

Greater Glasgow NHS Board

**Board Meeting
Tuesday 1st February 2005**

Board Paper No: 05/2

Report of the Chief Executive

**DRAFT CONSULTATION PAPER:
“ESTABLISHMENT OF A WEST OF SCOTLAND CARDIOTHORACIC CENTRE
AT GOLDEN JUBILEE NATIONAL HOSPITAL”**

Recommendation: The Board is asked to:

- i) receive the attached consultation paper which sets out a proposal for bringing together Glasgow’s cardiothoracic services, with planned interventional cardiology, together with thoracic services from Lanarkshire to establish a West of Scotland cardiothoracic Centre at Golden Jubilee National Hospital
- ii) approve the launch of a 12-week consultation on the proposal, following consideration by the Board, with comments returned by 5th May 2005.

1. Background

- 1.1 Adult cardiac and thoracic surgical services are currently provided on two sites within NHS Greater Glasgow. The plan to bring together cardiothoracic services in Glasgow on one site as part of NHS Greater Glasgow’s Acute Services Review has already had Scottish Executive Ministerial approval following extensive consultation in 2000-2002.
- 1.2 The benefits to patients and staff of this move have already been recognised. The centralisation of these services will create one of the largest specialist units in the UK for the investigation and surgical treatment of cardiac and thoracic patients. Clinical expertise and high-tech equipment will be concentrated on one site, offering patients in the West of Scotland timely, high quality treatment in a modern, custom-built facility.
- 1.3 This move – to a single location at Gartnavel General Hospital - is currently planned to happen in 2012 at the earliest.
- 1.4 An opportunity now exists to accelerate the centralisation of cardiothoracic services by 2006 and to achieve these benefits and others much sooner.
- 1.5 Golden Jubilee National Hospital, purchased by the NHS in 2002, includes a large, modern cardiac surgery facility and has significant potential for expansion of patient services. It could accommodate a West of Scotland Cardiothoracic Centre alongside its other national and regional services.

2. Development of the proposal

- 2.1 Senior clinicians, managers and patient representatives have been working together for 18 months to examine this opportunity and the feasibility of establishing the West of Scotland Cardiothoracic Centre at Golden Jubilee National Hospital.

- 2.2. This has included a major engagement event in summer 2004 when patient, carers and those with an interest in cardiothoracic services were invited to comment on the proposals whilst they were still under development. This process has concluded that there are significant patient and staff benefits that could be realised by taking up this opportunity.

3. Benefits of the proposal

- 3.1. The benefits that have been identified include:

- ❑ Bringing together the resources of the two Glasgow inpatient services onto a single site with Lanarkshire's thoracic service and Golden Jubilee National Hospital's cardiac surgery programme will help deliver new more challenging waiting times targets.
- ❑ Moving from four services to one will help harmonise patient waiting times so that patients no longer experience variable waiting times depending on which hospital they attend
- ❑ Planned surgery and diagnostic tests will be carried out without the extra pressures of dealing with emergency medical admissions – which can sometimes cause patients' planned surgery to be cancelled.
- ❑ Patients will be treated in modern facilities, including single rooms with en-suite facilities
- ❑ Co-location of cardiac surgery with planned interventional cardiology will support the modern multi-disciplinary approach to the treatment of patients with heart disease

4. Timetable for responses to consultation

- 4.1 Subject to comments and amendments made following discussion at the NHS Board meeting, it is intended to arrange a joint launch of the consultation with NHS Lanarkshire on 10th February. The consultation will run for 12 weeks until 5th May 2005 and comments from consultees on all aspects of the consultation paper are welcome.



Consultation Paper – Draft

Proposal to Establish a West of Scotland Cardiothoracic Centre at Golden Jubilee National Hospital

January 2005

Proposal for West of Scotland Cardiothoracic Centre at Golden Jubilee National Hospital

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Section 1 - Background & Introduction

As part of NHS Greater Glasgow's Acute Services Review, the plan to bring together cardiothoracic services in Glasgow on one site has already had Scottish Executive Ministerial approval following extensive consultation in 2000-2002. The benefits to patients and staff of this move have already been recognised. The centralisation of these services will create one of the largest specialist units in the UK for the investigation and surgical treatment of cardiac and thoracic patients. Clinical expertise and high-tech equipment will be concentrated on one site, offering patients in the West of Scotland timely, high quality treatment in a modern, custom-built facility.

This move – to a single location at Gartnavel General Hospital - is currently planned to happen in 2012 at the earliest.

In October 2003, NHS Greater Glasgow and Golden Jubilee National Hospital initiated discussions on a proposal that would advance these plans by some six years by establishing a West of Scotland Cardiothoracic Centre at Golden Jubilee National Hospital.

NHS Lanarkshire has also entered the discussions to explore whether the Hairmyres inpatient thoracic surgery service could be transferred with the Glasgow service to Golden Jubilee National Hospital. Workforce pressures, particularly relating to consultant thoracic surgeons, mean that Lanarkshire are unable to sustain this service in the medium to long term.

During the discussions that have followed, consideration has been given to the cardiology support required for the West of Scotland cardiac surgery programme. Based on these discussions, a proposal has been developed which would see all planned and non-emergency interventional cardiology for the West of Scotland (with the exception of NHS Lanarkshire) being provided at Golden Jubilee National Hospital, with emergency cases and clinically unstable urgent cases continuing to be dealt with in Glasgow.

