

## Greater Glasgow NHS Board

### Board Meeting

Tuesday 20<sup>th</sup> April 2004

Board Paper No. 2004/28

Chief Executive  
Director of Planning and Community Care  
Medical Director

## Modernising Maternity Services: Outcome of Consultation

### Recommendations:

The Board endorses the following recommendations based on the proposals we put to public consultation, but amended and extended to reflect the outcome of that consultation:

1. Delivery services should be located in the new facilities at the Princess Royal Maternity Hospital and high quality provision at the Southern General Hospital - the Queen Mother's Hospital should close as soon as physical capacity is available and the necessary planning can ensure a safe transition for all the services it provides. This is likely to be around 12 to 14 months from a ministerial decision.
2. In the context of the abolition of Trusts, the move to single system working and the need to look at appropriate organisational arrangements across NHS Greater Glasgow during spring and summer of 2004, the Corporate Management Team should develop an appraisal of a single structure to manage maternity and paediatric services across Greater Glasgow.
3. The report of the Maternity Planning Group should form the basis of a change implementation plan to ensure that the quality of specialist paediatric services is not compromised.
4. Community services should be strengthened and extended by the provision of a maternity centre in West Glasgow providing an extended range of services, redeployment of midwives into community services and the implementation of public health midwifery, as proposed by the Maternity Services Liaison Committee.
5. Both delivery units should provide midwifery delivery beds aimed at low risk women.

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6. **The Maternity Services Liaison Committee should be asked to develop proposals to enable women to have the choice of direct access to midwives.**
7. **Fetal medicine services should be consolidated into a single major fetal-maternal centre at the Princess Royal Maternity Hospital, with a strong clinical network to paediatric and genetic specialists at Royal Hospital for Sick Children, providing services to the West of Scotland and a national interventional service.**
8. **The proposed pattern of community services will minimise access and transport issues but we should build on the programme of work established for the Acute Services Strategy implementation to address transport issues identified by communities during this consultation.**
9. **The decision on maternity services is taken within the new context where there is now strong clinical support for the colocation of adult, paediatric and maternity services. A process is put in place to bring proposals for the longer term disposition of specialist children's services to formal public consultation by the end of 2004. We should be quite explicit that we are making that commitment to bring forward those proposals based on the responses we have had from clinical staff to the consultation on maternity services.**
10. **Confirm our commitment that any redeployment of staff required as a result of this decision should ensure the retention of skilled clinicians and the best use of their skills.**

### 1. CONTEXT

- 1.1 It is fundamentally important to restate the context in which the Board has to make this important decision:
- there is a clear clinical consensus that three delivery services are not sustainable and that one of the current units needs to close;
  - we have conflicting and irreconcilable clinical opinion within Glasgow about whether the Queen Mother's Hospital or Southern General Hospital unit should close;
  - but we have an inescapable responsibility to listen and consider these conflicting strands of clinical advice, wider professional opinion and the views of public and patient interests and make the best decision to ensure safe and sustainable services for women and their babies.

Throughout the consultation process our proposals have been characterised in a negative way, not as modernisation but as "vandalism". Those who have made such statements clearly hold strong views and do not have the obligation we face to resolve the conflict in views and arrive at a fair and balanced decision. It is also worth reminding ourselves about the bigger picture within which the decision about maternity units is framed:

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- most women receive the vast majority of their maternity care in community settings with few visits to hospital facilities and usually of a short duration;
- the primary factors which impact on the health of women and their babies relate to life circumstances including, poverty, social exclusion, drug misuse, diet and smoking. The best way to tackle these issues in maternity services is to develop the new models of community based care and extend the public health role of midwives;
- for hospital services, large clinical teams, interspecialty interaction and immediate access to neonatal and maternal critical care support are the key requirements to deliver safe care to mothers and babies;
- and finally, a critical point, confirmed again in clinical responses to consultation - that the present pattern of care does not represent services which are safe and sustainable beyond the very short term. Our clinical staff are presently working under excessive pressure which will continue to increase.

1.2 This context confirms that we will be able to improve maternity services in implementing the recommendations included in this paper in a number of different ways. These include:

- consolidation of senior and junior medical staff will enable us to provide improved cover and expertise;
- more of our midwifery staff will be working in community settings where most women get their care;
- the West of Glasgow will have a maternity centre to provide a more extensive and accessible range of services similar to services at Rutherglen and Millbrae;
- more women will have direct and immediate access to adult clinical expertise and intensive care;
- more specialist paediatric skills will be available to the neonates cared for in the PRMH and SGH;
- variations in services across Greater Glasgow will be reduced with best practice adopted more consistently;
- the development of public health midwifery practice will improve our ability to tackle the underlying causes of maternal and neonatal ill health and risk;
- the physical facilities in which women give birth will be improved, a brand new state of the art hospital at PRMH and a substantially upgraded facility at SGH;
- the colocation of the new perinatal mental health services at the SGH alongside a major maternity unit will enable us to provide properly integrated services for women suffering from postnatal depression;
- a consolidated fetal medicine service will create a larger pool of clinical experts offering greater potential for subspecialisation and research, alongside the Academic Department of obstetrics.

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### 2. PURPOSE

2.1 In May 2003 the Board embarked on a process to enable it to reach decisions about the future shape of maternity services. This paper has a number of purposes:

- restating the case for change to maternity services;
- confirming the process which preceded the recently completed public consultation;
- describing the conduct of the public consultation;
- setting out the main themes which have emerged from consultation.
- testing those themes against the basis on which the consultation proposals were made.

2.2 There are two key questions which this paper is intended to enable Board members to consider in concluding decisions on the future of maternity services before making a submission to the Minister for Health and Community Care. These are:

- **has the decision making process been appropriate?**
- **have the responses to consultation highlighted significant issues which challenge our consultation proposals, specifically:**
  - **the closure of a maternity hospital is required and pressing;**
  - **the closure of the Queen Mother's Hospital and development of services at the Southern General represents the safest service for mothers and babies.**

The concluding section of the paper reflects on these two questions.

2.3 This paper has three substantive attachments:

**Attachment 1: The report of the Maternity Working Group**

**Attachment 2: An index and summary of responses to the consultation including the issues raised in public meetings**

**Attachment 3: The report of the Maternity Planning Group**

### 3. BACKGROUND

3.1 The Board's Maternity Services Strategy, approved in 1999 following an intensive process of public and professional debate, included the decision to reduce the number of delivery units in Glasgow from three to two. This conclusion was reached with and retains, strong clinical support, for a number of important reasons:

- the birthrate is falling and is below the level needed to sustain three delivery services. Delivery services are currently provided at the Princess Royal Maternity Hospital (PRMH), the Queen Mothers Hospital (QMH) and the Southern General Hospital (SGH).;
- the brand new Princess Royal Maternity Hospital has significant spare capacity in first class facilities;

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- we cannot meet the highest standards of modern clinical practice in three units and medical staff spread across three sites is not sustainable;
- most women have most of their care in community settings and it is important that resources for maternity services are focused in the community, achieving maximum benefit, not underused hospital building
- most mothers now spend very little time in hospital, about two days. They receive most of their care from health staff working in their local communities and only come into hospital to give birth. Pressures on staff and changes to how health staff work means it is no longer possible to keep three maternity hospitals open safely. New legislation on the number of hours doctors can work, continuous training requirements and other factors means it's becoming increasingly difficult for specialist maternity staff to cover work rotas. For safety and legal requirements, there's a minimum number of maternity staff needed for each rota and skilled staff are required 24 hours a day, seven days a week.

Falling birth rates (a reduction of 3,500 over the last 11 years) means maternity hospitals are under occupied. The table below illustrates the excess capacity:

	<b>Births</b>	<b>Capacity</b>
PRMH	4800	6500
SGH	3000	4200
QMH	3400	4500
<b>Total</b>	<b>11200</b>	<b>15200</b>

At headline level, Glasgow has the capacity to deliver 4000 more babies than are presently being born in our hospitals.

- 3.2 Deciding on which hospital should be developed as our second delivery unit was always going to be difficult. Glasgow has been well served by its maternity hospitals over the years when the birthrate was higher. Having said that, it is important to see this final strand of implementing the Maternity Services Strategy in the context that, while this is a key decision about a core part of our maternity services, for the vast majority of women, almost all of their care, during the normal process of pregnancy and birth, is provided by midwifery, medical and primary care staff, working in community settings. Our consultation proposals reflected that reality and therefore included important questions about the development of community and midwifery services. Our objective is to provide high quality and safe hospital care and focus resources on community services.
- 3.3 On the issue of which delivery unit should close we took as given the assumption that the new Princess Royal Maternity Hospital, our most modern maternity facility, opened in the summer of 2002, should not close. Therefore, the need to reduce the number of delivery units from three to two presented the Board with a clear choice:
- to develop the Queen Mother's Hospital as our second delivery unit - **enabling the provision of maternity, neonatal intensive care and specialist children's services on the same site;**

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- to develop the Southern General Hospital as our second delivery unit - **enabling the provision of maternity, neonatal and adult intensive care and other adult services on the same site.**

Reflecting our commitment to public involvement and to ensure that our proposals for formal public consultation were based on detailed and thorough consideration of the key clinical and service issues we established a preconsultation process. Later sections of this paper describe in detail that process, the formal public consultation exercise which followed it and the work of the Maternity Planning Group.

3.4 It is important in restating the background to the proposal to confirm the process the Board has followed in reaching this decision point.

<b>Meeting</b>	<b>Board</b>	<b>Seminar</b>
May 2003	<p>“Improving Maternity Services - the Next Steps” - Board decided to:</p> <ul style="list-style-type: none"> <li>• establish a working group;</li> <li>• engage consumer interests.</li> </ul>	Detailed discussion on background and key issues and appropriate preconsultation and decision making process. Agreed proposals on process to come May Board.
June 2003	It was reported that Professor Margaret Reid would chair Working Group and three non-executives would be members. Professional advisers would also be available to working group.	
July 2003	Update that the Working Group was underway.	
August 2003	Update that the Working Group was now hearing evidence.	
September 2003	Noted that an additional Board meeting would be held on 7 October to hear three presentations on Maternity Services. 21 October meeting would consider maternity consultation document.	Professor Margaret Reid gave presentation. Discussed the arrangements to hear presentation reports at a future NHS Board meeting.
Special Meeting October 2003	“Future of Maternity Services in Greater Glasgow”. Report of the Working Group, midwifery and user perspectives presented.	Discussion in preparation for formal public Board meeting
October 2003	“Modernising Maternity Services - The Next Steps” proposals agreed for consultation.	
November 2003	Detailed report on the proposed approach to consultation.	Consultation process - proposals and communications launch agreed. Agreement on brief and membership for the Maternity Planning Group.

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Meeting	Board	Seminar
December 2003		Consultation started on 10 November. Discussion on progress. Update of calls received and hits on website
January 2004	Update on final stages of consultation.	
February 2004	Update on end of consultation and "Maternity Services: Estates Review" was noted.	Session on emerging key issues, clarifying policy guidance and work of Maternity Planning Group
March 2004		Review of all responses received to the consultation and agreed structure for draft Board paper.
March 2004		Agreed format of the seminar scheduled for 30 March 2004
March 2004		Clinical presentations by Yorkhill and PRMH/SGH. Discussion of draft Board paper and final draft Maternity Planning Group report.
April 2004		Amendments to final draft Board paper agreed.

Board members have heard directly from clinicians, participated in public meetings and a number of members have visited the maternity hospitals.

#### **4. PRECONSULTATION AND CONSULTATION PROCESS**

4.1 In May 2003 the Board established a preconsultation process with three strands:

- A Working Group, independently chaired, but including three non Executive Board members, with the remit to:
  - comprehensively review and provide advice on how to provide modern, safe and sustainable maternity delivery services for our population as the final stage of implementing of the Maternity Services Strategy;
  - carrying out its work in a fully engaging, transparent and accessible way.

The Working Group report - produced from a detailed review of policy guidance, with external clinical advice, visits to the hospital sites, written evidence and a number of public sessions to enable clinical and other staff to offer their views, is attachment 1.

- A workshop for midwifery staff from all the services offering the opportunity for practitioners to give their perspective on the future organisation of services.

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- The development of a report by the Maternity Service User Network (MATNET) which was established by the Maternity Services Liaison Committee in May 2003 to develop and support user involvement in the planning, management and delivery of maternity services.

4.2 In early October 2003 the Board received the outcome of the preconsultation process and approved seven proposals based on that process as the basis for public consultation. These were:

- Delivery services should be located in the new facilities at the PRMH and high quality provision at the Southern General.
- There should be greater consistency and co-ordination in the organisation of maternity services with a Glasgow wide approach to service delivery.
- The quality of services needs to be sustained during the implementation of change.
- Developing and improving community services will be a core part of our proposals for service change.
- Our final reorganisation of services will include specific proposals to develop midwifery services which are central to the provision of high quality maternity care. We want to ensure best practice and consistent care are provided across Greater Glasgow.
- Fetal medicine services currently provided at QMH will be transferred to the PRMH providing a single consolidated service for the West of Scotland and including current national services provided at the QMH.
- Our final modernisation proposals should clearly take account of access and transport issues, mainly by delivering as much service as possible in community settings.

A series of questions were agreed to be included in the consultation material to ensure that alternative views could be expressed although there was agreement to consult on a single set of proposals.

4.3 The Board decided not to consult on the eighth recommendation of the Maternity Working Group that:

**“In coming to a decision about the future location of maternity services, Greater Glasgow NHS Board should also consider the long term relocation of the RHSC to the SGH site taking into account the regional and national role of services provided by the RHSC.”**

The basis on which we took that position was simply that the preconsultation process had been established to consider the future shape of maternity not children's services. While we recognised that a strong clinical consensus had emerged through the submissions and consideration of the Working Group about the colocation of adult,

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maternity and paediatric services it would be inappropriate to put such a proposal to public consultation as an outcome of the preconsultation on maternity services.

- 4.4 Unfortunately, and inappropriately, this recommendation, which did not form part of the public consultation proposals became a central part of a major campaign by a local newspaper. This issue is covered in more detail in Section 5 of the paper.
- 4.5 The formal public consultation had a number of strands:
- wide circulation of the report of the Maternity Working Group's report and a covering paper setting out the Board proposals;
  - the development of a series of questions related to our proposals to facilitate responses to consultation;
  - production of a series of information leaflets covering each of the seven recommendations;
  - a series of public meetings;
  - a further round of activity by MATNET, the maternity service users network;
  - a telephone helpline to enable people to access information.

Sections 5 and 6 describe the responses to the consultation process and the themes which emerge from these responses.

### **5. CONSULTATION RESPONSES**

- 5.1 The purpose of this section is to give an overall sense of the consultation process and responses. Section 6 provides a more detailed analysis of the themes emerging from consultation.
- 5.2 This has been a very difficult consultation process. Our purpose in the preconsultation process had been to enable the strongly held and legitimate differences of clinical view to be heard and considered in a fair and measured way. However, as soon as the Working Group report was published and adopted by the Board as the basis for consultation those who opposed the proposals began a vociferous public and media campaign which focused on only one side of the debate. The alternative clinical views did not emerge with any sustained media profile..
- 5.3 In terms of public responses, the one sided coverage of the clinical issues, the misleading messages about the future of the RHSC and the political and public campaign inevitably led to petitions generating very high numbers, indeed record numbers of signatures, apparently opposing our proposals. It is important to reflect carefully on how those volumes of responses should impact on our consideration of final decisions. We must give greatest weight to the appraisal of what service will be safest for mothers and their babies. That appraisal cannot be simply based on the volume of public support for one site or the other. It is also worth noting that:
- many public responses do not accept the argument for a shift from three units to two and are therefore based on the false presumption that the status quo is a safe and sustainable option;
  - the work of the Maternity Planning Group has addressed many of the specific points of public concern, and although we may not be able to fully reflect the

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headline “save the QMH” proposition in our final decisions, we can be confident that a whole range of public concerns can be demonstrated to have been responded to.

- 5.4 Turning to responses from organisations and clinical interests. These illustrate a much more mixed picture. There is a clear difference of view between those who represent paediatric perspectives and those who represent obstetric and anaesthetic perspectives.

In taking a decision which can only meet the advice of one side of that debate, two things are important:

- that we acknowledge and act on the strength of clinical feeling that the colocation of maternity, adult and paediatric services is the only genuine option which delivers the ideal clinical synergies;
- that through the further work which will be required within the framework set by the Maternity Planning Group to deliver implementation, we ensure that the paediatric perspective is fully represented in detailed service arrangements.

## **6. THEMES FROM CONSULTATION**

- 6.1 Board members have had the opportunity to review all of the responses to consultation. The responses and the issues raised at public meetings are summarised at Attachment 2. This section sets out, and responds to the main themes which have emerged from all of these responses.

### 6.2 Criticisms of the Consultation Process

There have been two main strands of criticism of the consultation process. Firstly, criticism of the preconsultation process and secondly criticism of the formal public consultation.

Individual clinicians and clinical groups associated with Yorkhill have been highly critical of aspects of the preconsultation and consultation process, both in their written responses to the formal consultation but also in a number of public statements and comments in the media. Summarising these various criticisms:

- the balance of the Group’s final report;
- the range and balance of external advice;
- the lack of detail of the Maternity Working Group report on particular issues;
- the conduct of the Group’s work including visits to sites, the confidentiality of discussions with clinical advisers, and information provided to the clinical advisers.

- 6.3 In responding to these points it is important to remind ourselves of the context in which the Working Group was established. We knew that:

- there were strongly held and polarised clinical views about which delivery unit should close;

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- there were complex clinical arguments which would need many hours of review to give proper consideration;
- the status quo, retaining the present pattern of services, was not an option.

The purpose of the Maternity Working Group, with three non executives and an independent chair, none previously involved in the Board's deliberations on maternity services, supported by clinical advisers and with open opportunity for all interests to submit oral and written evidence, was to ensure that full and fair consideration was given to advising the full Board on this difficult choice.

- 6.4 Turning from that context to deal with the key criticisms. In terms of the balance of the report. This is a difficult issue on which to respond. The report clearly considers the risks to mothers and babies and the circumstances in which both require emergency intervention and transfer, clearly reviews the relevant policy advice, for maternal and neonatal services and reflects on wide ranging discussion with the clinical advisers.

There is no evidence that the preconsultation Working Group failed to take into account the views put to it but the Group heard evidence from around 40 staff over a period of about 80 hours. It was, therefore, not possible to include detailed reference to all the evidence heard in the final report, which represents a summary and a refinement of the key issues. The Group heard very divergent clinical opinions, equally strongly held and the report represented their considered view, taking account of all the evidence and the views of the clinical advisers.

- 6.5 Addressing the range and balance of external advice. External advisers were nominated by the relevant professional bodies. An additional anaesthetic adviser, the chair of our Anaesthetic Sub Committee was added to the Group with the agreement of the two Trust Chief Executives. The advisers were:-

- three were obstetricians but all with an interest in fetal medicine;
- two were adult anaesthetists;
- three were paediatric; covering anaesthetics, neonatology and surgery;
- one had management responsibility for women and children's services and was a qualified midwife.

- 6.6 In terms of the level of detail in the report and the information given to advisers. As paragraph 6.4 above highlights the Working Group heard many hours of evidence and spent a further considerable period of time reflecting on the key clinical issues. Their report is referenced and supported by summaries of evidence and all of the written submissions the Group received. We have published full details of the information made available to the advisers, this included various Yorkhill submissions and any additional information the advisers requested. It is also reasonable to assume that experienced and senior clinical staff, acting on behalf of their professional organisations would have taken personal responsibility to ensure they were in a position to offer informed and appropriate advice to an important and difficult review process.

