and rehabilitation needs of older people with dementia including those with co-morbidity (graduate patients). The potential for a managed clinical network for intermediate care will also be explored.

- the service will be protocol driven and, in appropriate circumstances, be nurse led. This is dependent on patients being medically stable, which is seen to be the primary function of the service.

- some additional medical costs have also been built in to the revenue costs to deliver the new model of care should there be agreement in the future to "step-up" provision including GP access to beds within the Community Hospital.

4.4.12 For inpatient mental health services agreement has been reached on the centralisation of all acute mental health beds as part of the review of acute hospital services in Forth Valley. It is envisaged that under a centralised model inpatient beds in Clackmannanshire will offer a step down and/or intermediate care service. As this work is still in progress the Outline Business Case reflects the current position with provision of 15 acute admission beds. The revenue costs identified in the Outline Business case are therefore for delivering the current model, including minimum safe staffing levels. The outcome of further work on the mental health aspects of the Forth Valley Healthcare Strategy and consideration of the potential community based alternatives to inpatient care referred to above will clearly influence the service model for this aspect of the Outline Business Case. A process has been agreed involving all stakeholders to conclude this work working within the current resource profile for adult mental health services, and this will be reflected within the Full Business Case for this scheme, and the Outline Business Case for acute services.

4.5 Local Acute Services

4.5.1 For many years there has been recognition of the benefits brought by the co-location of acute and primary care services in Clackmannanshire for both patients and clinicians. The intention is not only to retain the existing benefits but also to strengthen these by developing the linkages between primary care and acute services to improve access to care, and encourage greater integration and partnership working with other services.

4.5.2 It is proposed that the existing outpatient and ambulatory care services are retained and strengthened. These facilities will support not only the work of primary care but also the community hospital inpatient provision on the site. It is not envisaged that the scope of service provision will be extended to cover emergency care, which will continue to be provided from the main acute facility.

4.5.3 This model will support the development of shared assessments and shared care. The proposed introduction of electronic communications will also support direct booking of appointments, the development of 'one-stop' clinics, an expansion of electronic communications between primary, secondary and community providers and the introduction of telemedicine, and local provision of diagnostic cervices.

4.5.4 These proposals are consistent with the Forth Valley Healthcare Strategy and the model of care outlined in the Outline Business Case for area wide acute hospital services.

4.6 Services for Children

4.6.1 There is an opportunity to provide dedicated child friendly facilities as part of the community hospital development for the provision of children's services that are currently provided at locations in Stirling. The community hospital could provide a focus for child health and other paediatric outreach services, including children's services provided by social work and education in Clackmannanshire, and thus support the overall aim of integration. There is little scope to do this in current facilities.

4.7 Service Profile

4.7.1 The services to be included within the integrated service model are as follows:

Primary Care Services

Services would be focused around the three GP practices serving the Alloa area and the core primary care teams including community nursing teams (i.e. practice nurses, district nurses and health visitors). Other services to be included would be those with whom these core services need to relate to provide high quality primary care services, and those services it is appropriate to provide in a primary care setting. This is not to say the services listed below would each require dedicated accommodation. In some cases accommodation could be shared and services integrated, and for some services a satellite base would be all that was required. These services (some of which are Clackmannanshire wide) include:

- enhanced treatment room services;
- AHP services such as podiatry, physiotherapy, dietetics, and speech therapy;
- community midwifery;
- community dental services;
- community pharmacy;
- optometry;
- community addictions team;
- social work teams;
- family planning;
- a range of acute out-patient services including dermatology, ENT, general medicine, general surgery, geriatric assessment, gynaecology, medical paediatrics and obstetrics;
- other out-patient services such as behavioural psychotherapy, community addictions, old age psychiatry, adult psychiatry, adult clinical psychology, child & adolescent mental health services;
- area rehabilitation services and services for younger physically disabled;
- school nursing;
- community learning disability services;
- out-of-hours services such as CEDOC (GP out-of-hours co-op) and night nursing services; and,
- specialist nursing (e.g. Parkinson's Disease, MS and diabetes)
- health and benefits information

Community Hospital Services

A new community hospital providing services for the Clackmannanshire population as follows:

- community based services:
  - *satellite base for community mental health team for the elderly;*
  - *satellite base for out reach team for physically frail elderly;*
  - *community mental health team base;*
  - *base for assertive outreach services; and*
  - *social work assessment teams*

- day services:
  - *elderly day care services integrated with social work;*
  - *rehab/therapy services;*
  - *mental health day hospital places integrated with social work services;*

- inpatient services:
  - *in-patient beds for physically frail elderly people including provision for intermediate rehabilitation, palliative care and continuing care of those with complex needs;*
  - *in-patient beds for mentally frail elderly people including provision for respite care (possibly shared with frail elderly);*

Community Hospital Services

- *inpatient beds for people with mental health problems who require intermediate/step down care*

- children's services
  - *facilities for community paediatrics and other paediatric outreach services*

4.8 e-Health

4.8.1 This OBC presents an exiting opportunity to modernise the information systems and communications technology to deliver integrated redesigned services that meet patient's needs. Clinicians need access to the right information at the right time to respond to patient's needs. The Trust intends to exploit to opportunities within this business case to ensure staff and clinicians have the right information and communications systems, network connections and training to support the development of an e-health culture. This includes the development of an integrated care record.

4.8.2 NHS Forth Valley has a robust and widespread network linking all main hospital sites to the NHS Net. Services include e-mail and web access to the internal web site as well as the Internet. Use of clinical support systems is increasing with the introduction of the PiMS system in the Primary Care Trust, GPASS and supporting software in the practices and the SCI products in the Acute Trust.

4.8.3 To realise the opportunity e-health presents a comprehensive network and ICT infrastructure will needed within the new facilities. The key issues are:

- providing a link to the Forth Valley intranet with sufficient bandwidth to deliver access to the electronic care record as well as to all required clinical and administration systems;

- all office, consulting room, ward and clinic areas will provide access to information and communications technology services. Use of wireless networking may be likely within some ward areas. The imminent introduction of Class of Service within the Healthnet Community product from June 2002 means that consideration will also be given to utilising this technology within the new facilities.

- Video facilities will also be considered. Experience elsewhere shows that these facilities need to be sited close to clinical areas for maximum effectiveness The benefits which could be expected from such facilities include:

  - provision of video as well as data and digital imaging to support the possible development of local diagnostic services ;

  - Telemedicine – including remote consultation and distance learning

  - Teleconferencing – reducing travel time for meetings

- Public Information - access to information about services, care and treatment should be provided for patients, carers and the general public within all public areas such as waiting rooms and wards. Touch screen access to health and local authority information sources including printing facilities will help improve the availability of information and support health promotion initiatives.

4.8.4 While the new facility will incorporate passive network requirements and be compliant with other standard requirements for Information and Communications Technology, the capital and revenue costs associated with the development of e-health technology have not been included within the OBC and will be addressed through development of the Forth Valley Local Health Plan planning process

4.9 Key Issues

4.9.1 In this section we have described the proposed service model for primary care, community hospital services and local acute services. The overall theme is one of integration focused on the patient's journey. The aim is to integrate services so that from the patient's perspective referral, assessment and treatment are seen as one smooth process.

4.9.2 There are clear opportunities to realise this vision in Clackmannanshire, and respond to the specific health needs both now and in the future. There is sufficient flexibility within the service models to respond to further changes in need as they arise.

4.9.3 The model is also compatible with the proposals with the Forth Valley Healthcare Strategy, and the opportunities for Information and Communications Technology to support service change and integration have been highlighted.

4.9.4 We now move on to describe the assumptions in terms of capacity on which the service model has been based, and we then consider the options for delivering the desired changes.

5 CAPACITY PLAN

5.1 Overview

5.1.1 This section of the Outline Business Case describes the assumptions on which the service model and the bed capacity for the community hospital are based. It has been emphasised throughout the business case that the proposals for community hospital provision are a key part of the wider Forth Valley Healthcare Strategy. Therefore the bed capacity for the new Clackmannanshire Community Hospital should be seen as part of the work to identify the planning assumptions for provision throughout Forth Valley.

5.1.2 In particular, further work is planned on the model for mental health provision (see 2.9.4, 2.9.7 and 4..4.12 above) to ensure compatibility with the Acute Services Outline Business Case. The assumptions that follow for mental health will be firmed up for the Full Business Case.

5.2 Current Bed Capacity

5.2.1 The current in-patient provision for Clackmannanshire is as follows:

Figure 5-1 - Details of Current Bed Provision

Facility	Specialty	Bed Nos.
Clackmannan County Hospital	Adult Mental health acute admission Old age psychiatry continuing care	15 17
Total		**32**
Sauchie Hospital	Frail elderly long stay Respite	28 2
Total		**30**
Total Clackmannanshire bed provision		**62**

5.2.2 Occupancy levels and average length of stay are shown in the service profile at **Appendix A1**.

5.3 Forth Valley Healthcare Strategy

5.3.1 Capacity modelling for the Forth Valley Healthcare Strategy is in progress as work on the Acute Services Outline Business Case nears completion. The key assumptions from preliminary work on the acute Outline Business Case that have informed the bed modelling for the new Clackmannanshire Community Hospital are:

- the provision of all general acute hospital services including emergency services and mental health acute beds on one site; and,
- the provision of some intermediate / step down in-patient services for a range of client groups within a community hospital setting.

5.3.2 The bed capacity assumptions based on the emerging service model for the new acute hospital that inform the assumptions for the new Clackmannanshire Community Hospital are as follows :-

Figure 5-2 - Bed Provision - Current Planning Assumptions

Service	*Forth Valley provision*	*Clackmannanshire provision*
Intermediate care beds	100	45 #
Services for older people	314	
Mental Health acute admission beds including IPCU	80	15

The service model envisages a flexible use of in-patient services with no age barrier to accessing services. It is proposed that intermediate / step down care will be provided within the overall bed complement of 45.

5.3.3 The total number of adult mental health beds in Forth Valley (including acute admission, IPCU and intermediate care beds) will be determined as part of the review of the mental health strategy described in section 2.9.4, 2.9.7 and 4.4.12 above. The process will be co-ordinated by the Mental Health Strategy Implementation Group, and will be completed for the acute services Outline Business Case and the Full Business Case for this scheme. The planning assumption for the new Clackmannanshire Community Hospital includes the current provision of fifteen beds but this will change in the light of the decision to centralise all acute mental health beds on the acute hospital site. The exact number of intermediate/step down mental health beds to be provided in Clackmannanshire will be determined for the Full Business Case.

5.4 Clackmannanshire Community Hospital

5.4.1 The key assumptions that have informed the planned Clackmannanshire Community Hospital provision are:

- a requirement for 20 beds for older people with mental health problems based on current needs and projected future needs assessment;
- a requirement for 25 beds to meet the needs of frail older people and people requiring intermediate care in a community hospital setting based on current needs and projected future needs assessment; and,
- the need for a level of intermediate mental health beds to be determined as part of the review of the mental health strategy and informed by current needs and project future needs assessment.

5.4.2 The new service model envisages much greater flexibility in the use of in-patient services to respond to a wide variety of different patient needs that are appropriately met in a community hospital setting. Through this approach it is envisaged the new community hospital will be able to play a significant role in meeting the estimated demand for intermediate care provision in Forth Valley as a whole.

5.4.3 In mental health, future provision in Clackmannanshire has been significantly influenced by the decision to centralise all acute mental health beds on the new acute hospital site but the full impact of this model has yet to be identified. Current assumptions might change once the review and redesign process described in sections 2.9.4, 2.9.7 and 4.4.12 is complete in time for the Full Business Case.

5.4.4 As regards other services to be provided from within Clackmannanshire a steady state assumption has been made. The current range of general practice, outpatient, and allied health professional services are deemed to be appropriate to meet current and future needs. It may be that a more flexible use of facilities is required but the range of services is unlikely to be significantly expanded.

5.5 Key Issues

5.5.1 This section has highlighted the bed modelling and capacity assumptions on which the Outline Business Case is based. The capacity plan is clearly linked to work on the Acute Outline Business Case, and further work is required on the assumptions made particularly for mental health.

6 OPTIONS

6.1 Overview

6.1.1 In this section we describe the options we have considered to deliver the service specification, and achieve the project objectives outlined in the previous section.

6.2 Long and Short Listed Options

6.2.1 The Trust and its planning partners have looked at a number of possible options for delivering the desired service model. The long list was originally developed by looking separately at the options for the provision of primary care services and community hospital services. The long list included:

New Health Centre/Primary Care Resource Centre

a) do minimum.

b) further development of the existing Health Centre building by for example building an extension or other modifications;

c) reconfiguration of services within the Health Centre to make best use of current space, possibly involving moving some services to another location coupled with building an extension as above;

d) demolition of the Health Centre and build a new health centre on the current site;

e) new purpose built Health Centre on a new site; or,

New Community Hospital

f) do minimum;

g) reconfigure current mental health and older people's services within existing accommodation on current sites (i.e. Sauchie Hospital and Clackmannan County Hospital);

h) reconfigure current mental health and older people's services in existing accommodation on one site - either the Sauchie Hospital site or the Clackmannan County Hospital site;

i) reprovide current mental health and older people's services in new build accommodation on both Clackmannan County and Sauchie Hospital sites;

j) reprovide current mental health and older people's services in new build accommodation on one site - the Sauchie Hospital site, or the Clackmannan County Hospital site or on a new site;

6.2.2 The Trust and its planning partners after considering these options added a further option to the long list that effectively brought the two strands of the business case together.