This document therefore sets out, for consultation, detailed proposals to establish a West of Scotland Cardiothoracic Centre at Golden Jubilee National Hospital by

- ❑ Bringing forward the centralisation of adult cardiothoracic inpatient surgical services currently provided at Western Infirmary and Glasgow Royal Infirmary onto one site at least six years earlier than currently planned
- ❑ Transferring the national heart transplant service currently provided at Glasgow Royal Infirmary within the cardiac surgery unit
- ❑ Co-locating planned and non-emergency interventional cardiology for the West of Scotland with cardiac surgery. This proposal excludes NHS Lanarkshire which will continue to provide an interventional cardiology service to local residents, although as at present, a small number of emergency, out-of-hour cases will require transfer to Glasgow for treatment. Under the proposal, some diagnostic work would also continue in NHS Dumfries & Galloway, Ayrshire & Arran and Argyll & Clyde.

The proposed transfer of the adult thoracic surgical service from Hairmyres Hospital to Golden Jubilee National Hospital, which forms part of the overall proposal to establish a West of Scotland Cardiothoracic Centre, is subject to a separate but parallel consultation exercise conducted by NHS Lanarkshire.

Paediatric cardiac surgery will continue to be provided at the Royal Hospital for Sick Children, Glasgow, and does not form part of this proposal.

Section 2 - Current Service Models

2.1 NHS Greater Glasgow's Regional Cardiac Surgery Service

2.1.1 Current Patient Journey

Patients from throughout the West of Scotland are referred to a cardiac surgeon by a cardiologist who will have completed a range of investigations and tests prior to referral. The initial appointment with the cardiac surgeon provides the opportunity to discuss the proposed surgery. This either takes place at the Western Infirmary or Glasgow Royal Infirmary or at one of a number of outlying clinics (Victoria Infirmary, Monklands Hospital and Hairmyres Hospital).

A few days before planned surgery at either Glasgow Royal Infirmary or the Western Infirmary, patients who live within a reasonable distance of Glasgow are asked to attend a pre-operative assessment clinic. Patients living further afield have this assessment at the time of their admission (day before surgery). It is important to note that, as part of the drive to reduce waiting times, a number of patients (approximately six per week) are already having cardiac surgery carried out by Glasgow surgeons in Golden Jubilee National Hospital.

Following surgery, a post-operative appointment is arranged. In most cases, patients are seen again by the cardiac surgeon at the hospital where they had their initial cardiac surgery consultation. For patients who live a distance from established clinics, post-operative care transfers back to their local cardiologist.

Cardiac rehabilitation begins whilst the patient is still in hospital and continues following discharge into the community. Patients are supported by a multi-disciplinary cardiac rehabilitation team, including nurses, physiotherapists, dieticians and psychologists, who encourage and support them in regaining and maintaining optimum health. Patients from outwith Glasgow have access to a local cardiac rehabilitation team.

2.1.2 Current Activity

At present over 1900 cardiac operations are performed each year by Glasgow cardiac surgeons. Almost all patients attending for cardiac surgery are referred directly from cardiologists throughout the West of Scotland, with the majority (67%) coming from health board areas outside Glasgow.

Table 1 below shows the Boards served by the regional cardiac service and number of patient admissions in 2003/04.

Table 1. Cardiac surgery admissions by Health Board area 2003/04

Health Board	Elective	Urgent	Total Number of patients	%
Greater Glasgow	491	155	646	(33%)
Lanarkshire	350	110	460	(24%)
Argyll & Clyde	258	82	340	(18%)
Ayrshire & Arran	182	57	239	(12%)
Dumfries & Galloway	75	24	99	(5%)

Table 1 (continued). Cardiac surgery admissions by Health Board area 2003/04

Health Board	Elective	Urgent	Total Number of patients	%
Forth Valley	40	13	53	(3%)
Western Isles	26	8	34	(2%)
Others	40	12	52	(3%)
Total	1462	461	1923	

2.2 NHS Greater Glasgow's Regional Thoracic Surgery Service

2.2.1 Current Patient Journey

Thoracic patients are referred from a variety of sources, e.g. chest physicians, oncologists or General Practitioners. They are referred from throughout the West of Scotland for this specialist surgery. NHS Lanarkshire currently has its own thoracic service to which the majority of Lanarkshire patients are referred. However, it should be noted that approximately 11% of Glasgow's thoracic admissions are referred from NHS Lanarkshire. Following referral, the vast majority of patients are seen for outpatient consultation by the thoracic surgeons at either the Western Infirmary or Glasgow Royal Infirmary. A small number attend a multi-disciplinary satellite clinic in Gartnavel General Hospital, Victoria Infirmary, Southern General or Stobhill Hospitals.

If surgery is appropriate, patients are admitted to either Glasgow Royal Infirmary or the Western Infirmary. A few days before planned surgery, patients who live within a reasonable distance of Glasgow are asked to attend a pre-operative assessment clinic. Patients living further afield have these tests completed on admission.

Following surgery, the majority of patients are seen at the hospital where surgery was carried out then referred back to the local chest physician. Patients travelling from a distance have all their follow-up arranged locally by a chest physician.

2.2.2 Current Activity

The cardiothoracic team in Greater Glasgow see around 1,450 thoracic admissions a year. Half of the patients come from health board areas outside Glasgow.

Table 2 below shows the Boards served by the thoracic service the number of patient admissions in 2003/04.