- 6.7 We have responded on a number of occasions to the criticisms of the Working Groups decision, agreed with its nine advisers, that their lengthy and detailed discussions should be reflected in the Group's final report, including the overall

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balance of clinical advice, rather than separately recorded for publication. The individuals involved reached a mutual and informed judgement on the best way to address the task the Board had set them. In the context of the sensitivities of the clinical issues and the strength of local clinical feeling it is difficult to conclude that judgement was unreasonable. It is worth restating that 7 of the 9 advisers supported the conclusion that the QMH should close.

6.8 Turning to the criticisms of the formal consultation process. A number of commentators, including the Local Health Council, Glasgow City Council and some MSPs made particular comments, including:

- the impact on public confidence of polarised clinical views;
- criticising the decision to consult on a single option for delivery services;
- highlighting the confusion caused by media coverage suggesting the RHSC is to close;
- challenging the lack of detail on the impact of the closure of the QMH on specialist services;
- criticising the absence of detailed financial analysis as part of the consultation process

6.9 Dealing with each of the points in turn:

- Clearly the polarisation of clinical views and the way that a section of those views has been covered in the media has been a unique feature of this particular consultation process. The intention had been to create, through the preconsultation process, a way in which polarised clinical views could be aired, as constructively as possible, tempered with objective clinical advice, and recommendations reached. Unfortunately, but perhaps inevitably, our aspiration that a process, which was agreed and supported by all of the key interests, was a reasonable basis on which to proceed, has not been sufficient to avoid the public and angry expression of clinical views by those who did not agree with the outcome of the preconsultation and the Board's decision to use it as a basis for the formal consultation. Equally, it is not clear how any further process could avoid similar difficulties.
- The suggestion that we should consult on a specific option was carefully considered by the Board in its October meeting. We took the view, that having put in place an elaborate preconsultation process which had produced clear recommendations, we should use those recommendations as the basis for consultation, but create, through a series of questions, which Board members agreed, the opportunity for alternative views to be expressed. Our aim was to ensure that those proposing a contrary view had the opportunity to put forward the basis on which they held that view. This approach was only partially successful. Many individual respondents simply opposed the closure of the QMH.
- Paragraphs 6.23 and 6.24 address the points about service and financial analysis.

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As well as responding to these specific issues, we also need to consider the suggestion that further public consultation should take place. In considering that proposition it is important to reflect on a number of important points.

- For the staff concerned, in both units, we need to bring to an end a period of uncertainty which has continued since 1999.
- There is a polarisation of opinion around the three to two debate between NHS interests and sections of political and public opinion. As the Local Health Council reflected in its response there is acceptance among most clinicians and many other organisations, including Local Authorities, professional organisations, advisory structures and the Health Council itself, that a unit has to close. However, there are also political and public views expressed in the consultation process which strongly oppose any closure. It is not clear that further consultation will resolve this divide.
- There is no possibility of a clinical consensus emerging - suggested by some commentators as a requirement to restore public confidence. Clinical views are polarised and there is no evidence to suggest that position will change or can be changed.

The purpose of consultation is to ensure we have the widest range of views and debate on our proposals. We have, through the most extensive preconsultation exercise we have ever undertaken, and full, formal public consultation, generated substantial and detailed responses, fully testing our proposals. It is not clear that further public consultation will add any value to this process and it would have the potential to be portrayed as tokenistic unless we could be absolutely clear on its purpose. Very importantly, for the staff and potential patients who will be affected by service change we need to reach a conclusion. This is also relevant in terms of the need to address the present substantial pressures on the service.

### 6.10 Relative Risk

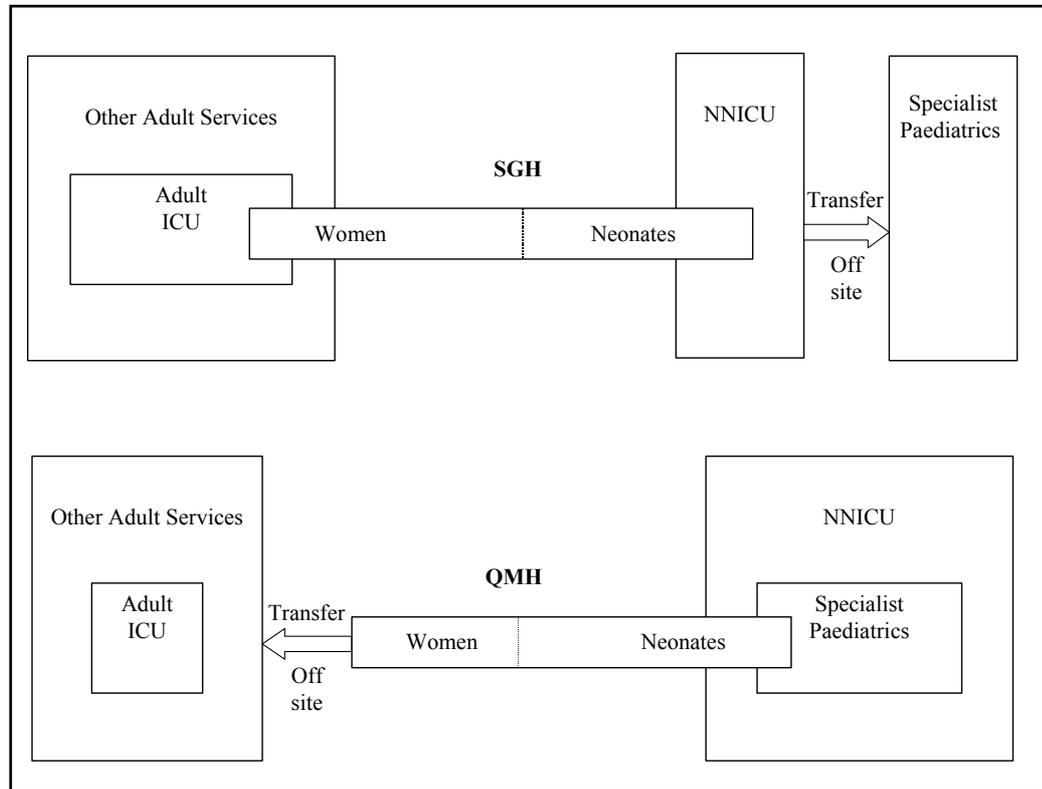
The assessment of relative risk of transfers to women and babies has been a key issue in the preconsultation and consultation debates.

Before reflecting on the consideration of the issue by the Maternity Working Group it is important to set a clear frame of reference. The presumption at the start of this review process was that the status quo of retaining three units was not an option and therefore there was an explicit choice to make between two services.

- A consultant led maternity unit delivering over 5000 women per annum (the third largest in Scotland):
  - **alongside adult services and intensive care for women and their babies;**
  - or**
  - **alongside specialist paediatric services and intensive care for babies.**

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We have to choose between transferring mothers for intensive care and adult clinical input or transferring neonates, who have been stabilised in intensive care for specialist paediatric services. The diagram below illustrates that choice.



6.11 The Maternity Working Group spent a substantial amount of time considering the balance of risk and which option would offer the safest service and in its consideration reflected on:

- local professional views and evidence;
- the advice of its clinical advisers;
- available policy and professional guidance.

6.12 It reached a number of conclusions on maternal risk:

- few women require intensive care but maternal emergencies are unpredictable and when they occur rapid access to the back up of adult services is paramount. Transferring a woman in an obstetric emergency may be difficult and time critical. Women do not respond well to transfer in such circumstances;
- in addition, a critical timescale is bringing ITU expertise to the critically ill woman not simply the transfer of the mother to ITU;
- maternal emergencies are less predictable than neonatal emergencies, particularly with 20 week antenatal screening improving the prenatal diagnosis of abnormalities.

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These conclusions are in line with the repeated conclusions of the Confidential Enquiry into Maternal Deaths most recently stated as:-

- *“Women at known higher risk of complications should not be delivered in maternity services separate from acute hospital facilities.”*

*“Tertiary centres accepting the care of women with medical complications in pregnancy must be staffed at consultant level by physicians with relevant specialist medical experience and knowledge of obstetrics.”*

and with the EGAMS conclusions on risk which state that :

- *“Mothers and infants should be transferred to a regional level III facility if sub-specialist maternal-fetal or specialised medical care is required, particularly from units without adult intensive care.”*

*“These units should have on-site adult intensive care, neonatal intensive care (Level IV neonatal facilities) and neonatal surgery, either on-site or close by.”*

6.13 For neonates the Maternity Working Group concluded that:

- neonatal intensive care provides services to very sick neonates;
- BAPS recommends close linkage between a paediatric surgical unit managing surgical neonates and a neonatal intensive care;
- more than 60% of neonates admitted for surgery at the RHSC were already transferred from elsewhere;
- neonates are best transferred in utero but across the UK neonates are transferred across services on a daily basis, confirmed by the local expert advice that the improvement to neonatal transport services and the pattern of 500 annual transfers without deaths or major morbidity, suggests neonatal transfer is safe.

These conclusions are in line with BAPS guidance which states:

- *“Retrieval of ill infants and children by a team from the specialist centre is well-established practice. Premature infants with respiratory distress and infants with severe cardiac disease are regularly transferred to specialist units. Equally, infants and children requiring specialist paediatric surgical management can be transported safely to a regional centre after initial stabilisation .....*”

and EGAMS guidance which states:

- *“maternity units should have neonatal surgery on site or close by.”*

6.14 In responses to consultation there was support for the Working Group’s assessment of the balance of risk from a range of interests. These included the local Anaesthetic and Obstetric subcommittees, a number of clinicians who act as Reviewers for the Confidential Enquiries into Maternal Deaths, the Area Clinical Forum, Clinical Directors from maternity services outside Glasgow, the Royal College of

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Anaesthetists Board in Scotland (including paediatric anaesthetists), a number of other NHS Boards and a range of other clinical interests.

In addition to confirming the Working Group's assessment of the risk, responses from obstetricians at the PRMH and SGH and the Professor of Obstetrics set out their advice that there are other substantial clinical advantages to colocation of maternity and adult services. This was particularly highlighted for deprived populations and in the case of PRMH clinicians, referenced to previous experience of practising on an isolated site.

On the other side, local neonatal and paediatric subcommittees challenged the Working Group's assessment, as did the Yorkhill Trust, the Scottish Neonatal Consultants Group and the Royal College of Paediatrics and Child Health (Scotland) and a range of other clinical interests.

The challenges have focused on the higher numbers of neonates who would require transfer, the excellence of the integrated service at Yorkhill and challenge to the policy guidance and clinical advice referred to by the Maternity Working Group.

6.15 These points do appear to have been carefully considered in the Maternity Working Group's deliberations and their debates with clinical advisers and are all explicitly covered in the Working Group's report.

6.16 The Issue of Morbidity and Mortality

The Yorkhill Trust response challenged the impact on mortality and morbidity for women of the lack of provision of on site adult and intensive care services and suggested that the impact on outcomes for neonates was much more substantial than what they suggested was a very small, almost theoretical risk to mothers on sites without adult services and intensive care. Their response stated about maternal risk:

*“this perception has not however been supported at any time by data demonstrating the existence of any such risk in terms of increased mortality or morbidity.”*

For relatively infrequent clinical events individual case review is the only approach to generate advice for future practice. Maternal deaths are now a relatively rare event but the Confidential Enquiry into Maternal Deaths (CEMD) consists of a detailed clinical review of every maternal death in the UK. It has run since 1950. Professor James Drife, the current Director of the CEMD, made a detailed response to consultation highlighting a number of important issues and all of the relevant recommendations since 1985. Fifty-four years of Confidential Enquiry reviews have generated clear advice which fully supports our decision to develop maternity services on an adult general hospital site and does not support the appraisal of maternal morbidity and mortality put forward by Yorkhill's response. A number of CEMD reviewers made detailed responses to consultation reinforcing this advice.

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6.17 In terms of neonatal mortality and morbidity the Yorkhill response states:

*“no service in Scotland is more structured..... than the QMH/RHSC.....to make a major contribution to the continued reduction of Scotland’s neonatal mortality rates. The room to reduce death rates.....is many times greater than the room to further influence the already very low death rates of women in childbirth.”*

An important question to consider is whether the equivalent morbidity and mortality reviews for neonates to the CEMD support these conclusions.

There are three relevant sources of information:

- the Scottish Perinatal and Infant Mortality and Morbidity report;
- the Confidential Enquiry into Stillbirths and Deaths in Infancy which covers England and Wales;
- the Confidential Enquiry into Peri Operative Deaths (CEPOD) - covers all surgery but in its 1999 review had a section “Extremes of Age” covering children’s surgical services.

The first two reports focus on the major causes of neonatal morbidity and mortality. These are highlighted as maternal health, particularly smoking, antenatal care and the management of labour. Neither have significant implications for an assessment about any risks posed to neonates by our proposals although it is worth noting that both reports emphasise that it is tackling wider social factors and inequalities which will offer further reductions in neonatal mortality and morbidity.

6.18 The “Extremes of Age” section of the 1999 CEPOD makes 10 main recommendations. The most relevant to our situation is the recommendation that a regional perspective is required for the organisation of patient transfer. In the body of that report there are also relevant key points which are in line with other policy guidance. These highlight the desirability of transfer before birth where possible, review issues about transfer including the importance of better transfer options, particularly retrieval teams. The report notes

- *“the issue of antenatal diagnosis has been studied in considerable detail. The most important factor is good neonatal care when the baby is born to ensure that it is stabilised and in optimum condition before transfer to a surgical unit.”*

In a later section on necrotising enterocolitis, a condition associated with prematurity and not predicted antenatally, which may require surgery, the report highlights the needs for teamwork between neonatal medicine, surgery and paediatric anaesthetists and adequate NNICU facilities. The Maternity Planning Group report includes more information on the care of those neonates who number about 10/12 in Greater Glasgow per annum.

6.19 In concluding, there has never been an argument that the ideal arrangement for the very small numbers of neonates who need specialist intervention is the colocation of maternity services and specialist paediatric services. The Maternity Working Group report stated that and the relevant policy guidance confirms the desirability of

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colocation of neonatal intensive care and surgical services, achieving in utero transfer for prenatally diagnosed disorders. Unfortunately, we cannot achieve that ideal service arrangement and also meet the imperative that major obstetric services should be alongside adult and intensive care services. But it is important to restate two things:

1. The reviews of maternal and neonatal morbidity and mortality do not appear to offer any support to the view that risks to women are theoretical and risks to neonates are substantial. The reverse is true.
2. There does not appear to be any information that illustrates worse outcomes in UK children's hospitals which are not colocated with maternity services. Indeed, a recently published review of paediatric cardiac surgery across the UK states that **“there is no discernible difference in survival between the 13 UK paediatric cardiac surgical centres....”**. Around half of those centres are not on the same site as a maternity hospital or NNICU.

6.20 However, as indicated above, policy guidance and clinical advice, local and external also confirm two key points about risk to babies:

- initial stabilisation in NNICU is the key to good outcomes;
- properly resourced, specialist neonatal transfer is safe.

Linking this point to consultation responses - a number of paediatric and neonatal interests and the Yorkhill Trust suggested there was a proposition of multiple transfers for neonates as a matter of routine practice. That is not what the Working Group proposed and the Maternity Planning Group report has set out clear clinical arrangements to assure the quality of care and the minimisation of transfers.

6.21 RHSC Closure

There is no question that there has been a degree of confusion about whether the consultation process included proposals to close the RHSC. The Working Group, reasonably, given the evidence they had heard, made a balanced recommendation about considering the longer term relocation of services provided at the RHSC. The Board Chair took an immediate and clear position that the RHSC was secure for at least 15 years and this was emphasised in all of the consultation material, meetings and media briefings. However, media coverage and a number of campaigning groups gave strong messages that both hospitals were under threat. This misinformation is reflected in many comments and issues raised in public meetings and individual responses to consultation. In addition, two petitions - one from the Evening Times which attracted 150,463 signatures and one from Sandra White MSP which attracted 1,629 signatures stated that both hospitals were at risk and presumably those who signed them were misled by that entirely inaccurate information.

It is difficult to know what further action we could have taken to make clear information available to the public.

## 6.22 Intensive Care Access

A small number of responses from the Yorkhill trust and paediatric interests suggested there was no better access to intensive care at the Southern General than the QMH because beds may not be available at the SGH and the Western Infirmary is virtually adjacent to the QMH. It was also suggested during the consultation process that paediatric intensive care staff from the RHSC could intervene in a maternal emergency in the QMH.

There are a number of points to make in response to these issues:

- the advice of anaesthetists, who provide intensive care support, in Greater Glasgow and across Scotland is completely unequivocal that there is significant clinical advantage. That view is supported by many years of Confidential Enquiry reports and is reflected in the fact that a number of CEDM reviewers have written in support of the closure of the QMH;
- the Working Group heard and reported local and external clinical advice, that in addition to the advantage of an onsite ITU avoiding the need for transfer there is also a significant advantage in the availability of specialists, including intensive care, to attend a maternity unit on the same site. Obstetricians at the PRMH confirmed their own sense of the substantial clinical gain in moving from an isolated site at Rottenrow to a general hospital campus;
- we are making a long term strategic decision - in that timeframe the Western Infirmary will have closed and the major in-patient centres at the GRI and Southern General will include very substantial intensive care facilities. These expanded facilities, consolidating from the present five sites, will significantly reduce the small number of occasions when a bed is not available;
- the paediatric intensive care specialists at the RHSC have made it completely clear that they cannot offer emergency intervention to women requiring intensive care expertise in the QMH.

## 6.23 Detail on the Impact of Closure

There was criticism that the detailed work to describe how services would operate should have been completed before the public consultation began and have been included in the process.

After the preconsultation process was completed and in preparing for formal public consultation it became clear that there were a number of issues about how services would operate if the QMH closed. These particularly focused on:

- risks to specialist services including fetal medicine;
- the separation of mothers and their babies;
- potential multiple transfers of the same neonate.

The Maternity Planning Group was put in place to work through these concerns (see Section 7).

While this is an important programme of work it would not have been appropriate to undertake such detailed review in advance of putting out a proposal - based on

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extensive consideration by the Maternity Working Group, to consultation. Had we done so we would have been accused of already having determined an outcome. The related point is that the primary purposes of this work are to:

- provide confidence to Board members that if the decision was taken to close the QMH, safe and sustainable services could be provided;
- demonstrate that concerns about the organisation of services raised in the preconsultation and consultation can be addressed.

The suggestion that this further work is now subject to a period of public consultation appears inappropriate given that its purpose was to address concerns emerging from that consultation process.

### 6.24 Detailed Financial Analysis

We did not include detailed financial analysis as part of the consultation because the primary driver of this decision is achieving the safest arrangement of clinical services. At the outset of this process our expectation was that the only substantive financial issue was that there may be significantly different costs of the two options related to estates and capital costs. We therefore commissioned, to a brief and process agreed with the South Glasgow and Yorkhill Trusts, an external expert review of the capital costs associated with the two sites. This was provided to the Maternity Working Group and Board members. Further details on capital issues are covered in Section 8. The Maternity Planning Group has completed further financial analysis which demonstrates that, with realistic but challenging assumptions about the need to increase spending in areas such as neonatal staffing, transport, information technology and additional ultrasound scanning, our proposals are deliverable within current costs.

### 6.25 Clinical Views on Triple Colocation

The Board decided not to put to consultation the conclusion of the Maternity Working Group that, in the longer term we should consider the transfer of the services from the RHSC to the Southern General. The reasons for that decision are outlined in Section 4. There have been suggestions that because new clinical support for the colocation of maternity, adult and paediatric services has emerged from this consultation process we should simply endorse that conclusion as the basis for future planning. There are a number of issues with such a proposition.

