



NHS Lanarkshire

**Capital and Logistical Considerations
in Providing A&E Services at
Monklands, Wishaw and Hairmyres
Hospitals.**

Report as at

19th September 2007

(Revision 14 - Final)

Prepared by

Currie & Brown UK Ltd
140 West Campbell Street
Glasgow
G2 4TZ

Tel 0141 221 0313
Fax 0141 227 8900

INDEX

1. Introduction
 2. Executive summary
 3. Indicative Cost Summary
 4. Logistical Issues and Constraints to Development
Works Associated with Each Scenario
 5. General Assumptions
 6. Risks and Programme
 7. Methodology
-
- | | |
|------------|---|
| Appendix 1 | Brief description of Clinical Proposal Scenarios |
| Appendix 2 | Clinical and Non Clinical Key Issues Schedule – Monklands A&E Services -
Scenarios |
| Appendix 3 | Clinical and Non Clinical Key Issues Schedule– Monklands A&E Services –
Review of Previous Monklands Options |
| Appendix 4 | (1) Description of Current Hospitals
(2) Building Services Constraints - Monklands Hospital |
| Appendix 5 | Cost Breakdown Across Scenarios and Sites |

1. Introduction

- 1.1 On the 6 June 2007 the Cabinet Secretary for Health and Wellbeing announced in the Scottish Parliament that she was reversing the decision taken¹ by the previous administration regarding the future provision of Accident and Emergency (A&E) services at Monklands Hospital.
- 1.2 The previous strategy developed by NHS Lanarkshire established that each of the three District General Hospitals, Monklands, Wishaw and Hairmyres, would have had two clearly defined roles, one as a local hospital and one as a specialist inpatient centre.
- 1.3 The local hospital role would have involved all three hospitals, Monklands, Wishaw and Hairmyres providing, as they do now: specialist out patient and day case services; minor injury and illness assessment and treatment; and extensive diagnostic services. Around 80 per cent of current patient attendances at each general hospital are for these services.
- 1.4 The specialist inpatient centre role would have involved:
- One of the three hospitals (as a Level 2 hospital) providing Lanarkshire's new planned care centre for medicine and surgery and including the proposed new cancer centre for Lanarkshire.
 - Two of the three hospitals (as Level 3 hospitals) providing emergency inpatient care and consultant-led A&E services for all of Lanarkshire.
- 1.5 Following consultation on the short listed options the decision taken at that time was to adopt the option that included Wishaw and Hairmyres as the Level 3 Hospitals and Monklands as the Level 2 Hospital.
- 1.6 The Cabinet Secretary's letter to NHS Lanarkshire, following her parliamentary announcement, asks for these original plans to be reviewed as a matter of urgency and to submit revised proposals that would enable A&E services to continue at Monklands, Wishaw and Hairmyres Hospitals.
- 1.7 The revised proposals for the provision of A&E services at all three hospitals must fulfil the criteria set by the Cabinet Secretary: of Quality, Sustainability, Patient Centredness, Safe, and Consistent with National Policy.
- 1.8 To respond to this request NHS Lanarkshire established a process involving clinicians and including a Clinical Core Group that has scoped out possible alternatives for the provision of A&E services for consideration by the Health Board at the end of September 2007. The proposals will then be submitted to an Independent Scrutiny Panel and an option appraisal will be undertaken with the Health Board providing a recommendation by the end of January 2008. A decision will then be taken by the Cabinet Secretary at the end of the February 2008.
- 1.9 This paper seeks to examine the potential to achieve this provision of A&E services in terms of logistics and to place a high level order of capital costs on the alternative proposals being considered.
- 1.10 NHS Lanarkshire will assess the requirements for staffing and other revenue consequences.
- 1.11 This report makes reference to Appendices; these have not been attached as part of the formal submission to the Independent Scrutiny Panel but are available if required.

¹ NHS Lanarkshire Board Meeting of 27 June 2006

2. Executive Summary

Purpose

- 2.1 This paper provides initial commentary on indicative capital costs and logistical aspects of maintaining Accident and Emergency services at the three acute hospital sites in Lanarkshire, Monklands, Wishaw and Hairmyres.

Clinical Proposals

- 2.2 Seven Scenarios, A, B, C, D, E, F and G for the provision of A&E services have been established. For information the general assumptions and costs established for the proposals in previous strategy, as referred to in the Introduction, are noted in 2.3.

Previous Proposals

- 2.3 The **previous proposals**² were costed at £133.80 million (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias) in April 2006 and provided for:
- Re-configuration of **Monklands Hospital** to be the Level 2 hospital providing Lanarkshire's new planned care centre for medicine and surgery and including the proposed new cancer centre for Lanarkshire at a gross cost of £80.18 million which included equipment, fees, VAT, Contingencies and optimism bias. This involved the provision of new build a geriatric orthopaedic rehabilitation facility at £3.04 million (net), upgrading of existing areas to various new functions at £22.07 million (net), refurbishment of various existing areas at £10.26 million (net) and other infrastructure replacements at £6.96 million (net).
 - Re-configuration of **Wishaw and Hairmyres Hospitals** to be the Level 3 hospitals providing emergency inpatient care and consultant-led A&E services for all of Lanarkshire at a gross cost of £11.43 million and £42.15 million respectively. This includes fees, equipment, VAT, Contingencies and optimism bias.
 - At **Wishaw** the provision of new build extensions to Imaging and Ultrasound at £0.79 million (net), upgrading of existing areas to various new functions at £4.43 million (net) and refurbishment of the existing Accident and Emergency area at £1.37 million (net).
 - At **Hairmyres** the provision of significant new build block for inpatient and associated services at £19.53 million (net), upgrading of existing areas to various new functions at £3.72 million (net) and refurbishment of the existing Pre-Assessment and CCU/MH DU areas at £1.00 million (net).
- 2.4 In the time available for review it has not been possible to establish wholly new detailed costings; rather the costs for the current proposals are generated from other current base data. Where based on the information outlined above in 2.3 costs have been updated to current prices (3Qtr07) with a review of optimism bias³ and as with the previous proposals include allowances for Equipment, Fees, VAT, Contingencies.

² Capital and Logistical Implications of either Option 2 or 3 for the Provision of Hospital Services as outlined in "a Picture of Health" – Option 3 - Currie & Brown Report of 19 April 2006

³ See Section 3.

Scenarios A, B and C

- 2.5 The **current proposals** for **Scenarios A, B and C** are based on the foregoing previous scope of service provision for Wishaw and Hairmyres only, and include for the following revisions:

Wishaw Hospital

- Based on NHS Lanarkshire's projected bed numbers⁴ the beds at **Wishaw** have been increased by 62 for Scenario A, 52 for Scenario B and 48 for Scenario C from the original estimated bed requirement. These have been assumed as new build for costing purposes and further work will be required to establish the feasibility of delivering the new functional capacity in an appropriate location with effective adjacencies.