Integrated Option
k) an additional option is to reprovide both the new Health Centre/Primary Care Resource Centre and the new Community Hospital services together in new build accommodation on a single site and thus further maximise the opportunities for service redesign and integration.

6.2.3 The Project Board, the Trust Management Team, partner agencies and the Trust's property advisers considered the long list of options in detail. The result of this assessment is included in **Appendix C1**. As part of this assessment the Trust commissioned a detailed feasibility study to assess the potential sites available within the Alloa area. Information from this study is included within the assessment at **Appendix C1**. The assessment of the long list of options identified two options that will be the subject of more rigorous appraisal as part of the OBC. The Trust Management Team and the Project Team endorsed this approach. The short listed options are:

- an integrated option with the new health centre and community hospital on one site; and,
- a do minimum option, which has to be included within the OBC as a baseline option.

6.2.4 Consideration was given to a two-site option, which would have resulted in the new health centre being located on one site and the new community hospital located on another site. This option was discounted largely because it did not achieve the objective of integration, and might mean some services such as allied health professionals being placed on both sites. Under a two site option decisions would have had to be taken about the location of some services that could be located with either primary care services or with community hospital services e.g. acute out patient services. Site options for a two-site solution were in any case not feasible as confirmed in the feasibility study commissioned by the Trust, and reported to the Trust Management Team. Taking all this into account the Trust agreed to discount the two-site option from the short list of options to be appraised within the OBC.

6.3 Short Listed Options

6.3.1 The short listed options are summarised in Figure 6-1 below:

Figure 6-1 - Short Listed Options

Option	Description
Option 1 - Do minimum	This option is included as a baseline option against which the one site option is appraised. The do minimum option would mean no change in the current configuration of services as described in the OBC and with minimal capital investment to up grade/improve facilities and accommodation in the health centre, Clackmannan County Hospital or Sauchie Hospital, as considered appropriate.
Option 2 - Integrated option	In this option the new primary care resource centre/health centre would be provided on the same site as the new community hospital, with the result that all the services described in the OBC would be located in new build accommodation on one site thus maximising the opportunities for service integration.

6.3.2 Under the integrated option the Trust would look to locate the proposed primary care resource centre/health centre and the new community hospital together on one site. Thus all the services described in the OBC would be located together. This option has the advantage of maximising the opportunities for service integration and access to a wide range of services in one setting. The option would also mean the Trust reduces its estate from three sites to one site and thus achieve economies of scale. One site would also allow greater flexibility in the future to respond to changes in needs.

6.3.3 It is recommended in the Scottish Capital Investment Manual that a no change or do minimum option is included to act as a baseline for comparison with other options. In the OBC the do minimum would involve:

- no change in the current configuration of services with primary care & acute outreach services, services for older people and mental health services provided on three separate sites;
- minimal capital investment in the health centre and the two hospitals focused on bringing the existing estate up to 'condition B status' but not of the level required to bring them up to modern day standards (e.g. providing patient privacy and dignity); and.
- no change in the pattern or configuration of service delivery or the supporting models of care.

6.3.4 Above all the do minimum option would mean that opportunities for service integration would be missed, scope for future service expansion would be limited and the potential to maximise access to services restricted. The option would also result in the provision of services in outdated accommodation, and the inability of the Trust to meet national standards with a consequent detrimental affect on the quality of patient care.

6.4 Service Components

6.4.1 An illustration of the main service components and their location under each option is given below in Figure 6-2 (note: for ease of reference not all services described within the service profile in section 4 are included in this table).

Figure 6-2 - Description / Location of Main Service Components

Service	Do minimum option	Integrated option
Primary Care Services:		
GP practices & attached staff	Alloa health centre	New build on a new site
AHP services	Alloa health centre	New build on a new site
Acute outpatients/ ambulatory care services	Alloa health centre	New build on a new site
CEDOC	Alloa health centre	New build on a new site
Older People's Services:		
Frail elderly beds	Sauchie Hospital	New build on a new site
Old age psychiatry beds	Clackmannan County Hospital	New build on a new site
Day services	Orchard House, Stirling	New build on a new site
Community team base	Kildean Hospital, Stirling	New build on a new site
Mental Health Services:		
Acute beds	Clackmannan County Hospital	New build on a new DGH site
Day hospital services	Clackmannan County Hospital	New build on a new site
CMHT base	Clackmannan County Hospital	New build on a new site
Other services:		
Children's services	Stirling Royal Infirmary	New build on a new site
Social work services	Lime Tree House, Alloa	New build on a new site

6.5 Site Feasibility Study

6.5.1 As part of the option appraisal process and the development of the Trust's estate strategy, a detailed feasibility study of potential sites in the Alloa area was commissioned by the Trust. In August 2001 G D Lodge and partners and W S P Group Plc were appointed by the Trust to prepare a feasibility study on the best and most economic way of providing the services within the business case on one site.

6.5.2 The feasibility study took into account a number of issues:

- appraisal of potential sites in terms of existing buildings, topography, location, access points etc;
- the overall space requirements for individual services included within the scheme;
- planning and design issues;
- assessment of engineering services including transportation issues, geotechnical and environmental issues.

6.5.3 G D Lodge reported to the Trust in October 2001, and three potential sites were identified for the preferred option. The report also discounted the Alloa Health Centre and the Clackmannan County Hospital sites from the site appraisal process. The criteria used to assess potential sites included:

- the site's ability to accommodate the footprint of the new facilities;
- the site's ability to accommodate the resultant car parking requirements;
- the potential for further and/or future development, not necessarily NHS services;
- the location of the site in terms of access to services by patients and users;
- the site's ability to provide amenity space to support the model of care.

6.5.4 Of the three sites recommended only one was largely within NHS ownership (i.e. the Sauchie Hospital site). The other two sites identified within the Alloa area were both within private ownership. On further investigation one of the sites was discounted on clinical grounds as it did not satisfy the benefits criteria identified in the option appraisal exercise. The other site identified was also discounted as it was considered unlikely to become available for purchase within a reasonable timescale for this scheme, and at a reasonable cost.

6.5.5 The Sauchie Hospital site is already within NHS ownership and with the addition of the Hall Park Mill site was considered by the Trust to be the preferred site option, and satisfied the benefits criteria in the option appraisal. A site map detailing the existing Sauchie Hospital site and the adjacent Hall Park Mill site is provided at **Appendix B2**.

6.5.6 Following discussion with Clackmannanshire Council and the Trust's property advisors, the Trust agreed to proceed with an enhanced Sauchie Hospital site as the preferred site option for the scheme. A development brief for the site has been prepared by the Council, and it has been recognised that it cannot be assumed the buildings on the Sauchie site will be demolished without due consideration being given to some of the special features of the site, and the local interest in the buildings.

6.6 Key Issues

6.6.1 In this section we have described the process supporting the development of the long-list of options for delivering the service objectives and specification outlined in chapters 3 and 4.

6.6.2 The long-list is extensive and rigorous and incorporates an approach, which looks at options from the perspective of both maintaining distinct health centre and community hospital facilities and services as well as exploring the scope for greater service and facility integration.

6.6.3 In assessing which of the long-listed options should be taken forward to the detailed appraisal process (benefits assessment, financial and economic appraisal - including sensitivity testing – and the risk assessment) a clear and robust process has been developed which has ultimately been supported by the Trust Management Team (TMT). The basis under which multi site options have been excluded links directly to failure to meet the service integration objectives.

6.6.4 A detailed site feasibility study also ran along side the option appraisal process with a number of potential sites assessed for their suitability to deliver the one site integrated option. After this detailed assessment and discussions with planning partners it was agreed to proceed with an enhanced Sauchie Hospital site as the preferred site location for the scheme.

6.6.5 The short-listed options are well described and understood. The reference option (do minimum) provides a robust baseline against which the single site option will be compared. The following chapter subjects the remaining options to a detailed benefits appraisal process whereby these are measured against their ability to meet the key benefits criteria.

7 BENEFITS APPRAISAL

7.1 Overview

7.1.1 The benefits appraisal process had three main stages:

- identification of the benefits criteria;
- weighting of the benefits criteria; and,
- scoring of the options against the benefits criteria.

The Project Board involved a number of individuals in the appraisal exercise including clinicians, staff, service users, GPs and managerial staff in both Trusts and social services. The Project Board proposed the benefits criteria based on the investment objectives of the business case.

7.2 Benefits Criteria

7.2.1 The benefits criteria were developed in the light of the project objectives set out in section three, and were as follows.

Figure 7-1- Description of Benefits Criteria

Benefits Criteria	***Description***
Quality of service provision	***The degree to which the option would be able to provide high quality clinical care***. This criterion included whether the option allowed compliance with national clinical standards and frameworks such as CSBS, SHAS, mental health, RCGP and other national guidelines, and the ability to support the recruitment and retention of staff.
Quality of environment	***The degree to which the option would be able to provide a high quality environment suited to the needs of patients and staff.*** This criterion included ease of access to other community facilities, whether the option provided a safe environment with space and grounds appropriate for the needs of patients, and whether the option would allow for the provision of facilities to meet best practice in terms of design standards.
Flexibility	***The degree to which the option would facilitate flexibility both in the short and long term.*** This criterion measured the scope for flexibility in the design and configuration of buildings, so that should services need to change to meet future changes in local needs, buildings/facilities could be put to other uses should this be necessary (e.g. to meet the needs of a different client group) or the buildings/facilities easily adapted or changed.
Strategic fit	***The ability of the option to meet the strategic aims for NHS Forth Valley as set out in the Local Health Plan, local strategies and the national policy documents referred to in section three.*** For example the criterion measured the degree to which the

Benefits Criteria	Description
	option allowed the scope for service integration, and supported implementation of A Joint Future.
Location/ease of access	***The degree to which the option would provide for ease of access for the majority of people who it is planned would use the services outlined in the business case.*** An accessible location was also one that had ample car parking, was close to other services, was accessible by emergency services, allowed for compliance with legislative requirements e.g. Disability Discrimination Act and facilitated access to as many services as possible in one location.

7.3 Benefits Criteria Weighting

7.3.1 The Project Board then weighted the benefits criteria. In the scoring exercise individuals were given the option of changing the weights so that the robustness of the appraisal was tested. The weightings agreed by the Project Board are as follows (total weighted score = 100):

Figure 7-2 - Benefits Criteria Weighting

Benefits Criteria	Weight
• Quality of service provision	30
• Quality of environment	20
• Flexibility	15
• Strategic fit	20
• Location/ease of access	15

7.4 Scoring of the Short-listed Options

7.4.1 The next step was to score the short-listed options against the benefits criteria. Scores were awarded on a scale of 0-10 with 10 scoring the highest. All members of the project team were asked to score the short listed options, including members from each GP practice, allied health professionals, service users involved in the sub groups and other clinicians. All the scores were then collated and summarised without identifying individual's names. The resulting scores are summarised in Figure 7-3 below. A more detailed analysis of the scores is provided at **Appendix D1**.

Figure 7-3 - Option Appraisal Scores

Benefit criteria	Weight	Weighted Scores	
		Option 1 - Do minimum option	Option 2 - Integrated Option
Quality of service provision	**30**	1,300	3,960
Quality of environment	**20**	550	2,500
Flexibility	**15**	240	1,755
Strategic fit	**20**	430	2,430
Location / ease of access	**15**	995	1,870
Totals	**100**	**3,515**	**12,515**

7.4.2 From the above analysis it is clear that the integrated option scores well ahead of the do minimum option with a total of 12,515. As the do minimum option is largely a reference position it is not surprising that the overall level of anticipated benefits delivered by the one site option is significantly greater.

7.5 Key Issues

7.5.1 The benefits appraisal clearly indicates a preference for the integrated option, with this option scoring well ahead of the do minimum option on all five criteria. It was noted that the do minimum option scored particularly low on flexibility, quality of environment and strategic fit highlighting that the current facilities are not fit for the purpose of providing modern health care services.

7.5.2 These issues are also reflected in the risk appraisal exercise the results of which are reported in chapter nine.

8 FINANCIAL AND ECONOMIC APPRAISAL

8.1 Overview

8.1.1 This chapter explains the methodology for costing the remaining short-listed options in terms of both capital and revenue implications. The methodology and assumptions are applied to derive the comparative cost implications of each of the options. Subsequently, these costs are adjusted to reflect the risks that will vary over the options.

8.1.2 The outputs from the cost models identified in this chapter form the basis of both the financial and economic appraisal of the short-listed options. The financial appraisal will be the ultimate determinate of affordability whilst the economic appraisal will determine the value for money provided. Value for money is demonstrated by measuring the ratio of overall costs to non-financial benefits for each option. It does not always follow that the option offering the best value for money will be affordable; hence the need to consider affordability as a parallel assessment criteria.

8.1.3 All current guidance has been followed in constructing the financial and economic appraisal, principally : Scottish Capital Investment Manual (SCIM) and Department of Health Principles of Generic Economic Model for OBC Option Appraisal.

8.1.4 Revised interim guidance, under HDL(2003)13, has recently been issued to cover the requirements of the HM Treasury New Green Book which comes into effect from 1 April 2003. The revised guidance alters the procedures for appraisal and evaluation in Health.