- The Board took the view in considering the outcome of the early consultation of the Acute Services Review in 2000 that it would not proceed with its proposal to relocate the RHSC services to the Southern General site alongside maternity and adult services. We have had no further process around the future location of specialist children's services since that decision.
- After the preconsultation process, we took a very clear and public position that the future of the RHSC was secure on the Yorkhill site for 15 years. While it may be reasonable to revisit that timeline given the clear clinical responses to consultation, that needs to be on the basis of due process.

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- Although there is a degree of overlap between public and professional interests in maternity services and specialist children's services there are a number of interests who would need to be fully included in any developing proposals for the future of paediatric services who have not been part of the process in the consultation on maternity services.
- While there is clear clinical support for the concept of triple colocation, to which we must respond, that should not be taken as a short cut basis on which the Board could overturn its existing commitments.

Two final related points. It would not be possible to sustain three maternity units for the length of time required to plan and build a new children's hospital, even if such a process was launched relatively quickly. Secondly, the facilities at the RHSC are of relatively high quality compared to many of Glasgow's hospital facilities and the early prioritisation of their replacement on an alternative site is unlikely to be a higher priority than existing commitments to replace poor facilities as part of the Acute Services Review.

### **It is therefore proposed that:**

- **The decision on maternity services is taken within the new context where there is now strong clinical support for the colocation of adult, paediatric and maternity services.**
- **A process is put in place to bring proposals for the longer term disposition of specialist children's services to formal public consultation by the end of 2004. We should be quite explicit that we are making that commitment to bring forward those proposals based on the responses we have had from clinical staff to the consultation on maternity services.**

### 6.26 Retention of Three Sites

Our consultation proposals reflected the consensus from 1999 that a shift from three to two units was essential to provide safe and sustainable services in the context of reduced clinical experience and hours for junior doctors, the declining birthrate and excess capacity, particularly in our most modern facility at the PRMH. Again, in this consultation exercise, there is an almost universal acceptance within the NHS that we need to move to two delivery units. However, a number of political and public responses have put the view that three units should be retained

Two arguments have been mounted to suggest that three units are appropriate for the future:

- that we should be planning for a rise in the population and the birthrate in Greater Glasgow. It is suggested this could be driven by asylum seekers and new housing developments;
- coherent regional planning would bring more births into Glasgow, justifying a third unit here.

In addition to these points, a number of responses simply stated that we must retain three delivery units in the interests of women and their babies.

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6.27 Dealing first with the challenge to our projections on birth numbers. The table below illustrates the decline in births to Greater Glasgow residents over the last 10 years.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Births in Glasgow hospitals	13472	13487	13241	13384	12313	11413	11175	11173	11065	11914*
Actual births to NHSGG residents	11333	11098	10995	10955	10294	9861	9504	9656	9242	9417

\* Around 700 additional births due to closure of Vale of Leven, now reopened.

To arrive at our future projections for births in Glasgow hospitals, we assume that around 300 Glasgow women will deliver outside Glasgow and around 2000 non Glasgow women will deliver within Glasgow hospitals. Both of these numbers have been stable over a number of years, since the closure of Rutherglen Maternity Hospital.

With the Vale of Leven community midwifery unit reopened this would suggest that planning for between 11000 and 11500 deliveries is a prudent approach, particularly as we have made relatively conservative assumptions about throughput in sizing the physical capacity of the two units.

6.28 Dealing with the issues of regional planning. We have worked closely with Lanarkshire and Argyll and Clyde NHS Boards throughout the last decade to ensure our maternity plans are coherent. Lanarkshire has an established pattern of flows into its single and relatively new delivery unit at Wishaw. Argyll and Clyde concluded a major strategic review of maternity services in the middle of last year, closing two consultant led units, at Inverclyde and Vale of Leven and consolidating services at the RAH in Paisley. We engaged fully in that review and the only outstanding issue is the definitive assessment of how many women from the Dumbarton area will opt to deliver in Glasgow. The maximum impact of this factor is an additional 200/300 deliveries above our planned 11,200 - those numbers would not require a third delivery unit.

The suggestion has been made that because the RAH is marginally nearer the Southern General than the QMH that would offer a basis to close the Southern General and retain the QMH, which is around two miles further from the RAH than the SGH. It is difficult to see relative proximity as a definitive factor in reaching a decision. The pattern of maternity hospitals does reflect historic patterns of residence and delivery and, as always, we need to make decisions about future services with the present pattern as a start point. The suggestion that a further regional planning exercise could result in Glasgow retaining three units can only be made on the basis that either the delivery unit at Wishaw or the RAH would close. Both serve distinct populations and it is unlikely there would be support for their closure in order that Greater Glasgow can retain three units within a three mile radius of each other.

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6.29 Finally, addressing the general point that three units should be maintained in the interests of women and their babies. Consideration of that proposition has a number of dimensions which suggest the status quo does not serve the best interests of women and their babies:

- there is strong clinical consensus that three units cannot provide safe and sustainable services. Our professional Advisory Committees support the closure of one unit;
- retaining unused capacity has an opportunity cost in terms of resources available to other services. The vast majority of maternity care is delivered in community settings - our proposition has seen that is where resources should be concentrated and will have most impact in addressing the effects of poverty and the health inequalities it creates;
- there is no evidence that the very marginal additional travelling times, no more than five minutes by blue light ambulance, represent any risk to safety, particularly when that pattern of service retains units north and south of the river, addressing the City Council's point that over reliance on cross river routes in dealing with time critical emergencies might be unwise.

6.30 Hobson's Choice between Mothers and Babies

A number of political and public interests have suggested the Board is asking them to make a "Hobson's choice" between the safety of mothers or their babies. **That is quite simply not the case.** In response it is important to restate:

- the clear commitment the Board has made is that the decision on the final disposition of services should be based on achieving the safest arrangements for mothers and babies - not one or the other;
- accepting the premise that the status quo is not in itself a safe or sustainable option for the medium term, in the process of the preconsultation, our deliberations on formal consultation and all of our discussions and process since we have been absolutely clear that in reaching a final decision we need to be confident that the proposed pattern of service will be safe for mothers and their babies;

6.31 Loss of Specialist Staff

A number of consultation responses raise concerns about the loss of specialist staff or the redeployment of staff into roles which will not enable them to continue to use their specialist skills.

Two key points in response:

- we have been committed, since the start of this process, to ensuring that clinical staff are retained and any redeployment which is required is done on a fair basis and one which retains excellent and specialist skills to deliver services to patients - regardless of the location of those services;
- **the Board should reaffirm its commitment to a single system approach to the management of change to maternity services to ensure that there is a level playing field for all staff, regardless of current location and to enable the redeployment of staff to ensure best use of clinical skills.**

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### 6.32 Threat to National Services

Clinicians within Yorkhill and the Trust itself have suggested that the national services of ECLS, fetal intervention and neonatal cardiac surgery would be threatened if the QMH closed. Members have seen the National Services Division, which is responsible for commissioning these services, response to consultation. Their response confirms the need for consequential service issues to be carefully considered. The Maternity Planning Group particularly focused on these issues in its proposed service model and we will continue discussion with the National Services Division.

### 6.33 Threats to the Adult Metabolic (PKU) and Lactation Services provided at the QMH for the Yorkhill Campus

These services were suggested to be under threat if the QMH closed. The Maternity Planning Group considered both.

The metabolic service is out-patient based and requires the co-ordination of a multidisciplinary group of specialist staff. It is clear that it is possible to continue to organise those clinical staff to deliver the same service either from the PRMH or RHSC sites.

A lactation bank will be provided within the RHSC to meet the needs of mothers whose babies have been admitted there.

### 6.34 Threat to Fetal Medicine

A number of responses suggest that there is a threat to the future of the fetal medicine service at the QMH. That view is not reflected in the advice from the Obstetric Sub Committee and it is also worth noting that the three obstetric advisers to the Maternity Working Group were all fetal medicine specialists. Because of the significance of this issues we asked the Maternity Planning Group to consider carefully how a fetal medicine service, consolidated at the PRMH, as we proposed, could be delivered. This issue is covered in detail in their report.

### 6.35 Land Sales

The suggestion has been made that our proposal to close the QMH was motivated by a desire to profit from the value of land sales. We have made no assessment of land values in any consideration of maternity services - our proposals have not been driven by financial considerations.

### 6.36 Access and Transport

A number of responses have highlighted issues about access and transport. Firstly, concerns about access for patients and secondly, about north to south patient flows. Dealing with the first point, because so much maternity care is provided in the community and we have proposed a maternity centre in West Glasgow, the closure of a delivery unit will have a very limited impact on access. Other responses highlighted that the key access issue is developing community services. Having said

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that, in the detailed implementation of any agreed change it would be important to carefully identify and act on local access issues.

On the second point, our proposal creates less additional north to south patient flow than if the Southern General closed and by providing a delivery unit on either side of the Clyde minimises any requirement for north/south patient journeys.

### **6.37 Teaching and Research**

It is not easy to address the theoretical threat perceived by some respondents to teaching and research. The national and international dimensions of research activity linked to the Yorkhill site suggest that excellent networking can be achieved without direct colocation. Teaching and research are critical issues - but the challenge is to ensure that in implementing a decision which is driven by achieving a safe and sustainable clinical service that teaching and research are not compromised.

### **6.38 Ronald McDonald House**

There has been a question in some responses about how our proposals would affect Ronald McDonald House and voluntary activity associated with the RHSC and QMH. Ronald McDonald House would remain an important facility for the RHSC, regardless of the future of the QMH and one which we strongly support.

Equally, there should not be any undermining of the very strong voluntary activity associated with the RHSC if the QMH closes. Finally, equipment which has been donated to the QMH by voluntary and charitable activity would need to be reviewed if the hospital closed. Our commitment would be to ensure that it would continue to be used in the best interests of mothers and babies.

### **6.39 PRMH Planning**

In the public meetings we were challenged on a number of occasions about why planning for the PRMH had resulted in excess capacity and whether it should have been built at all if Greater Glasgow required one less maternity unit. A number of points in response:

- the PRMH was planned to enable the closure of Rottenrow following the accepted clinical logic that maternity hospitals should be sited alongside adult services;
- there was a long gap between the planning of the PRMH and its construction;
- regional planning arrangements were less well developed when the PRMH was planned and changes to flows of Lanarkshire patients were not fully taken into account in decisions about its capacity;
- the birthrate has declined much faster than anticipated.

## **7. MATERNITY PLANNING GROUP**

7.1 The Board established this group at the start of the formal consultation to ensure that the important service issues which had emerged in the preconsultation process and were being highlighted as we began formal public consultation were addressed. A

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primary purpose was to enable the Board to have confidence, in reaching decisions at the end of consultation, that the major issues about service provision if the QMH closed have been carefully reviewed.

The full report of this group is included as Attachment 3 to this paper. Although the Planning Group included three senior staff of the Yorkhill Trust and involved many clinical staff at the RHSC and the QMH the Trust's representatives have not supported the final report. To a degree this is not surprising, as the conclusions are substantially at odds with the Trust's own consultation response.

7.2 The report clearly demonstrates how services can be organised for babies in a safe and sustainable way.

7.3 At headline level the report concludes:

- the closure of the QMH would generate around 150 extra transfers each year - we propose an additional transfer vehicle to ensure these can be safely and expeditiously undertaken;
- we can put in place arrangements to ensure that mothers would not routinely be separated from their baby if it required admission to the RHSC;
- a consolidated fetal medicine service at the PRMH operating in a structured clinical network with the RHSC can continue to provide high quality antenatal and perinatal care and well planned and organised care for babies with prenatally diagnosed abnormalities;
- the development of a critical care floor at the RHSC with paediatric intensive care specialists, neonatal surgeons, neonatologists and cardiologists, working as a team, can deliver safe and quality care;
- the ECLS service, which provides advanced life support to very ill babies, can continue to be provided within the RHSC as part of the service supported by clinicians in the critical care services;
- the proposed model of service is affordable within current costs including the investments required to deliver the services outlined above.

## **8. ESTATE AND CAPITAL ISSUES**

8.1 In August 2003 the NHS Board commissioned Keppie Design to the following brief, which was agreed with the Yorkhill and South Glasgow Trusts.

### **A. Process**

**Keppie's will link with each Trust's advisors to generate a single report offering their assessment of the capital costs associated with the three scenarios below. The draft report will be available for discussion when we meet at 2.00 pm on 22<sup>nd</sup> August 2003 before a final version is made available to the Working Group.**

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### B. Three Timeframes

1. The capital requirement and assessment of timeframe to provide a facility able to deliver the capacity below in the short term. to Category C standard.
2. The capital requirement to provide a facility able to deliver the capacity below with a 10 year life.
3. The capital requirement to provide a facility able to deliver the capacity below with a 25 year life.

In cases 2 and 3 to Category B standard at minimum capital cost, ie, a durable and reasonable standard of facility but not necessarily the equivalent of the PRMH or other newbuild. Because the two sites may offer different standards of accommodation in these timeframes we will need to be explicit if the outputs for a particular capital cost are not directly comparable.

### C. Capacity

The three timeframes should be assessed on the basis of providing the necessary inpatient beds, theatres, delivery rooms, neonatal inpatient and day case facilities for 4500 deliveries, set out below is our assessment of the total facilities required.

1. Beds
  - 55 deliveries/bed and 60 deliveries/bed
  - range 82-75 beds for the second unit
2. Delivery rooms
  - using PRMH current performance 11 rooms/5000 births
  - capacity requirement 10 rooms for the second unit
3. Neonatal
  - using DoH NNICU review, March 2003, would suggest the requirements below for the West of Scotland at 27,000 deliveries per annum

Given the capacity at the PRMH this generates a second Greater Glasgow unit requirement:

•	NNICU	-	6
•	HDU/SCBU	-	31
•	Total	-	37

- 8.2 The purpose of this work was to provide a consistent appraisal of the capital costs which would be associated with the development of each site as the second maternity unit. In our original appraisal of financial issues our view was that differences in capital costs were likely to be the only significant factor in creating different revenue profiles for the two options.

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- 8.3 Keppie worked with both trusts and their advisers to develop their report which concluded the costs of the three options were as follows:

	<b>QMH £'000</b>	<b>SGH £'000</b>
Short term	5,200	4,400
Medium term	19,500	7,200
Long term	21,500 or newbuild 37,000	8,300

The Yorkhill Trust challenged aspects of the costing of the short term option, points which were responded to by the professional advisers.

This information was passed to the Maternity Working Group and thereafter to NHS Board members prior to being formally noted at the February Board meeting.

- 8.4 When we received the Yorkhill Trust's response to consultation on 20th February 2004 it suggested for the first time that the QMH building could have a life of 15 years for a capital cost of £5 million. Yorkhill had, in parallel to the corporately agreed Keppie review, commissioned two further estates reviews. The first was undertaken by WS Atkins in August 2003. This review confirmed costs as:

	<b>QMH £'000</b>
Short term	730
Medium term	18,700
Long term	18,700 or newbuild 30,400

ie, for the critical medium term period very similar costs to the Keppie's conclusion. The Trust had then commissioned a further appraisal by Armitage Associates, in February 2004. This appraisal concludes that the QMH can have a 10/15 year life with additional clinical activity for a total cost of £4.8 million. The brief for that further appraisal appears to have been whether the QMH could be altered to provide a secure and fire safe environment for that time period.

- 8.5 The Corporate Management Team agreed that a further appraisal of these various reports was required and it agreed that the Director of Planning would convene a discussion with Keppie, WS Atkins, Armitage and the Trust to consider what advice to offer the Board.
- 8.6 At a headline level, the meeting confirmed that Keppie and WS Atkins stood by their earlier assessments of the capital cost for a 10 year life of around £18/19 million. WS Atkins were able to confirm their understanding that their August 2003 report had been accepted by the Trust.
- 8.7 Because of the different briefs and advisers approaches it has not been possible to fully delineate the differences in the appraisals but the essential areas of difference appear to be as follows:-

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- a. Armitage have not appraised the building on the basis of the Estates Code.
  - b. Armitage proposed costs leave potentially significant unanswered questions about costs assumed to be covered by cyclical maintenance.
  - c. There is not clarity that the Armitage proposals fully meet the requirements of relevant health service technical guidance in relation to space, functionality and elements of the fire code. They certainly do not achieve category 'B' standard.
- 8.8 In conclusion, it is unfortunate that the Board is in a position of having to form an appraisal of reports prepared to different briefs and processes. What view should the Board take of these conflicting capital reports in reaching its decision? The purpose of undertaking the Keppie's process was to ensure comparable and objective appraisal of the two options. While it was clear the Yorkhill Trust had issues, which were responded to, about the short term costs in the Keppie's work at no stage prior to receiving the Trust's consultation response was there any indication that further estates review was required to inform decision making. The Trust's brief for the Armitage review is not comparable to the one which was the basis of the earlier reports. In addition, both Atkins and Keppie have raised concerns that the works proposed by Armitage could be undertaken while the hospital is still functioning.
- 8.9 Overall, it is not clear that the Armitage proposals could provide a durable and high quality patient environment for the 15 years suggested and, although, estates issues are not definitive in making this decision, the Keppie's and Atkins work appear to offer a more robust and comparable capital cost backcloth for the Board's decision.

## **9. CONCLUSIONS**

- 9.1 The beginning of this paper posed two key questions for the Board to consider in concluding its decisions on maternity services. These questions were:

### **Has the decision making process been appropriate?**

In reflecting on this question a number of important points:

- we have run the most extensive and engaging preconsultation process ever undertaken in Greater Glasgow;
- the formal consultation process has included extensive information and events to encourage public and professional participation;
- MATNET has ensured that interest groups with an ongoing interest in maternity services have been able to fully express their views;
- our public involvement network have led a substantial effort to ensure the engagement of a wide range of community groups;
- key clinical groups have had a series of opportunities to express their views at different stages in the process;
- a wide range of local and external advice has been generated.

**All of this activity should lead us to conclude that the consultation process has been appropriate.**

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Turning to the second key question.

**Have the responses to consultation highlighted significant issues which challenge our consultation proposals specifically:**

- **The closure of a maternity hospital is required and pressing.**

The consultation process has confirmed the strength and degree of the professional concerns that the status quo is not an option to provide safe and sustainable services. That view is supported by the Local Health Council, a number of Local Authorities and other NHS Boards. It has been challenged by a range of political and public responses essentially on the basis of optimistic and unsupported statements about potential ways of sustaining three sites or future population growth. No challenge has emerged which would lead us to conclude that we could safely ignore clear clinical advice.

- **The closure of the QMH and the development of services at the Southern General Hospital represents the safest service for mothers and babies.**

Section 6 highlights the extent to which this proposition has been debated during the consultation period. A number of important and substantive issues have emerged from the consultation and the work of the Maternity Planning Group should give us confidence that these can be properly dealt with in safe and robust service arrangements if the QMH closes. We always knew that there was a difficult decision to make and that there would not be a local clinical consensus. We responded to that with a very open and externally advised preconsultation process, followed by very careful consideration by Board members of consultation responses, detailed further work and direct clinical presentations. We know there are strong views within Yorkhill and among neonatologists against our proposal and equally strong views among obstetricians and anaesthetists in support of our proposal. Taken a measured view of responses to consultation, the further clinical information we have considered and our own interactions with clinical staff should enable us to conclude that our proposal is the safest way forward for mothers and babies.