Hairmyres Hospital

- Similarly the beds at **Hairmyres** have been reduced by 38 for Scenario A, 46 for Scenario B and 48 for Scenario C from the original estimated bed requirement.

Monklands Hospital

- NHS Lanarkshire have advised that for Scenarios A, B and C at **Monklands** See and Treat and Resuscitation as well as common assessment beds will be included within the current service compliment.
- In all scenarios at **Monklands** a capital cost of £84.42 million (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias) is included for infrastructure and base fabric replacements. These are replacements on a "like for like" basis and are required in order to "stand still", this investment would not rectify the functional inefficiencies.
- The likely practical spend profile for such works, some of which have been carried out or may be in progress, would be in the order of £3 million per annum for the first three years with the remainder spent over the following four years.
- This £84.42 million (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias) is the total present day cost of all infrastructure and fabric replacement works identified in a previous condition survey report⁵ and reduced by 40%. This reduction has been assessed on the basis that in Scenarios D, E, F, and G the new build (decant) beds and operating theatres would remain in permanent use and therefore corresponding existing areas would not require this upgrading work. In regard to Scenarios A, B and C, as less existing bed area is actually required to be upgraded, this cost is likely to reduce further, but until further feasibility exercises are progressed equal costs have been applied.
- It should be noted that this reduction assumes, firstly, that it is possible to only replace part of existing infrastructure such as electrical and water supplies to required areas, and secondly, that areas not required will be left vacant. Both these assumptions will have risks that will have to be evaluated in feasibility exercises.

⁴ "Bed Numbers Under Different Scenarios 21st August 2007"

⁵ Capita Report of 2003

- In addition, all scenarios at **Monklands** include notional (net) allowances for Upgrading (based on 50% area upgrade 30,000m² @ £500 = £15,000,000) of £15.00 million in scenarios E, F, and G; £10.00 million in scenario D; and £5.00 million in scenarios A, B, and C. These costs have been included as it is considered that the varying degree of changes to clinical services will require physical re-configuration beyond infrastructure and fabric replacements.
- Under these scenarios the **Cancer Centre** would be provided at Monklands Hospital by upgrading of existing areas at a cost of £2.63 million (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias).
- The indicative costs (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias) are as follows: -

Scenario A	£161.31 million
Scenario B	£158.39 million
Scenario C	£157.41 million

- 2.6 Under these scenarios space would be available on site to provide a new build 142-bed mental health unit on the Monklands site. This with upgrading and extension of the Hairmyres site to provide a 112-bed mental health unit would facilitate the implementation of the **Mental Health** strategy.
- 2.7 The current estimated cost of the construction of the **Mental Health facility at Monklands** Hospital is £30.81 million (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias). These costs are not shown in the summary cost tables. However, in order to enable the Scenarios A, B and C to proceed it is essential that the current mental health beds at Wishaw General are vacated to such a new facility to enable the vacated space to be converted into acute beds.

Key Issues for Scenarios A, B and C

- 2.8 At **Monklands Hospital** these scenarios anticipate in the order of £49.42 million (net) of construction works to the existing estate, it must be emphasised that, the existing buildings infrastructure is in a fragile state with much of its main elements, particularly mechanical and electrical services, beyond its normal life span. This issue of backlog maintainance is expanded below.
- It is essential that the significant challenges that relate to the undertaking of building alterations to Monklands Hospital are identified regardless of which of the seven scenarios outlined are implemented. However, the option of 'do nothing' is not feasible as without investment in the infrastructure there is significant risk in services becoming unsafe, leading to significant interruption and actual loss of service. While precise dates cannot be provided for when such events will occur it is inevitable because many of the current services e.g. electrical wiring, drainage, water supply, are beyond the usual life cycle after which interruption or loss will occur. The risk of occurrence increases significantly as time passes without investment.
 - To establish a clear investment plan with an associated operational plan to minimise service interruption, and to appoint an appropriate contractor will take some 9-12 months before commencing.
 - To delay investment will further exacerbate safety and service interruption risks that are included in Section 6. Commentary on investment in Monklands being able to provide value for money is described later in this section.

- The complexity of undertaking building work in Monklands Hospital should not be underestimated as this has delayed investment to date. It is a site that includes extensive use of asbestos in ceiling, walls and floors. To undertake alterations in such circumstances requires whole areas to be sealed and decontaminated in a single operation. Many elements in close proximity to asbestos cannot be upgraded until this occurs e.g. lighting within imperial asbestolux ceiling tiles; windows in asbestos cladding panels; partitions on asbestos floor tiles/sealants.
- The regulations required to undertake work with asbestos does mean that when work is being undertaken on part of the building it does make economic and logistical sense to undertake all necessary work in that particular area to bring fabric and engineering services up to modern standards. The work to raise standards is, therefore, extensive and requires to be undertaken in a phased approach. If the hospital is to provide operational services during this period. The amount of work to be undertaken at any one time is limited and it is estimated that this will take a minimum of seven years to complete. This is for guidelines only as individual pieces of work may require specific arrangements.
- In addition, many services lack capacity, local isolation valves, or run below or above the areas served, e.g. drainage, heating, and power making localised isolation difficult.
- In these circumstances such a high spend will involve significant risk to service interruption during works and for the reasons touched on above will require major areas to be vacated, in particular the ward towers will require to have 2/3 floors or possibly the whole tower vacated. Also, the existing operating theatres plant room installations would require total closure for the duration of the refurbishment works.
- The construction works would most likely be carried out in two or three work streams: upgrading of departments, upgrading of infrastructure and fabric refurbishment. As noted above this would require major decanting of departments and the major works are likely to require a period on site of 4 to 5 years during which there would be major disruption to areas. Whilst some work would require to commence immediately the bulk of this expenditure would commence when work is completed at the Hairmyres and Wishaw sites, this being necessary to facilitate continuity of overall clinical services.

2.9 At **Wishaw Hospital** the scale of works is less, in the order of £12.68 million (net), but this will cause significant disruption to some existing departments during upgrading and refurbishment works. In addition working with the PFI provider under the current contract will be complex.

- It is anticipated that these works will require a period on site of 2 - 3 years.
- To complete these works it is essential to vacate the mental health unit at Wishaw. These beds would be re-provided as part of the planned 142-bed mental health development on the Monklands site. The overall timetable would mean that the Mental Health facility has to be completed prior to work commencing at Wishaw Hospital.
- There would be some new build of ward accommodation for this development. Location would require to be identified and services linked to ensure operational efficiency.

2.10 At **Hairmyres Hospital** the main part of the works will comprise a significant new build block extension, in the order of £22.36 million (net), for new in-patient accommodation. Whilst a major build this will cause minimal disruption to existing departments, because it can largely be constructed in isolation, although again working with the PFI provider under current contract will be complex.