8.1.5 The main impact of the revised guidance is to disaggregate the 6% composite rate of return (and therefore both the rate at which composite capital charges are calculated and the discount rate used in the economic appraisal), specifically, the requirements of the New Green Book differ from current appraisal requirements in the following areas :-

- The introduction of a 3.5% rate of return
- Introduction of Optimistic Risk bias
- Adjusting for corporate tax flows
- More detailed analysis of valuation of benefits

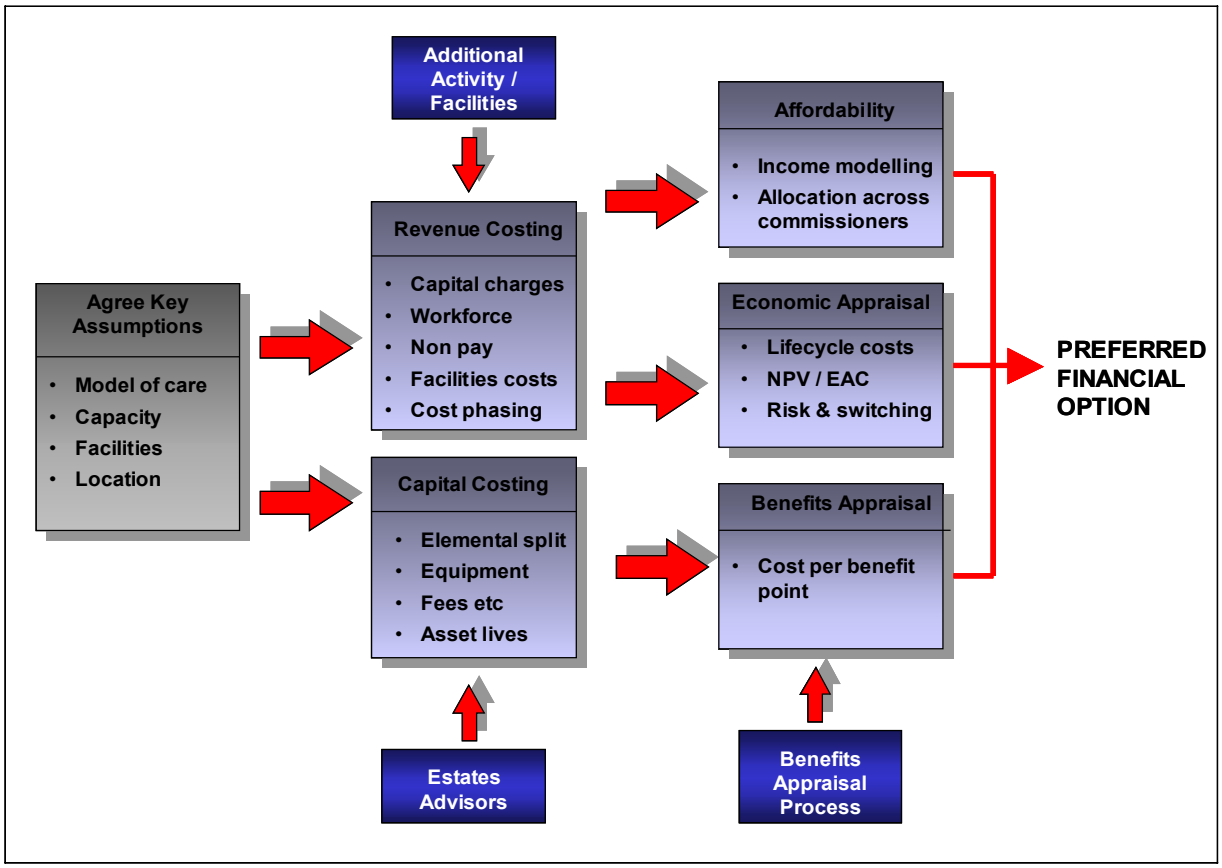
8.1.6 For the purposes of the Full Business Case (FBC) it is likely that this will be undertaken using the revised requirements outlined above. It will therefore be necessary to establish a robust audit trail between OBC and FBC without impacting adversely on the overall affordability or value for money associated with the preferred option.

8.1.7 Whilst further clarification will be required on the application of the revised guidance in relation to this OBC, existing guidance has been used in conducting the financial and economic appraisal. However, in anticipation of the requirements of the New Green Book becoming mandatory we have conducted a number of sensitivity tests in relation to the Net Present Value (NPV) of the options to determine if this has a significant impact on the ranking. Further details are provided in section 8.7.

8.1.8 The financial model for each option utilises a number of key outputs from other parts of the OBC process, namely workforce planning, capacity planning, and design in establishing the capital and revenue implications for each of the short-listed options.

8.1.9 The general approach to the financial appraisal is summarised in Figure 8-1.

Figure 8-1- Methodology for Financial Appraisal



8.1.10 A financial model was set up to identify the different components of the proposed cost structure of each option. Representatives from the relevant Finance departments, along with key members of the project team, have been involved in drawing up all of the financial information contained in the following analysis.

8.2 Key Financial Assumptions

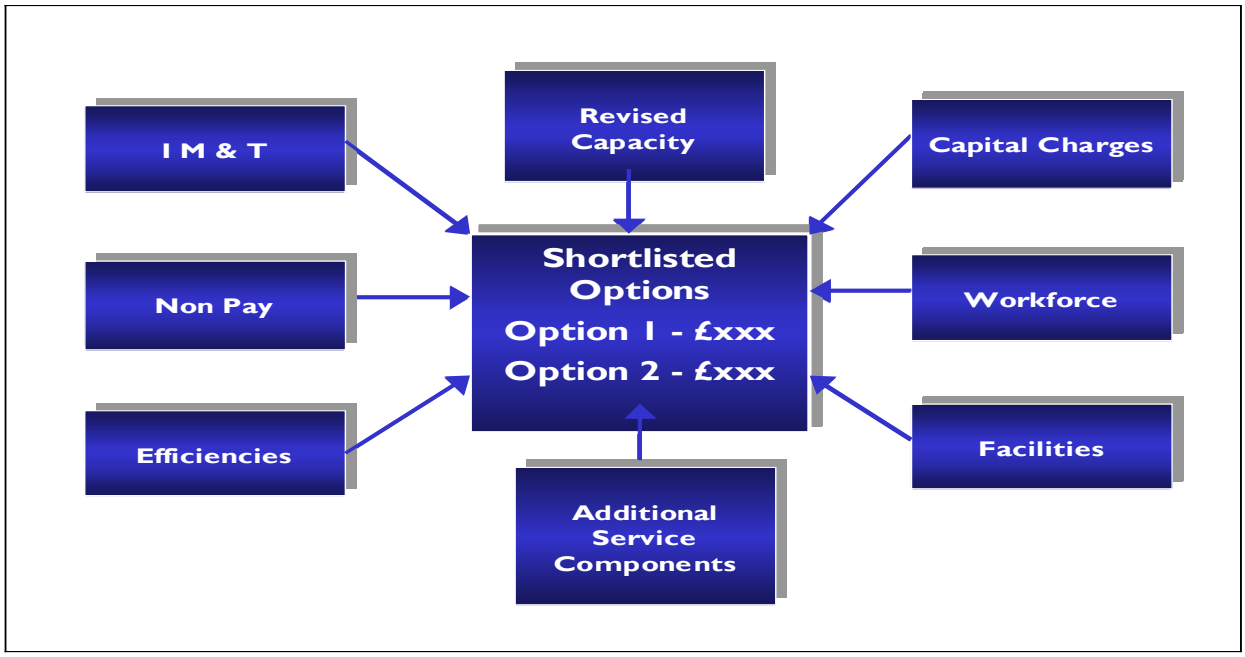
8.2.1 The financial model is driven by key assumptions which potentially have a material effect on the overall operating costs of the new facility, such as;

- likely capital costs;
- revenue costs (pay and non-pay) associated with existing services which are to be maintained, i.e. baseline costs;
- changes to revenue costs associated with service redesign;
- variations in revenue costs (pay and non-pay) associated with each of the shortlisted options;
- projected capital charges; and
- variations in income.

8.3 Costing Methodology

8.3.1 Each of the short-listed options has been costed in a manner that identifies the key elements of change associated with the project. The specific components of this are set out in Figure 8-2 .

Figure 8-2 - Key Components of Costing



8.4 Capital Costings

8.4.1 The Trust, in conjunction with their professional advisors, has prepared the capital costs based on an appraisal of the capital requirements of each option. Within these estimates, Figure 8-3, below summarises the key capital assumptions :-

Figure 8-3 - Key Capital Assumptions

Capital Costs	• Costed at third quarter 2002 price base • Split into three categories – building, engineering and equipment / fittings • Appropriate on-costs have been applied • A provisional location adjustment of 5% has been applied to the capital costs of option 2 • Fees have been applied at a rate of 15% • Contingencies at 9% of overall capital cost • VAT is added at 17.5 %, but the design team fee element of cost is recoverable
Write off / disposals	• Surplus buildings and those to be replaced are written off in accordance with the demolition schedule for each option • Accounting treatment will be to write-off disposals / demolitions at book value to I&E in the year that the asset is no longer available for use. FRS 11 will apply • It is assumed that the general fund, previously Public Dividend Capital (PDC), will be reduced by the value of the write-off and that the I&E impact will be matched by a funding flow adjustment • It is assumed that capital charges from surplus buildings is retained in the base funding • At the direction of the NHS Board, estimated proceeds from the sale of surplus land and accommodation have not been used to offset the capital costs under option 2

8.4.2 In addition to the initial construction capital costs an allowance of £200k has been built into the overall project capital costs to cover initial equipment purchases. It is envisaged that a proportion of the equipment stock held prior to commissioning the facilities will transfer from existing sites. A detailed condition survey will be undertaken to assess the suitability and extent of transfers. The balance of equipment requirements is likely to be financed from surplus land sale receipts (see figure 8-17) with on going replacement funded from formula capital allocations.

8.4.3 Having applied the costing methodology to the two short-listed options, the resultant capital expenditure is analysed in Figure 8.4 below

Figure 8-4 - Capital Costing Summary - £000

Cost Component	Option 1 Do Minimum	Option 2 Integrated Site Option (existing Sauchie Hospital site)
Works cost @ 3rd Qtr 2002	1,673	10,300
Provisional location adjustment	0	(515)
Total Works cost	**1,673**	**9,785**
Design Team Fees	200	1,468
Non-works Costs	0	258
Planning Contingencies	200	1,000
Total excl VAT	**2,073**	**12,511**
VAT @ 17.5 %	363	2,144
Total	**2,436**	**14,655**

8.4.4 The Trust acquired the Hall Park Mill Site to facilitate the development of option 2 at a cost of £258k (included as non-works costs). This cost has been incorporated within the capital base used for calculating the capital charges for this option.

8.4.5 The initial capital costs for Option 1 have been developed by the Trust's Estates Manager who has undertaken a detailed assessment of the financial implications of bringing the existing three sites up to condition B status. This review has covered both the building and engineering components of the required capital programme as well as on-going lifecycle spend. It is not envisaged that this lifecycle expenditure will add value to the existing estate and as such it has been treated as revenue expenditure in much the same way as backlog maintenance (see para 8.5 - Revenue Analysis).

8.4.6 The Trust have assessed that the initial capital investment and supporting lifecycle expenditure will have the following impact on the assumed remaining useful life of the existing buildings :-

Figure 8-5 - Impact of Do Minimum Investment on Asset Lives

Estate Element	Initial Capital Spend £'000	Estimated Life Years
Sauchie Hospital	1,317	20
Clackmannanshire County Hospital	653	30
Alloa Health Centre	465	20

8.4.7 It is therefore envisaged that under the do minimum option, further capital spend, on top of the revenue lifecycle costs will be required after the periods indicated above. For the purposes of the OBC it is assumed that these would be in line with the initial do minimum capital spend. Furthermore the initial capital investment has been written off in line with the expected lives outlined Figure 8-5

8.4.8 Whilst the do minimum capital investment will result in the estate being brought up to a condition B status, this investment will not address some of the fundamental issues relating to the infrastructure of the existing facilities, examples include :-

- the inappropriate functional suitability of the existing premises
- the poor space utilisation of the existing estate
- the requirements of the Disability Discrimination Act
- scope for future estate expansion

8.4.9 The capital costs associated with the single site option have been developed by Gleeds , the Trust's appointed Quantity Surveyors and are based on indicative schedules of accommodation. A detailed analysis of these costs, including details of the space footprint upon which they are based is provided in the Indicative Feasibility Cost Plan provided as **Appendix E1**. In addition, further analysis of these costs comprising cost form OB1 is provided at **Appendix E2**. They have assessed the required level of capital contingency for a project of this size and complexity and this is incorporated within the overall costs. The Trust has undertaken a separate detailed risk assessment of both options to test the appropriateness of this contingency. Further details can be found in chapter 9.

8.4.10 The capital costs associated with the single site option supports a gross internal floor area of 6,880m^2 and provides accommodation for a Community Hospital and a Health Centre incorporating the services described in section 4.7.

8.4.11 For both options it is assumed that a proportion of group 2, 3, and 4 equipment will transfer from the existing facilities. An initial allowance of £200k (in addition to the capital construction costs) has been built into the costs for the purposes of calculating capital charges. The balance of initial equipment is likely to be funded from land sale receipts. Group 1 equipment would be provided within the overall construction costs noted above.