**The proposed recommendations to this paper reflect these answers.**

**MODERNISING MATERNITY SERVICES IN GLASGOW**

**Working Group Report  
a pre-consultation process carried out for the  
Greater Glasgow NHS Board**

**Working group Membership**

Professor Margaret Reid (Chair)	(University of Glasgow)
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Professor Michael Farthing	(University of Glasgow/Non-Executive Director GGNHS Board)
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**October 2003**

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## **Introduction**

Greater Glasgow NHS Board has been committed for several years to a process for reshaping its maternity services. After wide consultation, the decision was reached in 1999 by the (then) Greater Glasgow Health Board to reduce the number of maternity hospitals in the city from 3 to 2. There were three maternity hospitals in Glasgow, Glasgow Royal Maternity Hospital, the Queen Mother's Hospital (QMH) and Southern General Maternity Unit (SGH). In 2001 Glasgow Royal Maternity Hospital ('Rottenrow') closed and a new maternity hospital, the Princess Royal Maternity Hospital (PRMH), was opened, co-located with Glasgow Royal Infirmary.

Since 1999 data from Scottish Executive have shown that the birth rate within Scotland has continued to fall – in 2001 the number of births in Scotland were at their lowest number ever recorded, at 51,642 births, 1500 fewer than in 2000 – with births in Glasgow city being equally reduced (see Table 1).

*Table 1. Births in Greater Glasgow H/B by year (ISD data)*

<i>Year</i>	<i>Babies born</i>
99/00	11491
00/01	11084
01/02	11024
02/03	11300*

(\*includes deliveries from Vale of Leven Hospital, Argyll and Clyde NHS Board, following its closure)

A number of rooms at PRMH remained unopened, while bed occupancy fell from 73% and 78% for QMH and SGH in 1993 to 59% and 63% respectively in 2002; bed occupancy at PRMH rose from 67% to 74%<sup>1</sup>. Staffing difficulties in the maternity services in Scotland were considerable, with shortages in neonatology, and trainee shortages in anaesthesia, obstetrics and neonatal paediatrics. Additional constraints were imposed by the New Deal for Junior Hospital Doctors hours, and by changes in consultant job plans deriving from the new EU Directive on Working Hours. The need to consider the future of the Greater Glasgow maternity services thus became urgent and a decision required as to which maternity hospital should close. One commentator summarised the situation by writing "Resources relevant to the quality of care are spread too thinly over 3 maternity units".

## **Options**

The two options available to the Board are as follows:

- The closure of the Southern General Hospital Delivery Unit and expansion of facilities at the Queen Mother's Hospital to deal with additional deliveries
- The closure of the Queen Mother's Hospital and expansion of facilities at the Southern General Hospital Delivery Unit to deal with additional deliveries

## **The Pre-consultation process**

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<sup>1</sup> These figures are for overall adult bed occupancy and include pre- and postnatal beds. The rise at PRMH is partly explained by the closure of Rutherglen maternity hospital during that time period plus a change of other policies which affected bed occupancy.

This report is part of a consultation process which follows the guidelines on consultation and public involvement issued by the Scottish Executive in May 2002. The current guidance requires a pre-consultation stage to any major service change proposal to gain the views of key interest groups on a range of options. A pre-consultation Working Group was established in May 2003, the *Modernising Maternity Services Working Group*, to consider both options available to the Board. The remit of the Group is as follows:

- *Comprehensively review and provide advice how to provide a modern, safe and sustainable maternity delivery services for our population as the final stage of implementing of the Maternity Services Strategy*
- *Carrying out its work in a fully engaging, transparent and accessible way*  
(Minutes, GGNHS Board Meeting 20<sup>th</sup> May 2003)

The report which derives from the pre-consultation process described below concludes with a number of recommendations which will be presented to Greater Glasgow NHS Board in October 2003. At that meeting reports will also be presented by MATNET (a city-wide umbrella group representing a range of voluntary maternity groups) and by an informal group of senior midwives from the 3 Units, following a seminar at which their views were reported. These reports will inform the Board which will then reach a decision, subject to a formal 3 month consultation period.

The Working Group has, during the pre-consultation stage, gathered information on this complex issue in a number of ways;

- 1 The Working Group visited the 3 maternity delivery units in Greater Glasgow and met with staff on-site.
- 2 Leaflets were sent to a wide range of professional and other groups on the Greater Glasgow NHS Board mailing list to inform them of the process and invite individuals and groups to give evidence in August on the topic of the maternity hospitals and the experiences of staff working in the hospitals. The Working Group held eleven “evidence” sessions for clinical and non-clinical staff (Appendix 1). Evidence was heard from 85 individuals, including representatives from professional organisations, staff from clinical, midwifery and nursing backgrounds, Support Groups, representatives from the Local Health Council, MSPs and others. Advance notice of these sessions was advertised through the media to invite members of the public to attend.

More than 55 written submissions were received from many sources within United Kingdom. (Appendix 2).

- 3 External clinical advisors were consulted at the beginning and end of the pre-consultation stage. Nine individuals were nominated by their professional bodies; expertise covered obstetrics, anaesthesia (both paediatric and adult), neonatology, neonatal surgery and midwifery (see Appendix 3). The majority of expert advisors visited Glasgow twice and were given a tour of the hospitals prior to meeting the Working Group. The concluding session had 8 of the 9 present; all were asked to indicate their recommendation about which hospital to close, whilst one expert sent his comments in writing with a recommendation contained with the submission.
- 4 The Working Group had access to relevant documents which are referenced in this report.
- 5 The Working Group attended a meeting of MATNET as observers, when the various options were discussed.

The process outlined above proved invaluable to the Working Group, allowing them to identify and focus on the key issues. The Group was particularly impressed by the commitment, enthusiasm and indeed, passion of those health professionals and others who presented evidence to the Group.

*'Givens'*

In the process of consultation the Working Group took certain issues as agreed. It did not consider further, for example, the earlier debate about '3 to 2', ie the reduction in the number of maternity hospitals in Glasgow. It was understood that the choice of closure of a maternity hospital would not include consideration of the recently-opened PRMH.

It understood that, in keeping with its 'modernising' remit, the Working Group would consider long term solutions to the maternity services and indeed embrace this opportunity to offer recommendations to develop services.

The Group were aware of the decisions stemming from the Acute Services Review and the ultimate reconfiguration of adult hospitals within Glasgow which would result in in-patient services being split between three sites, Gartnavel General Hospital, the Southern General Hospital and Glasgow Royal Infirmary<sup>2</sup>.

It was known that from April 1<sup>st</sup> 2004 the reorganisation of the National Health Service in Scotland would strengthen unified working and that recommendations to the maternity services should fit into, and also ideally benefit from, opportunities arising from the new structure.

It was recognised that Glasgow maternity services did not routinely scan women at 20 weeks with an anomaly scan. Routine scanning is currently under review by NHS Quality Improvement Scotland. One possible outcome of the review would be that in future a 20 week anomaly scan would be routinely carried out in Glasgow with greater possibilities to diagnose fetal anomalies.

Finally, but importantly, the Working Group understood from professional documents that the process of childbirth cannot be without risk. Thus maternity services should be set up with a view to *minimising the risk to mother and infant*.

### **Findings from Pre-consultation**

#### *The Glasgow population*

The context within which maternity services are provided in Glasgow is important to remember. The *Confidential Enquiries into Maternal Deaths in the United Kingdom*, an influential triennial review published on behalf of the joint Departments of Health for the 4 UK countries (CEMD 2001) reported in their 2001 publication that women from deprived areas were more likely to have poor maternal-fetal outcomes and greater morbidity associated with childbirth. More women in Glasgow fall into this category than anywhere else in Scotland, with 48.4% of women at PRMH falling into the 5<sup>th</sup> (most deprived) quintile, 44.3% and 47.2% from QMH and SGH (*Expert Group on Acute Maternity Services Reference Report, EGAMS 2002*)<sup>3</sup>.

<sup>2</sup> Ambulatory Care and Diagnostic Centres will be located at Stobhill Hospital site and the Victoria Infirmary Hospital site.

<sup>3</sup> EGAMS – The Expert Group on Acute Maternity Services produced two reports, one an overview and one a reference report. In a letter dated 25<sup>th</sup> September 2003, M.McGuire notes "The position of both reports is clear, both reports were agreed by the EGAMS membership, are integral components of EGAMS and complement each other. Neither report takes precedence over the other, the reference document being in greater detail and outlining the available evidence and consensus opinion while the overview report is a summary".

As well as deprivation factors, figures show that the age of first pregnancy across Scotland has risen with the mean age of first pregnancy being 26. Approximately 17% of Glasgow women giving birth were aged 35 and over, with PRMH having the lowest percentage (15%), SGH, 17% and QMH the highest with 20% (EGAMS 2002). Additionally, it was reported at the evidence sessions that there was an increasing number of women giving birth who had existing medical conditions (for example eg diabetes, heart problems), who were having multiple births, and an increasing number of women with assisted conceptions (and resultant multiple births). Finally comment was made about obese women giving birth, a risk factor for thrombo-embolism. These are all factors which would lead to the categorisation of the mother as 'high risk' (CEMD 2001).

### ***Maternity Hospitals***

PRMH is a new build located on the site of Glasgow Royal Infirmary. The hospital has 2 theatres with a recovery area and an area suitable for the care of critically ill women, 4 high dependency beds<sup>4</sup>, 123 obstetric beds catering for different risk groups, a midwives birthing unit, prenatal assessment unit, early pregnancy unit, daycare, ultrasound, an antenatal clinic and a neonatal intensive care unit (NICU). In 2002 4,719 women were delivered at the hospital (ISD data) although the hospital has capacity to deliver 6,000-6,500 women per year. Data reported in EGAMS (2002) show that 6.4% of women had a parity of 3+ while the hospital had a Caesarian section rate of 21%. Plans are under way to move in-patient gynaecology services into the PRMH.

QMH is co-located on the Yorkhill site with the Royal Hospital for Sick Children (RHSC). QMH has 70 obstetric beds, 4 early pregnancy assessment beds; 14 delivery rooms including 4 beds in the Tower suite (low risk) and 1 high dependency bed. It has 2 obstetric theatres and a daycare unit with 12 places. QMH contains prenatal/fetal medicine services, with specialist skills required for intrauterine therapy and a NICU. Data show that in 2002 the QMH delivered 3,232 women (ISD data). Data reported in EGAMS (2002) show that 7% of women had a parity of 3+ while the hospital had a Caesarian section rate of 26.3%. The RHSC is a paediatric hospital which serves the West of Scotland, and is the Scottish Centre for neonatal cardiac surgery. The Yorkhill site hosts a number of additional clinical and support services which are shared by the two hospitals.

The SGH, an adult hospital with a range of services, has a maternity hospital within its complex and a NICU. It has 52 obstetric beds, 10 delivery rooms, 1 obstetric theatre and 5 high dependency beds. Currently refurbishment work is underway to provide in- and outpatients gynaecology services and daycare. On-site are other adult departments including medicine, surgery, the Institute of Neurological Sciences and the Queen Elizabeth National Spinal Injuries Unit for Scotland which provides services to the whole of Scotland. Data for 2002 show that SGH delivered 2,714 women (ISD data). Data reported in EGAMS (2002) show that 8.3% of women had a parity of 3+ while the hospital had a Caesarian section rate of 21.4%.

### **Clinical Issues**

#### *Pre- and early pregnancy Care*

All three hospitals provide pre- and early pregnancy care. The value of these services was stressed and it was seen as important that they should be made easily accessible for women.

#### *Antenatal Care*

Women receive most of their maternity care in the community and spend only a few days during and after delivery in hospital (in 2002 30% of mothers were discharged by or on the second day

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<sup>4</sup> These rooms are used for women when it may be beneficial for them to be more closely monitored than normal or where there is an extreme and life-threatening situation such as a severe haemorrhage or severe pre-eclampsia/eclampsia

postnatally at QMH and SGH, with nearly 40% of mothers at PRMH discharged at that time). Organisation of antenatal services is therefore very important.

Different models of antenatal care operate across the city. The PRMH midwives work within small teams which cover a set geographical area and link to a named consultant and groups of GPs. These midwives also provide intrapartum care in the midwives birthing unit where they provide care for women experiencing normal labour and delivery. The QMH operate a system of midwife-led outreach clinics within health centres and general practices. The SGH reported consultant-led antenatal care with midwifery teams seeing patients in general practices.

Daycare facilities are offered by all three hospitals across the city. Midwives from PRMH reported on the Rutherglen Maternity Care Centre (MMC), opened to ensure good antenatal services were provided locally after the closure of Rutherglen Maternity Hospital. The Centre offers community midwifery, scanning and day care services with consultant clinics for women who require that input. A comparative evaluation of this MMC with one at Millbrae (attached to the SGH) reports that while they are well received by women they are both currently under-utilised (see Shields *et al*, nd).

In the evidence sessions midwives reported concern that with closure of one maternity unit women from deprived areas would have greater difficulty in accessing the antenatal services. ‘Women from social deprived areas need local services’. The issue of transport was raised, both in terms of lack of available car parking for visitors and public transport.

#### *Midwifery-led care within the hospital setting*

Whilst planning for maternity services rightly focuses upon the availability and response of services where mother and baby are potentially at risk, the majority of women will experience an uneventful delivery. Many women in every city, including Glasgow, will have been identified as at ‘low risk’ and will have an uneventful childbirth. Earlier policy documents (for example, “*Changing Childbirth*,” Department of Health 1993 and Scottish Office Home and Health Department [1993]) recommended that for these women services should become midwife-led, and that midwifery units should be developed in maternity hospitals, a point re-emphasised in EGAMS (2002). It is important that services are configured to respond to their needs.

All three hospitals had ‘low tech’ rooms available for low risk childbirth. Experts encouraged us to emphasise the value of the midwifery delivery beds in the Glasgow hospitals and to use this opportunity to develop further the concept of midwifery-led care for low risk women.

QMH and SGH have both received UNICEF baby friendly awards for promoting breastfeeding, QMH among the first in the UK to receive the award.

#### *High risk births*

Although the United Kingdom is now fortunate to have a very low incidence of maternal mortality from childbirth, nevertheless a foundation stone of the services are that they are organised to ensure maternal safety. The Confidential Enquiry notes that “Women at known higher risk of complications should not be delivered in maternity services separate from acute hospital facilities (p14)” and that “tertiary centres accepting the care of women with medical complications in pregnancy must be staffed at consultant level by physicians with relevant specialised medical experience and knowledge of obstetrics” (p19, CEMD 2001).

#### *The emergency situation*

Few women will require access to an Intensive Therapy Unit (ITU) during childbirth (CEMD 2001). There is, however, wide recognition that rapid access to ITU is an essential component of

well-organised maternity services, CEMD (2001) states that “in over 31% of deaths in this report there was a recorded need for intensive care”. Statistics vary but CEMD (2001) quotes 1 women in 1000 being admitted to ITU and Scottish data confirm this figure. In Scotland 40 obstetric cases were admitted to Scottish ITUs in 1999, 50 in 2000 and 59 in 2001. The two main SICS (Scottish Intensive Care Society) diagnoses were post-partum haemorrhage and toxæmia/PIH/eclampsia/pre-eclampsia (Scottish Intensive Care Society Audit Group). Hospitals such as QMH and SGH would expect to transfer no more than 5 women per year to ITU. In NHS Greater Glasgow there were 9 admissions in 1999, 12 in 2000 and 11 in 2001, with one death in 1999.

All three maternity hospitals have access to ITU, the PRMH and SGH with ITU on-site, with the QMH off-site. EGAMS (2002) notes that Level III centres (i.e. consultant-led specialist maternal-fetal units with more than 3,000 births)<sup>5</sup> should have “on-site adult intensive care”(p55). Since the availability of emergency care was presented as a critical issue for the services considerable time was spent in the evidence sessions on the protocols and procedural responses of the three hospitals to emergency situations.

### *High Dependency Unit*

At the evidence sessions midwives from the three maternity units explained the risk assessment procedure used in their units to decide if a woman requires high dependency care. Generally the risk assessment approach was the same in the three units.

Models differ with respect to staffing the labour ward, and to providing cover for the high dependency unit.

- At the PRMH the staffing model was described as a core team of midwives dedicated to the labour ward. Their midwifery birthing unit is staffed by community midwives who come into the unit on a rota basis.
- The QMH staffing model was described as a core staff of midwives dedicated to the labour ward, complemented by midwives who are part of the hospital rotation scheme, i.e. they spent time in all areas, antenatal, intrapartum, and postnatal care. Additionally, community midwives spend 1 week per year in the labour suite as part of their personal development plan. QMH also employ operating department practitioners (ODPs) who are trained in critical care procedures; currently of the five, two have a nursing background.
- The SGH has a core team of midwives supported by a rota of midwives from the community, who split their time 50/50 between intrapartum care and community midwifery.

At each hospital midwives working in the labour wards had completed appropriate training (e.g. the advanced life support obstetrics [ALSO] courses).

In addition to midwife cover, in all three maternity units obstetricians and obstetric anaesthetists provide care to women requiring high dependency care. At present only the PRMH fulfils the requirements laid down in EGAMS (2002) for full obstetric anaesthetic consultant cover on a 24 hour basis. Anaesthetic rotas are an area of concern for GGNHS service planning although it was suggested during the evidence gathering that a separate obstetric anaesthetic consultant rota would be possible on the second site when services were reorganised.

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<sup>5</sup> There are two Level III centres in Glasgow, PRMH and QMH; with SGH designated as Level IIc, delivering 1000-3,000 births per year (EGAMS 2002).

*Emergency responses*

It was emphasised during the evidence sessions that on many occasions a maternal emergency cannot be predicted. Thus while in all three hospitals women were stabilised on-site, the importance of rapid access to adult back-up services (for example interventional radiology) to carry out life-saving procedures was said to be paramount. Staff from PRMH and SGH described how staff from on-site adult ITU would come to the labour ward high dependency area to provide additional expertise in emergency situations and contribute to the decision of transfer of the mother to an adult ITU. Staff from PRMH reported a demonstrable benefit of the current situation following the move from Glasgow Royal Maternity Hospital (Rottenrow), which was a stand-alone maternity hospital. The Expert Advisors noted that the availability of on-site gynaecology staff (particularly those with an interest in gynaecological oncology) with experience of dealing with major maternal haemorrhage, was an additional advantage of obstetric and gynaecology services being co-located. Whilst QMH does not have direct access to this immediate level of specialist assistance it does have access to an “obstetric crash team”<sup>6</sup> the composition and speciality of which is the same as the HDU team.

Staff would access the ITU Bed Bureau to check availability, and if transfer off-site was required the “Shock Team”<sup>7</sup> would be notified and with the necessary expertise the patient then be transferred. This would occur when an ITU bed was not available at the PRMH and SGH on-site, or in the case of QMH, because there is no ITU facility on-site. At the PRMH and SGH transfer of a patient to an available ITU bed on-site would be carried out by the obstetric HDU and on-site ITU teams and the “Shock Team” would not be utilised.

As well as the availability of the unit obstetric anaesthetist, PRMH and SGH can call for consultant anaesthetic assistance from the hospital ITU where there would also be another trainee on-call. This flexibility was confirmed by the expert advisors to be important since at the time of an emergency the on-site anaesthetist may be unable to respond with help (for example engaged in theatre with another birth).

At QMH a call for additional expertise would be taken at the Western Infirmary for adult intensivists to attend QMH. The mother would be stabilised and transferred to an ITU bed (at the Western or another available bed in the city) for interventional procedures. Staff at QMH noted that they had radiology on-site in the form of a paediatric radiologist and additional anaesthetic expertise. It was felt by the expert advisors that whilst this would be an appropriate response in an emergency, it was not a basis on which to plan future services and would leave clinicians and Greater Glasgow NHS Board exposed and potentially open to criticism. It was agreed that in an emergency situation it was essential that staff with experience of dealing with maternal haemorrhage were immediately available and that paediatric-trained staff were unlikely to have the same level of experience.