- It is anticipated that these works will require a period on site of around 2 years.

Scenario D

2.11 The **current proposals** for **Scenario D** are also based on the foregoing previous scope of service provision for Wishaw and Hairmyres only, and include for the following:

- At **Wishaw** the scope is as the previous original that included an additional 100 beds in place of the current mental health beds.
- At **Hairmyres** beds have been reduced by 111 from the original proposed bed requirements and the costs have been reduced to reflect less departmental changes in this scenario as advised by NHS Lanarkshire.
- As noted in 2.5 all scenarios at **Monklands** include a capital cost of £84.42 million (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias) for infrastructure and base fabric replacements. These are replacements on a “like for like” basis and are required in order to “stand still”, this investment would not rectify the current functional inefficiencies.
- As noted in 2.5 all scenarios at **Monklands** include notional (net) allowances for Upgrading (based on 50% area upgrade 30,000m² @ £500 = £15,000,000). This scenario includes £10.00 million. These costs have been included as it is considered that the varying degree of changes to clinical services will require physical re-configuration beyond infrastructure and fabric replacements.
- To facilitate this scenario costs of £17.97 million and £53.77 million (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias) have been included for **new build operating theatres and 216 beds** respectively.
- Under this scenario the **Cancer Centre** would be provided at Monklands Hospital as part of the decant (new build) at a further cost of £2.90 million (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias).
- The indicative cost (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias) is as follows: -

Scenario D £210.50 million

2.12 Under this scenario it is uncertain whether or not the new build **Mental Health** unit could still be provided at Monklands Hospital until further planning is undertaken. In addition it should be noted that the **decant (new build) operating theatres and 216 beds** also require planning to establish if this assumption is in fact viable in terms of the site logistics and in establishing working adjacencies. The provision of new build theatres within a mainly refurbished project would probably exacerbate the inefficiencies in functionality of the departments as the location will be different from the present situation. This indicates that the refurbishment of the existing Monklands site would prove difficult to demonstrate value for money.

Key Issues for Scenario D

- 2.13 At **Monklands Hospital** this scenario anticipates a much higher degree of construction works to the existing estate.
- This will exacerbate the construction and logistical issues described for scenarios A, B, and C and will mean that possibly both ward towers will have to be completely vacated in turn along with other departments such as operating theatres for the duration of the works. For this reason the decant facilities have been included and means that these have to be completed before the upgrading works can begin. The viability of such a programme does require careful planning being carried out in a fully operational environment.
 - Again these construction works would most likely be carried out in two or three work streams: upgrading of departments, upgrading of infrastructure and fabric refurbishment. As noted above this would require major decanting of departments and the works are likely to require a period on site of around 7 years during which there would be major disruption to areas. Whilst some work would require to commence immediately the bulk of this expenditure would commence when the decant is completed to facilitate continuity of overall clinical services.
- 2.14 At **Wishaw Hospital** the works are the same as under scenarios A, B, and C without the additional beds above those planned to replace the mental health beds.
- 2.15 At **Hairmyres Hospital** the main part of the works will again comprise a new build extension for in-patient accommodation. This is not as large as that under scenarios A, B, and C, and while still a significant build, again this will cause minimal disruption to existing departments because it can largely be constructed in isolation. Working with the current PFI provider under current contract will again be complex.
- It is anticipated that these works will require a period on site of around 2 years.

Scenarios E, F and G

- 2.16 None of the **current proposals** for **Scenarios E, F and G** are based on any of the previous proposals but rather include the following:
- As noted in 2.5 all scenarios at **Monklands** include a capital cost of £84.42 million (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias) for infrastructure and base fabric replacements. These are replacements on a “like for like” basis and are required in order to “stand still”, this investment would not rectify the current functional inefficiencies.
 - As noted in 2.5 all scenarios at **Monklands** include notional (net) allowances for Upgrading (based on 50% area upgrade 30,000m² @ £500 = £15,000,000). These scenarios include £15.00 million. These costs have been included as it is considered that the varying degree of changes to clinical services will require physical reconfiguration beyond infrastructure and fabric replacements.
 - To facilitate these scenarios costs of £17.97 million and £53.77 million (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias) have been included for **decant (new build) operating theatres and 216 beds** respectively.
 - Under these scenarios the **Cancer Centre** would be provided at Monklands Hospital as part of the decant (new build) at a further cost of £2.90 million (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias).

- £3.15 and £4.41 million (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias) allowances are included for upgrading the Accident & Emergency Departments at **Wishaw and Hairmyres** respectively. This is to enable the departments to cope with increased activity.
- Scenario G assumes that some centralisation of specialties will be developed and NHS Lanarkshire will evaluate revenue costs in relation to this.
- Costs for the changes associated with the location of trauma and orthopaedic services have been treated as neutral in these scenarios.
- The indicative costs (gross: including Equipment, Fees, VAT, Contingencies and Optimism Bias) are as follows: -

Scenario E £198.84 million

Scenario F £198.84 million

Scenario G £198.84 million

- 2.17 The current NHS Lanarkshire strategy for Mental Health could not be achieved with any of these options as the development at Monklands Hospital of 142 beds could not be accommodated. Further work is being undertaken by NHS Lanarkshire to assess the implications of this scenario in relation to mental health services.

Key Issues for Scenarios E, F and G

- 2.18 At **Monklands Hospital** these scenarios anticipate a higher degree of construction works to the existing estate than the other four scenarios.

- Considering the constraints noted above these scenarios carry the greatest risk to service disruption and interruption.
- Again these would most likely be carried out in two or three work streams: upgrading of departments, upgrading of infrastructure and fabric refurbishment. As noted above this would require major decanting of departments and the works are likely to require a period on site of around 7 years during which there would be major disruption to areas. Whilst some work would require to commence immediately the bulk of this expenditure would commence when the decant is completed to facilitate continuity of overall clinical services.

- 2.19 At **Wishaw Hospital** the scale of works is less and confined to upgrading the Accident & Emergency Department but will cause some disruption to some existing departments during upgrading and refurbishment works. In addition working with the PFI provider under current contract will be complex.

- It is anticipated that these works will require a period on site of around 1-2 years.

- 2.20 At **Hairmyres Hospital** the scale of works is less and also confined to upgrading the Accident & Emergency Department that will cause some disruption to some existing departments during upgrading and refurbishment works. In addition working with the PFI provider under current contract will be complex.

- It is anticipated that these works will require a period on site of around 1 - 2 years.

New Build

2.21 A **current proposal** for a **new build Scenario for Monklands** has been included and is based simply on current areas and will require scoping and identification of a suitable site as practically this is unlikely to be achievable on the Monklands site.