8.4.12 The capital costs will be incurred over a number of years and the phasing of these costs has been provided by the design team and is illustrated in Figure 8-6 below:-

Figure 8-6 - Phasing of Capital Costs - £000

	Option 1 Do Minimum	**Option 2 Integrated Option (existing Sauchie Hospital site)**
Year 0 – 2004/05	2,436	9,770
Year 1 – 2005/06	0	4,885
Total	**2,436**	**14,655**

8.4.13 The Trusts quantity surveyors have estimated that the single site option would require a total construction period of 18 months whereas it is likely that condition B status could be achieved within a period of no more than 12 months.

8.5 Revenue Implications

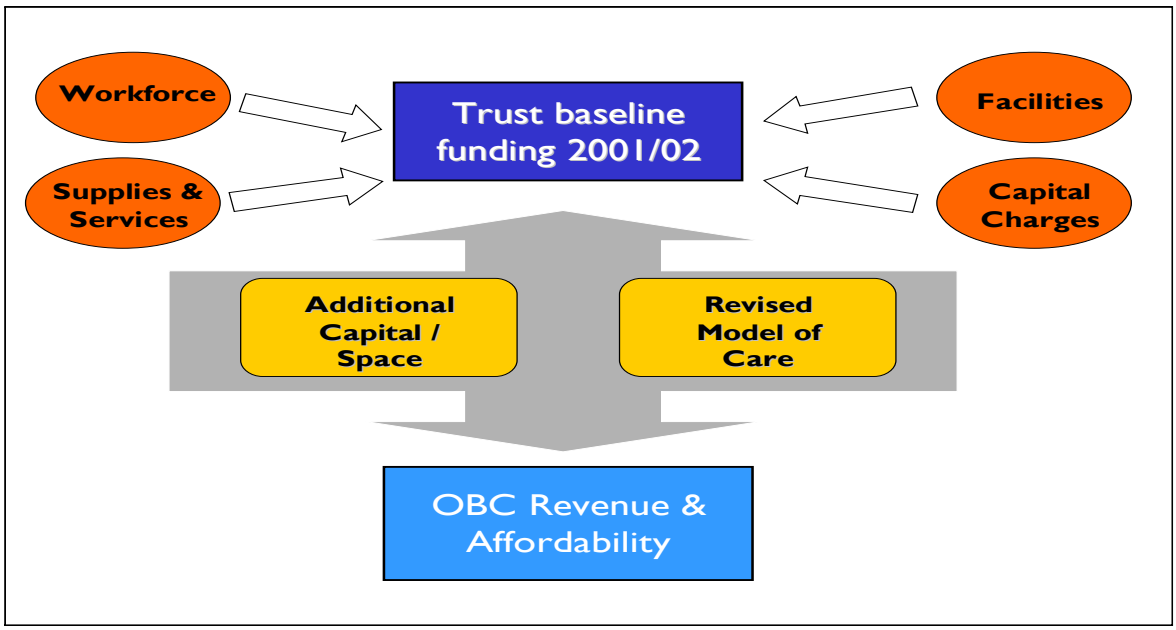
8.5.1 Revenue cost implications are split between services currently provided and new developments. In order to assess the revenue implications of current services it was initially necessary to establish a baseline of cost from which any changes could be considered. The high level assumptions used in the revenue cost model for each of the short-listed options are set out in Figure 8-7, this is supported by a more detailed analysis which models all of the baseline costs in accordance with the key assumptions.

Figure 8-7 - Revenue Cost Model Assumptions

General	• Costs and income are stated at 2001/02 price levels • Costs are expressed as annual equivalents for all options, showing movements from the 2001/02 full year recurrent baseline • Baseline capital charges are derived from the capital asset register • Income has been analysed by category, source and status so that non-recurring income has been excluded unless there is an explicit assurance that it will become recurrent • Pay costs are inclusive of full on-costs • Supply costs include VAT where it is not recoverable
Cost Drivers	• Where possible pay costs are derived from the workforce plan using a 'bottom-up' approach which takes account of the model of care and the key capacity changes • Movements in non-pay costs have been calculated using appropriate cost drivers for each expenditure type and location, these include :- ♦ Capacity requirements (e.g. beds) ♦ Patient episodes and length of stay ♦ Whole time equivalents ♦ Estate profile / area / volume • Movements in capital charges (reflecting the short-listed options) have been calculated using the schedules of accommodation and site development plans

8.5.2 The revenue analysis also takes account of a number of related aspects of the OBC specifically associated with and model of care and capacity assumptions (see chapters 4 and 5). Fuller details of these aspects are incorporated into the following section and a more detailed analysis is provided in the supporting financial appendices. In summary the components of the revenue analysis are highlighted in Figure 8-8. Revenue and affordability is phased into time periods in Figure 8-16.

Figure 8-8 - Key Elements of Revenue Analysis



Baseline Costs - Current Services

8.5.3 Baseline costs for current services for each of the areas affected, including capital charges are shown in Figure 8-9 below, a detailed breakdown is supplied on **Appendix E3**.

Figure 8-9 - Baseline Costs (based on 2001/02 recurrent budgets) - £000

	Service	Facilities	Total
Hospital Services			
Clinical Costs	1,610	0	**1,610**
Support Costs	207	797	**1,004**
Capital Charges	156	0	**156**
Sub Total	***1,973***	***797***	***2,770***
Health Centre			
Clinical Costs	672	0	**672**
Support Costs	236	0	**236**
Capital Charges	142	0	**142**
Sub Total	***1,050***	***0***	***1,050***
Total	**3,023**	**797**	**3,820**

8.5.4 Facilities costs include both expenditure associated with hard and soft facilities management as well as costs (or share thereof) pertaining to support functions including corporate departments.

8.5.5 Capital charges have been included in lieu of depreciation and interest payable and represent the 2002/03 estimate expressed at 2002/03 price base (i.e. the latest estimate).

Capital Charges

8.5.6 Capital charges have been calculated for existing services for each option based upon:-

- 6% return on all assets;
- depreciation on a straight line basis over the life of the assets excluding land;
- asset lives as follows; buildings 60 years, engineering 25 years, equipment 10 years;
- calculated on capital costs outlined above and the relevant land value for each option;
- new build capital cost split as follows; construction cost split between buildings (70%) and engineering (30%) per quantity surveyor assessment;
- includes fees, contingencies and VAT where applicable.

8.5.7 The revised capital charges and the net impact are summarised in Figure 8-10 below. Full supporting papers are attached at **Appendix E4**.

Figure 8-10 - Capital Charges - £000

	Option 1 Do Minimum	Option 2 Integrated Option (existing Sauchie Hospital site)
Revised Capital Charges	494	1,257
Existing Capital Charges	297	297
Net Impact	**197**	**960**

8.5.8 Baseline capital charges represent the 2002/03 quarter 4 position expressed at 2002/03 price base and as such take account of indexation, additions and impairments.

8.5.9 Revised capital charges reflect the nature and phasing of capital spend and incorporate construction, equipment and other capital expenditure. They also incorporate the charges associated with retained land, buildings and equipment.

8.5.10 In light of the requirements of the HM Treasury New Green Book with regard to the introduction of a 3.5% rate of return we have recalculated the capital charges on the initial investment accordingly. The results are summarised in Figure 8-11below.

Figure 8-11 – Gross Capital Charges Restated at 3.5% Rate of Return

	Option 1 Do Minimum	Option 2 Integrated Option (existing Sauchie Hospital site)
Interest	165	520
Depreciation	210	365
Total Capital Charges @ 3.5% Rate of Return	**375**	**885**

8.5.11 The total net book value of assets written off (expressed at 31 March 2003 written down value) as a result of demolition or disposal is set out in Figure 8-12 below along with the associated released capital charges. These have been applied as an offset against the capital charges resulting from the initial capital investment, however an impairment is incurred.

Figure 8-12 - Impact of Asset Write-off and Associated Capital Charges - £000

	Option 1 Do Minimum	Option 2 Integrated Option (existing Sauchie Hospital site)
Asset NBV Written off	-	2,120
Capital charges released	-	281

Service Based Revenue Costs – Pay and Non-pay

8.5.12 Figure 8-13 below represents the net revenue costs for core developments required to deliver the new model of care. Full supporting papers are included at **Appendix E5**.

Figure 8-13 - Net Revenue Impact – Pay and Non-pay Costs - £000

	Option 1 Do Minimum	Option 2 Integrated Option (existing Sauchie Hospital site)
Proposed Service Based Costs	3,952	4,146
Existing Service Based Costs	3,522	3,522
Overall Net Revenue Impact	**430**	**624**

8.5.13 Proposed changes to existing services are presented as either ***core developments*** that are required to deliver the new models of care and are therefore included within the revenue requirements of the Outline Business Case, or potential additional ***service developments*** that would only be funded should resources be available and these are agreed as part of the Local Health Plan in future years. **Appendix E5** summarises both core developments and potential service developments.

8.5.14 The main factor driving out the difference in service costs between options one and two is the service model described within chapters four and five. The model of care for the community hospital envisages a more dynamic rehabilitation model with inpatient services provided to meet a range of different needs. Although predominately for older people the service will not be age specific and the emphasis will be supporting people after an acute episode of care.

8.5.15 The model is therefore intimately linked with the emerging service model for acute care for Forth Valley as a whole. The staffing levels within option two reflect this. Under option one the costs of the current staffing levels are included as it is not feasible to introduce the new model of care with the current site and service configuration. There is therefore no provision within current staffing levels to meet the service model envisaged under option two.

8.5.16 In mental health a strategic review is underway and as highlighted earlier in the OBC. The current assumption is that the service will become increasingly community based supported by step down/intermediate beds, with access to acute mental health beds on the new DGH site. The exact level of bed provision in Clackmannanshire has yet to be determined but will be clarified for the Full Business Case. The costs in the OBC for option 1 therefore reflect the current level of service. The costs for option 2 include additional nursing and AHP staffing associated with an enhanced day hospital service described in para 4.4.10 and 4.4.12, and to meet service standards for acute admission facilities as specified by NHS Quality Improvement Scotland and the Scottish Health Advisory Service.

8.5.17 In line with the key capital assumptions the capital lifecycle expenditure under option 1 has been treated as a revenue cost. It is not envisaged that this lifecycle expenditure will add value to the existing estate and as such it has been treated as revenue expenditure in much the same way as backlog maintenance.

8.5.18 Facilities costs, including rates and energy, have been projected on a steady state basis. It is assumed that property and water rates associated with the existing buildings will offset rates applicable to the new facilities. Discussions are underway with Clackmannanshire Council to clarify this position. As it is unlikely that there will be major changes in clinical activity, direct overheads such as catering, laundry and portering are likely to remain at their current levels. Other overheads such as cleaning, energy and building maintenance tend to be related more to the overall size of the facility.

8.5.19 Under the single site option, the overall space footprint will be smaller than at present (i.e. a smaller gross internal floor area than the sum of the existing three sites), which may result in some economies in facilities expenditure. However, there is likely to be a requirement to maintain building and engineering fabric at a higher standard than at present and this is likely to dilute the impact of any cost savings. Furthermore, property and water rates charged for new premises are normally at a higher level than for existing properties that may result in additional costs. It will be necessary to discuss the implications of the preferred option with the Local Authority.

Additional Income

8.5.20 It is anticipated that as a result of the enhanced facilities resulting from the investment associated with option two the following additional income contributions will be secured :-

Figure 8-14 - Additional Income Contributions Under Option 2 - £'000

Source of Additional Receipts	Estimated Contribution
GMS non cash limited contributions	335
Social Work / Clackmannanshire Council	54
Total Additional Income	**389**

8.5.21 The increased income arises from :-

- Increased rental reimbursed from GMS non cash limited expenditure in respect of the level of accommodation occupied by the GPs and primary care teams, and;
- Contribution to costs from the occupation of accommodation by the Social Work department of Clackmannanshire Council

8.5.22 Charges are based on the expected floor area to be occupied by these services and advice from the District Valuer on the market rent applicable.

8.5.23 Further discussion and negotiation with these parties will be required to secure the levels of contribution highlighted.

8.5.24 As the nature of these income contributions is likely to be recurrent they have been used to offset the additional revenue costs resulting from option 2.

Overall Net Revenue Impact

8.5.25 Taking the capital charge, service, and facilities impact , the overall change in total Trust recurrent revenue resulting from the development is summarised in Figure 8-15 below.

Figure 8-15 - Net Revenue Impact - £000

	Option 1 Do Minimum	Option 2 Integrated Option (existing Sauchie Hospital site)
Capital Charges	197	960
Service (pay and non pay)	430	624
Additional Income	0	(389)
Total	**627**	**1,195**

8.5.26 The revenue costs above reflect the levels anticipated in the first full year of operation.

8.5.27 Unsurprisingly option one, the do minimum option has significantly lower revenue implications than option two. This is largely as a result of the capital charge implications of significant initial capital investment associated with the development of a new single site facility. The do minimum option would however retain many of the existing inefficiencies associated with the current service configuration and would not address a number of significant building regulation and other statutory requirements. Furthermore option one would not provide a basis for developing greater service integration or revised models of care.

8.5.28 It has already been established that the level of non-financial benefits accruing under option two is significantly in excess of the do minimum option. The economic appraisal attempts to measure the overall value for money associated with the shortlisted options by considering both costs and benefits.

8.6 Effect on Commissioners

8.6.1 The overall annual recurrent revenue implications of option two on Forth Valley NHS Board are £1,195k expressed at 2001/02 outturn price base. It is essential that this revenue envelope is protected during the approval process and through to FBC. As such it will require to be uplifted by means of the GDP deflator (or equivalent NHS Board uplift) to reflect the prevailing price base. When assessing value for money and affordability at FBC stage it will be necessary to re-base the capital and revenue costs and as such the overall affordability envelope identified as part of the OBC will need to be updated accordingly

8.6.2 The phasing of the project is such that the first full year impact will be in 2006/07, based upon the current development timetable it is anticipated that the additional revenue requirement will be phased as set out in Figure 8-16.