During the evidence sessions some commented that in all three hospitals transport of a mother in a critical condition to ITU was by ambulance. It has been confirmed that at the PRMH there is direct access to the ITU and other medical and surgical specialties via internal lifts and corridors within the hospital. At SGH transfer is across site by a dedicated ambulance. Oral evidence led us to understand that transferring a woman in an obstetric emergency situation was difficult and time-critical. Women were reported not to respond well to transfer, a statement supported by research (e.g. Durairaj *et al* 2003) and the CEMD (2001). However written evidence, confirmed by the

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<sup>6</sup> “Crash team,” a team with the necessary clinical expertise who are called to an emergency on-site, eg cardiac arrest, major haemorrhage.

<sup>7</sup> Shock team, a team with the necessary clinical expertise to transfer critically ill patients between sites, based at Glasgow Western Infirmary

expert advisors, noted that the critical timescale is not in the transfer of the mother to the ITU but in bringing ITU clinical expertise to the critically ill women in the HDU.

#### *Access to Blood and Lab facilities*

There was concern expressed in the evidence sessions that all hospitals did not have speedy access to high quality blood and blood products and laboratory services. This was pursued in the sessions and the Working Group are satisfied that all three hospitals have appropriate access to blood products and laboratory services.

#### *Gynaecology services in Glasgow*

All three hospitals offered gynaecology services. Although the general view was that the location of gynaecology in relation to maternity hospitals should not be a deciding factor, it was agreed that co-locating obstetrics and gynaecology on the same site was of value, particularly to staff in training since junior hospital doctors benefited from the ready exposure to both specialities.

#### *Maternal-Fetal Medicine in Glasgow*

In Glasgow there are two units which practice the sub-speciality of maternal-fetal medicine, at the PRMH and the QMH, although staff at PRMH preferred the term ‘maternal-fetal medicine’ and QMH, Fetal medicine. Both units are of international standing and with a strong research profile which bring credit to the Glasgow health services. It was suggested by some staff that the research in the PRMH was more oriented towards maternal conditions and at QMH, fetal problems. At QMH research on fetal surgery was an important development and one which clearly derived benefit from the co-location with RHSC. Both units have a substantial training role.

### **Neonatal Care**

All three maternity units in Glasgow have an on-site NICU and therefore access to neonatal services including intensive care and special care. In addition to normal post-natal care, all three provide neonatal medical care to very sick neonates.

In the PRMH NICU there are currently 10 Intensive care cots and 23 special care cots which if working at full capacity these could be increased to 12 and 32, respectively. The QMH has a NICU with 10 intensive care cots and 18 special care cots. On-site is the Regional Genetic Medicine Services and infants at QMH also benefit from other services available at RHSC, including ECMO (see below). In addition the QMH is able to provide neonatal intensive care for surgical cases treated at RHSC, and intensive care for neonates with complex metabolic, autoimmune and cardiac disorders. The NICU at SGH is smaller than the other two with 4 intensive care cots and 17 special care cots.

While these units vary in capacity and staffing levels there was less discussion about the neonatal services in the evidence sessions, the view being that they were adequate. On the site visits, repeated comments were made in all three units about the difficulties of recruiting and staffing the NICUs with appropriately trained staff, especially neonatal nursing staff, which any reorganised service should help ameliorate. Such staff shortages are nationally recognised (BAPM 2001). The focus of concern in the evidence sessions related to the location of QMH adjacent to the RHSC, and the latter’s role and services as an important paediatric hospital in Scotland.

#### *Neonatal surgery*

EGAMS notes that maternity units should have “neonatal intensive care and neonatal surgery either on-site or close-by” (EGAMS 2002, p55). Likewise, the British Association of Paediatric Surgeons recommends that surgical neonates are managed within a paediatric surgical unit which should be

closely linked to a neonatal intensive care unit (BAPS 1999). RHSC is the Scottish referral centre for neonatal and paediatric cardiac surgery in Scotland but also carries out a wide range of surgical procedures.

We were advised of the difficulties associated with closing the QMH NICU for post-surgical neonates. It was felt that these neonates would require NICU-based care which would not be available. Others, including the expert advisors, have suggested that elsewhere neonates are either transported back to their host NICU on the same day, if the surgery was minor, or would be cared for in the PICU until they were sufficiently stable to be transported.

It is widely agreed that the close integration of maternity and neonatal services provides a high quality of care for the sick neonate requiring medical or post surgical intensive care. We received evidence from staff across Scotland vouching for the excellence of the existing service. Staff emphasised the concern and anxiety of parents that resulted from their infant undergoing surgery. The Working Group would not disagree, but figures in Table 2 show that the numbers of the very young neonatal surgical cases of RHSC were small, and of those very young neonates admitted for surgery, the majority were transported from other hospitals. Accommodation for parents would already be an important aspect of service delivery which had been managed successfully.

Table 2. All neonatal admissions to RHSC under 28 days of age (ISD data)

<i>Provider</i>	<i>Yorkhill site</i>		<i>Transported to RHSC from elsewhere</i>	
	<i>2001</i>	<i>2002</i>	<i>2001</i>	<i>2002</i>
No of surgical episodes <sup>8</sup>	81	80	192	213
No admitted at 0 to 1 day old	26	29	38	37
No operated on at less than 24hrs	7	8	1	4

In the evidence sessions concern was expressed about transporting infants, especially in relation to the neonatal surgical cases. Neonatologists would probably agree with the statement that the best transport system is the mother herself, *in utero*, but the expert advisors noted that across the UK neonates are being transferred across the services on a daily basis. The BAPS ‘*Paediatric Surgery: Standards of Care*’ (BAPS nd) states that “Retrieval of ill infants and children by a team from the specialist centre is well established practice. Premature infants with respiratory distress and infants with severe cardiac disease are regularly transferred to specialist units. Equally, infants and children requiring specialist paediatric surgical management can be transported safely to a regional centre after initial stabilisation” (BAPS, nd,p17).

Within Glasgow neonatal transport services have improved considerably in recent times. Funding received at the beginning of 2003 has contributed significantly to the establishment of a dedicated infant transport ambulance, the new system (the National Newborn Transport Services (NeTS) Western Service) now being in place. It is a one phone call system with a co-ordinator with out-of-hours medical and (increasingly) nursing cover. The system anticipates between 400-500 annual transfers and since it was set up in March 10<sup>th</sup> 2003, has recorded no deaths and no major morbidity due to transfer. As with the NICUs, there is reported staffing difficulties which have not been completely resolved; transport fellows are reported to be in place, assistants have still to be trained but this is in progress.

### **Research and Teaching**

<sup>8</sup> The reasons for surgery/major investigation were mainly cardiac, abdominal and digestive.

Research is carried out at PRMH and QMH, the latter with links to RHSC. As noted above, both units have an international profile. There are University of Glasgow staff at PRMH (Obstetrics and Gynaecology) and honorary University staff at QMH, with University staff being based in RHSC, notably in Medical Genetics, Child Health (including the PEACH Unit) and Child and Adolescent Psychiatry. Most of the academic groupings fall within the new academic Division of Developmental Medicine at Glasgow University<sup>9</sup>, which is split across the two sites. There are no academics in the SGH maternity services.

Research in both PRMH and QMH is associated with the Maternal-Fetal medicine. In the evidence sessions we were told that the 'Yorkhill' site is highly research active and has good collaborative research links between QMH and RHSC. There was concern expressed in both the oral and written evidence that relocation of the maternity hospital would reduce these research links and the productivity of the teams. It was agreed by the Working Group that proximity can facilitate informal research discussion and it acknowledged that good collaborative working links were well-established within the Yorkhill site. However, many collaborative research projects are successful with teams located geographically distant and staff on both sites have run research projects which have had national and international collaborators.

We heard from all three hospitals about the importance of training and the value of the different arrangements for training junior staff. Difficulties were described to the Working Group of providing optimum training to junior staff if QMH were to close, with junior medical and nursing staff losing the opportunity to experience the 'natural' linkage between maternity and paediatric care. The Working Group would hope that with the reorganised services training should be arranged so that all junior staff in specialty training across Glasgow should be exposed to such valuable lessons.

### **Other Services**

During the course of the evidence sessions the Working Group heard evidence from a wide range of staff working in services associated with maternity care. Services were located in one hospital but some were offered with a city-wide, West of Scotland or a national remit. Some at QMH operated in conjunction with RHSC. There was considerable concern that closure of a hospital would have a 'domino' effect and would result in closure of the linked services.

We comment below only on those services drawn to our attention in the evidence sessions and any view should be qualified by an awareness that we have only heard from some services and staff and that we have not carried out any external evaluations. There were a number of services which appeared to the Working Group to represent 'best practice'. It may be appropriate to consider whether they should be made available to women across the city.

- Clinical services include the national PKU services based on the Yorkhill site, with laboratory services and clinical expertise available. The service offers advice, treatment and support for individuals who have PKU and their families and has been operating for a number of years.
- Additionally, we heard of the access of QMH patients to specialised paediatric visual electrophysiology, audiology and foetal, neonatal and paediatric MRI imaging services, renal services and clinical psychology. Other clinics to which mothers at QMH have access – and which we heard about - are a diabetic pregnancy service and a medical-obstetric clinic. Others yet are noted on information received about the QMH.

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<sup>9</sup> Child and Adolescent Psychiatry is part of the Division of Community Based Sciences

- SGH have a planned specialist in-patient Mother and Baby Unit for Perinatal Illness to be opened early in 2004; the hospital also has an on-site ophthalmologist who consults in the maternity unit, one of whom is a joint adult/paediatric ophthalmologist. Information about the hospital lists further clinics provided on-site.
- PRMH offers a range of clinical services. One mentioned on a number of occasions was the Women's Reproductive Health Service based in PRMH and serving disadvantaged women with medical and social problems in pregnancy. The Unit delivers local services across the city and liaises with other services such as social work.

Each hospital also offers a range of support services, not all replicated elsewhere. All, however, offer bereavement services. All hospitals have rooms where families with terminally ill babies may spend time and stay overnight; QMH and SGH have support from voluntary organisations for bereaved women and families. We heard from two Chaplains of the value of their services.

All hospitals have some provision for women and their partner to stay overnight (for example, if they have a sick infant in the NICU). The family approach was reported as well developed at the QMH which has access to the Ronald Macdonald House, which is a registered charity and which provides accommodation for parents who have a sick infant on the Yorkhill site (annually for over 500 families from all over Scotland).

The Yorkhill site contains several family support services including the Family Information and Support Services, a Child Protection Advisor and Domestic Abuse Midwife and a Young People's service including a youth worker. These services are based on-site, shared between the two hospitals, RHSC and QMH and funded by Yorkhill Trust. The Family Information and Support Services offers families whose child was in RHSC or mother in QMH access to the Internet as well as practical and emotional support. A crèche was introduced in 2003.

Staff from two voluntary organisations (SANDS, Miscarriage Association) who offer their services in the maternity hospitals presented evidence. Neither group offered a view about preferred location. Both groups were anxious that changes to the services would result in difficulties in continuing the services; "we're keen that the service is maintained; we just need a place to meet".

### **Qualitative issues**

A significant feature of the evidence sessions was the importance of the qualitative aspects of the service which staff feared would be lost in a relocation. Staff from all hospitals commented on the value of having colleagues on-site to whom they could ask ready advice about a patient, or who when contacted, could attend an on-going consultation. Each had clearly built up their own supportive professional networks which varied depending upon the group and the hospital.

Staff also reported anxieties around professional/patient consultations in a reorganised service. On the other hand, the Working Group also heard of a reported lack of equity with existing professional contacts, with staff noting difficulties in obtaining professional advice from other clinicians not on-site.

The Working Group recognises that changes to the services will foster some working relationships while others would require more effort to be maintained. While access to colleagues may not be so easy it is hoped that new communication patterns will be established. Although we were told that “decision-making across sites is more difficult”, many staff already work across sites and the reported main frustrations tended to be practical, the time-consuming nature of travel, finding car-parking and so on. Mention was made to existing working links between hospitals for professional practice and research.

### **Location, estates and transport**

#### *Location*

A brief description of the location of the hospitals appears in the introduction to the report. EGAMS listed 20 maternity hospitals in Scotland, with 17 being located on the same site as an adult hospital with ITU services. More recent information from the Scottish Executive<sup>10</sup> noted that 19 hospitals were either co-located or to become co-located with adult hospitals.

#### *Estates*

Estate issues are described at the end of this report as they were not a priority during the pre-consultation process. For that process we concentrated upon clinical and related issues. Nevertheless, the structure of the respective buildings and their maintenance are central to the maternity services. Costs relating to estate matters will contribute significantly to the final decision by the Board, and have contributed to our final decision.

Our advice on estate issues derives from a report of Keppie Design Ltd and Currie and Brown, commissioned by the Board to provide an appraisal of relative capital costs between the two options and building on an earlier report from WS Atkins 1997. The report is available from NHS Greater Glasgow. Since our remit was to consider recommendations which look to the future, we have focused not upon a short term option (Option 1) but on Option 2, 5-10 years.

The Keppie Report summarises the options and costs, which are indicative, and notes “We believe that to allow the QMH to continue to operate, without risk of potential building failure, the backlog of upgrade work must be completed, at worst, within a 5-10 year period. Furthermore, the work, which is required to satisfy the statutory requirements, should be considered as urgent and be carried out within the same timescale. It has not been possible within the timescale of our study to consider in detail the disruption that will be created by these works. We agree with the WS Atkins report that it may not be possible to carry out these works whilst the QMH remains operational.”

Detailed costs for Option 2 to the SGH total £7.1M; to QMH, £19.5M.

#### *Transport*

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<sup>10</sup> Letter from M.M.McGuire dated 16.09.2003

Although the majority of submissions focused upon clinical issues, the topic of transport to the respective hospitals was a recurrent theme in the pre-consultation process, and one stressed in written evidence from (primarily) users of the services and family. Transport issues in relation to the services are undergoing a review by the Greater Glasgow NHS Board and it is worthwhile here only to note that they form an important consideration in any future plans.

### **The preferred long-term solution**

A view expressed in the evidence sessions by staff from all three hospitals was that the preferred long-term solution, acceptable to all, was that the maternity and paediatric hospital should be located on an adult site. This point was expressed repeatedly, and echoed by the expert advisors. They acknowledged that many cities have not yet achieved this solution. The Working Group was not given a brief which explicitly encompassed consideration of the RHSC but feel that it would misrepresent the evidence, both oral and written, to ignore this important statement about the future organisation of the maternity services in Glasgow.

### **In summary; key issues**

The Working Group received a substantial volume of evidence, both written and oral, about the services. The Group also met with expert advisors with whom they discussed critical issues to be considered when planning the future services. The report and the recommendations derive from these sources, as well as from national sources of professional guidance.

*Maternal safety:* Although maternal mortality from childbirth is now very low, nevertheless the services are organised to ensure minimum risk to the mother giving birth. National and professional documents support the decision of locating a maternity hospital on-site with a hospital with adult ITU services.

The trend of maternity hospitals in Scotland has been towards relocation to an adult hospital with on-site adult ITU facilities with 19/20 hospitals now moved to, or moving to, a site co-located with adult services. QMH will remain as the only maternity hospital without adult ITU on-site.

Expert advice as well as research evidence suggests that transfer of mothers in an emergency condition is time-critical and that mothers do not transport well. Locating maternity services (for low and high risk mothers) with on-site ITU facilities allows a rapid transfer of the woman if there are complications during labour or delivery.

As well as stressing the importance of transfers, many acknowledged the importance of providing access of expertise from an on-site adult ITU to the mother in an emergency situation; QMH does not have rapid access to adult health services which is seen as a vital component when planning maternity services for the future.

Maternal emergencies were seen as less predictable than neonatal emergencies. This would increasingly be the case if the Glasgow maternity hospitals adopted a 20 week routine anomaly scan which would provide greater likelihood of predicting the need for neonatal surgery.

Very small numbers of critically ill women will be transferred from any hospital in one year. Experience of junior medical (obstetric and anaesthetic staff and midwives) of managing life-threatening emergency situations in the mother is therefore likely to be very limited. Staff on an adult site (notably medical, anaesthetic, and gynaecological specialties) have more routine exposure to adult emergencies and hence more experience.

National guidance for women who might be categorised as 'high risk', (eg from areas of deprivation, older mothers, multiple pregnancies and/or who have existing medical conditions) is

that they should give birth to a hospital with on-site ITU facilities. Statistics relating to Glasgow women suggest that a significant proportion will fall into a high risk category.

*Neonatal safety:* It was generally agreed that although staffing of the NICUs in Glasgow was part of a national shortage, the NICUs were thought of as appropriate in their standard of care.

Neonatal transport within Glasgow is now organised to offer an appropriate standard to provide safe transport to neonates who require transporting across the city.

Neonates can be safely transported to and from RHSC before and after surgery from other hospitals; it was stressed that such transport takes place elsewhere in the UK on a daily basis.

*Service organisation:* It was noted that the units worked to different protocols and practices. Services across the three units were not equitable. Experts stressed the importance of the development of midwife-led care where appropriate.

*Research:* It is clear that research in this broad area is strong and that any changes to the service should ensure that research strengths are maintained.

*Estates:* The study undertaken by Keppie Design and Currie and Brown into the capital costs associated with the various options at both QMH and SGH offered substantially different costs associated with refurbishment. The report concluded that in the medium term the QMH might not be able to provide maternity services while substantial refurbishments were being made to the building.

*Transport:* Transport issues were seen to affect both patients and staff. We were asked to make strong recommendations to ensure good transport provision in any future services.

**Recommendations for modernising the maternity services in Glasgow**

**Recommendation 1**

**Transfer maternity services from Queen Mother's Hospital to the Southern General Hospital site, with the exception of the QMH Fetal Medicine Unit.**

- It is important that following the formal consultation process and once agreement has been reached about the shape and form of the future services, implementation should be carried out quickly, with a Steering Group established to oversee the process.
- Closure of the QMH would result in additional neonatal transfers to RHSC; the Working Group strongly suggests that the service requirements of the transfer services are considered as a priority.
- the proposed changes would mean that the SGH NICU would require additional resourcing in terms of staffing and equipment. The rationalisation of the services should facilitate this process.
- While it is not evident that the RHSC would require a substantial NICU on-site, the staffing complement should be considered to ensure that there is sufficient staff with NICU experience.
- The decision to transfer maternity services to SGH site was supported by the majority of the expert advisors.

**Recommendation 2**

**Maternity services should be organised as single integrated system across Greater Glasgow using agreed protocols and an agreed model of care for the two delivery units and community services.**

- Establishment of a single integrated system for maternity services would facilitate cross hospital working, integrate rotas for junior hospital doctors and unify models of care.
- Visible clinical leadership would be essential to drive forward the change management process needed to achieve an integrated maternity service, which has the ultimate aim of improving services for patients and their families and improving the working environment and conditions for staff.
- The reorganisation should include a city-wide workforce plan which would incorporate training and development.
- We received a proposal for a Maternal and Child Operating Division in Greater Glasgow, responsible for developing a single integrated system addressing issues of equitable provision of care, funding and enhanced community services. The Working Group saw merit in this proposal if consistent with the other recommendations within this report.

**Recommendation 3**

**Existing quality services as provided are sustained and be made available across Greater Glasgow**

- It is important that changes maintain the excellence of Glasgow maternity services; this includes the many examples of good practice which are evident in the existing clinical services in one hospital/location but which at present are not always available on a city-wide basis. The implementation team should treat this as a priority.
- The examples of good support services should be equally sustained and made available on a city-wide basis where appropriate.