- The indicative cost is as follows: -

New Build Scenario £355.13 million (no costs included for Wishaw or Hairmyres)

Key Issues for New Build Scenario

2.22 A new build **Monklands Hospital** is likely to provide the best value for money and highest quality facility for the provision of health services, however there are significant issues to be considered:-

- This would be the highest capital cost but most efficient life cycle cost.
- This scenario assumes that there would be no works at Wishaw and Hairmyres.
- The existing Monklands site would require to be kept running until the new facility is operational
- A suitable site would be required to be identified and purchased.
- NHS Lanarkshire have stated that this is not an option that it wishes to consider and is included for information purposes only

Risks

2.23 The report includes in section 6. a commentary on risks, however the following are highlighted as being particularly critical to any re-development works.

Risks - General

2.24 NHS Lanarkshire has advised that the affordability envelope would remain on the same basis as for the previous strategy. We have to advise that in keeping with the previous report the above costs do not include for the Mental Health strategy and that therefore if any increased costs are to be accommodated for acute services under some scenarios then, without additional capital, this will impact on Mental Health and Primary Care investment.

2.25 As a general comment, North and South Lanarkshire Councils Planning Departments will require reassurance on parking capacity and on overall road and transport network implications within Lanarkshire associated with any further developments on the current sites. This would be both during construction and on completion and associated costs are likely to be considerable. These issue have not been allowed for and would be integral to the planning approval process and in the business case process.

Risks - Monklands Hospital

- 2.26 Relating to the commentary on costs above, and as noted in the previous reports, there is a risk that major spend on the existing estate at Monklands may not demonstrate value for money through the business case process required by Scottish Government Health Department and, therefore, may fail. However it is essential that there is investment in the fabric of the building if this is to continue as an operational site. The redevelopment of the Monklands site will realise the greatest benefit and value for patients if the majority of site development can be undertaken as new build; retained refurbished accommodation, while able to achieve an estate condition rating of condition B, will not optimise functionality and space utilisation or meet current standards for these.
- 2.27 To bring the current healthcare services at Monklands into the 21st Century requires both a physical and functional upgrade. Any physical upgrade should be a catalyst for functional and service improvement. Fabric and infrastructure replacement will extend the fabric's potential life for a further twenty to thirty years. However this alone would not deal with the many changes in clinical practice and the Health Building Note and Health Technical Memorandum guidance that has been implemented since the buildings initial design of 1960/70.
- 2.28 This report and those previous⁶ highlights the physical, as well as functional, inefficiencies, constraints and compromises at Monklands Hospital. Many of the physical shortcomings are potential risks to service failures such as mechanical and electrical installations that are past their normal life expectancy. This poses a serious threat to business continuity and without major investment it could be surmised that these installations will suffer failures within the next five years. This is why there is a need for immediate investment.
- 2.29 Regardless of which Scenario is adopted, at Monklands Hospital there is a risk that there will be non compliance with Scottish Health Technical Memoranda such as FIRECODE relating to fire evacuation and Scottish Health Building Notes and other Scottish Government Guidance on issues such as ward bed spacing, single bed accommodation and provision of clinical wash-hand basins for the management of Hospital Associated Infection (HAI). In addition, working within the existing building footprint will inevitably prove inefficient in use of space and necessary clinical and facilities servicing.
- 2.30 While no costs are included for the Mental Health strategy the previous proposals included for the new build provision of a 142-bed facility on the Monklands site. Under Scenarios D, E, F and G, while this may be physically accommodated on the site currently occupied by the Residencies, this is unlikely to be feasible as space would be required for increased activity and parking. An alternative site would therefore have to be sourced or a smaller unit considered.
- 2.31 The feasibility and sustainability of Scenarios D, E, F and G are untested and, considering the logistical issues and risks noted, could be undeliverable without significant consideration to decant/replacement build and associated costs. This paper assumes that space within the existing envelope would be utilised and this would restrict clinical service provision.
- 2.32 A full investigation of site conditions should be undertaken to allow full evaluation and assessment of such risks.
- 2.33 Consideration of decanting arrangements will be a major issue including possible buying in of temporary accommodation, a new build facility, or mobile theatres. Further at the end of the works there is the potential for a tower to lie empty.

⁶ Capital and Logistical Implications of either Option 2 or 3 for the Provision of Hospital Services as outlined in "a Picture of Health" – Option 3 - Currie & Brown Report of 19 April 2006 and Site Development Plans Report – Atkins of June 2007

Risks - Wishaw and Hairmyres

- 2.34 While to some extent similar risks exist at Wishaw and Hairmyres they are at a lower level as these buildings are relatively new and have been designed for flexibility and with thought to future expansion. Further, the scale of the proposed works is significantly less.
- 2.35 However there is significant financial risk in terms of potential cost increases, as demonstrated with other recent changes to existing PFI contracts, when negotiating with existing PFI providers.

Logistics

- 2.36 Section 4 of this paper provides additional detail on the logistical issues and constraints to the proposals under each scenario.
- 2.37 Table 1 compares some of the key Service Impacts under each scenario.
- 2.38 Table 2 compares some of the Key Operational Impacts under each scenario.
- 2.39 A critical future task is to fully plan the services provision across all three sites.
- 2.40 Following this, space planning will inform more detailed feasibility and costs.
- .

Comparison of Key Service Impacts

Clinical Proposal A				
	Monklands	Hairmyres	Wishaw	Notes
Bed Numbers	103	517	694	Based on NHS Lanarkshires projected bed numbers (21 Aug 07). Note excludes Mental Health Beds
Car Parking	Assume Adequate	Inadequate	Inadequate	Urgent need for additional capacity at Wishaw
Mental Health	✓	✓	X	Additional Mental Health beds at Monklands & Hairmyres/Convert Wishaw beds to Acute beds
Cancer Centre	✓	X	X	Develop Cancer Centre at Monklands (35 chairs)

Clinical Proposal B				
	Monklands	Hairmyres	Wishaw	Notes
Bed Numbers	121	509	684	Based on NHS Lanarkshires projected bed numbers (21 Aug 07). Note excludes Mental Health Beds
Car Parking	Assume Adequate	Inadequate	Inadequate	Urgent need for additional capacity at Wishaw
Mental Health	✓	✓	X	Additional Mental Health beds at Monklands & Hairmyres/Convert Wishaw beds to Acute beds
Cancer Centre	✓	X	X	Develop Cancer Centre at Monklands (35 chairs)

Clinical Proposal C				
	Monklands	Hairmyres	Wishaw	Notes
Bed Numbers	127	507	680	Based on NHS Lanarkshires projected bed numbers (21 Aug 07). Note excludes Mental Health Beds
Car Parking	Assume Adequate	Inadequate	Inadequate	Urgent need for additional capacity at Wishaw
Mental Health	✓	✓	X	Additional Mental Health beds at Monklands & Hairmyres/Convert Wishaw beds to Acute beds
Cancer Centre	✓	X	X	Develop Cancer Centre at Monklands (35 chairs)