Figure 8-16 - Additional Recurrent Income Required (cumulative) - £000

	Option 1 Do Minimum	Option 2 Single Site Option (existing Sauchie Hospital site)
Financial year 2004/05	141	587
Financial year 2005/06	197	1,038
Financial year 2006/07	627	1,195

8.6.3 It is unclear at this stage precisely how the facilities would be commissioned under the new build option and therefore the timing of the additional revenue cannot be precise. As only the interest element of capital charges is incurred during the construction period this has been phased in line with the construction spend. In relation to the new build option (Option 2) it is assumed that commissioning and service transfer would be completed by the end of 2005 at the latest.

8.6.4 Capital receipts and capital charges released under option 2 from disposals are assumed to come on stream only after the completion of commissioning.

8.6.5 The revenue implications of option two are within provisional affordability parameters identified by Forth Valley NHS Board.

8.7 Economic Appraisal

8.7.1 A discounted cash flow for each of the options has been undertaken over 60 years (plus initial construction period) using a discount rate of 6%. Both the Net present Cost (NPC) and Equivalent Annual Cost (EAC) have been calculated. EAC is used for comparison of options over different life spans as it converts the NPC to an annual figure. The key elements used in the analysis are summarised below: -

- initial capital outlay for each option exclusive of VAT;
- estimated proceeds from land sales (option 2 only);
- detailed lifecycle costs of building and engineering works, provided by the Quantity Surveyors;
- revenue costs for each option, and
- transitional and opportunity costs for each option

The Department of Health Generic Economic Model (GEM) was populated with the base data for each option. The key outputs from the model are available at **Appendix E6.**

8.7.2 The additional income contributions identified in figure 8.13 have been excluded from the economic appraisal as these are not generated from non-public sector organisations.

8.7.3 The estimated proceeds accruing from the disposal of surplus sites (Alloa Health Centre and Clackmannanshire Community Hospital) have not been used to offset the capital costs for the purposes of calculating capital charges in the financial appraisal (on the specific guidance of the NHS Board). It is however necessary to incorporate these within the economic appraisal in assessing the overall net present cost of this option. The estimated gross proceeds and demolition costs of the existing facilities are summarised in Figure 8-17 and have been based on an assessment undertaken by the Trust's property advisors which was completed in November 2001.

Figure 8-17 - Estimated Proceeds from Land Sales - £'000

Site	Estimated Gross Sales Proceeds	Demolition Cost	Net Proceeds from Disposal
Alloa Health Centre	576	176	400
Clackmannan County Hospital	501	122	379
Total	**1,077**	**298**	**779**

8.7.4 The estimated proceeds have been provided by Ryden Property Consultants, the Trust's property advisors and are based on values prevailing as at November 2001.

8.7.5 It is estimated that these receipts would become available following the completion of the commissioning of the new facilities in 2006/07.

8.7.6 At the direction of the NHS Board, estimated proceeds from the sale of surplus land and accommodation have not been used to offset the capital costs under option 2, however, it is likely that some of the proceeds will be used to fund the balance of non-transferrable equipment.

8.7.7 It is anticipated that there may be some transitional costs arising in relation to option two. These relate to the extent to which the existing site would require to be cleared to allow the proposed development to proceed. The Trust is working on the basis that interim arrangements would see patients moved into temporary accommodation within existing Acute and / or Primary Care Trust wards. The expectation is that this would be managed at minimal cost to the Trust and as such an allowance of £50k has been built into the appraisal. Further work will be undertaken at Full Business Case (FBC) stage to reassess, and if necessary, quantify any impact.

8.7.8 The results of the economic appraisal are summarised in Figure 8-18 below, a more detailed analysis is provided at **Appendix E6**.

Figure 8-18 - NPC and EAC - £000

	Option 1 Do Minimum	**Option 2 Integrated Option (existing Sauchie Hospital site)**
Net Present Cost (NPC) over 60 years	8,244	21,848
Equivalent Annual Cost (EAC)	480	1,273
Ranking	**1st**	**2nd**

8.7.9 As expected the do minimum option has a significantly lower NPC than option two. This is a direct result of the additional initial capital costs associated with this option. These carry significant weighting in the NPC calculation as the impact of discounting is less significant in earlier years. It is however important to relate the NPC's of the options to the non financial benefits scores derived through the benefits appraisal. This provides an overall assessment of the value for money offered by the range of options (see para 8.7.11).

8.7.10 The results of the economic appraisal have been subjected to a sensitivity analysis to examine the impact of movements in capital costs, annual revenue costs, variation in land sale proceeds (latter applies to option two only), and delays in capital programme. The following factors were applied consistently to the options :-

- + / - 10% to initial capital costs
- + / - 5% to operating costs
- + / - 10% to land sale proceeds (option 2 only)
- A 1 year delay in the capital programme
- A 3.5% discount rate in lieu of new Treasury Green Book guidance

8.7.11 The results of the sensitivity tests are summarised in Figure 8-19 below.

Figure 8-19 - Sensitivity Analysis - £000

	Option 1 Do Minimum	Option 2 Integrated Option (existing Sauchie Hospital site)
Baseline NPC	8,244	21,848
Ranking	**1st**	**2nd**
Increase initial capital costs by 10%	8,452	22,999
Ranking	**1st**	**2nd**
Reduce initial capital costs by 10%	8,057	20,695
Ranking	**1st**	**2nd**
Increase operating costs by 5%	8,517	22,282
Ranking	**1st**	**2nd**
Reduce operating costs by 5%	7,972	21,413
Ranking	**1st**	**2nd**
Increase land sale proceeds by 10%		21,782
Ranking	**N/a**	**N/a**
Reduce land sale proceeds by 10%		21,913
Ranking	**N/a**	**N/a**
One Year Delay in Capital Programme	8,127	21,850
Ranking	**1st**	**2nd**
Application of 3.5% discount rate	12,580	29,601
Ranking	**1st**	**2nd**

8.7.12 As the gap between the baseline NPC's of the two options is significant it is unsurprising that the ranking of the options is unchanged for any of the range of sensitivities applied.

8.7.13 To inform the economic appraisal further, switching value analysis has been applied to areas of material cash flow, to identify the extent that costs must change in order for the ranking of options to change. The results of this analysis are presented in Figure 8-20.

Figure 8-20 - Switching Values

% Change in option for NPC to equal other options		
	To Equal Option 1	**To Equal Option 2**
Option 1 – Do Minimum		+488% initial capital cost or +249% lifecycle costs
Option 2 - Single Site Option (existing Sauchie Hospital site)	-116% initial capital cost or -684% lifecycle costs	

8.7.14 In view of the substantial difference between the NPC's of the options it is not surprising that the switching values are significant.

8.7.15 By way of further demonstrating the value for money presented by each option the financial appraisal techniques demonstrated in the economic appraisal have been linked to the non financial benefits exercise (see Chapter 7). This full appraisal takes into account the non financial benefits of each option alongside the costs. Value for money is demonstrated in the option that delivers the highest ratio of benefits to cost (i.e. lowest cost per benefit point). The results of this analysis are summarised in Figure 8-21.

Figure 8-21 - Cost to Benefit Ratio

	Option 1 Do Minimum	**Option 2 Integrated Option (existing Sauchie Hospital site)**
NPC (£'000)	8,244	21,848
Ranking	**1st**	**2nd**
Non financial benefit score	3,515	12,515
Cost per Benefit Point (£)	2,345	1,745
Ranking	**2nd**	**1st**

8.7.16 From the above analysis it is clear that option two – the single site integrated service option offers overall better value for money than the do minimum option. It delivers benefits at a lower cost than option one despite the fact that it requires a significantly greater initial capital investment.

8.8 Conclusion

8.8.1 Option two – the single site integrated service option emerges as the preferred option from the financial and economic appraisal. It offers value for money within the provisional affordability limits identified by the NHS Board and offers significantly better value for money than the do minimum option. Option one is effectively the reference option and it is unlikely that it would be implemented, however, it has been demonstrated that option two offers a much greater level of benefits in return for the associated investment.

9 RISK ASSESSMENT

9.1 Overview

9.1.1 Risk analysis has three main uses:

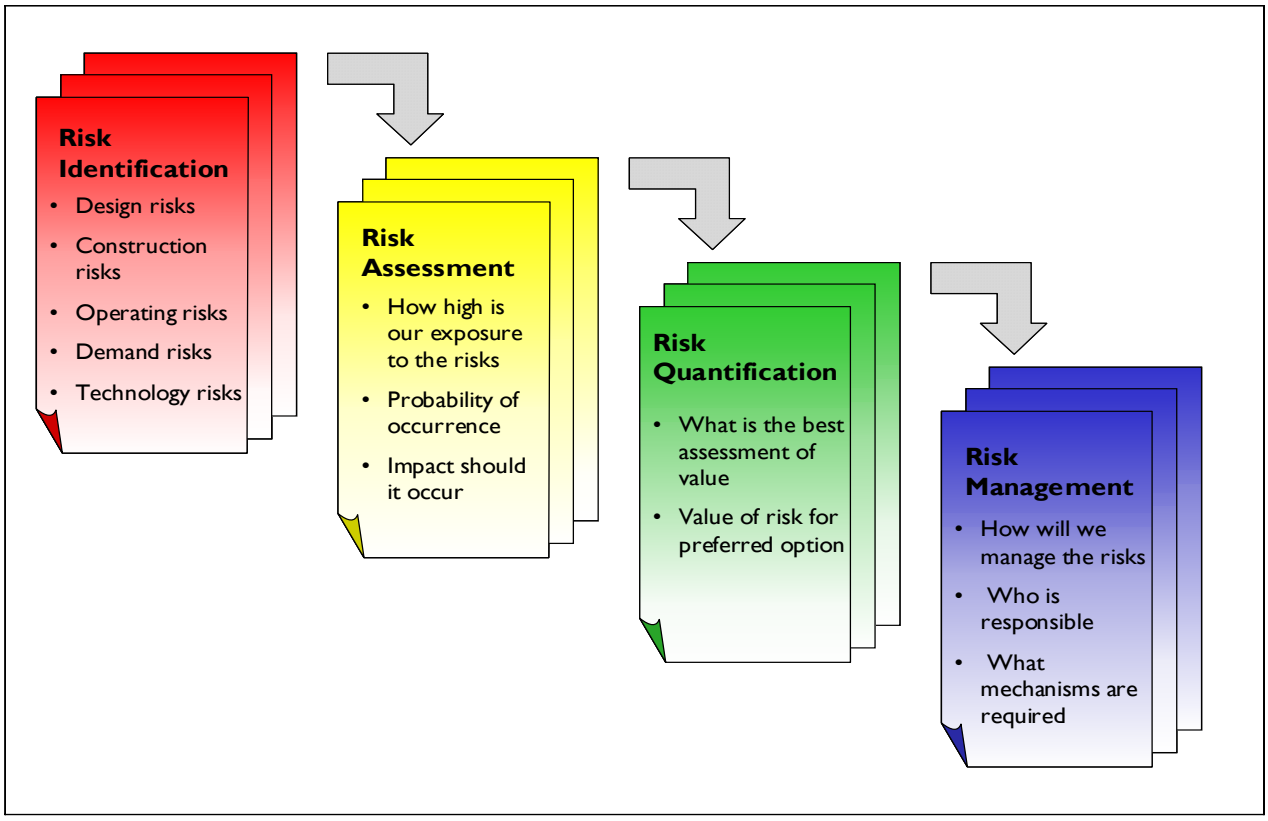
- to deliver a robust financial and contractual structure for the project
- to create a risk management process during procurement and execution of the contract
- to demonstrate value for money for the Trusts' financial commitments.

9.1.2 The Trust and their professional advisors have carried out a qualitative risk assessment, the results of which have been used to assess the overall level of project risk.

9.2 Methodology

9.2.1 The methodology used to assess risk is outlined in Figure 9-1. Risk quantification and management is required only in relation to the preferred option and therefore does not play a part in the qualitative assessment. It is however a critical part of overall risk assessment process.

Figure 9-1 - Risk Assessment Methodology



9.2.2 The process of risk assessment for an OBC is fourfold:

a) **Risk Identification** – develop a RISK REGISTER covering key risk areas and individual risks within these areas.

b) **Risk Assessment** – each of the options must be assessed against the risk register, assessing the impact, probability and exposure using a simple scale of 1(low) to 5 (high). The overall exposure to risk is then a product of the impact of risks and likelihood of them occurring

c) **Risk Quantification** – putting a value to each of the risks using estimates of probability, impact and timing. Generally for the preferred option only.

d) **Developing a Risk Management Plan** – a plan to manage all the risks identified in the risk register for the preferred option, including responsible persons and monitoring mechanism.

9.3 Risk Assessment Process

9.3.1 The risk assessment exercise involved the following key tasks:

- Identification of risks
- Estimation of the probability of the risks occurring under each option
- Estimation of the likely impact on the hospital of the identified risks occurring

9.3.2 Members of the Project Team, with additional stakeholder input carried out the risk assessment. Secta acting as professional advisors provided further support.