**Recommendation 4**

**Accessible antenatal and daycare services for the population of Glasgow should be enhanced.**

- Accessible antenatal and daycare facilities should be provided for all women within Glasgow and care is required to ensure that the closure of QMH does not reduce women's access to services. Women in socially deprived areas and women from ethnic backgrounds, in particular, need every opportunity to ensure easy access to care.
- The Working Group believes that a Maternity Care Centre facility should be considered for mothers in the West End.
- There were examples of good practice where midwives were expanding their role and offering broader range of support to women and this should be enhanced by developing the public health role of midwives.

**Recommendation 5**

**Existing midwifery service within the PRMH is encouraged and that midwifery delivery beds within SGH are developed, along with the relevant 'ethos' of a midwifery based unit.**

- Midwifery Unit at PRMH is utilized fully, and that midwifery delivery beds are developed at the SGH, staffed by appropriately trained midwives. Such a service should be aimed at low risk women, and should facilitate a midwifery ethos to birthing.

**Recommendation 6**

**The Fetal Medicine Unit should be transferred to PRMH**

- The Fetal Medicine Unit is recognised to be of international excellence and the Board, in bringing about changes to the service, should do their utmost to ensure that excellence in this area is built upon and developed.
- Staff should be offered every support for their research and the opportunity to build on their research strengths should be given high priority.

**Recommendation 7**

**That Greater Glasgow NHS Board, in its deliberations over transport issues as a result of the Acute Services review, should include a consideration of the impact on public/patients as a consequence of the proposed transfer of services from QMH to SGH.**

- The Working Group is aware of on-going work by an NHS Greater Glasgow sub-committee on transport issues. We ask that this committee consider this proposed service change as part of its remit.

#### **Recommendation 8**

**In coming to a decision about the future location of maternity services, Greater Glasgow NHS Board should also consider the long-term relocation of RHSC to the SGH site, taking into account the regional and national role of services provided by the RHSC.**

- It is acknowledged that any decision relating to RHSC would require appropriate consultation and be commensurate with the Board's overall strategic and financial plan.

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**Appendix 1. Evidence Sessions**

Danny Crawford, Local Health Council  
 Moira Ravey, Local Health Council  
 Patricia Bryson, Local Health Council  
 Caroline McCalman, Local Health Council  
 Louise Wheeler, Local Health Council

Alistair Bull, Chaplain, Yorkhill NHS Trust  
 Geraldine Dodd, Family Support and Information Co-ordinator, Yorkhill NHS Trust  
 Sheila Smith, Cardiac Liaison Team Leader, Yorkhill NHS Trust

Blair Robertson, Chaplaincy Co-ordinator, South Glasgow University Hospitals NHS Trust

Sandra White MSP

Julie and Jim Riley (parents)

Sue Forsyth, Chair of Partnership Forum, Yorkhill NHS Trust  
 Tom Holmes, Secretary of Staffside of Partnership Forum, Yorkhill NHS Trust

Dr Alison Wood, R&D Development Manager, Yorkhill NHS Trust

James Cassidy, Chair, Greater Glasgow Area Nursing and Midwifery Committee

Dr Peter Robinson, Consultant Paediatrician in Metabolic Diseases, Yorkhill NHS Trust  
 Dr Heather Maxwell, Consultant in Renal Medicine, Yorkhill NHS Trust  
 Dr Peter Galloway, Consultant in Biochemistry, Yorkhill NHS Trust  
 Dr Andrew Watt, Clinical Director: Diagnostic Imaging, Yorkhill NHS Trust  
 Dr Neil Geddes, ENT Consultant, Yorkhill NHS Trust

Dr Alison Robertson, Clinical Psychologist, Yorkhill NHS Trust  
 Dr Joyce Reid, Consultant in Anaesthesia, QMH/WI  
 Dr Michael Bradnam, Head of Clinical Physics, Yorkhill NHS Trust

Dr Alan Cameron, Consultant obstetrician, Yorkhill NHS Trust  
 Dr Lena Macara, Consultant obstetrician, Yorkhill NHS Trust  
 Dr Kevin Henretty, Consultant obstetrician, Yorkhill NHS Trust  
 Dr Christine Taggart, Consultant obstetrician, Yorkhill NHS Trust  
 Dr Janet Roberts, Consultant obstetrician, Yorkhill NHS Trust  
 Dr William Chatfield, Consultant obstetrician, Yorkhill NHS Trust

Helena McLaren, Glasgow Support Volunteer, Miscarriage Association  
 Mana Hazlek, Glasgow Support Volunteer, Miscarriage Association

Dr Brian Cowan, Medical Director, South Glasgow University Hospitals NHS Trust

Lyn Wojciechowska, Head of Midwifery, South Glasgow University Hospitals NHS Trust  
 Irene Woods, Senior Midwife, South Glasgow University Hospitals NHS Trust  
 Anne Glenn, Senior Midwife, South Glasgow University Hospitals NHS Trust  
 Sam Donovan, Senior Midwife, South Glasgow University Hospitals NHS Trust

Dr Fiona MacKenzie, Consultant Obstetrician, PRMH  
Dr Burnett Lunan, Consultant Obstetrician, PRMH  
Dr Alan Mathers, Clinical Director, PRMH

Dr Peter Raine, Consultant in Surgical Paediatrics, Yorkhill NHS Trust  
Dr Carl Davis, Consultant in Surgical Paediatrics, Yorkhill NHS Trust  
Dr Robert Carachi, Consultant in Surgical Paediatrics, Yorkhill NHS Trust

Eleanor Stenhouse, Head of Midwifery, Yorkhill NHS Trust  
Claire Gonella, Supervisor of Midwives, Yorkhill NHS Trust  
Diane Paterson, Senior Midwife - Community/Outpatients, Yorkhill NHS Trust  
Jessie Scott, Senior Midwife - Neonatal Unit, Yorkhill NHS Trust

Brenda Townsend, Director of Nursing, Yorkhill NHS Trust

Diane Anderson, Supervisor of Midwives, Yorkhill NHS Trust  
Lorna Pender, Supervisor of Midwives, Yorkhill NHS Trust  
Ann Ovens, Supervisor of Midwives, Yorkhill NHS Trust

Professor Forrester Cockburn (paediatrics)  
Professor Dan Young (paediatric surgery)  
Professor John Stephenson (paediatric neurology)  
Dr Krishna Goel (chief paediatrician)  
Dr Robert Logan (biochemistry)  
Professor Charles Whitfield (midwifery)

Pauline McNeill MSP

Dr Tom Turner, Consultant Neonatologist, Yorkhill NHS Trust  
Dr Jonathan Coutts, Consultant Neonatologist, Yorkhill NHS Trust  
Dr Peter Macdonald, Consultant Paediatrician, Yorkhill/SGH  
Dr Leila Al Roomi, Consultant Neonatologist, Yorkhill NHS Trust

Dr Regina O'Connor, Obstetric Anaesthetist, SGH NHS Trust  
Dr Stewart Pringle, LW Consultant, SGH NHS Trust

Dr Gibson, Obstetrician, QMH, Yorkhill NHS Trust  
Sister Karen McIntosh, Midwife, QMH, Yorkhill NHS Trust  
Sister Sandra Whitelaw, Midwife, QMH, Yorkhill NHS Trust

Morgan Jamieson, Medical Director, Yorkhill NHS Trust

Dr Andrew Powls, Consultant Paediatrician, PRMH

Dr Alex Macleod, Consultant Anaesthetist, NGUT

Professor Laurence Weaver, Yorkhill NHS Trust

Dr Cameron Howie, Consultant Anaesthetist, South Glasgow University Hospitals NHS Trust  
Dr Garrioch, Consultant Anaesthetist, South Glasgow University Hospitals NHS Trust  
Dr Marco Gaudoin, Consultant Obstetrician, South Glasgow University Hospitals NHS Trust  
Dr Ian Ramsay, Consultant Obstetrician, South Glasgow University Hospitals NHS Trust

Liz Terrace, Midwife, North Glasgow University Hospitals NHS Trust  
Liz Callander, Midwife, North Glasgow University Hospitals NHS Trust  
Sharon Smith, Midwife, North Glasgow University Hospitals NHS Trust

SANDS (Stillbirth and Neonatal Death Society)

Dr Alan Houston, Consultant Cardiologist, Yorkhill NHS Trust

Grant Urquhart, Consultant Radiologist, South Glasgow University Hospitals NHS Trust

Anne Byrne, Midwife, Yorkhill NHS Trust  
Cindy Horan, Midwife, Yorkhill NHS Trust  
Barbara Cochrane, Dietician, Yorkhill NHS Trust

## Appendix 2. Written Submissions

Date	From
26 <sup>th</sup> September 2003	Laura Gibson
22 <sup>nd</sup> September 2003	Dr Matt J Carty, Consultant Obstetrician and Gynaecologist, Southern General University Hospitals NHS Trust
21 <sup>st</sup> September 2003	Dr Paul Galea, Chairman, Area Paediatric Sub Committee
17 <sup>th</sup> September 2003	Dr Ian Bone, Consultant Neurologist, South Glasgow University Hospitals NHS Trust
14 <sup>th</sup> September 2003	Michael Duffy
12 <sup>th</sup> September 2003	Brian M Simmers, Chairman, Yorkhill Childrens Foundation
11 <sup>th</sup> September 2003	UNISON Scotland
10 <sup>th</sup> September 2003	Professor Ian Greer, Regius Professor of Obstetrics and Gynaecology, University of Glasgow
10 <sup>th</sup> September 2003	Alison J MacLeod, Consultant Obstetrician and Gynaecologist, St Johns Hospital Livingston
10 <sup>th</sup> September 2003	Area Nursing and Midwifery Committee
9 <sup>th</sup> September 2003	Sally Kuenssberg, Chair, Yorkhill NHS Trust
9 <sup>th</sup> September 2003	Dr J P McClure, Deputy Medical Director, Ayrshire and Arran Acute Hospitals NHS Trust
8 <sup>th</sup> September 2003	Dr Norman C Smith, Consultant Obstetrician, Grampian University Hospitals NHS Trust
8 <sup>th</sup> September 2003	Anna F Dominiczak, British Heart Foundation Professor of Cardiovascular Medicine, BHF Glasgow Cardiovascular Research Centre
8 <sup>th</sup> September 2003	Dr Robert D H Monie, Consultant Physician, Southern General University Hospitals NHS Trust
5 <sup>th</sup> September 2003	Mr Jonathan Best, Chief Executive, Yorkhill NHS Trust
4 <sup>th</sup> September 2003	Professor M Connor, Division of Developmental Medicine, University of Glasgow
4 <sup>th</sup> September 2003	Dr N J Kenyon, Consultant Obstetrician and Gynaecologists, Vale of Leven District General Hospital
4 <sup>th</sup> September 2003	Dr T L Turner, Consultant Paediatrician, Dr A Cameron, Consultant Obstetrician and Ms Eleanor Stenhouse, General Manager/Head of Midwifery, Yorkhill NHS Trust
3 <sup>rd</sup> September 2003	Dr H Gordon Dobbie, Consultant Obstetrician and Dr S M Prigg, Consultant Obstetrician, Ayrshire and Arran Acute Hospitals NHS Trust
3 <sup>rd</sup> September 2003	Dr Roch Cantwell, Consultant Perinatal Psychiatrist, Glasgow Perinatal Mental Health Service
3 <sup>rd</sup> September 2003	Mary Grant
2 <sup>nd</sup> September 2003	Dr M Small, Consultant Physician, North Glasgow University Hospitals NHS Trust

<b>Date</b>	<b>From</b>
	Hospitals NHS Trust
31 <sup>st</sup> August 2003	Jennifer Welch
28 <sup>th</sup> August 2003	Dr T L Turner, Consultant Paeditrician, Yorkhill NHS Trust
28 <sup>th</sup> August 2003	Lorna McLellan
28 <sup>th</sup> August 2003	Alan Houston, Consultant Paediatric Cardiologist, Yorkhill
28 <sup>th</sup> August 2003	Dr S J Wisdom, Consultant Obstetrician and Gynaecologists, Dumfries and Galloway Royal Infirmary
27 <sup>th</sup> August 2003	Professor C R Whitfield et al
27 <sup>th</sup> August 2003	Dr Michael Morton, Consultant Child Psychiatrist and Dr Alice McGrath, Senior Registrar in Child and Adolescent Psychiatry
26 <sup>th</sup> August 2003	Graham Tydeman and Rennie Urquhart, Consultant Obstetricians, Forth Park Hospital
26 <sup>th</sup> August 2003	Dr Rhona G Hughes, Lead Clinician/Obstetrics, Lothian University Hospitals NHS Trust
26 <sup>th</sup> August 2003	Area Medical Committee
26 <sup>th</sup> August 2003	Professor James C Dornan, Director of Fetal Medicine, Royal Jubilee Maternity Service, Belfast
25 <sup>th</sup> August 2003	David McVicar, Chairman, Ronald McDonald House
25 <sup>th</sup> August 2003	Dr T J Beattie, Consultant Paediatrician and Nephrologist, Yorkhill NHS Trust
22 <sup>nd</sup> August 2003	Dr Ian Laing, Consultant Neonatologist, Simpson Centre for Reproductive Health
22 <sup>nd</sup> August 2003	Professor H L Halliday, Consultant Neonatologist, Royal Maternity Hospital, Belfast
21 <sup>st</sup> August 2001	Dr Peter Fowlie, Consultant Paediatrician, Tayside University Hospitals Trust
21 <sup>st</sup> August 2003	Dr Fiona Crichton, Consultant Obstetrician/Gynaecologist, Falkirk and District Royal Infirmary
19 <sup>th</sup> August 2003	Dr Janet Brennand, Consultant in Fetal and Maternal Medicine, Yorkhill NHS Trust
19 <sup>th</sup> August 2003	Dr Judith Simpson and Dr Chris Tomlinson
19 <sup>th</sup> August 2003	Dr B E Gibson, Consultant Haematologist, Yorkhill NHS Trust
18 <sup>th</sup> August 2003	Dr Colin G Semple, Consultant Physician, Southern General University Hospitals NHS Trust
18 <sup>th</sup> August 2003	Grant D K Urquhart, Consultant Interventional Radiologist, South Glasgow University Hospitals NHS Trust
18 <sup>th</sup> August 2003	Una McFadyen, Consultant Paediatrician, Forth Valley Acute Hospitals NHS Trust
15 <sup>th</sup> August 2003	Dr Paul Galea, Consultant Paediatrician, Yorkhill NHS Trust
5 <sup>th</sup> August 2003	Duncan McNeill MSP (Greenock and Inverclyde)

<b>Date</b>	<b>From</b>
5 <sup>th</sup> August 2003	Pauline McNeill MSP (Glasgow Kelvin)
August 2003	Dr T E Lavy, Consultant Opthamologists, Yorkhill
August 2003	David Stone, Professor of Paediatric Epidemiology, Yorkhill
August 2003	Dr Valerie D Hood, Consultant Obstetrician an Gynaecologist,
August 2003	Jessie Scott, Neonatal Clinical Manager, Yorkhill NHS Trust
August 2003	Mr Andrew Radford, UNICEF
24 <sup>th</sup> July 2003	Diana Clark, Practice Development Midwife, South Glasgow University Hospitals NHS Trust
24 <sup>th</sup> July 2003	Dr William Anderson, Medical Director, North Glasgow University Hospitals NHS Trust
23 <sup>rd</sup> July 2003	Roderick Duncan, Consultant Orthopaedic Surgeon/Honorary Clinical Senior Lecturer, Yorkhill NHS Trust
14 <sup>th</sup> July 2003	Graham Vahey, Consultant Psychotherapist
11 <sup>th</sup> July 2003	Marie Davie, National Officer, Royal College of Midwives Board for Scotland
10 <sup>th</sup> July 2003	Mary Curtis
8 <sup>th</sup> July 2003	Margaret Walker
7 <sup>th</sup> July 2003	Jacki McIlraith
7 <sup>th</sup> July 2003	Ruth Aitken, Secretary, Cathcart and District Community Council
17 <sup>th</sup> June 2003	John Morrison, Leader of the Council, East Dunbartonshire Council

### Appendix 3. Expert Advisors

*Obstetricians:*

Professor Peter Soothill, Department of Obstetrics and Gynaecology, St Michael's Hospital, Bristol

Professor David James, Professor of Feto-maternal Medicine, School of Human Development, Queen's Medical Centre, Nottingham

Professor Charles Rodeck, Department of Obstetrics and Gynaecology, Royal Free and University College Medical School, London

*Neonatologist/Neonatal Surgeon:*

Mr Anthony JB Emmerson, Consultant Neonatologist, Clinical Director of Neonatal Services, St Mary's Hospital, Manchester

Mrs Leela Kapila, Willoughby on the Wolds, Leicestershire, formerly Paediatric Surgeon, Queens Medical Centre, Nottingham

*Anaesthetists;*

Dr Ian Barker, Department of Anaesthetics, Sheffield Children's Hospital, Sheffield

Dr William Frame, Chair, Anaesthetic Sub-Committee, North Glasgow University Hospitals NHS Trust, Glasgow Royal Infirmary, Glasgow

Dr Griselda Cooper, Consultant Anaesthetist, Birmingham

*Midwife*

:

Ms Cathy Warwick, General Manager Women and Children's Services, Kings College Hospital, Denmark Hill, London

## HEALTH ORGANISATIONS OR GROUPS

No	Organisation	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
1.	Area Medical Committee - Pass on view of subcommittees	✓			
2.	Area Clinical Forum - Support proposals - Reassurance required on service quality	✓	✓		✓
3.	Area AHP Committee - Support proposals - Comments on AHP staffing and regional planning	✓			✓
4.	Area Nursing and Midwifery Committee - No comment on site - More expert advice needed - Support single system - Need robust neonatal transfer - Importance of clinical leaders - Concerns about national services - Need to work with transport authorities - May be capacity issue if A&C births increase				
5.	Area Pharmacy Committee - Comments on pharmacy services				
6.	Hospital Sub Committee - Supports reduced sites - Triple colocation as soon as possible	✓	✓		
7.	GP Sub Committee - If SGH consolidation relocate RHSC asap - Wish to be involved in midwifery developments		✓		
8.	Obstetric Sub Committee - Fully support GGNHSB's proposals	✓			✓
9.	Anaesthetic Sub Committee - Fully support Board's proposals - Neonatal transfer is safe - 3 to 2 essential - Range of risks to mothers is significant	✓			✓
10.	Neonatal Sub Committee - Significant rota pressures - Consultant workload pressures are major issue - Quotes guidance on neonatal medical and surgical colocation - Suggests a maternal/neonatal conflict - Criticises preconsultation - QMH closure worsens workforce issues and full NNICU would be required - Highlights risks to neonates - 200 extra transfers and 400 journeys, minimum - Separation of mothers and babies - Improve QMH ICU is solution - Fetal medicine may be unsustainable	✓	✓	✓	
11.	Psychiatric Sub Committee - Advantages of psychiatric neonatal and maternity colocation				