Table 2. Thoracic admissions by Health Board area 2003/04

Health Board	Number of patients	Total number of patients (%)
Greater Glasgow	736	(51%)
Lanarkshire	160	(11%)
Argyll & Clyde	237	(16%)
Ayrshire & Arran	64	(4%)
Forth Valley	83	(6%)
Other	169	(12%)
Total	1449	

2.3 Current Cardiothoracic Facilities

Cardiothoracic inpatient services at Glasgow Royal Infirmary are based in the Queen Elizabeth building, which opened in 1982. The unit has a combination of inpatient beds, cardiac intensive care (CICU) beds and high dependency (HDU) beds, co-located on the fourth floor, with theatres located some distance away on the lower ground level.

The unit at the Western Infirmary also has inpatient beds, CICU and HDU beds, provided over two floors, with theatres situated on the same floor as the CICU.

A bid has been lodged with the West Coast Cardiac Consortium for funding for additional CICU and HDU beds, in an effort to address pressures in these areas.

2.4 National Heart Transplant Service

2.4.1 Current patient journey

Patients are referred from throughout Scotland for review and treatment by this multi-disciplinary team of specialists. Patients undergo a number of tests at their initial appointments at the Glasgow Royal Infirmary to determine whether they are suitable for transplant or whether treatment with drugs is the preferred option. Due to the range and nature of the tests undertaken, some patients require a short inpatient stay during this assessment.

Patients considered suitable for transplant surgery are placed on a waiting list pending the availability of a suitable donor organ. Throughout this period, close contact is maintained between patient and the unit.

Following a transplant, patients continue to be treated and reviewed regularly by the Transplant Unit. Some of these episodes require a stay in hospital, otherwise patients are seen at the hospital on an outpatient basis.

2.4.2 Current Activity

The unit receives between 60-70 referrals per annum from throughout Scotland. From these referrals, up to 15 adult heart transplants are performed each year. The multi-disciplinary team participates in retrieval and transplantation of donor organs at any time 24 hours per day.

The unit also provides regular long-term follow-up and monitoring of over 200 patients who have already been transplanted.

As of April 2005, the National Heart Transplant Service will become part of a larger National Advanced Heart Failure Service.

2.4.3 Current Facilities

The unit has dedicated inpatient beds. Post-operative transplant patients are particularly susceptible to infection therefore these beds are provided in individual rooms, each with a sophisticated air filtration system. The unit also has day-case accommodation and facilities for cardiac biopsies.

As this is a national service and patients and relatives may travel considerable distances, residential accommodation can be provided for relatives at the time of transplant surgery. Patients living out with Glasgow are discharged into accommodation along with a relative for approximately one week prior to going home.

2.5 NHS Greater Glasgow's Regional Interventional Cardiology Service

2.5.1 Current Patient Journey

Interventional cardiology is a collective term for a range of diagnostic and therapeutic procedures, including angiography and angioplasty, used in the treatment of certain cardiac conditions.

Angiography is a diagnostic test that involves injecting radio-opaque dye into the bloodstream to visualise heart blood vessels. The results of this test may indicate the need for further treatment, for example angioplasty or cardiac surgery. Angiography is generally carried out as a planned day case treatment but may be used in some cases for urgent diagnosis.

Angioplasty is a procedure similar to angiography that involves introducing a balloon into a blood vessel to a site where the blood vessel is narrowed and inflating the balloon to expand the diameter of the vessel. This treatment is either performed on an emergency, urgent or planned basis. This treatment can be carried out as a day case procedure although sometimes requires an overnight stay.

Angiography and angioplasty are both performed in the specialist environment of a cardiac catheter laboratory by a small team of specialists, which includes an interventional cardiologist, nurses and a cardiac technician. There are two cardiac catheter laboratories in Glasgow Royal Infirmary and two at the Western Infirmary.

Patients from Glasgow, Forth Valley, Argyll & Clyde (with the exception of Inverclyde patients) requiring a planned angiography have this carried out in Glasgow. Patients from Lanarkshire, Ayrshire & Arran, Dumfries & Galloway and Inverclyde currently have access to local cardiac catheter laboratory facilities for angiography within designated hours. Outwith these times all emergency angiography is carried out in the two Glasgow centres, either Glasgow Royal Infirmary or Western Infirmary.

NHS Lanarkshire provides an angioplasty service to its residents between the hours of 9am-10pm. A small number of patients requiring this procedure on an emergency basis outwith these times transfer to Glasgow for treatment. All other West of Scotland Health Boards, including NHS Greater Glasgow, send all patients requiring emergency, urgent or elective angioplasty to either Glasgow Royal Infirmary or the Western Infirmary.

All patients requiring an emergency or urgent interventional cardiology procedure - who are not already inpatients in either Glasgow Royal Infirmary or the Western Infirmary - are transferred by ambulance to one of those two hospitals for their investigation and/or treatment.

2.5.2. Current Activity

Table 3. Angiography and Angioplasty Activity in North Glasgow Division 2003-04

Procedure	Elective	Urgent	Emergency	Total
Angiogram	2792	863	38	3693
Angioplasty	469	80	7	556
Combined Angiogram and Angioplasty*	489	538	109	1136
Total	3750	1481	154	5385

* A combined procedure is where a patient has undergone, in the same session, a diagnostic angiogram with an angioplasty following on immediately.