Clinical Proposal D				
	Monklands	Hairmyres	Wishaw	Notes
Bed Numbers	369	354	591	Based on NHS Lanarkshires projected bed numbers (21 Aug 07). Note excludes Mental Health Beds
Car Parking	Inadequate	Assume Adequate	Inadequate	Additional Car Parking is likely on all 3 sites, particularly at Monklands and Wishaw
Mental Health	?	✓	?	Requirement to establish feasibility of delivering Mental Health Beds at Monkland and Wishaw
Cancer Centre	✓	X	X	

Table 1 Key: ✓ Service on site: X Service not on site: ? Requires evaluation

Clinical Proposal E				
	Monklands	Hairmyres	Wishaw	Notes
Bed Numbers	415	347	552	Based on NHS Lanarkshires projected bed numbers (21 Aug 07). Note excludes Mental Health Beds
Car Parking	Inadequate	Assume Adequate	Inadequate	Additional Car Parking is likely on all 3 sites, particularly at Monklands and Wishaw
Mental Health	✓	✓	✓	Development of MH services at Monklands and Wishaw is unlikely due to site constraints
Cancer Centre	✓	X	X	

Clinical Proposal F				
	Monklands	Hairmyres	Wishaw	Notes
Bed Numbers	466	315	533	Based on NHS Lanarkshires projected bed numbers (21 Aug 07). Note excludes Mental Health Beds
Car Parking	Inadequate	Assume Adequate	Inadequate	Capacity at Monklands & Wishaw would require improvement
Mental Health	✓	✓	✓	Reflects status quo. Unlikely to satisfy Mental Health Strategy i.e. rationalisation on 2 sites
Cancer Centre	✓	X	X	

Clinical Proposal G				
	Monklands	Hairmyres	Wishaw	Notes
Bed Numbers	466	315	533	Based on NHS Lanarkshires projected bed numbers (21 Aug 07). Note excludes Mental Health Beds
Car Parking	Inadequate	Assume Adequate	Inadequate	Capacity at Monklands & Wishaw would require improvement in line with increased staffing numbers
Mental Health	✓	✓	✓	Reflects status quo. Unlikely to satisfy Mental Health Strategy i.e. rationalisation on 2 sites
Cancer Centre	✓	X	X	

Table 1 Key: ✓ Service on site: X Service not on site: ? Requires evaluation

Comparison of Key Operational Impacts

<i>Clinical Proposals A/B/C</i>				<i>Notes</i>
<i>Monklands</i>	<i>Hairmyres</i>	<i>Wishaw</i>		
Patient Activity	↓	↑	↑	Based on NHS Lanarkshire's Bed number model (21 Aug 07) using option F activity as the benchmark
Operational Disruption	+++	+	++	
Infrastructure	+++	+	++	
Utilities	+++	+	+	
Site Access/Car Parking	Neutral	↑	↑	

<i>Clinical Proposal D</i>				<i>Notes</i>
<i>Monklands</i>	<i>Hairmyres</i>	<i>Wishaw</i>		
Patient Activity	↓	↑	↑	Disruption at Monklands will increase because of the increase in upgrading works
Operational Disruption	+++	+	++	
Infrastructure	+++	+	++	
Utilities	+++	+	+	
Site Access/Car Parking	↑	↑	↑	

<i>Clinical Proposal E</i>				<i>Notes</i>
<i>Monklands</i>	<i>Hairmyres</i>	<i>Wishaw</i>		
Patient Activity	Neutral	↑	↑	
Operational Disruption	+++	+	++	
Infrastructure	+++	+	+	
Utilities	+++	+	+	
Site Access/Car Parking	↑	↑	↑	

<i>Clinical Proposal F</i>				<i>Notes</i>
<i>Monklands</i>	<i>Hairmyres</i>	<i>Wishaw</i>		
Patient Activity	Status Quo	Status Quo	Status Quo	
Operational Disruption	+++	+	++	
Infrastructure	+++	+	+	
Utilities	+++	+	+	
Site Access/Car Parking	↑	Neutral	Neutral	

	<i>Clinical Proposal G</i>			<i>Notes</i>
	<i>Monklands</i>	<i>Hairmyres</i>	<i>Wishaw</i>	
Patient Activity	Status Quo	Status Quo	Status Quo	
Operational Disruption	+++	+	++	
Infrastructure	+++	+	+	
Utilities	+++	+	+	
Site Access/Car Parking	↑	↑	↑	

Table 2 Key

- ↑ **Increase** **+++** **Major Impact**
- ↓ **Decrease** **++** **Medium Impact**
- +** **Low Impact**

3. Indicative Cost Summary

For the seven service scenarios considered the indicative capital costs can be summarised as follows: -

Capital Cost Summary:

	Works	Equipment	Fees	VAT	Contingencies	Opt. Bias	Total
Scenario A	84,447,000	2,686,000	10,137,000	15,254,000	11,255,000	37,499,000	161,309,000
Scenario B	82,828,000	2,604,000	9,939,000	14,951,000	11,032,000	37,031,000	158,385,000
Scenario C	82,278,000	2,576,000	9,873,000	14,850,000	10,958,000	36,875,000	157,411,000
Scenario D	108,566,000	8,193,000	13,028,000	20,433,000	15,022,000	45,254,000	210,497,000
Scenario E	101,049,000	8,677,000	12,126,000	19,202,000	14,105,000	43,683,000	198,843,000
Scenario F	101,049,000	8,677,000	12,126,000	19,202,000	14,105,000	43,683,000	198,843,000
Scenario G	101,049,000	8,677,000	12,126,000	19,202,000	14,105,000	43,683,000	198,843,000
New Build	169,871,000	10,617,000	27,073,000	31,585,000	23,915,000	92,071,000	355,132,000

Basis of Costs

- 3.1 Costs are indicative only based on current projects cost data, Building Cost Information Service and Departmental Cost Allowance Guides on the following basis: -
- 3.2 Current at 3rd Quarter 2007.
- 3.3 No allowance has been included for inflation to a potential start date.
- 3.4 Equipment allowed at 15% Monklands and 5% each at Wishaw and Hairmyres with additions for specialist items where identified.
- 3.5 There has been no capacity or space planning and therefore a general contingency allowance of 10% has been added. This will be refined through detailed planning.
- 3.6 Costs have generally been based on Health Building Note areas.
- 3.7 Following a review of single bed provision at Wishaw and Hairmyres and an assessment of potential accommodation possible within the existing single Monklands Tower, single Bed provision has been taken at 50%. This is in accordance with expected minimum standards for future hospital developments.
- 3.8 The costs of provision of Mental Health beds (254) have been excluded from this report, as these will be considered under NHS Lanarkshire's Mental Health Strategy.
- 3.9 No Development works have been included for any identified current services pressures. Only essential changes required through the reconfiguration of hospitals have been included.
- 3.10 It is likely that additional accommodation, in the form of offices, will be required in each model and this will have to be assessed at a later stage.
- 3.11 Costs do not include for the provisions of additional car parking at any site. NHS Lanarkshire have advised that while they recognise that this will be required it will be subject to a separate review of the entire provision across the estate and the availability of funding.