## HEALTH ORGANISATIONS OR GROUPS

No	Organisation	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
12.	Paediatric Sub Committee - Highlights increase in transfers - Best transport in utero - Separation of mothers and babies - Needs separate NNICU - Post operative transfer undesirable - Disadvantage in either scenario - Improve QMH ITU	✓	✓	✓	
13.	LHCC Professional Committee - Interim response - Difficult decision - QMH closure pragmatic with further reassurances	✓	✓		✓ (cond)
14.	British Association of Perinatal Medicine - Difficult choice - Highlights changes to clinical practice - Neonatal paediatric colocation a key determinant - Also concerned about maternal wellbeing			✓	
15.	Royal College of Paediatrics and Child Health (Scotland) - Inextricable linkages with paediatric services and neonatal services - Denounce unnecessary parental separation - Safest transport in utero			✓	
16.	The Royal College of Anaesthetists Board in Scotland - Support rationalisation - Second site must be adult - Unanimous view including paediatric anaesthetists	✓			✓
17.	Director, Confidential Enquiries into Maternal Deaths in the United Kingdom (CEMD) - Restates CEMD recommendations - Highlights severe morbidity - Life threatening complications not always predicted and prevented - 30-120 near misses per annum in Glasgow - Major risk factor deprivation				✓
18.	Director, National Services Division - Notes potential effect on national services - Consequential service issues need careful consideration - Tertiary paediatrics only one element in consideration - Detailed planning is important - Clinical networking is essential - Will wish to review detailed arrangements before giving full support				✓ (cond)
19.	Chief Executive, Ayrshire and Arran NHS Board - QMH closure in line with clinical guidance - Invaluable services at RHSC and fetal medicine				✓
20.	Consultant Obstetrician and Clinical Director, Fife Acute Hospitals NHS Trust - Congratulates Reid Report - QMH closure limited impact - Issue of transfer less relevant - Suggests paediatric transfer	✓	✓		✓

## HEALTH ORGANISATIONS OR GROUPS

No	Organisation	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
21.	Director of Public Health and Health Policy, Lothian NHS Board - Present Edinburgh children's/maternity split not aware of clinical concerns - Potential to limit transfers		✓		
22.	Clinical Director: Reproductive Health, Edinburgh Royal Infirmary - Maternity/adult colocation is most important - High risks of separation of adult and maternity				✓
23.	Consultant Obstetrician/Adviser - Confidential Enquiry - Highlights FAIs on isolated site deaths - Retaining QMH detrimental - Obstetric care should be on a general hospital site		✓		✓
24.	Chief Executive, Grampian University Hospitals NHS Trust - Transfer minimum impact - Important neonatal support to cardiac surgery				✓
25.	Scottish Neonatal Consultants Group - Concern over risks to babies - Proposals will damage care - Colocation important for fetal medicine - Risks to cardiac and surgical babies of transfer - Immediate ECMO for diaphragmatic hernia - Separation is not acceptable - Need a national maternity and paediatric colocated service - Linked service offers best care			✓	
26.	Director of Public Health, Tayside NHS Board				✓
27.	Director of Nursing, Argyll and Clyde NHS Board - Support basis of decision - Raises issues to be addressed for paediatric services				✓
28.	Chief Executive, Forth Valley NHS Board - Will not affect current provision of national services				
29.	Chief Executive, Lanarkshire NHS Board Support overall direction on 3 to 2 and ITU siting	✓			✓
30.	Group Practice Midwives, NGUH NHS Trust - Important that closure does not result in impersonal service - Support unified care - Staff involvement is important - Expand maternity care - Importance of seamless transfer				
31.	Consultant Obstetricians and Gynaecologists/Consultant Anaesthetists, NGUH NHS Trust - Support conclusions of preconsultation exercise - Cannot overstate importance of colocation - Highlight experience before colocation at PRMH	✓	✓		✓
32.	Fetal Medicine Team, Yorkhill NHS Trust - Retrograde step in moving from colocation - no benefit for fetal or neonatal health - Quality of present service cannot be replicated		✓	✓	

## HEALTH ORGANISATIONS OR GROUPS

No	Organisation	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
33.	Paediatric Surgeons, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Proposals are a threat to present effective clinical arrangements</li> <li>- Highlights BAPS guidance and Bristol report on colocation of maternity, neonatal and surgical services</li> <li>- Challenges our use of BAPS guidance</li> <li>- Describes surgical workload</li> <li>- Highlights rapid access to counselling</li> <li>- Integrated neonatology and surgery are imperative</li> <li>- Highlights expertise of PAMS and nursing staff</li> <li>- Emphasises national dimension</li> <li>- Sets out series of clinical governance issues</li> <li>- Consent on a split site is a major issue as is child and maternal separation</li> <li>- Neonatology role in ECMO</li> <li>- Current arrangement is best</li> </ul>			✓	
34.	Consultant Neonatologists, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Standalone undervaluing of neonates</li> <li>- GGNHSB has misrepresented numbers affected and risks</li> <li>- Breach of UN convention on rights of the child</li> <li>- Optimal care for mothers and babies is possible at the QMH</li> <li>- Closure of the QMH will result in avoidable death or permanent damage to babies</li> </ul>			✓	
35.	Neonatal Nurse Specialists, Dan Young Neonatal Intensive Care Unit <ul style="list-style-type: none"> <li>- Describes excellence of neonatal surgical facility</li> <li>- Risks to national services</li> <li>- In utero is best transport</li> <li>- Mother/baby separation unacceptable</li> </ul>			✓	
36.	Yorkhill NHS Trust		✓	✓	
37.	Medical Staff Association, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Unique Yorkhill configuration a 40 year partnership</li> <li>- Training and research excellent</li> <li>- MWG report unbalanced and unrepresentative</li> <li>- No evidence of deficient critical care management</li> <li>- Yorkhill is not isolated</li> <li>- SGH requires ambulance ITU transfer</li> <li>- Challenges ITU research base</li> <li>- Loss of in utero transfer increases risks and loses opportunity for immediate ECMO</li> <li>- Proposals disrupt care.</li> <li>- Transfer service could not cope with extra work</li> <li>- Highlights neonatal workforce issues</li> <li>- Proposals have no regional perspective</li> </ul>		✓	✓	
38.	Child Psychiatrists, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Concern over vulnerable babies who need specialist services</li> <li>- Major role of clinical psychology</li> <li>- Potential for specialist adolescent mothers service</li> <li>- Potential development of RHSC development model</li> </ul>			✓	

## HEALTH ORGANISATIONS OR GROUPS

No	Organisation	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
39.	Paediatric Haematologists, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Expertise in maternal haemorrhage at Yorkhill</li> <li>- Combined haematology/obstetric clinics</li> <li>- Paediatric haematology department at RHSC has unique expertise</li> <li>- PRMH and SGH would need on site services</li> <li>- Role in mothers of children who are in RHSC for BMT and also pregnant</li> </ul>			✓	
40.	Surgical Services Division, SGUH NHS trust <ul style="list-style-type: none"> <li>- Accept Working Group's conclusions highlight Confidential Enquiry evidence</li> <li>- Highlight SGH infrastructure for other clinical service input</li> <li>- Separation of mothers and babies important but should not be a determining factor</li> </ul>	✓			✓
41.	Medical Staff Association, SGUH NHS Trust <ul style="list-style-type: none"> <li>- Endorse Board's proposals</li> <li>- Want to see commitment to more paediatrics</li> <li>- Choice for women is important</li> </ul>	✓	✓		✓
42.	Senior Midwifery Team, SGUH NHS Trust <ul style="list-style-type: none"> <li>- Support for review process and outcome</li> <li>- Note policy guidance supports our conclusion</li> <li>- Transfer of neonates has got progressively safer</li> <li>- Speed of women deterioration is significant</li> <li>- Important role of on site intensivists and radiologists</li> <li>- Experience of PRMH is important</li> <li>- Highlight other SGH colocations and relationship to gynaecology</li> </ul>	✓	✓		✓
43.	Consultant Interventional Radiologists, SGUH NHS Trust <ul style="list-style-type: none"> <li>- Importance of interventional radiologists</li> <li>- Experience and familiarity with procedures is important</li> <li>- Key treatments available in the delivery suite at SGH</li> </ul>				✓
44.	South Glasgow Obstetricians <ul style="list-style-type: none"> <li>- Support fully review process and outcome</li> <li>- Main fetal medicine service should be at PRMH</li> </ul>	✓	✓		✓
45.	Chief Executive, Forth Valley Acute Hospitals NHS Trust <ul style="list-style-type: none"> <li>- Working Group analysis of risk concurs with their view</li> <li>- Support cross site working</li> <li>- Midwifery development important</li> </ul>	✓			✓

## HEALTH ORGANISATIONS OR GROUPS

No	Organisation	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
46.	Greater Glasgow Health Council - Fundamental issues to be addressed to ensure public confidence in the proposals: - national services - safe transfer - maternal/baby separation - impact of RHSC services - fetal medicine - Accepts arguments to reduce from three to two - Fundamental issues need further public consultation when detailed analysis is available an also details of estates, staffing and transport issues - NHSGG should make representations to SEHD to expedite move to maternity/adult/paediatrics on same site				
47.	Lothian NHS Board - Arguments logically lead to conclusion				
48.	Royal College of Obstetrics and Gynaecologists - RCOG has contributed through its nominated experts				
49.	Dumfries and Galloway NHS Board - Decision to close QMH made on reasonable grounds but limits options for transferring preterm women - Seek reassurance on neonatal cot numbers and that any risks are addressed through clinical care pathways				

## CLINICAL RESPONSES: INDIVIDUAL

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
1.	Prof Valerie Fleming, Head of Division of Midwifery, Glasgow Caledonian University - Few women require intensive care most are uncomplicated - Potential to develop midwifery practice - Site of little relevance, quality of midwifery care is key				
2.	Prof H L Halliday, Consultant Neonatologist, The Royal Maternity Hospital, Belfast - No Belfast paediatricians support paediatric/maternity separation - QMH provides safest and most efficient service - <b>NB: In Belfast choice was between two adult sites</b>			✓	
3.	Prof M Hall, Consultant in Obstetrics and Gynaecology, University of Aberdeen - Supports principle that major maternity hospitals should be sited where adult ITU is immediately available				✓
4.	Dr John H McClure, CEDM Reviewer, Edinburgh Royal Infirmary Must implement CEDM recommendations - EGAMS reference report should be referred to				✓
5.	Dr S A Walkinshaw, Consultant in Maternal and Fetal Medicine, Liverpool Women's Hospital - Describes safety of a standalone maternity site in Liverpool - Separation from adult services not regarded as an issue - Envy integrated fetal medicine/paediatric sites - Highlights study showing unimportance of ITU colocation			✓	
6.	Dr Elaine B Melrose, Consultant Obstetrician and Gynaecologist and Training Director West of Scotland, Ayrshire Central Hospital - Describes arrangements for neonatal transfer - Must meet CEDM criteria				✓
7.	Prof James C Dorman, Consultant Obstetrician and Gynaecologist, The Royal Maternity Hospital, Belfast - Objects to closure of QMH - Highlights importance of fetal medicine/neonatal surgery proximity - Would not wish to work in an obstetric environment which is not colocated with adult ITU		✓		
8.	Dr H R McClelland, Consultant Obstetrician, The Royal Maternity Hospital, Belfast - "Babies will die headlines" shamefully used to sway public opinion - Supports Reid's conclusions - No evidence paediatric/maternity colocation improves safety - Overriding factor is adult colocation				✓
9.	Ms Dina McLellan, Consultant Obstetrician, Wishaw General Hospital QMH is unique and envy of other centres - Wonderful multidisciplinary team - ITU beds argument is spurious - Highlights potential impact on neonatal outcomes			✓	
10.	Ms Sheona Brown, Project Midwife Public Health Midwifery, Greater Glasgow NHS Board - Highlights issue of access and potential to redesign community services - Importance of involving women and focusing on integrity	✓			

## CLINICAL RESPONSES: INDIVIDUAL

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
11.	Dr Lesley A Jackson, Consultant Neonatologist, Princess Royal Maternity Hospital, NGUH NHS Trust - Glasgow newborn sites exceptional, cannot be replicated on a split site - Post operative babies should not transfer out of RHSC - Fully staffed neonatal services should remain with Yorkhill		✓		
12.	Ms Ann Holmes, Consultant Midwife/Local Supervising Authority Officer, Greater Glasgow NHS Board - Detailed comments on developing midwifery - Representation from service users is important - Essential that mothers and babies are not separated				✓
13.	Dr Charles Skeoch, Consultant Neonatologist, Princess Royal Maternity Hospital, NGUH NHS Trust - Does not support proposed arrangements for post operative care - Suggests increased morbidity for ECMO babies in transfer - Retrograde not to have in utero transfer to QMH - Neonatal ECMO will be lost to Scotland - Impossible to replicate fetal medicine		✓		
14.	Prof Ian A Greer, Regius Professor of Obstetrics and Gynaecology, Faculty of Medicine University of Glasgow - Need to deliver services locally per Rutherglen - Maternal deaths small but enormous maternal morbidity - Key issue is siting with adult services - Ex utero neonatal transfer arrangements are good - Highlights potential for immediate surgical care - Fetal transfusion can be provided at PRMH - Highlights issues around research strength at PRMH - Fetal surgery is a long way from being a clinical service	✓			✓
15.	Prof Anna F Dominiczak, BHF Professor of Cardiovascular Medicine, BHF Glasgow Cardiovascular Research Centre - Describes medical/obstetric clinic and emergency arrangements from WI to QMH - Very difficult to replicate at SGH			✓	
16.	Dr Heather Maxwell, Young People's Service Development Group, Yorkhill NHS Trust - Yorkhill is a better environment for pregnant teenagers			✓	
17.	Ms Lorna Pender, Supervisor of Midwives, Yorkhill NHS Trust - Mothers and babies must be on the same site			✓	
18.	Mr J C S Pollok, Consultant Cardiac Surgeon, Yorkhill NHS Trust - 60 babies undergo surgery each year - Team with neonatology is critical - Particular issue for low birth weight babies - In utero transfer is safer			✓	

## CLINICAL RESPONSES: INDIVIDUAL

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
19.	Dr Kevin P Hanretty, Obstetrician and Gynaecologist, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Supports Yorkhill MSA response</li> <li>- Challenges preconsultation process</li> <li>- No evidence of regional planning</li> <li>- Fetal medicine should not be consolidated</li> <li>- Yorkhill blood bank is excellent</li> </ul>	✓		✓	
20.	Dr Alasdair H B Fyfe, Consultant Paediatric/Neonatal Surgeon, RHSC, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Has QMH higher maternal morbidity?</li> <li>- Must consider neonates</li> <li>- Sets out benefits to neonates of colocation: <ul style="list-style-type: none"> <li>- in utero transfer</li> <li>- specialist input delivery</li> <li>- mothers and babies together</li> </ul> </li> <li>- These benefits lost if colocation lost and will be increased mortality and morbidity</li> <li>- Temporary measure until full Yorkhill move to support QMH</li> </ul>	✓		✓	
21.	Dr Ann Harvie, Consultant Paediatrician, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Raises questions about fact finding visits and need to look at Edinburgh service</li> </ul>			✓	
22.	Dr Michael Bradnam, Medical Physicist, RHSC, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Highlights benefits of direct access to specialist electro physiology services at Yorkhill</li> <li>- Clinical physics department is unique and attracts national referrals</li> <li>- Highlights research links</li> <li>- Either duplicate services or transfer babies</li> </ul>			✓	
23.	Ms Isobel Fulton, Midwife, Queen Mother's Hospital, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Decision already made and wrong/biased</li> </ul>			✓	
24.	Dr Layla Alroomi, Consultant Paediatrician, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Separation of mother and baby is wrong</li> <li>- Important to keep maternity and paediatrics together</li> </ul>			✓	
25.	Ms Hazel Ford, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Objects to closure</li> <li>- Very small babies need NNICU stabilisation before surgery</li> </ul>			✓	
26.	Dr Joan Burns, Senior Clinical Psychologist, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Have failed to consider psychosocial needs</li> <li>- Mother and baby separation is detrimental</li> <li>- Describes unique QMH model</li> <li>- They work closely with fetal medicine</li> </ul>			✓	
27.	Ms Marjorie Clark, Neonatal Midwife, Queen Mother's Hospital, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Raises issues about transfer, not a simple procedure</li> <li>- Separation of mothers and babies is not acceptable</li> <li>- If not possibly baby may die</li> <li>- Issues about north/south access</li> <li>- Compromises specialist input</li> <li>- ITU on site no guarantee of space</li> </ul>		✓	✓	

## CLINICAL RESPONSES: INDIVIDUAL

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
28.	Ms Andrena Kelly, Surgical Neonatal Unit, Yorkhill NHS Trust - What will happen to sick neonates if hospital closes - How will mothers and babies stay together - Added risk of transfer			✓	
29.	Mr David Barnett, Midwife, Yorkhill NHS Trust - Dire parking at PRMH				
30.	Ms Ros Montgomerie, Neonatal Nurse Specialist, Queen Mother's Hospital, Yorkhill NHS Trust - Highlights range of specialist inputs immediately available at QMH - Staff have specialist skills - Mothers and babies can be together - Great risks involved in transfers - QMH lacks specialist care for sick mothers but numbers are small			✓	
31.	Ms Bridie Cowan, Midwife, Queen Mother's Hospital, Yorkhill NHS Trust - Proposal destroys a world renowned family institution			✓	
32.	Ms Kate Bourne, Midwife, Queen Mother's Hospital, Yorkhill NHS Trust - Emphasises closeness of mothers to babies and downside of separation			✓	
33.	Mr Rob Hardie, Community Midwife, SGUH NHS Trust - Can provide a seamless service - Excellent model of care - Mothers and babies together		✓	✓	
34.	Ms Diane Anderson, Clinical Midwifery Manager, Queen Mother's Hospital, Yorkhill NHS Trust - Comments on the consultation leaflets - QMH/RHSC work not equalled anywhere - Cannot see how separation for mothers and babies can be avoided - Challenges our use of EGAMS - On site adult intensive care not stipulated - Inaccuracies in MWG report on radiology, haemorrhage anaesthetics - Not aware of research to support MWG of maternal mortality and morbidity	✓		✓	
35.	Ms Brenda Townsend, Director of Nursing, RHSC, Yorkhill NHS Trust - Proposal fails to understand range of resources of Yorkhill services - NHS Board information flawed - Suggest Reid report was probably based on an earlier paper prepared by the Director of Planning - Overemphasis on maternal risk - We inaccurately quote BAPS and EGAMS		✓		
36.	Dr A Watt, Consultant Radiologist, RHSC, Yorkhill NHS Trust - Highlights 200/300 extra transfers for imaging - Corrects assumption that on site adult interventional radiology at RHSC is not possible			✓	

## CLINICAL RESPONSES: INDIVIDUAL

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
37.	Ms Jessie Scott, Midwifery Manager, Queen Mother's Hospital, Yorkhill NHS Trust - Highlights specialist skills of neonatology at QMH - Quick access to specialists is vital for babies and parents - Mothers and babies together - Unique clinical psychology service			✓	
38.	Dr Judith Roberts, Consultant Obstetrician, Queen Mother's Hospital, Yorkhill NHS Trust - QMH not isolated - Adult colocation does not guarantee clinical input - Describes strong specialist input to QMH service - QMH consultant anaesthetists do not consider hospital unsafe - Last two years no cases of problems transferring women - ITU access Western and SGH is similar - Obstetric emergencies do not require physicians - Change will not improve care to Drumchapel women - Separation of mothers and babies is wrong			✓	
39.	Mrs Diane Paterson, Midwife, Queen Mother's Hospital, Yorkhill NHS Trust - Closure jeopardises national services - Professionals and public want temporary closure of SGH - Criticism of preconsultation process - Ill neonates do not travel well - Highlights level of public and professional concern	✓		✓	
40.	Dr Alison Wood, Research and Development Manager, Yorkhill NHS Trust - Yorkhill campus has unique research and development programme - Heavily dependent on close collaboration - Closure would lose critical mass and seriously inhibit future R&D activity			✓	
41.	Dr Carl Davis, Paediatric Surgeon, Yorkhill NHS Trust - Detailed critique of external anaesthetic advisers advice				
42.	Rev Alister W Bull, Hospital Chaplain, Yorkhill NHS Trust - Dissatisfied with summary of his opinion in Maternity report - Proposals would increase spiritual distress and cause spiritual damage - Continuity of spiritual care is important and only possible at Yorkhill - Benefit of RHSC experience in dealing with QMH patients			✓	