Table 4 shows the health board areas served by the Greater Glasgow Interventional Cardiology service and breakdown by emergency and elective cases.

Table 4. Interventional Cardiology Procedures by Health Board area

Health Board	Number of patients			Total Number of patients	%
	Elective	Urgent	Emergency		
Greater Glasgow	1989	891	94	2976	(55)
Lanarkshire	191	62	11	264	(5)
Argyll & Clyde	974	255	22	1251	(23)
Ayrshire & Arran	226	124	21	371	(7)
Dumfries & Galloway	34	10	0	44	(1)
Forth Valley	259	120	3	382	(7)
Western Isles	55	8	0	63	(1)
Others	22	11	1	34	(1)
Total	3750	1481	154	5385	

2.5.3. Cardiac Catheter Laboratory Facilities

Each site has two cardiac catheter laboratories, operational on a Monday-Friday basis. There is also provision for emergency out-of-hours access.

The four cardiac catheter laboratories are used by consultant cardiologists from NHS Greater Glasgow and visiting consultants from other West of Scotland Health Boards.

The cardiac catheter laboratories at the Western Infirmary are also used to support the work of the Scottish Pulmonary Vascular Unit (SPVU). Patients currently attending SPVU require access to a cardiac catheter laboratory as part of their planned assessment and investigations.

Electro-physiology and complex pacing services also make use of Glasgow Royal Infirmary cardiac catheter laboratories.

Section 3 - Why consider a new proposal for a West of Scotland Cardiothoracic Centre?

3.1. Background

In the year 2000, consultation on NHS Greater Glasgow's Acute Services Review included a proposal to bring together adult inpatient cardiothoracic services on a single centralised site at the re-developed Gartnavel General Hospital by 2012.

The proposals, subject to extensive public consultation, were subsequently approved by the Minister for Health and Community Care in August 2002.

Some of the benefits of this proposal highlighted in the year 2000 were:

- ❑ Modern patient accommodation and facilities designed from the patient's perspective
- ❑ The development of a single centre of excellence for cardiothoracic services, concentrating clinical expertise - and allowing greater specialisation and improved training
- ❑ No duplication of expensive equipment and other facilities across several sites.
- ❑ As one of the largest units in the UK, recruitment of surgeons may be enhanced.
- ❑ It will enable the health service in Glasgow to tackle problems in medical staffing and to ensure new regulations on doctors working hours are met.

Source: Why Centralise Cardiothoracic Surgery, pub. 2000, Greater Glasgow Health Board
The Patient's Experience, pub. 2000, Greater Glasgow Health Board

As detailed in the Acute Services Review, these benefits to patients and staff will not be achieved before 2012 when the two units are to be centralised at Gartnavel General Hospital.

An opportunity now exists to accelerate the centralisation of cardiothoracic services and to achieve these benefits and others much sooner.

3.2 Opportunities at the Golden Jubilee National Hospital

Golden Jubilee National Hospital, which was purchased by the NHS in 2002, is part of the National Waiting Times Centre, a Special Health Board, and currently supports the wider NHS in providing additional capacity to meet waiting time guarantees in specialties such as cardiac surgery. The Hospital, which includes a large, modern cardiac surgery facility, was originally opened in 1994 and has significant potential for expansion of patient services. This purpose-built facility already has a wide range of clinical services on-site e.g. laboratories, x-rays, scans and pharmacy, which support current hospital activity. This infrastructure could be augmented to provide the levels of support required for the West of Scotland cardiothoracic programme, including heart transplantation and interventional cardiology.

Within its long term strategy, the Golden Jubilee National Hospital could accommodate the West of Scotland Cardiothoracic Centre alongside its other national and regional services, for example, as a major elective orthopaedic centre and providing a significant contribution in the national drive to reduce waiting times.

Using these modern facilities, including single rooms with en-suite facilities, it would be possible to achieve the centralisation of cardiothoracic surgery for the West of Scotland by 2006 – at least six years earlier than currently planned.

3.3 Waiting Times

The Scottish Executive has set a range of waiting time guarantees to ensure that patients are seen and treated by specialists within those time periods. As explained previously, NHS Greater Glasgow already relies on Golden Jubilee National Hospital in the achievement of current waiting times guarantees for cardiac surgery and other specialties. Table 6 shows the specific waiting times for cardiac and thoracic treatment.

Table 6. Guaranteed Waiting Times

Specialty	Current Guarantee	Guarantee by 2005
Coronary Artery Bypass Graft	18 weeks	No change
Other cardiac surgery	9 months	26 weeks
Angioplasty	18 weeks	No change
Angiography	8 weeks	No change
Lung surgery for cancer	2 months	No change
Other lung surgery	9 months	26 weeks
General outpatient waiting times	No guarantee	26 weeks

As this table demonstrates there is a continued drive to reduce waiting times within cardiac and thoracic surgery and indeed further new targets for certain cardiac procedures have recently been announced. This will require patients to be seen within 16 weeks from the time of GP referral to treatment including diagnosis by 2007. This new target applies to Coronary Artery Bypass Graft and Angioplasty.

The higher levels of productivity required to meet these challenging targets can be achieved more readily by working on fewer sites. Bringing together the resources of the two Glasgow inpatient services onto a single site with Lanarkshire's thoracic service and Golden Jubilee National Hospital's cardiac surgery programme will also help deliver these waiting times and ensure equitable waiting times for all patients.