9.4 Defining the Risks

9.4.1 The risks associated with the short-listed options fall into two categories:

- Design & Construction risks
- Operating, Performance and Availability risks

9.4.2 The main identified risks associated with the project are described below in Figure 9-2.

Figure 9-2- Description of Risks

Design & Construction Risks	Description
Design Risks	
♦ Change in requirements of partners	Design changes leading to additional design & construction costs
♦ Changes in design due to changes in NHS policy	Legislative or regulatory changes specific to NHS requiring additional costs
♦ Inadequate design	Failure to translate Trust requirements into design leading to changes and increased construction costs
♦ Design team fault	Failure or misinterpretation to design to specification requiring changes during construction, increased costs & delays
Construction & Development Risks	
♦ Incorrect cost estimates	Additional costs if underestimated
♦ Incorrect time estimate	Time taken to complete could be over programme completion date
♦ Unforeseen ground/site conditions	Additional costs when contractor is unable to carry out surveys prior to commencing due to Trust operational requirements
♦ Delay in gaining access to site	Lack of site access may put back the entire project
♦ Delay due to partners interfering with works	Unauthorised requests or instructions from Trust personnel to contractor causing delay & costs
♦ Exceptional weather conditions	Delay to contract completion
♦ Contractor default	Additional costs & delay if replacement contractor is required
♦ Poor project management	Delay to contract completion due to poor co-ordination & planning

♦ Cost over-runs	Could put contractor in default and force replacement if substantial
♦ Incorrect time and cost estimates for decanting	Could cause delays to contract and additional costs
♦ Incorrect time and cost estimates for commissioning	Delay in handover & consequent effect on Clinical services with possible additional operational costs
Other design and Construction Related Risk	
♦ Delayed planning & building warrant approvals	Prevent start of project and extend completion date
♦ Land sale receipts	The estimated receipts from the sale of surplus land may be incorrect
Operating, Performance & Availability Risks	**Description**
Performance and availability risks	
♦ Unavailability of facilities	There is a risk that some or all of the facility will not be available for the use to which it is intended. There may be costs involved in making the facility available
♦ Disruption to services during construction	Services are unable to be provided or accessed during the construction phase
♦ Not meeting professional standards and accreditation	There is a risk that the facilities fail to meet standards set down by professional bodies and statutory organisations (e.g. Quality Improvement Scotland, Mental Welfare Commission, HSE)
♦ Not achieving access targets (i.e. waiting times)	There is a risk that the service model and configuration fail to support the delivery of access (geographical or otherwise) and waiting time targets
♦ Not supporting service redesign & change in practice	There is a risk that the configuration of service fails to support service redesign which is critical to the achievement of the project objectives
♦ Insufficient space and capacity	Service configuration fails to deliver facilities and care where and when it is required
♦ Unused facilities and capacity	The service model results in surplus capacity (perhaps offset by inadequate capacity elsewhere in the health economy)
♦ Inadequate patient environment	The patient environment is insufficient to support the needs of modern healthcare
♦ Facilities not able to accommodate new technology	New technology supporting service delivery is unable to be accommodated within the service model adopted
♦ Facilities not flexible enough to respond to changes in service and demand	Flexibility within the project is minimal resulting in significant difficulties in responding to changing service requirements
♦ Inability to recruit and retain sufficient staff	The service model and facilities have a detrimental impact on the ability to attract and retain staff
Operating Cost Risks	
♦ Incorrect estimated cost of providing clinical services	The cost of providing clinical services may be different to the expected. These costs include: staff, recruitment, training, equipment and supplies

♦ Incorrect estimated cost of maintenance	The cost of building and engineering maintenance may be different to the expected costs
♦ Cost overruns on utilities	The estimated cost of the utilities, such as water and energy, may be incorrect
♦ Estimated cost of restructuring workforce wrong	The estimated cost of restructuring the workforce at any time during the operating phase, such as recruitment costs and redundancy payments, may be incorrect
Variability of Revenue Risk	
♦ Unexpected changes in the Board's procurement strategy	Unexpected changes in the health authority's procurement strategy, such as more "care in the community", may occur. If so, there may be a need to rescale or reconfigure the provision of services. The changes in costs may include the cost of construction.
♦ Unexpected changes in allocation of healthcare resources	There is a risk that the resources allocated to the area, is reduced or increased. If such unexpected changes do occur, there may be a need to rescale the provision of services. The changes in costs may include the cost of construction, labour, equipment etc.
♦ Changes in the volume of demand for patient services	There is a risk that the volume of demand for health care will change, because of changes in the size of the catchment area. This may occur because there is, for example: an unexpected increase in the size of the population, leading to more demand.
♦ Unexpected changes in medical technology	Unexpected changes in medical technology may lead to a need to rescale or reconfigure the provision of services. For example, if the increase in day surgery is greater than expected, the total number of required beds may fall. This may affect labour etc.
♦ Unexpected changes in the Government's health policy	Unexpected changes in the Government's health policy may lead to a need to rescale or reconfigure the provision of services. Changes may include, for example, the targeting of resources to particular health care needs. This may affect labour, capital etc.
♦ Unexpected changes in the epidemiology	Unexpected changes to the epidemiology of the people in the catchment area may lead to a reconfiguration of rescaling of the provision of services. The changes in costs may include the cost of construction, labour, equip.
♦ Estimated income from income generating facilities is incorrect	There is a risk that income-generating schemes, such as car parking and retail outlets, generate less or more income than anticipated.

9.5 Risk Assessment

9.5.1 The probability of each of the above risks occurring was assessed using the following scale:

1 - Low

2 - Low/Medium

3 - Medium

4 - Medium/High

5 - High

9.5.2 The impact on the service of each of the risks occurring was assessed using the same scale.

9.5.3 The estimated probability of the identified risks occurring along with the estimated impact of each identified risk is shown in the risk matrix in **Appendix E1**. The probability scores for each option were multiplied by the impact scores to give an overall value of risk, the results of which are summarised in Figure 9-3 below. Full analysis is again provided at **Appendix F1**.

Figure 9-3 - Risk Assessment

Risk Category	Option 1 Do minimum	Option 2 Integrated Option
Design & Construction risks	115	120
Operating & Performance risks	245	151
Total Risk Scores	**360**	**271**
Ranking	**2**	**1**

9.5.4 Option 2 (single site integrated option) ranks first in terms of the lowest level of overall qualitative risk. Although it displays a marginally greater design and construction risk than Option 1 (the do minimum option), this is comfortably offset by a significantly lower operating and performance assessment. Option 1 (do minimum) carries the highest level of overall risk with a total score, which is 33% higher than the lowest ranked option (Option 2).

9.6 Risk Quantification

9.6.1 The project team has also calculated the cost of risk where appropriate. A risk model has been derived and the following factors used to calculate the financial impact of the risk.

- Probability of event occurring i.e. what is the probability of the risk occurring?
- Basis for quantification i.e.. what area of cost will the risk impact upon if it occurs?
- Likely financial impact i.e. If the risk occurs what % of the cost identified above will be borne under a minimum, likely and maximum scenario
- Years present i.e. over what time period is the risk present?

9.6.2 The NPC of the risk can then be calculated over the life of the scheme.

9.6.3 It was agreed that the design and construction and development risks could be quantified. It was not felt to be appropriate to put a value on the remaining risks such as operating and performance, given the difficulty in assessing the realistic impact of any occurrence.

9.6.4 The NPC of the risk was calculated over the life of the scheme. This was carried out using @Risk, an Excel™ based Monte Carlo simulation package. This software runs hundreds of iterations to generate a comprehensive profile of the distribution of possible outcomes.

9.6.5 The costs of the design and construction risks are shown in Figure 9-4 with detail provided in **Appendix F2**.

Figure 9-4 - Quantification of Design and Construction Risks - £000 (simulated values)

Risk	Option 1 Do minimum	Option 2 Integrated option
Total Design Risks	13	100
Total Construction and Development Risks	180	1,067
TOTAL	**193**	**1,167**

9.6.6 Although the do minimum option has a lower level of quantified design and construction risk this is to be expected as the capital costs are significantly less than the single site option. More significantly the simulated values of the design and construction risks as a proportion of the capital costs (exclusive of contingency and VAT) show that option 2 carries a lower comparative design and construction risk.

9.6.7 The quantification of design and construction risk allows comparisons to be drawn with the contingencies that have been incorporated within the capital costs of the options. The comparative values are similar in that there are not significant differences in the relative figures. As such it is prudent to conclude that the level of contingency built into the capital costs are appropriate.

9.6.8 The Trust is confident that these risks can be managed in full.

9.7 Risk Management Strategies

9.7.1 The Trust will develop strategies to minimise its exposure to the identified risks. These risk management strategies will be reviewed and refined as procurement of the scheme progresses. A summary of the proposed action to minimise the likelihood and impact of the identified risks is provided in Figure 9-5 below.

Figure 9-5 - Risk Management Strategy

Design & Construction Risks	Description
Design Risks	
♦ Change in requirements of partners	Ensure clinicians, and other users are signed up to design prior to construction. Establish change control process
♦ Changes in design due to changes in NHS policy	Monitor national developments and guidance Maintain close liaison with SEHD
♦ Inadequate design	Ongoing involvement of users during design process
♦ Design team fault	Ongoing involvement of users during design process Close monitoring of design process
Construction & Development Risks	
♦ Incorrect cost estimates	Early liaison with QS as professional advisors to ensure design reflects clinical requirements along with application of latest departmental clinical allowances to derive accurate capital costs
♦ Incorrect time estimate	Work with developer and professional advisors to develop detailed construction timetable
♦ Unforeseen ground/site conditions	Undertake thorough site survey to validate costs. Thoroughly assess financial and time implications of any perceived issues prior to committing to build
♦ Delay in gaining access to site	Identify potential areas of difficulty and communicate accordingly
♦ Delay due to partners interfering with works	Ensure robust and clear process is in place to support communication between Trust and developer
♦ Exceptional weather conditions	Monitor weather conditions and make adequate plans for bad conditions where possible
♦ Contractor default	Ensure financial stability prior to commissioning
♦ Poor project management	Ensure appropriate individuals and structure in place Regular reports to Project Steering Group, HMT, TMT & NHS Board
♦ Cost over-runs	Effective project management and monitoring

♦ Incorrect time and cost estimates for decanting	Develop detailed decant plan as part of overall project plan and communicate key messages to stakeholders
♦ Incorrect time and cost estimates for commissioning	Develop detailed commissioning plan as part of overall project plan and communicate key messages to stakeholders
Other design and Construction Related Risks	
♦ Delayed planning & building warrant approvals	Engage planning authorities at earliest possible stage and involve in design process
♦ Land sale receipts	Engage professional advisors to obtain estimates of likely proceeds
Operating, Performance & Availability Risks	**Description**
♦ Unavailability of facilities	Involve users in design process to ensure that any planned service changes are incorporated
♦ Disruption to services during construction	Ensure clinicians and managers are involved in agreeing construction plan with contractors Identify minimum requirements for maintaining services during construction
♦ Not meeting professional standards and accreditation	Incorporate relevant standards into design specification
♦ Not achieving access targets (i.e. waiting times)	Ensure waiting times reduction plans are fully incorporated into scheme design process
♦ Not supporting service redesign & change in practice	Ensure full involvement of Clinical Redesign Project working groups in design process
♦ Insufficient space and capacity	Robust capacity modelling, subject to ongoing review Involve clinical staff in developing schedules of accommodation
♦ Unused facilities and capacity	See above
♦ Inadequate patient environment	Ensure adherence to national standards and good practices for 'consumerism' Involve patient representatives in design process (via Project Steering Group members)
♦ Facilities not able to accommodate new technology	Monitor national developments in clinical practice and technology Involve clinical staff in developing schedules of accommodation
♦ Facilities not flexible enough to respond to changes in service and demand	Identify and model impact of planned changes in service building in enough flexibility to meet known changes in demand
♦ Inability to recruit and retain sufficient staff	'Sell' features and benefits of the hospital re-development to existing staff and potential recruits Involve 'front-line' staff in design process
Operating Cost Risks	
♦ Incorrect estimated cost of providing clinical services	Utilise experiences from previous developments and involve clinical users in profiling resource requirements
♦ Incorrect estimated cost of maintenance	See above
♦ Cost overruns on utilities	Ensure energy efficiencies are built into design
♦ Estimated cost of restructuring workforce	Establish key changes at earliest opportunity

wrong	
Variability of Revenue Risk	
♦ Unexpected changes in the Board's procurement strategy	Engage Board at earliest opportunity to ensure strategic fit
♦ Unexpected changes in allocation of healthcare resources	See above
♦ Changes in the volume of demand for patient services	Identify key clinical practice changes and develop capacity plans built around models of care and performance targets
♦ Unexpected changes in medical technology	Identify technology 'hot spots' and agree key developments. Ensure impact of technological change is accurately modelled
♦ Unexpected changes in the Government's health policy	Discuss project with Health Department at early stage
♦ Unexpected changes in the epidemiology	Use predicted population trends to model capacity requirements
♦ Estimated income from income generating schemes is incorrect	Identify key areas of income generation and set charges at a level that is both benchmarked and secures full cost recovery

9.7.2 These strategies will be maintained and developed throughout the business case process and formalised through the Trust board prior to the commencement of any work on the scheme.

9.8 Summary

9.8.1 There is a clear differentiation in qualitative risk over the range of short-listed options, with Option 2 – single site option carrying the lowest level of overall risk.