- 3.12 Optimism Bias – until proposals are further developed and refined, 23% (Largely New Build) has been applied to Hairmyres costs, 39% (Largely Upgrade/Refurbishment) has been applied to Wishaw costs, and 43% (Largely Upgrade/Refurbishment) has been applied to Monklands costs. This is assessed on current guidance.
- 3.13 Professional Fees for Design and associated disciplines have been applied as a flat 12% across all costs.
- 3.14 Costs exclude legal and financial fees in regard to change order works at Wishaw and Hairmyres.
- 3.15 VAT has been applied at 17.5% on all costs excepting Professional Fees.
- 3.16 No account has been taken of potential VAT recovery that may be possible when refurbishing existing accommodation.
- 3.17 Costs do not include for any work to utilities or main services elements to provide additional capacity for re-configuration.
- 3.18 Costs exclude Revenue, Double Running and NHSL Management Costs.
- 3.19 Costs exclude Risk and Impact Analysis and Traffic Impact Analysis Report requirements.
- 3.20 Capital Charges are subject to a number of variables but under the proposed developments, these will increase but will be part of NHS Lanarkshire's exercise on affordability of the proposals.
- 3.21 Revenue Costs and Life Cycle Costs do have to be evaluated for impact both during and following development and will be included in the Finance assessment of proposals.

4. Logistical Issues and Constraints to Development Works Associated with Each Scenario

General

- 4.1 The seven scenarios tested will have differing impacts on the overall services provision and configuration in relation to clinical and support services, manpower and planning across NHS Lanarkshire.
- 4.2 All public bodies owning assets have landlord obligations to ensure a safe workspace and NHSL have a corporate responsibility that all buildings have a safe environment.
- 4.3 Legal obligations exist around the management of all capital investment works that will include H&S at work Act, Construction Design and Management regulations (CDM) and, compliance with fire safety regulations Firecode and other guidance and regulation.
- 4.4 The above requirements require to be undertaken while at the same time ensuring safe and effective clinical care.

Process

- 4.5 In implementing any of the scenarios NHS Lanarkshire is required to comply with the Scottish Government Finance and Capital Divisions Business Case Process. This will also test and establish the Funding method, as well as a full feasibility and option appraisal.
- 4.6 This will involve notification to the market followed by evaluation and selection of suitable constructors to take part in a tendering process.
- 4.7 Integral with the tendering process, it is necessary to programme and plan the works with a full impact and risk analysis being prepared.
- 4.8 The above process is required on all of the three acute hospital sites. However, at the Wishaw and Hairmyres sites, where the private sector providers own the buildings, additional processes in line with each contract will be required.

Scenarios A, B and C – Monklands Hospital

- 4.9 There are similarities in implementing the required changes in scenarios A, B and C. It is assumed that all refurbished scheduled areas would be reprovided within the existing envelope.
- 4.10 In these scenarios there would be a major element of alteration and refurbishment. Logistical difficulties and the need to maintain current services would require that significant decant facilities be available. This could be facilitated through the movement of in-patient numbers to Hairmyres and Wishaw hospitals when works are completed on the two sites, and subsequent use of the existing medical and surgical towers. At the end of this process the current Medical Tower would be retained but no longer required for hospital clinical use. Therefore alternative uses would require to be identified if additional revenue costs are to be avoided. This paper does not include for any refurbishment or demolition of the Medical Tower.

Scenarios D, E, F and G – Monklands Hospital

- 4.11 In scenario D at Monklands Hospital there would be a major element of alteration and refurbishment. Logistical difficulties and the need to maintain current services mean that it is necessary to have significant decanting to enable capital works

- 4.12 Under scenarios D, E, F and G the inherent problems associated with the current building will only partially addressed. There will be difficulties in providing effective adjacencies between certain departments due to the assumption that a number of key departments will remain in their current location, e.g. Imaging and Accident & Emergency.
- 4.13 Similarly, travel distances between different locations will be less efficient because of the general disposition of services within the hospital site and the use of new build decant for operating theatres and beds.
- 4.14 The retained refurbished areas of the Monklands Hospital redevelopment would seek to accommodate specialties within available vacated space rather than in the optimal adjacency to related departments. Retained departments will be determined by the space available rather than its optimal area configuration, e.g. imaging.
- 4.15 Imaging Department falls well short of current space standards and as designed no longer delivers adequate functionality, in particular, does not facilitate patient privacy and dignity.

Constraints for All Scenarios A, B, C, D, E, F & G – Monklands Hospital

- 4.16 The complexities of the implementation of a capital investment plan for Monklands hospital will be extremely challenging in particular in establishing feasibility of any development proposals associated with either refurbishment and/or new build. It is not practical / possible to address the replacement of individual elements of building fabric and mechanical and electrical services, this is due to existing elements being integral with each other. In addition, issues such as asbestos require strict specialist removal procedures to be adopted. The limitations associated with methods of working which require to ensure that there is no risk to continuity of life critical engineering and building services.
- 4.17 The refurbishment requirement are in areas around the patient environment that covers lighting, ceilings, Floor coverings, heating, ventilation and bed head services and the general electrical distribution systems. Over and above changes to the physical environment there is a requirement to construct Schedules of Accommodation to meet current guidance on bed spacing, single room provision, Fire Safety, Energy Efficiency and all other guidance.
- 4.18 With regard to the management of HAI, significant additional clinical wash hand basins are required in all wards and departments to meet current guidance. The disruptive nature of these installations are such that they require to be undertaken as part of a larger scheme for the reasons identified above. Further in respect of aspergillus, a potential spore that can adversely affect immuno-suppressed patients, full consideration will be required to protect patient safety during refurbishment works.
- 4.19 Careful planning is required to minimise noise, vibration, dust and maintaining fire safety at all times.
- 4.20 There is limited drainage capacity on the site and in the hospital this requires to be rerouted to overcome existing problems with blockages. This will require additional manholes and pipe runs set around existing buildings; the feasibility of this is possible. The existing system would require to be fully surveyed and the existing invert levels re-set.
- 4.21 The existing above ground drainage in the ward blocks will require to be re-routed to the external walls of the block. This replacement requirement will impact in a large number of locations within the buildings which may require to be co-ordinated within a wider refurbishment scheme due to the issues of integration of services, asbestos removal and fire compartmentation.
- 4.22 External drainage provision will have significant disruption to service deliveries, car parking provision, traffic management and pedestrian segregation.