A further advantage of locating the West of Scotland Cardiothoracic Centre at Golden Jubilee National Hospital is that planned surgery and diagnostic tests can be carried out without the extra pressures of dealing with emergency medical admissions – which can sometimes cause patients' planned surgery to be cancelled.

By taking advantage of the opportunity at Golden Jubilee National Hospital - in addition to being treated in modern, purpose-built accommodation by a larger team of specialists - waiting times will be improved.

3.4 Emerging workforce pressures

A number of significant workforce pressures have also emerged which are creating major challenges to sustaining current services that are duplicated across two sites in NHS Greater Glasgow for the timescales envisaged in the Acute Services Review.

Various new regulations have come into force including the European Working Time Directive, New Deal for Junior Doctors, Modernising Medical Careers and the new Consultant Contract. These have resulted in a reduction in the available working hours of medical staff and other NHS staff. These regulations, taken together, present NHS Greater Glasgow with real challenges in sustaining the current configuration of cardiac and thoracic services in the city.

The reduction in available working hours and the requirement to increase productivity to achieve new waiting times targets mean that we need to explore, now, how cardiothoracic surgery might be consolidated earlier than planned in Glasgow's Acute Services Review using existing NHS buildings and accommodation in an effort to address these pressures. The Golden Jubilee National Hospital presents that opportunity.

Section 4 - What options have been considered?

4.1 Options considered

At an early stage of the feasibility study into the future of West of Scotland cardiothoracic services, the following seven options were considered:

- (a) Keep the status quo. This would mean maintaining the current two services separately at Glasgow Royal Infirmary and the Western Infirmary until 2012 at the earliest, when these services would be centralised at Gartnavel General Hospital
- (b) Centralise Glasgow adult inpatient cardiothoracic surgical services with Lanarkshire inpatient thoracic services on one site within a North Glasgow hospital
- (c) Centralise other surgical specialties in Golden Jubilee National Hospital to release accommodation in North Glasgow for centralised cardiothoracic services which would include thoracic services from Lanarkshire
- (d) Centralise Glasgow adult inpatient cardiothoracic surgical services with Lanarkshire inpatient thoracic services on site at Golden Jubilee National Hospital with only **minimal** interventional cardiology support
- (e) Centralise Glasgow adult inpatient cardiothoracic surgical services with Lanarkshire inpatient thoracic services on site at Golden Jubilee National Hospital with **all** cardiac catheter laboratory investigation and intervention on the same single site
- (f) Centralise Glasgow adult inpatient cardiothoracic surgical services with Lanarkshire inpatient thoracic services on site at Golden Jubilee National Hospital with planned cardiac catheter laboratory investigation and intervention on the same site. Emergency and clinically unstable urgent interventional cardiology cases would remain in Glasgow
- (g) Develop a 'Heart Hospital' concept at Golden Jubilee National Hospital which would include adult cardiothoracic services, interventional cardiology, medical cardiology, together with thoracic services from NHS Lanarkshire.

4.2 Creating a short list of options

Through detailed discussions with senior managers and clinicians, including the considerations of a number of clinical advisory groups, this long list of options was reduced to a short list of two options.

Options b, c, d, e and g were discounted for the following reasons:

- (b) There is insufficient space to accommodate a combined regional centre within either the Western Infirmary or Glasgow Royal Infirmary
- (c) Other surgical services which could be considered for a move to Golden Jubilee National Hospital would not release sufficient accommodation at either Western Infirmary or Glasgow Royal Infirmary for the combined regional centre
- (d) The clinical consensus is that a stand-alone regional cardiothoracic centre – without significant interventional cardiology support - is not a sustainable way of providing a modern cardiothoracic service.
- (e) Concerns were expressed about the separation of the emergency component of interventional cardiology from acute receiving in Glasgow
- (g) It would not be feasible or desirable to remove medical cardiology from acute receiving hospitals.

4.3 Short list of options

This leaves a short list of two options.

These are, either:

- (a) Keep the status quo. This would mean maintaining the current 2 services separately at Glasgow Royal Infirmary and the Western Infirmary until 2012 at the earliest, when the services would be centralised at the newly developed Gartnavel General Hospital.
This option will now be identified as Option 1.

OR

- (f) Centralise Glasgow adult inpatient cardiothoracic surgical services with Lanarkshire inpatient thoracic services on site at Golden Jubilee National Hospital with planned cardiac catheter laboratory investigation and intervention on the same site. Emergency and clinically unstable urgent interventional cardiology cases would remain in Glasgow.
This option will now be identified as Option 2.

Section 5 – Testing the views of our stakeholders

5.1 Engaging with interested parties

In order to give patients and stakeholders an opportunity to comment on the proposal while it was still under development, NHS Greater Glasgow, NHS Lanarkshire and Golden Jubilee National Hospital held an Engagement Event on 12th July 2004. The overall aim of the event was to make sure that the views of cardiothoracic patients, their carers and those with an interest in the service were taken into account at an early stage. Patient groups, carers, Local Health Council representatives, voluntary groups, MSPs and staff representatives were invited to view the existing facilities, then tour the proposed site at Golden Jubilee National Hospital. Thereafter, the attendees were split into small focus groups and asked to comment on the proposals. This provided valuable feedback on the aspects of the proposal that are important to the public and other interested parties. Overall the event was very positive, with participants particularly praising of the facilities at Golden Jubilee National Hospital. A copy

of the full report from the event can be found on NHS Greater Glasgow's website at www.nhsgg.org.uk.