9.8.2 Quantification of the design and construction risk was undertaken as part of the OBC to identify the planning contingency. This confirms that the level of contingency built into the capital costs of the options is appropriate.

9.8.3 The Trust will develop a management plan for all the potential risks associated with these options and will further develop its risk management strategies as the capital investment plans progress.

9.8.4 A project management structure will be set up to ensure an effective process for managing the above risks.

9.8.5 The Risk Register will continue to be monitored and adapted as necessary in the construction of the Public Sector Comparator and in relation to the risks arising in the context of PFI, should this be the preferred procurement route, up to financial close of the PFI agreement. A strategy for managing retained risks under both scenarios will be developed within the overall project plan.

9.8.6 Most of the risks identified will apply throughout the lifetime of the facilities. Principal strategic risks have been identified at this stage in the process, together with appropriate risk management strategies.

9.8.7 Further quantification of the risks associated with the project will be undertaken as part of the Full Business Case (FBC) process, primarily to value the allocation of risk between public sector and PFI options. This will result in a monetary value being attached to the agreed range of risks per the risk matrix, which will subsequently be used to assess the overall Net Present Value (NPV) of the project. Depending on the financing route of the project, this will then be allocated to the party best able to manage the risk.

10 CONSULTATION

10.1 Overview

10.1.1 NHS Forth Valley has worked closely with both staff and patients and its planning partners in developing the proposals in this business case. Extensive consultation has taken place with the result that there is wide spread support for the preferred option outlined in section eleven.

10.2 Engaging, Informing and Consulting

10.2.1 There have been several initiatives to engage, inform and consult with patients and the general public since the Initial Agreement was approved in December 2000.

- sub groups to develop specific aspects of the business case and the service models for each service component have involved users and carers (e.g. mental health);

- the relevant Forth Valley strategic planning groups (and local Clackmannanshire implementation or action groups) have been involved in the development of the models of care to ensure compatibility with Forth Valley services strategies, and this process has also involved user and carer involvement;

- the Trust held an Open Space event in Clackmannanshire in June 2001 attended by over 100 people including voluntary organisations, patient groups, community representatives, clinicians, staff local authority staff, local MPs and MSPs, local councillors and NHS managers. The outcome of the Open Space event was support for a new community hospital and a new health centre for Alloa including the services described within the Outline Business Case. At the time of the Open Space event site options were still being explored with the Council, and the feasibility study had not been completed. The principle, however, of an integrated solution with the health centre and the community hospital on one site was supported (see also section 2.8.2).

- in September 2002 the NHS Board initiated a wide ranging public consultation exercise on the future healthcare strategy for Forth Valley, including proposals for area wide acute hospital services. A key component of the strategy were the proposals in this business case for a new health centre for Alloa and a new community hospital on the Sauchie Hospital site. A full report on the public consultation was considered by the NHS Board on 24 January 2003 and is available on the NHS Forth Valley web site. The responses to the Clackmannanshire proposals included:

    - correspondence - 1700 people indicating their support for a new community hospital and a new health centre for Alloa on the same site;

    - meetings - a consultation fair and two public meetings were held during October and November 2002 at which wide spread support was expressed for the proposals; and,

    - questionnaires - 86% or respondents to the consultation questionnaire also indicated their support to the proposals in this business case.

10.3 Key Issues

10.3.1 The clear conclusion from these initiatives to engage with patients, staff and the general public is that there is overwhelming support for the preferred option within the business case.

11 PREFERRED OPTION

11.1 Overview

11.1.1 This section highlights the preferred option and summarises the key factors from the appraisal process, which support its selection.

11.1.2 The key features and benefits of the preferred option are also highlighted and plans for realising the anticipated benefits outlined.

11.2 Selection of the Preferred Option

11.2.1 The following table summarises the results of the benefits appraisal, financial appraisal, and economic appraisal and risk assessment. A comparison of Net Present Cost per benefit point is also included.

Figure 11-1 - Option Appraisal Results

Option Appraisal Measure	Option 1 Do minimum	Option 2 Integrated option
Benefit Points	3,515	12,515
Initial Capital Cost – excl equipment (£000)	2,436	14,655
Annual Revenue Cost (£000)	627	1,195
Net Present Cost (NPC £000)	8,244	21,848
Equivalent Annual Cost (EAC £000)	480	1,273
Risk Assessment Points	360	271
NPC per Benefit Point	**2,345**	**1,745**

11.3 Description of the Preferred Option

11.3.1 The preferred option was **Option 2 – Integrated Single Site Option**. This decision was based on the analysis of the benefits, costs and risks associated with each option. In particular, the two major tests of benefits appraisal and risk adjusted economic appraisal give Option 2 as the preferred option. It provides the best fit with the objectives of the investment while demonstrating value for money, achieves the required non-financial benefits and is affordable to commissioners.

11.3.2 The case for investment in Clackmannanshire is strong in terms of local health deprivation, clinical quality, capacity and environmental suitability.

11.3.3 In terms of cost benefits analysis, the revenue requirement of Option 2 has a better yield (£1,745 per benefit point) than Option 1 (£2,345 per benefit point).

11.4 Key Features of the Preferred Option

11.4.1 The key features of the preferred option are summarised below :-

Figure 11-2 - Key Features of the Preferred Option

- Capital investment in excess of £14.7 million in health services for Clackmannanshire
- Adequate investment in staffing resources to ensure safe and effective service

delivery for patients

- A new custom built community hospital for Clackmannanshire
- A new co-located health centre serving the population of Alloa and the surrounding area
- An integrated allied health professional facility supporting the needs of the hospital and wider community
- Access to intermediate care facilities which will serve both as a means for rehabilitating Clackmannanshire residents following an acute hospital episode or act as a resource to prevent the need for admission to acute facilities
- Frail Elderly and Mental Health facilities which address many of the deficiencies associated with the outdated Sauchie Hospital and Clackmannanshire County Hospital facilities
- Facilities which meet current building and statutory requirements

11.5 Key Benefits of the Preferred Option

11.5.1 This option offers a range of benefits, key areas being illustrated below:-

Figure 11-3 - Key Benefits of the Preferred Option

- Continued local access to a range of clinical services
- Improved overall accessibility through implementation of new service models, providing a greater level of service on or close to the patient's own home, reducing the need to access the main acute site
- Provide modern purpose-built functional accommodation and provide the best use of the existing estate
- Support the implementation of new models of care to improve service effectiveness and cost efficiency, and enhance functional relationships across the health economy
- Treatment and investigation in facilities that ensure privacy and dignity

11.6 Affordability

11.6.1 The financial strategy for NHS Forth Valley identifies additional recurrent revenue funding of £7.3m to support delivery of the Healthcare Strategy. This covers acute care and community service changes including the proposals in this OBC. The overall annual recurrent revenue implications of the preferred option in the OBC are £1,195k. The phasing of the project is such that the first full year impact will be in 2006/07. The revenue implications of the OBC therefore fit within the current affordability parameters identified by the NHS Board but all costs will need review as part of the Full Business case to ensure affordability remains within the parameters for the wider Healthcare Strategy, and do not exceed £1.2m.

11.7 Statement of Support

11.7.1 A letter of support accompanies the OBC from the NHS Board Chief Executive that confirms the NHS Board has considered the OBC.

11.8 Benefits Realisation Plan

11.8.1 The combination of investment aims, project objectives and benefits has enabled the Trust to develop a Benefits Realisation Plan (BRP) for the Project, which will finally appear in the Full Business Case.

11.8.2 The BRP will merge the benefits and objectives into a set of measurable targets. Each will have a method of monitoring (from direct measurement to patient and staff surveys and proxy measurement), a series of targets linked to dates, a set of prerequisite conditions for the benefit to be realised, and a named person to take responsibility.

12 HUMAN RESOURCE ISSUES

12.1 Overview

12.1.1 This section of the Outline Business Case considers the human resource issues that arise from the preferred option outlined in the previous section, and describes the Trust's approach to tackling these.

12.2 Background

12.2.1 The NHS Forth Valley and Clackmannanshire Council recognise the mutual benefits to be gained from working more closely together and re-designing services to further improve access and the quality of services for the local population.

12.2.2 It is the staff who currently work in our local services who will lead and deliver this change and they are therefore an integral component to this proposal. To date there has been an inclusive approach involving staff and their representatives in the planning process. To ensure this change process is achieved the following will be evidenced.

12.3 Staff Governance

12.3.1 One of the key challenges facing the service is the implementation of the Staff Governance Standard. Its terms have a direct impact on the preferred option, namely :-

- ***Well informed***

  To ensure the established communication process continues and develops to meet the needs of staff, a programme of involvement and information will be established building on the lessons learned from other local change management processes.

- ***Appropriately Trained***

  This component covers professional and behavioural skills and education, and links to the Trust Local Learning Plan. Again a training needs analysis in support of the change will identify specific priorities. Resource will require to be prioritised.

- ***Involved in Decisions, which affect them***

  To date there has been good evidence of staff participation in planning and development of services in Clackmannanshire. Structures to support partnership working exist which enable staff involvement through their trade union/professional organisation representatives. Lessons from previous re-design projects have shown that dedicated partnership groups focussed on significant change issues are successful. This model will be developed for Clackmannanshire.

- ***Treated Fairly and Consistently***

  Trust Policies, as they relate to employment are current and reflect good practise. In particular the Trust Organisational Change Policy will be utilised as the agreed process.

- ***Provided with an improved and safe working environment***

  The input of the Risk Management and Occupational Health Services teams ensure that a safe environment is a key issue in planning new work practice and accommodation. The Trust has significant experience in this area which will be available to progress this initiative.

12.4 Workforce Development

12.4.1 Workforce development is about the right people, in the right place with the right skills, at the right time. The workforce development agenda associated with this initiative is part of a wider Forth Valley approach that includes the development of acute hospital services.

12.4.2 The model of care for the business case envisages a considerable change from the current provision. A more proactive model focused on rehabilitation and the active care and treatment of a wide range of patients is a significant and radical change from the status quo or the do minimum option. The workforce issues associated with this change are mainly focused on nurse staffing and allied health professional input, and this will be a common feature of taking forward the Forth Valley Healthcare Services Strategy.

12.4.3 Workforce information data to assist planning is available area wide and a workforce-planning model is already utilised within the Trust. This together with the launch of the Nursing Strategy and the Organisational Development Agenda for Forth Valley enables a meaningful development agenda in Clackmannanshire to be part of a Forth Valley wide approach.

12.4.4 In taking this scheme forward the Trust will work closely with staff to realise the opportunities available to improve patient care. The Trust will also follow the Scottish Executive and STUC protocol and guidance on employment issues in relation to Public Private Partnerships should the preferred procurement route be through the Private Finance Initiative.

12.5 Key Issues

12.5.1 This section has highlighted the human resource issues implicit in the preferred option. The Trust recognises the human resource challenge in moving the project forward, and will have regard to the issues in the Staff Governance Standard. The Trust has a policy on openness which it will follow in working with staff on the workforce issues in taking forward the new model of care envisaged as a key part of the Forth Valley Healthcare Services Strategy.

13 PROCUREMENT STRATEGY

13.1 Overview

13.1.1 A range of funding sources has been identified as potentially available for the scheme, including NHS Board formula capital, land sale receipts, and private finance.

13.1.2 This section explores the range of the alternative funding routes (including combinations of different methods) to determine the most feasible solution for delivering the preferred option.

13.2 Source of Capital Funds

13.2.1 NHS Forth Valley has received notification of its Capital allocation for 2003/04, and indicative allocations for 2004/05 and 2005/06. The capital costs of the preferred option are £14.7m phased over 2004/05 and 2005/06 (see figure 8-6 above). While it would be possible to meet the capital costs from this source within 2005/06, it would not be possible to fund the project from the formula capital allocation in 2004/05 unless further capital was allocated to Forth Valley.

13.2.2 Although funding the project from NHS Forth Valley's formula capital allocation with additional support from the Scottish Executive may be possible the implications of this approach would be such that little capital monies would be available to support other projects within NHS Forth Valley, including emergency expenditure and medical equipment replacement.

13.2.3 In light of this it is unlikely that the NHS Board would endorse funding the project from its formula capital allocation without additional support from the Scottish Executive as such an approach since the risks involved and opportunity costs are substantial.

13.2.4 There will be capital receipts accruing from the disposal of surplus land and property under the preferred option (existing Alloa Health Centre and Clackmannanshire County Hospital) and these have been assessed and quantified as part of the Estates Strategy.

13.3 Assessment of PPP/PFI Options

13.3.1 In light of the capital value of the preferred option it is necessary under SEHD capital planning guidance to explore the scope for the project to be financed and delivered under the Private Finance Initiative (PFI).

13.3.2 The use of private finance avoids the up front commitment of valuable capital resources as the associated costs are paid over the lifetime of the project as revenue subject to confirmation of 'off balance sheet treatment'. It is however implicit within the Full Business Case to clearly demonstrate that such an approach is affordable to the local health economy and offers better value for money than traditional public procurement.

13.3.3 In order to assess the suitability of the preferred option to be delivered through the use of private finance a 'PFI ability' has been undertaken. This utilises a number of qualitative criteria by way of a 'road test' to determine if the scheme as currently scoped can be delivered under PFI whilst offering an affordable and economic solution to the NHS.

13.3.4 A summary of the overall assessment is included in Figure 13-1 below. Full details of the PFI assessment is provided in **Appendix G1**.