- 4.23 North Lanarkshire Council Planning Department will require reassurance on parking capacity and on overall road and transport network implications within North Lanarkshire associated with any further development of the site. For example the implication of any construction compound would require to be located within the existing site, this, along with the additional traffic associated with construction workers and deliveries would remove parking provision and increase parking requirements.
- 4.24 External fabric maintenance e.g. concrete sections, roofs and window replacement will require scaffolding to be provided. Patient privacy may be impacted, in addition, dust and noise will be issues as well as natural ventilation if the windows cannot be opened.
- 4.25 The construction of the buildings makes it difficult to deal with small discrete works. Any proposed refurbishment is likely to have a significant impact on the availability of space because the nature of the works is likely to require the decanting of 2/3 ward floors or possibly the whole tower. This would require decant facilities or a planned ongoing reduction of clinical services on the site.

Constraints for Scenarios A, B & C – Wishaw and Hairmyres Hospital

- 4.26 There are no significant construction-related constraints that could not potentially be managed in delivering these scenarios. However, there are risks that would require to be managed in the context of an operational PFI facility with an incumbent PFI provider.
- 4.27 Under these scenarios, Wishaw will require increased medical and surgical beds. This would be achieved in part by conversion of the existing 69 mental health beds and some new build.
- 4.28 Additional works will be required for the re-configuration and expansion of accident and emergency services.

Constraints for Scenarios D, E, F & G – Wishaw and Hairmyres Hospital

- 4.29 Under these scenarios, additional works will be required for the re-configuration and expansion of accident and emergency services and this will have some disruption to services.

5 General Assumptions

- 5.1 Efficiencies in any service re-design through detailed clinical modelling have still to be evaluated. This report is part of the process under which bed numbers and configuration of services will require much more detailed assessments and consultations with a wide group of clinicians and stakeholders.
- 5.2 Proposals for the Monklands tower are based on an initial desktop exercise that indicates the bed number potential per floor at 54 beds for 50% single room or 44 beds at 100% single room (Current provision at approximately 25% single room is 72 beds per floor)
- 5.3 Work to existing elements with a risk of asbestos content assumes that whole areas can be sealed and decontaminated in a single operation.
- 5.4 No detailed service delivery models or capacity planning has been carried out in respect of clinical services and this would be required to test the assumptions on bed numbers and other clinical and support services.
- 5.5 No space planning has been carried out and this is also required to test the proposals.
- 5.6 The extent of Accident & Emergency redesign has to be developed following planning.
- 5.7 In regard to the current residences provided at Monklands Hospital, NHS Lanarkshire have advised that they will be exploring alternative options for the provision of staff accommodation under all scenarios.

6. Risks and Programme

Monklands Hospital

- 6.1 The Ward area Towers configuration at Monklands limits the opportunity for flexibility between wards at each level as well as provision of horizontal evacuation.
- 6.2 FIRECODE - Scottish Hospital Technical Memorandum (SHTM) 81 new build and/or SHTM 83 upgrade - at Monklands the requirement for horizontal evacuation is currently not met and this is unlikely to be achieved through any of the planned investment programmes.
- 6.3 Hospital Building Note 4, regarding ward bed space dimensions and Scottish Government Health Department guidance on percentage of single rooms to multi bed will require to be tested in feasibility and in the business case approval process is unlikely to be significantly improved.
- 6.4 At Monklands Hospital the clinical adjacencies and the Patient Journey would be improved but may represent a compromise compared with current service ideals, the lack of a "Street" and the inflexible Ward configuration are most notably at variance with modern design.
- 6.5 While fabric repairs at Monklands may extend the potential life of the building for twenty to thirty years a period significantly less than say the 60 years for a Category A (new build) provision building as defined by NHSScotland.
- 6.6 Any new build expansion of inpatient and day/outpatient areas is limited at Monklands due to the lack of available locations where a new development could be linked into the main building. Further, once these proposed development works have been implemented there may be virtually no further expansion areas available and there may be impact on the functionality of the overall site.
- 6.7 In respect of the existing infrastructure at Monklands there are logistical issues in respect of inadequate capacity, means of isolation, access etc that cannot be fully evaluated until feasibility planning actually begins; these are likely to be onerous.
- 6.8 The site at Monklands has a large number of physical constraints that will require full evaluation prior to development works including site topography, potential mine workings, infill areas, restricted site access, parking and poor services infrastructure.
- 6.9 Any proposals to demolish a tower at Monklands hospital would require a detailed feasibility study as initial discussions with a demolition contractor would indicate that the entire building would require to be evacuated and that the podium area would also have to be demolished.
- 6.10 It will be necessary to comply with health and safety regulation, control of infection standards, Healthcare Associated Infection System for Controlling Risk In the Built Environment Toolkit (HAI SCRIBE), vibration, noise and dust.
- 6.11 Double Running costs will be incurred at various stages of the re-development; no allowance has been included for this. NHS Lanarkshire will address this in their affordability work.
- 6.12 As well as physical construction, decanting costs will involve NHS Lanarkshire staff and external consultants' time and services; no allowance has been included for this.
- 6.13 New energy compliance legislation, to be effective by 2007, may impact on the re-development requiring higher provision that will be both costly and difficult to achieve.

- 6.14 The Local Authority Planning Department have expressed concerns around traffic flow in regard to access, parking and management during both construction phase and following completion. They also considered that there is a lack of connectivity on the Monklands site and that there may be an adverse effect on road junctions in the immediate area and also further a field.

Wishaw Hospital

- 6.15 There is a general risk on cost and timescales due to a requirement to negotiate with the incumbent PFI providers at Hairmyres and Wishaw Hospitals.

Hairmyres Hospital

- 6.16 There is a general risk on cost and timescales due to a requirement to negotiate with the incumbent PFI providers at Hairmyres and Wishaw Hospitals.
- 6.17 Hairmyres Hospital may require some upgrading of the physical site infrastructure e.g. boilerplant etc. This requires further assessment.

General Risks

- 6.18 While there will be extensive planning and impact analysis undertaken there may remain significant service continuity risks to hospital services during the re-development at all three sites. The building characteristics and potentially shorter, less phased, building programme at Hairmyres and Wishaw Hospitals will reduce this potential disruption compared to Monklands Hospital.
- 6.19 Similarly there will be significant Risk to Programme during the re-development. In turn this gives rise to a risk in construction inflation in a market that is already overheating.
- 6.20 All of the foregoing issues will become apparent in the procurement process and collectively constitute a significant risk in Business Case Approval by the Scottish Government Health Department.
- 6.21 Traffic Impact Analysis will be required at all sites although risks as described above are likely to be significantly lower at Wishaw and Hairmyres.
- 6.22 Development of suitable car parking facilities at all three sites is essential.

Programme

- 6.23 The detailed programmes for implementation of the Development Works require further work but as noted in previous reports, and considering the need to phase implementation and procurement, the potential timeframe for overall completion could be in the order of eight to nine years. There could be a period of two to three years prior to commencement of any major works on either site.