Other key questions that emerged from the group discussions related to:

- ❑ Staffing - questions mainly related to the implications for staff working at the existing sites. Participants raised questions about the number of staff who would transfer with the service and management arrangements following transfer.
- ❑ Travel & Transport - participants questioned travel and transport arrangements for patients, their carers, visitors and staff.
- ❑ Accommodation - accommodation for relatives, particularly those acting as carers, was identified as an important issue, especially for the significant proportion of cardiothoracic surgery patients who reside outside Greater Glasgow.
- ❑ The Service Model - several questions related to the proposed future service model particularly on the provision of rehabilitation, diagnostic services and outpatient clinics.

5.2 Issues

5.2.1 Consideration of Staffing Issues

During the development of the proposals staff have been kept fully informed of progress through a series of briefings. A Human Resource Sub-group of the Project Team has been established with staff representation invited from the relevant professional organisations and unions. If the proposal is approved, this group will be responsible for developing a workforce plan, managing the organisational change process and addressing issues raised at the Engagement Event and through the Staff Briefings. Staff have been reassured that if the proposal is to go ahead, there will be no detriment to their existing terms and conditions.

5.2.2 Travel and Transport

Patients already travel to Golden Jubilee National Hospital from all over Scotland for both inpatient and outpatient appointments. Building on the existing transport links, further work has begun - involving local agencies such as Clydebank Rebuilt, transport providers and other stakeholders - to consider the additional requirements for patients and relatives under this proposal taking into account local authority green travel strategies. Additional car parking spaces would be provided as part of the site development associated with the proposal.

5.2.3 Accommodation

Currently, accommodation is not provided for cardiac surgery patients treated in Glasgow. However, in view of the issues raised by participants at the Engagement Event, Golden Jubilee National Hospital has begun to explore the potential use of the Beardmore Hotel by relatives and patients travelling from outlying health board areas.

5.2.4 Service Model

Some of the issues associated with the service model will be described later in the report. This includes information confirming that, under the proposal, local access to outpatient services will be maintained.

The move to a single centre will provide an opportunity for services to be reviewed and redesigned, taking account of changing roles and practices e.g. opportunities for further development of specialist nursing roles.

Section 6 - Option 1: Status Quo

6.1 Reasons why Option 1 is not preferred option

The workforce pressures outlined in Section 4 will become increasingly difficult to manage in the period up to 2012. In order to address the pressures, senior clinicians and managers have agreed that maintaining the status quo until at least 2012 is not a desirable course of action.

Section 7 - Option 2: Proposed West of Scotland Cardiothoracic Centre at Golden Jubilee National Hospital

7.1 Scope of the proposed service

The preferred option proposes the establishment of a West of Scotland Cardiothoracic Centre at Golden Jubilee National Hospital by 2006. This would be achieved by:

- ❑ Bringing forward the centralisation of adult cardiothoracic inpatient surgical services currently provided at Western Infirmary and Glasgow Royal Infirmary onto Golden Jubilee National Hospital
 - ❑ Transferring the national heart transplant service currently provided at Glasgow Royal Infirmary within the single cardiothoracic unit
- and,
- ❑ Co-locating NHS Greater Glasgow's planned interventional cardiology service for the West of Scotland with cardiac surgery.

This proposal excludes NHS Lanarkshire which will continue to provide a diagnostic and interventional cardiology service to local residents, although as at present, a small number of emergency, out-of-hour cases will require transfer to Glasgow for treatment. Under the proposal, some diagnostic work would also continue in NHS Dumfries & Galloway, Ayrshire & Arran and Argyll & Clyde.

Because of the requirement for access to cardiac catheter laboratory investigations, it is also proposed to locate:

- ❑ the Scottish Pulmonary Vascular Unit (SPVU), the national service providing care for patients with pulmonary vascular conditions
- ❑ electro-physiology, and
- ❑ complex pacing

at Golden Jubilee National Hospital.

The activity at the new single centre would be as detailed below in Table 5.

Table 5. Proposed activity at Single Site Centre

Activity	Approximate Number
Cardiac surgery	1900
Thoracic surgery	2500
Heart transplants	15
Angioplasties	1700
Angiograms	3700
Others e.g. electro-physiology and complex pacing	600

Cardiothoracic surgery cannot be done in isolation. It has strong links with a range of specialties, including cardiology, respiratory, renal, and general medical and surgical services.

As explained previously, under this proposal cardiology support would be provided through having cardiac catheter laboratory investigation and intervention on the same site. The proposal to transfer the Scottish Pulmonary Vascular Unit from the Western Infirmary would ensure on-site specialist respiratory advice. Greater Glasgow renal services have an outreach team who would be available to support the cardiothoracic programme. General surgery and general medicine links are currently being developed in order that consultant cover is available at Golden Jubilee National Hospital 24 hours per day.

Cardiothoracic surgery also needs links with a number of supporting clinical services, including imaging, laboratory specialist services, pharmacy and instrument sterilisation units. These supporting clinical services are all currently available at Golden Jubilee National Hospital but would need to be expanded to meet the needs of an expanded cardiothoracic programme.

Despite its highly specialised nature, the inpatient support arrangements for the heart transplant service are similar to those required for a major cardiac surgery programme, as detailed in the Department of health's National Heart and Lung Transplant Standards (2002). The clinical standards and specialist facilities described in these standards will be provided at Golden Jubilee National Hospital.