Figure 13-1- Summary of Qualitative Assessment of PFI Ability

Category	Score
Capital Efficiency	**23.3**
Revenue (Facilities Management) Efficiency	**10.0**
Risk Transfer	**21.4**
Potential for alternative source of income	**3.3**
Total	**58.0**
Rating of Score	
Score 0-25 = Minimal prospects for PFI	☐
Score 26-50 = Some prospects for PFI	☐
Score 51-75 = Good prospects for PFI	☑
Score 76+ = Excellent prospects for PFI	☐

13.3.5 The above qualitative assessment shows that the scheme has 'good' prospects for PFI but there are some features that may have to be reviewed to improve its overall attractiveness to the private sector.

13.3.6 By way of further testing the 'PFI attractiveness' of the scheme it is recommended that soft market testing be undertaken with a number of major players in the PFI market. A brief project summary should be prepared which provides basic information on the scheme covering service provision, site location, capital and operating costs, construction requirements and indicative timescales.

13.3.7 This would than be submitted to established players in the PFI marketplace who would, without prejudice, be asked to indicate potential interest in the scheme.

13.3.8 Based on this initial assessment it is possible to determine the likely private sector interest in the project without embarking on a formal tendering exercise.

13.4 Conclusions

13.4.1 In light of the significant restrictions associated with the availability of NHS Board formula capital it is unlikely that this will prove to be a feasible route for financing the preferred option and therefore the feasibility of alternative options have been explored, specifically private finance.

13.4.2 A 'PFI ability' assessment has been undertaken and the following key conclusions are based on the findings of the assessment: -

- The qualitative assessment shows there are 'good' prospects of achieving a viable PFI scheme.
- The options for the development are unlikely to be restrictive to private sector bidders given the extent of new build and the early identification of a suitable site on the existing Sauchie Hospital grounds.
- In light of the likely capital costs, funders are unlikely to charge high levels of fees relative to the size of the scheme and offer unattractive interest rates.

13.4.3 Overall it can therefore be concluded that this scheme appears to be suitable for PFI procurement and should attract adequate private sector interest. It will however be necessary, as part of the Full Business Case process, to clearly illustrate that this provides better value for money than a publicly funded procurement whilst still remaining within the limits of the available affordability envelope.

14 PROJECT MANAGEMENT & TIMETABLE

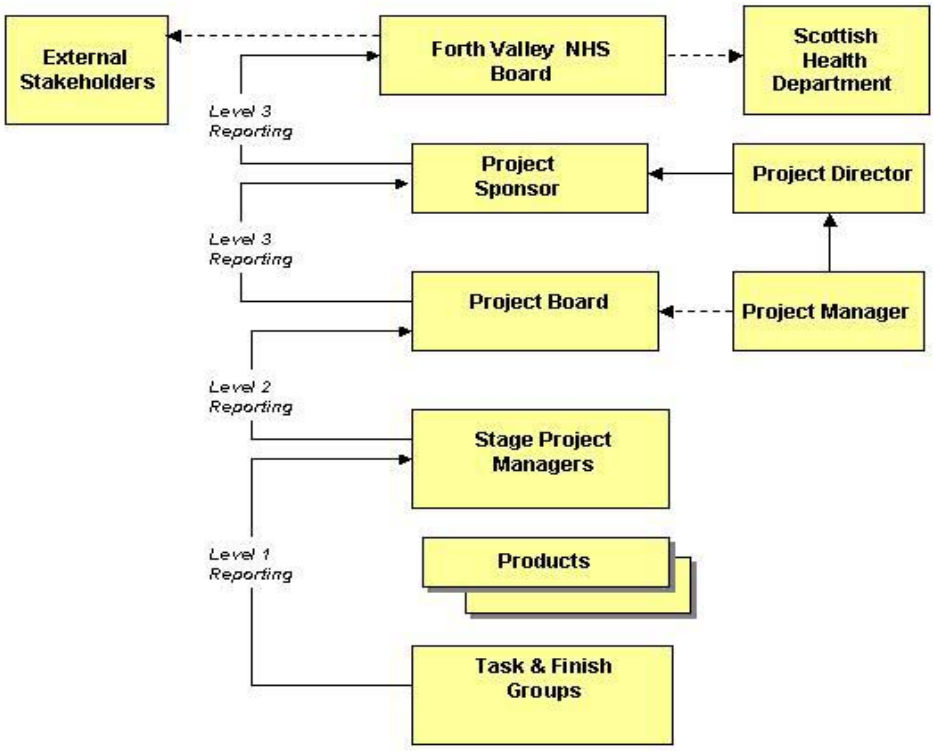
14.1 Overview

14.1.1 The successful implementation of this development is vital to the provision of appropriate health services in Clackmannanshire. Robust project management arrangements will be implemented to ensure that the project meets with all expected time, cost and quality criteria.

14.2 Project Management Arrangements

14.2.1 Potential project management arrangements are outlined in Figure 14-1 below, which shows roles and relationships together with reporting processes. The potential to dovetail these arrangements with project management arrangements for the acute services OBC and the wider Healthcare Strategy are being explored, and may involve one overall Project Board. Potential roles and responsibilities within the suggested project management arrangements for this scheme are outlined in Section 14.3. Individual responsibilities against each area will be clarified during the discussions with the NHS Board on the project management arrangements for the scheme.

Figure 14-1 - Proposed Project Structure



14.3 Project Roles

14.3.1 Each of the key project roles is defined below identifying responsibilities, and reporting mechanisms. It is likely that in its role of delivering the overall healthcare strategy for Forth Valley, the **NHS Board** will retain overall decision-making authority in the medium term. Their role will include:-

- approval of appointment of advisers;

- approval of OBC;
- confirmation of shortlist of bidders;
- confirmation of preferred bidder(s);
- approval of FBC (which embraces the commercial contract, financial arrangements etc.);
- award of contract/financial close.

14.3.2 The **Project Sponsor** is likely to be the Primary Care Trust Chief Executive or delegated individual. Their role will be to: -

- appoint a single Project Director to manage the project;
- ensure adequate resources are made available to the project;
- facilitate and resolve difficult issues;
- provide overall internal and external leadership for the project;

14.3.3 The role of the **Project Board** for this scheme and the acute OBC potentially will be to: -

- take responsibility for decision making, strategic vision and leadership;
- approve the project initiation document and project plans;
- monitor and approve any changes to the programme;
- exercise delegated authority, on behalf of the NHS Board to ensure that the scheme delivers:-
  - the long term clinical benefits detailed in the OBC;
  - the economic advantages of rationalisation;
  - a scheme financing which satisfies audit, is robust and offers good public VFM and meets the required risk transfer and accounting criteria;
  - a contract agreement which offers the best way for the scheme objectives to proceed to a project conclusion;
  - a legal framework, which ensures the protection of the Boards' positions and long term futures.

14.3.4 The role of the **Project Director** will encompass :-

- Prime Responsibility - *To oversee the project as a whole, including all relevant public and private financed procurements, and realise the intended benefits*.
- Specific tasks:-
  - Manage stakeholder's interests in the project, providing decisions and direction on their behalf, embracing direction from the Project Board;
  - Appoint consultants and contractors to undertake the work within the project budget; act as point of contact to all external organisations as a direct link to the Board Chief Executive, Project Board and respective organisations;
  - Beyond ITN, to lead, with adviser's support, the evaluation of bids and the external negotiating teams up to financial close.

14.3.5 The role of the **Project Team** will be to: -

- deliver the project to the objectives set by the Project Board;
- give guidance to the project advisers at key stages in the process;
- direct the input through to the full business case and PFI, ensuring adequate resources are made available;
- undertake a quality assurance role as outlined in this document;

- review and approve the operational matters concerning operational policies, outline requirements, output specifications and outline design;
- take a lead responsibility for internal and external communications;
- monitor project costs;
- present summary reports to the Chief Executive and NHS Board at key points during the project and make a recommendation as to the preferred option;

14.3.6 The Project Director and Project Team will be assisted by a **Project Administrator** with responsibilities for:-

- delivery of tasks as directed by the Project Management Team and Project Manager;
- production of minutes to meetings;
- co-ordination of all meetings;
- production (with Project Director) of progress reports to appropriate organisations

14.3.7 The **Project Manager's** role will encompass: -

- Prime Responsibility to set up the project in a controlled environment, implement a regime of sound project management and advise the Project Director as to progress on time, cost and quality.
- Specific tasks:-
  - prepare Project Initiation document (PID);
  - authorise Level 1 Project Plan;
  - advise Project Management Team of progress;
  - monitor against project execution plan and ensure corrective action is taken if needed;
  - agree project monitoring procedures and documentation;
  - report progress to Project Director.

14.4 Stakeholder Involvement

14.4.1 Key documentation such as OBC, FBC and the final contract must be made publicly available within one month of their respective final approval. Publicly available is defined in the latest guidance as:

- One copy on NHS Board premises for staff and patients to see
- One copy to Chair of trades unions representing staff within the Trust
- One copy each to Stirling, Falkirk and Clackmannanshire Councils
- One copy to main public library
- One copy each to Scottish Parliament library and PFI Treasury Taskforce library.

14.4.2 The size of the scheme in Forth Valley would also require the Board to advertise in the local media when these documents are being made available. We will be able to agree with our PFI partners if any information contained within key documents should be considered 'commercial in confidence', but this will be required to be agreed with the PFU in advance.

14.4.3 Consultation should be a continuing dialogue throughout the project with key stakeholders – both informal and formal. The Project Board will have responsibility for ensuring meaningful consultation throughout the project.

14.5 Role of External Advisors

14.5.1 Various advisors will be required to provide an advisory role to the project in the following capacities :-

- Service Specification : Prime Responsibility - *To provide healthcare planning advice and manage a process to define service models, departmental and operational policies and to draft output specifications for clinical and non-clinical support specifications.*
- Finance and Management Consultancy : Prime Responsibility -*To provide specialist corporate finance support to the PFI procurement together with management consultancy input to secure OBC and FBC approval*
- Design and Technical : Prime Responsibility -T*o work with healthcare planners to produce schedules of accommodation and building specification for the ITN and to evaluate design responses from bidders.*
- Legal : Prime Responsibility - *To provide legal support/advice and to deliver contract documentation in line with latest guidance.*

14.6 Legal Issues

14.6.1 It is anticipated that the project agreement will follow the format of the standard form contract. The schedules therein will cover such aspects such as contract structure, payment mechanism, project refinancing, indexation and termination.

14.6.2 As this is integral to the successful development of the project it is recommended that legal advisers are selected at an early stage in the procurement process. They will provide key inputs into the procurement documentation including the development of the Official Journal of European Union (OJEU) advert and the Invitation to Negotiate (ITN).

14.6.3 A sample OJEC advertisement is included at **Appendix H1**.

14.7 Post-Project Evaluation

14.7.1 The purpose of Post-Project Evaluation (PPE) is to improve project briefing, design management and implementation for future projects. An evaluation report will be produced and approved for issue by the Project Director.

14.7.2 It is envisaged that PPE process will be divided into four stages, summarised below.

Stage 1- Planning

14.7.3 The initial planning of the PPE process, involving identifying the scope, timing and costing of the exercise, beginning during the full business case stage and finishing following its approval in order that any terms and conditions of the various approvals may be properly addressed.

Stage 2 - Building Completion

14.7.4 Towards the end of the construction process an initial evaluation of the building will be undertaken against the design brief and other relevant data. The building will be reviewed, with special reference to project performance of materials, energy usage, space utilisation, design-in-use evaluation, once they have been in use for a period of time. The project will be subject to regular progress reporting.

14.7.5 When the project has been completed, its construction record and functional suitability can be reviewed through an evaluation workshop involving a cross-section of stakeholders. The major areas likely to be addressed at this stage include:

- project performance in terms of time, cost and quality
- reasons for any deviation from the business case time and cost estimates
- compliance with Trust requirements
- functional suitability;
- energy performance;
- design-in-use performance;
- added value areas, including identification of those not previously anticipated.

Stage 3 – Service Outcomes

14.7.6 This will comprise an evaluation of the service provisions and will concentrate on service delivery patterns and their implications once they have been operational for an appropriate period.

14.7.7 At this stage, a more wide-ranging evaluation of the costs and benefits of the project, in service delivery terms, can be undertaken. This may include an in-depth review of elements of Stage 2. It will involve reviewing the performance of the project in terms of the project objectives.

14.7.8 Monitoring actual operating costs against projected costs will assess revenue performance.

Stage 4 – Overall Conclusion

14.7.9 This will bring together and update the evaluations undertaken at stages 2 and 3 and include a review of the project with reference to the likely outcomes had the Project not been undertaken. Details of the lessons to be learnt from the experience will be included in both full and summary form.

14.8 Timetable

14.8.1 A detailed project plan will be produced following approval of the Outline Business Case and agreement of the procurement strategy. At this stage, the Trust is aiming to achieve the following milestones, assuming a PFI procurement route:

Figure 14-2 - Provisional Project Timetable

Milestone	Target Date
Initial Agreement submitted to SEHD	October 2000
Approval of Initial Agreement	December 2000
Outline Business Case approved by Forth Valley NHS Board	April 2003
Outline Business Case approved by SEHD	May 2003
Outline planning permission for new hospital	August 2003
OJEC notice placed	September 2003
Pre-qualification of bidders	October 2003
Selection of shortlisted bidders	January 2004
Preferred bidder selected	April 2004
Full Business Case submitted	October 2004
Financial close	November 2004
Construction commences	December 2004
Hospital facilities completed	June 2006