7. Methodology

- 7.1 Initially Currie & Brown and Buchan + Associates carried out a review of the Clinical and Non Clinical Key Issues Schedule, Version 7⁷. The review adjusted this to reflect the current alternative proposals for A&E services. In addition a full Schedule of Clinical and Non Clinical Issues was compiled that allows comparison across all Scenarios⁸.
- 7.2 Alternative proposals considered were: -
- | | | |
|---------------|---|--|
| Scenario A | - | See Treat and Resuscitation |
| Scenarios B&C | - | See Treat & Resuscitation with Common Assessment Beds |
| Scenario D | - | As B&C with Emergency Medical Services |
| Scenario E | - | Status Quo without Trauma and Orthopaedics |
| Scenario F | - | Status Quo including Trauma and Orthopaedics |
| Scenario G | - | Status Quo including Trauma and Orthopaedics with potential sub-specialisation of services |
| New Build | - | Re-provision of Monklands Hospital |
- 7.3 Following these reviews the Schedules of Areas for Scenarios A, B and C were re-visited and revised indicative costs compiled. This was subsequently revised as indicated in the Executive Summary to reflect changes advised by NHS Lanarkshire.
- 7.4 It is emphasised that the outcomes of this report are to some extent based on the information included in the 19 April 2006 Report that used data from the previous reports prepared in March 2004 and December 2005. The outcomes therefore are indicative and are based on the parameters outlined.
- 7.5 Significant further work is required in developing the options proposed to lead to the submission of an Outline and Final Business Case in accordance with the Scottish Government Health Department Capital Investment Manual.
- 7.6 In summary this paper provides a very high level commentary and a broad order of costs for the options proposed for A&E services, all of which will require development and testing to provide a viable implementation process and programme.
- 7.7 Careful and detailed planning will be required to ensure that as far as possible ongoing health service provision is protected and potential risks minimised when working in fully operational environments. This is particularly applicable in the case of the development of Monklands Hospital where there are major logistical difficulties associated with the condition, configuration and servicing capacities of the existing estate.

⁷ Compiled for the 19 April 2006 Report, included in Appendix 2

⁸ Appendix 3

Appendix 1 Description of Clinical Proposal Scenarios

Clinical Proposal Scenarios

- 1 The following section provides a high level overview of the main service elements and assumptions for each of the seven scenarios considered for Monklands Hospital Accident & Emergency Services, as at 4 September 2007:

Scenario A

- 1 See & Treat with Resuscitation and a stabilisation function. Patients requiring acute treatment beyond See & Treat will be stabilised and transferred. Assume 49,000 patient attendances/annum.
- 2 This option is similar to the original Monklands proposal. Space could be provided within the existing A&E to provide a Resuscitation Area, Plaster Room, Consultation/Examination Rooms (2), 6 Bay Holding Area and additional waiting space.
- 3 This option assumes that emergencies will emanate from individuals who self-present at the department; SAS will divert all emergency patients to either Wishaw or Hairmyres.
- 5 Diagnostic and investigation capability will require to be reviewed.
- 6 Particular attention will require to be paid to logistics between NHS & SAS if this is to be successful.

Scenario B

- 1 An A&E service providing See & Treat with Resuscitation and stabilisation function with, in addition, a common assessment area including beds that can manage patients for up to 24 hours for observation and quick interventions. Only patients over 16 years would be admitted to the 24-hour assessment facility. Early decision will be required whether the maximum stay will be over 24 hours and if this is the case the patient will be transferred. Assume 49,000 patient attendances/annum.
- 2 Common Assessment Area, 18 beds (4 x 4 bedded areas and 2 single rooms), to deliver a protocolised set of conditions for retention for 24 hours.
- 3 Additional diagnostic (labs and imaging) requirements to level 2 assumptions will have to be assessed.
- 4 Quick interventions, scope, additional capability to deliver service beyond level 2 assumptions will also have to be assessed.

Scenario C

- 1 An A&E service providing See & Treat with Resuscitation and stabilisation function with, in addition, a short stay admissions unit (adult and older peoples') which can manage patients for up to 48 hours. Only patients over 16 years would be admitted. Early decision will be required whether the maximum stay will be over 48 hours and if this is the case the patient would be transferred. Surgical cases will be assessed in the common assessment area and a decision taken to discharge or admit through transfer to a level 3 hospital. Assume 53,000 patient attendances/annum.
- 2 Common Assessment Area, 24 beds (5 x 4 bedded areas and 4 single rooms), to deliver a protocolised set of conditions for retention for 48 hours, additional capability to deliver service beyond level 2 assumptions would have to be assessed.

Scenario D

- 1 An A&E service providing See & Treat with Resuscitation and stabilisation function with, in addition, the capacity to admit, manage and treat emergency medical admissions (adult and older peoples') and would include CCU/MHDU and ITU beds. Only patients over 16 years would be admitted. Surgical cases will be assessed in the common assessment area and a decision taken to discharge or admit through transfer to a level 3 hospital. Assume 61,000 patient attendances/annum.
- 2 To review this scenario additional time would require to be spent on reviewing the service disposition across NHS Lanarkshire, particularly CCU, MHDU, ITU, OPD, Day Case and Cancer Services.
- 3 Common Assessment Area, 30 beds (6 x 4 bedded areas and 6 single rooms), additional capability to deliver service beyond level 2 assumptions would have to be assessed.

Scenario E

- 1 Full status quo including A&E, acute medical and surgical admission and ITU. 24 hour critical care, acute medicine and acute surgical. No trauma and orthopaedics. Some patients being diverted to other level 3 hospitals, e.g. chest pain, some respiratory patients.
- 2 To review this scenario additional time would require to be spent on reviewing the service disposition across NHS Lanarkshire particularly ITU, Theatres, OPD, Day Case and Cancer Services.

Scenario F

- 1 Current service as is with full status quo including A&E, 24-hour critical care, acute medical and surgical admission, anaesthetics, ITU, taking trauma and orthopaedics.
- 2 As for Scenario D, without the need to consider ITU, Theatres and support services.

Scenario G

- 1 Current service as is with full status quo as Scenario F and enhanced consultant capabilities as defined by NHS Lanarkshire.
- 2 Feasibility and sustainability of Scenario G is untested and considering the logistical issues and risks noted could be undeliverable without significant investment in decant/replacement build, as per Scenario D.

Appendix 2
Clinical and Non Clinical Key Issues Schedule – Monklands A&E
Services – Scenarios

Appendix 3
Clinical and Non Clinical Key Issues Schedule – Monklands A&E
Services – Review of Original Monklands Level 2 and Level 3
Options

Appendix 4 (1)
Description of current Hospitals

Appendix 4 (2)
Building Services Constraints – Monklands Hospital

Appendix 5
Cost breakdown Across Scenarios and Sites