7.2 Proposed patient journeys

7.2.1 Cardiac Surgery

Under the proposal, patients referred by a cardiologist to cardiac surgery would still have their initial appointment with the cardiac surgeon at clinics either in Glasgow Royal Infirmary or the Western Infirmary or at a satellite clinic in the Victoria Infirmary, Monklands or Hairmyres Hospitals.

Following a decision to proceed to surgery, patients living within a reasonable distance of Golden Jubilee National Hospital would attend a clinic at the hospital for a pre-operative assessment, where they would be seen by a specialist nurse, pharmacist, rehabilitation nurse and a physiotherapist. Patients living further afield would have their assessment at the time of admission (one day before surgery).

Surgery and subsequent inpatient care would be at Golden Jubilee National Hospital. During their hospital stay, patients would be seen by the Cardiac Rehabilitation Team who would start a programme of general health advice and an appropriate exercise regime. This type of

support and advice is continued once the patient has returned home, with each Health Board having their own Cardiac Rehabilitation Teams. Following discharge from hospital, a post-operative appointment would be arranged back at the hospital the patient attended for their initial surgical consultation. For patients who live a significant distance from Glasgow, it may be more appropriate for their follow-up to be with their local cardiologist.

The proposed co-location of interventional cardiology and cardiac surgery within the same unit would bring opportunities to redesign the patient journey, for example, it would be possible to offer a “one-stop” assessment with patients being seen by the surgeon on the same day as diagnostic angiography – and a decision on the need for, and the timing of, surgery – being taken.

What changes will this mean for patients?

The changes for patients will be:

- ❑ The development of a West of Scotland Cardiothoracic Centre - concentrating clinical expertise and allowing greater specialisation - by 2006 instead of waiting until at least 2012
- ❑ The single site cardiothoracic centre will be located at Golden Jubilee National Hospital instead of Gartnavel General Hospital
- ❑ Surgery will be carried out at Golden Jubilee National Hospital
- ❑ Patients suitable for pre-operative assessment will have this performed at the Golden Jubilee National Hospital
- ❑ There will be an opportunity to redesign the patient journey
- ❑ The location for all outpatient clinics will remain as at present

7.2.2 Thoracic Surgery

Patients referred for thoracic surgery would continue to be seen at their referring hospital for outpatient assessment and follow-up, with their surgery carried out at Golden Jubilee National Hospital.

Following a decision to proceed to surgery, patients suitable for a pre-operative assessment clinic would attend Golden Jubilee National Hospital, where they would be seen by a specialist nurse, pharmacist and a physiotherapist. If not suitable for a pre-operative assessment clinic, either due to their condition or if they live a significant distance from Glasgow, then these tests would be performed at the time of their hospital admission.

What changes will this mean for patients?

The changes for patients will be:

- ❑ The development of a West of Scotland Cardiothoracic Centre - concentrating clinical expertise and allowing greater specialisation - by 2006 instead of waiting until at least 2012
- ❑ The single site cardiothoracic centre will be located at Golden Jubilee National Hospital instead of Gartnavel General Hospital
- ❑ Surgery will be carried out at Golden Jubilee National Hospital
- ❑ Patients suitable for pre-operative assessment will have this performed at Golden Jubilee National Hospital
- ❑ The location for all outpatient clinics will remain as at present
- ❑ The proposed model of care for NHS Lanarkshire patients is described in the NHS Lanarkshire Consultation Paper which can be found at www.a-picture-of-health.org

7.2.3. Heart Transplant Services

All heart transplant outpatient appointments would be held at the Golden Jubilee National Hospital. Surgery or alternative heart failure treatments would also be provided at the hospital. Because of the complex nature of patient conditions, there is a requirement for frequent follow-up and review of heart transplant patients. This would be managed initially by the unit and then as the patient progresses, jointly with the unit and the patient's local hospital.

What changes will this mean for patients?

The changes for patients will be:

- ❑ The development of a West of Scotland Cardiothoracic Centre including heart transplantation by 2006 instead of waiting until at least 2012
- ❑ The Cardiothoracic Centre will be located at Golden Jubilee National Hospital instead of Gartnavel General Hospital
- ❑ The venue for all outpatient and inpatient episodes will be Golden Jubilee National Hospital

7.2.4 Interventional Cardiology

Under the proposal, patients referred for diagnostic and interventional cardiology on a planned basis would be treated at Golden Jubilee National Hospital. The majority of planned angiographies and many planned angioplasties would be performed on a day case basis, with the patient admitted and discharged on the same day.

Patients requiring emergency cardiology services, e.g. for heart attacks or chest pain, would continue to attend their local Accident & Emergency Department, where they would be admitted to the local medical receiving unit. Any patient requiring specialist interventional cardiology treatment as an emergency would have their procedure performed in Glasgow. Patients who require urgent cardiology interventions, but are not deemed to be emergencies, would be transferred to Golden Jubilee National Hospital for their procedure when their condition is stable.

The co-location of planned interventional cardiology with cardiac surgery will support a modern multi-disciplinary approach to the treatment of patients with heart disease.

What changes will this mean for patients?

The changes for patients will be:

- ❑ Patients attending for planned angiography or angioplasty will have this procedure at Golden Jubilee National Hospital
- ❑ Patients requiring an urgent (not an emergency) interventional cardiology procedure and deemed clinically stable for transfer will be transferred to Golden Jubilee National Hospital for their procedure
- ❑ The location for all outpatient clinics will remain as at present

7.2.5 Acute Cardiology

All coronary care units and medical units on the acute hospital sites will continue to provide a 24-hour a day cover by cardiology consultants, supported by non-invasive testing.

What changes will this mean for patients?

There is no change for acute cardiology patients:

- ❑ Patients who require emergency cardiology intervention will have this procedure at one of Glasgow's acute hospitals
- ❑ Patients experiencing a heart attack or chest pain will be admitted to their local acute receiving hospital
- ❑ Coronary care units and general cardiology services will remain at the acute receiving hospitals

7.2.6 Cardiothoracic Surgical Emergencies

Patients presenting to their local Accident & Emergency Department with a cardiothoracic surgical emergency, e.g. chest injury / stabbing, will be admitted. They will be assessed by the cardiothoracic surgeon on-call for such emergencies who will travel from Golden Jubilee National Hospital or from home to see the patient, if appropriate. If surgery is necessary the operation will either be carried out at the local hospital or the patient's transfer to Golden Jubilee National Hospital will be arranged.

What changes will this mean for patients?

There will be no change for patients with a cardiothoracic surgical emergency:

- ❑ Patients who present as a cardiothoracic surgical emergency will continue to be admitted to acute receiving hospitals initially and will be assessed and treated by the cardiothoracic service as necessary.

7.3 Staffing implications of the proposal

There are over 500 staff involved in providing the current cardiothoracic and interventional cardiology services. As a result of this proposed change, staff will suffer no detriment to current terms and conditions of service, including income and earning levels, which will be fully protected should staff be required to change job, responsibilities, location or hours of working.

7.4 Benefits to patients and staff

As described elsewhere in the document, the preferred option will bring many benefits to patients and staff. To recap, these are:

- ❑ Patients will be treated quicker. Bringing together the resources of the two Glasgow inpatient services onto a single site with Lanarkshire's thoracic service and Golden

Jubilee National Hospital's cardiac surgery programme will help deliver new more challenging waiting times targets.

- ❑ Equity of waiting times for all patients. Moving from four services to one will help harmonise patient waiting times so that patients no longer experience variable waiting times depending on which hospital they attend
- ❑ Planned surgery and diagnostic tests will be carried out without the extra pressures of dealing with emergency medical admissions – which can sometimes cause patients' planned surgery to be cancelled.
- ❑ Co-location of cardiac surgery with planned interventional cardiology will support the modern multi-disciplinary approach to the treatment of patients with heart disease
- ❑ Treatment in modern facilities, including single rooms with en-suite facilities
- ❑ Opportunity for service re-design including 'one-stop clinics'
- ❑ The concentration of clinical expertise, in what will be one of the largest cardiothoracic centres in the UK
- ❑ Bringing together medical staff from the three sites to one should enable a less onerous, compliant on-call system to be established
- ❑ More efficient use of expensive specialist equipment and facilities
- ❑ Increased pool of patients will facilitate sub-specialisation, which means that doctors and nurses can develop their interest and expertise in particular areas of cardiac and thoracic work
- ❑ Opportunity for further development of specialist nursing roles
- ❑ Teaching and other academic activities can be concentrated on a single site

7.5 Management and Resourcing Arrangements

It is intended that the major stakeholders associated with the management and resourcing of regional Cardiothoracic and National Heart Transplant Services will come together to form a Partnership Board to oversee the implementation of the proposed West of Scotland Cardiothoracic Services and its continued relationship with clinical networks throughout the West of Scotland.

The stakeholders are committed to managing the complex resourcing arrangements associated with the transition from services currently provided on four separate sites across three separate health boards to a single site within one health board. The process agreed between the stakeholders will adopt a risk sharing approach that will ensure that the complex resourcing arrangements will not hamper the realisation of the significant patient benefits associated with this proposal.

The Partnership Board will ensure that the proposed West of Scotland Cardiothoracic Centre will remain a fully integrated component of a wider cardiac services network operating throughout the West of Scotland.

During the consultation period, the major stakeholders will be continuing to develop the detail of how the Partnership Board will operate in practice.

7.6 Teaching & Research

It is anticipated that there would be many advantages to clinical research of having a large number of patients in one centre.

7.7 Academic links

It is envisaged that the close links between the clinical cardiothoracic and cardiology services and a number of university and college departments will be maintained.

7.8 Proposed timescale

If the proposal is approved, it is anticipated the services could transfer from late autumn 2006.

Section 8 – Comments

This consultation document has set out two options on which NHS Greater Glasgow wish to seek your views.

The two options are:

Option 1 - The status quo. This would mean maintaining the current two services separately at Glasgow Royal Infirmary and the Western Infirmary until 2012 at the earliest, when the services would be centralised at the newly developed Gartnavel General Hospital.

AND

Option 2 – Centralise Glasgow adult inpatient cardiothoracic surgical services with Lanarkshire inpatient thoracic services on site at Golden Jubilee National Hospital with planned cardiac catheter laboratory investigation and intervention on the same site. Emergency and clinically unstable urgent interventional cardiology cases would remain in Glasgow. It is proposed that this would be achieved by late autumn 2006.

Individuals or organisations wishing to comment should send their responses to:

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Closing date for submission of views is **5th May 2005**.