## CLINICAL RESPONSES: INDIVIDUAL

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
43.	Ms Marjorie Gillies, Yorkhill NHS Trust <ul style="list-style-type: none"> <li>- Recommendation not equitable to mothers and babies</li> <li>- QMH or SGH make no difference to mothers health</li> <li>- Anaesthetists do not understand neonatal care</li> <li>- Has risk to babies of hospital transfer been assessed</li> <li>- Babies rights are not respected</li> <li>- Potential problems with Clyde Tunnel</li> <li>- Separation of mothers and babies is wrong</li> <li>- Time delay in specialist advice is a major issue</li> <li>- GGNHSB has a lot to learn about consultation, process has not been completely open</li> </ul>			✓	
44.	Dr Peter Macdonald, Consultant Neonatal Paediatrician <ul style="list-style-type: none"> <li>- Paediatricians unanimously oppose QMH closure</li> <li>- No confidence process was open and free from bias</li> <li>- Does not benefit newborns</li> <li>- Compromises optimum clinical relationships</li> <li>- Sacrifices national paediatric service for local maternity service</li> <li>- Inefficient neonatal model</li> </ul>		✓	✓	
45.	Ms Fran Donovan, Senior Midwife, SGUH NHS Trust <ul style="list-style-type: none"> <li>- Supports Maternity Working Group recommendations</li> <li>- PRMH and SGH can both provide full adult and neonatal intensive care</li> <li>- Scare mongering must not effect decision</li> <li>- No evidence has been produced to indicate babies will die</li> <li>- Skilled clinicians are key not location</li> <li>- To close a unit with a full range of services in favour of one without would be retrograde</li> </ul>	✓			✓
46.	Mrs Janice Sangster, Neonatal Midwife, SGUH NHS Trust <ul style="list-style-type: none"> <li>- QMH closure is safest decision for mothers and babies</li> <li>- Vast majority UK babies are not delivered colocated with children's services, transfer of very small number is inevitable</li> <li>- Paediatricians are a very strong lobby all with interests at Yorkhill</li> <li>- Message about maternal risk is being obscured - the safest place for women is a general hospital</li> <li>- Need adult intensive care specialists on site</li> <li>- South people don't see their service under threat so are not swamping the media</li> </ul>	✓			✓
47.	Mr David Ritchie <ul style="list-style-type: none"> <li>- Replace Southern and Victoria</li> <li>- QMH not sound</li> <li>- New southside hospital</li> </ul>		✓		✓
48.	Ms Jennifer Brown, Consultant Neurosurgeon and Lead Clinician for Paediatric Neurosurgery, SGUH NHS Trust <ul style="list-style-type: none"> <li>- Only one view being heard</li> <li>- Should move both services</li> <li>- Availability of adult emergency services are advantageous</li> <li>- Describes advantages of moving maternity and children's to an adult site</li> </ul>		✓		✓

## CLINICAL RESPONSES: INDIVIDUAL

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
49.	Dr M E Garrioch, Consultant Intensivist, SGUH NHS Trust - Neonatal and fetal needs are important as are needs of pregnant women - Sets out information on ITU transfer 1/1000 - Compromised care if transfer required because of potential delay in full range of care - Difficulty in stabilising for transfer - Should not underestimate adult colocation benefits - Age of women means emergencies will increase				✓
50.	Dr J C Howie, Consultant Anaesthetist - Provides detailed analysis of intensive care transfers - Highly specialist ITU support is critical because of small numbers - Transfer team is not a substitute for on site critical care		✓		✓
51.	West of Scotland Paediatric Consultants Group - Tertiary maternity and paediatrics should be colocated - Consultation option offers no advantage for neonates and potential of adverse impact - Transfers will increase and there is risk - Separation of mothers and babies is a problem - National tertiary services would be affected			✓	
52.	Dr Katherine Turner, GP, Drumchapel Health Centre - Closure will destroy excellent relationships - SGH access/ability is an issue, public transport is poor - Tremendous advantage to maternity/children's colocation - SGH still requires on site transfer so arguments on advantages are spurious - RHSC will be compromised				
53.	Dr Pauline McGowan, General Practitioner - Why ask public we ignore them				
54.	Ms Diane Stark, Superintendent Physiotherapist, SGUH NHS Trust - Describes SGH service and highlights good practice				✓
55.	Prof Lawrence T Weaver, Professor of Child Health, University of Glasgow Department of Child Health - Describes links between maternal and child health - Research groups tackling the deprivation problem in a community at Yorkhill - Very successful 5 star grouping - His primary consideration is research which is intertwined with health services - Maternity services should be with children's services - Loss of QMH would be a disservice to mothers and damage research				
56.	Individual Consultant Obstetricians - Proposals will lead to worse outcomes and are deeply insensitive - Judgement is wrong	✓		✓	
57.	Ian Laing, Consultant Neonatologist - Describes advantages of QMH/RHSC - Retain QMH and PRMH			✓	

## LOCAL AUTHORITIES, MSPS AND OTHER ORGANISATIONS

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
1.	<p>Ms Pauline McNeill MSP</p> <ul style="list-style-type: none"> <li>- Consultation flawed</li> <li>- Quality of QMH deliberately being talked down</li> <li>- Welcomes enhanced role for midwives</li> <li>- Raises issues of risk assessment</li> <li>- Remiss of MWG not to recognise impact of loss of colocation</li> <li>- West Glasgow is losing essential services</li> <li>- No analysis of impact outside Glasgow</li> <li>- Should consider a midwifery led unit at SGH</li> <li>- PRMH and QMH centres of excellence</li> <li>- Unfair to compare QMH with any other unit</li> <li>- Women will be denied choice of best facility for their baby</li> <li>- Decision should not be local given national impact</li> <li>- Birthrate assumptions must be revised</li> <li>- Preconsultation report is incomplete and biased - sets out a number of detailed points on this issue</li> <li>- Criticism of leaflets and consultation process</li> </ul>			✓	
2.	<p>Mr Patrick Harvie MSP</p> <ul style="list-style-type: none"> <li>- Lack of regional and national planning</li> <li>- QMH should remain open until demonstrable proof that services will improve through its closure</li> <li>- Arguments present QMH as irreplaceable need confidence that is not the case</li> <li>- Need to test differing clinical views</li> <li>- Should balance external advice with local expertise</li> </ul>			✓ (cond)	
3.	<p>Mr Des McNulty MSP</p> <ul style="list-style-type: none"> <li>- Case for closure not made</li> <li>- Lack of financial detail</li> <li>- Clinical leadership has failed</li> <li>- Yorkhill clinicians must substantiate claims about preconsultation process</li> <li>- Need to pause and reconsider all options</li> <li>- Illogical to have SGH and RAH close together and no north west service</li> </ul>	✓		✓	
4.	<p>Ms Nicola Sturgeon MSP</p> <ul style="list-style-type: none"> <li>- Persuasive case for 3 to 2 not made</li> <li>- QMH not just another unit - national service</li> <li>- Why is lack of QMH adult facilities suddenly dangerous?</li> <li>- Inconceivable that QMH professionals will not be listened to</li> </ul>			✓	
5.	<p>Ms Janis Hughes MSP</p> <ul style="list-style-type: none"> <li>- Clinicians are polarised makes exercise difficult</li> <li>- Regional planning is important</li> <li>- Unanswered questions about services if QMH closes - raise alarm in public mind</li> <li>- Colocation is optimal</li> <li>- Board has not succeeded in constructive public engagement</li> </ul>		✓		
6.	<p>Mr Stewart Maxwell MSP</p> <ul style="list-style-type: none"> <li>a. Does not understand rationale behind QMH closure</li> <li>b. Demands in Glasgow will rise, keep all three hospitals</li> </ul>			✓	

## LOCAL AUTHORITIES, MSPS AND OTHER ORGANISATIONS

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
7.	Ms Sandra White MSP <ul style="list-style-type: none"> <li>- Decision was made before preconsultation</li> <li>- Wrong to move from unique to fairly typical service</li> <li>- Challenge advice about adult ITU</li> <li>- Clinical advice should be followed in decisions</li> <li>- Safest transfer is in utero</li> <li>- Yorkhill services cannot be replicated</li> <li>- Need regional planning and demographics across West of Scotland</li> <li>- Public consultation grudgingly held, advice ignored and skewed</li> <li>- Yorkhill leaflet suppressed</li> <li>- Many signatures in opposition</li> <li>- QMH should be upgraded</li> </ul>			✓	
8.	Mr Ian Davidson MSP <ul style="list-style-type: none"> <li>- Concern that there should be new consultation if decision taken not to shut QMH</li> </ul>				
9.	Mr Jimmy Wray MSP <ul style="list-style-type: none"> <li>- Hospitals should remain open</li> </ul>			✓	
10.	Ms Jackie Baillie MSP <ul style="list-style-type: none"> <li>- Evidence for QMH closure flawed</li> <li>- Fail to recognise unique colocation and range of specialist services</li> <li>- Risks to mothers overemphasised</li> <li>- Should consider adding an ITU to QMH</li> <li>- Bed occupancy not fully considered</li> <li>- Consequences for transport not considered</li> <li>- No evidence of consultation with other health boards</li> <li>- Range of issues about services to Vale of Leven area</li> <li>- Risk of loss of experienced clinicians</li> <li>- Strong and convincing case made against closure</li> <li>- SGH and RAH five minutes apart</li> </ul>			✓	
11.	Councillor Alex Mosson, Glasgow City Council <ul style="list-style-type: none"> <li>- Case against QMH does not stack up</li> <li>- Clinicians and best medical people have made the argument</li> <li>- Strong objections to closure</li> </ul>			✓	
12.	Mr Phil Walker, Head of Community Services, Glasgow City Council <ul style="list-style-type: none"> <li>- Concern about the basis for consultation:</li> <li>- one option only</li> <li>- gaps in information</li> <li>- Will not expressed view on contested clinical issues</li> <li>- Given clinical disagreements no public confidence</li> <li>- Look again at approach to consultation to command public confidence</li> <li>- Seeks reassurances on site planning</li> <li>- Should be risk assessment of cross river emergency transport requirements</li> <li>- Yorkhill service highly regarded should be no decision until clear on impact of closure and firm proposals for future of services</li> </ul>				
13.	Mr George Hunter, Director of Social Work, East Renfrewshire Council Social Work Department <ul style="list-style-type: none"> <li>- East Renfrewshire Council has encouraged residents to participate</li> </ul>				

## LOCAL AUTHORITIES, MSPS AND OTHER ORGANISATIONS

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
14.	Councillor Andy White, Leader of the Council, West Dunbartonshire Council <ul style="list-style-type: none"> <li>- Questions clinical basis of MWG recommendations</li> <li>- Number of factors not given close consideration including deprivation, transport, consequences of closure and regional planning</li> <li>- QMH/RHSC link must be retained</li> </ul>			✓	
15.	Mr Sandy Cameron, Executive Director, South Lanarkshire Council Social Work Resources <ul style="list-style-type: none"> <li>- Welcome proposed increased community services</li> <li>- Access to hospitals is an issue in Rutherglen and Cambuslang - transport is important</li> </ul>				
16.	Councillor Gordon Macdiarmid, Glasgow City Council <ul style="list-style-type: none"> <li>- Eminently sensible to uphold the position advocated by Reid report</li> <li>- Evening Times campaign flawed has misled people into signing petition</li> </ul>	✓	✓		✓
17.	Ms Liz Cameron, Lord Provost of Glasgow <ul style="list-style-type: none"> <li>- Concerned about public disquiet</li> <li>- Profound concerns raised need to be taken into account by GGNHSB</li> <li>- People need confidence about fairness and comprehensiveness of review</li> </ul>				
18.	Royal College of Midwives Scotland (response awaited)				
19.	UNISON Regional <ul style="list-style-type: none"> <li>- Opposes closure of QMH or SGH</li> <li>- Wrong to invite consultees to select site for closure</li> <li>- Should have been consultation on a positive agenda</li> <li>- Consultation not conducted in good faith, sets out details</li> <li>- Unconvinced any closure is necessary</li> <li>- Overall driver is financial</li> <li>- Facilities providing a national service should be exempt from closure</li> </ul>			✓	
20.	UNISON Yorkhill Branch <ul style="list-style-type: none"> <li>- Scotland wide review required</li> <li>- Review was limited in scope</li> <li>- Challenge conclusions on intensive care</li> <li>- No substitute for unique, linked service</li> <li>- Provides a clinical case example of that service</li> </ul>			✓	
21.	Yorkhill NHS Trust Partnership Forum <ul style="list-style-type: none"> <li>- Challenge preconsultation process</li> <li>- They have best option for mothers and babies</li> <li>- Service more important than lifespan of building</li> <li>- Transfer causes anxiety and distress</li> </ul>			✓	
22.	Ms Rose Harvie, Secretary, Silverton and Overtoun Community Council <ul style="list-style-type: none"> <li>- Accept unit needs to close but not QMH</li> <li>- Access to southside a major issue</li> <li>- Highlight greater number of babies would transfer than women</li> <li>- Separation discourages breastfeeding</li> </ul>	✓		✓	

## LOCAL AUTHORITIES, MSPS AND OTHER ORGANISATIONS

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
23.	Mr Ali Syed, Glasgow Black and Ethnic Minority Voluntary Sector Network - Proposal unsound and threatens RHSC - Maternity and children should be together - Hospitals are closely connected - QMH staff views are important - Population trend may reverse - Retain all three			✓	
24.	Mr Paul C Mahon, Thornwood Community Council - Concerned about undemocratic health board and consultation playing off communities - Retain all three			✓	
25.	Mr Eric Flack, Secretary, Blairdardie and Old Drumchapel Community Council - Proposals fail to address wider issues Yorkhill is a national resource - Consultation is prejudged - Challenges ITU conclusions - Avoid unnecessary baby transfer - in utero is safest - Fetal medicine will not exist if QMH closes - Unique teaching and research situation - Support services are unique			✓	
26.	MATNET - Confirms submission to preconsultation - No preference on second site, focus on community services and their improvement - ET and SSP campaigns not helpful has led to misunderstandings - Comments on facilities PRMH/QMH differences in quality - Support for QMH team midwifery - Parking on all sites criticised	✓			
27.	Ms Laura Campbell, Treasurer, Hillington, North Cardonald, Pennilee Community Council - ET campaign ill informed and biased - Board should stick with Reid report	✓	✓		✓
28.	Mr John Goldie, Penilee Tenants and Housing Association - Board should stick with Reid report and now be swayed by emotional campaign	✓	✓		✓
29.	Ms Patricia Fort, Claythorn Community Council - Good transport links to QMH not to SGH concerned about Clyde Tunnel - Critical to keep mothers and children together - Access for visitors important			✓	
30.	Cllr Malcolm Green, Yorkhill and Kelvingrove Community Council - Not convinced on case for QMH closure and separation from RHSC would jeopardise standard of service	✓		✓	
31.	Mr J H Gordon, Chairman, Mearns Community Council - Must retain QMH/RHSC colocation - Must not close Southern - Keep all three units			✓	

## LOCAL AUTHORITIES, MSPS AND OTHER ORGANISATIONS

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
32.	Ms Margaret Daly, Partnership Manager, Greater Pollok SIP - Less focus on buildings and more on services and inequalities - Invest in community services - SGH best option for Pollok				✓
33.	Mrs R Pitts, Secretary, Bearsden North Community Council - Proposed QMH closure unsound and damaging - Birth numbers at QMH sustainable - Maternity and children's should be on same site - Closure would undermine RHSC - Population trend may reverse			✓	
34.	Ms Ruth D Aitken, Secretary, Cathcart and District Community Council - Be guided by Reid report not ET hysteria - Retain SGH	✓	✓		✓
35.	Ms Elizabeth Boyd, President, Glasgow Association of Women Graduates - Two will not be adequate - Maternity and children's together is important - Laboratories are unique - Services require on site collaboration - Support community service development - Public transport is a problem			✓	
36.	Mr Arthur West, Secretary, Socialist Health Association Scottish Branch - Proposal unsound and damaging - Number of QMH births is sustainable - Maternity/children colocation is vital - Research and development is world class - Closure would undermine RHSC			✓	
37.	Mr John H Corcoran, Chairman, Save our Services - Vale of Leven Maternity Services Campaign - Retain QMH, wonderful world class facility			✓	
38.	Mr Andrew Radford, Programme Director, UNICEF UK Baby Friendly Initiative - QMH should remain open as a centre of excellence in promotion of breastfeeding and baby friendly principles			✓	
39.	Ms Heather Cassidy, Drumchapel Drop-in Group - Concerns about breastmilk availability - Must not separate mothers and babies - Long distances to travel are a problem including costs - Public transport to PRMH and SGH is poor - Congested roads might lead to deaths			✓	
40.	Mr Brian Simmers, Chairman, Yorkhill Children's Foundation - Challenges decision to build PRMH - Reduce beds on current sites to reduce capacity - Will PRMH and SGH be envy of other cities? - Challenge conclusions on ITU			✓	

## LOCAL AUTHORITIES, MSPS AND OTHER ORGANISATIONS

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
41.	Mr Duggie Struthers, Health Development Officer, Blue Triangle (Glasgow) Housing Association - Closure will result in fatality because of neonatal transfers and traffic congestion - Increase staffing levels if there are pressures - SGH a problem because of territorialism - Challenges conclusions about adult services			✓	
42.	Ms Sandra Henderson, Chair - West of Scotland Branch, Down's Syndrome Scotland - ITU not guaranteed for mothers at SGH - Ex utero transfers not ideal - Fetal medicine service is excelled and will be at risk - Separation compounds emotional shock - Yorkhill support services are excellent - Very difficult to deliver teaching and research on a split site			✓	
43.	Ms Jane Corrie et al, Acting Centre Manager, The Annexe Healthy Living Centre - Keep Yorkhill open - Need more hospitals - Cut out health boards			✓	
44.	Mrs Marilyn Hazlett, Glasgow Support Group of the Miscarriage Association - Evidence to preconsultation misrepresented			✓	
45.	Amina - The Muslim Women's Resource Centre - Comments in detail on antenatal services and local access - Public transport and parking are important - Need specialist support for BEM women - Opportunity to stay longer in hospital				
46.	Mrs Sara Bartlett, Chair, National Society for Phenylketonuria (UK) Ltd - Decision based on small ITU numbers is unbalanced - Concerned about metabolic service no other unit has Yorkhill expertise			✓	
47.	Ms Brenda Townsend, Yorkhill Rights of the Child Group - Proposal fails to take account of interests and rights of babies - Consequences of closure - Loss of access to specialists - Loss of in utero transfer - Mother/child separation - Dismantling fetal medicine - Loss of regional and national services - Highlights UN convention breaches			✓	

## LOCAL AUTHORITIES, MSPS AND OTHER ORGANISATIONS

No	Name	Implication of response			
		Support 3 to 2	Triple colocation	Retain QMH	Shut QMH
48.	Dr Una M MacFadyen, Chair, Action for Sick Children (Scotland) <ul style="list-style-type: none"> <li>- Emphasises rights of children</li> <li>- Appropriate service is at Yorkhill</li> <li>- Proposals destroy a national resource</li> <li>- Denies mothers access and information</li> <li>- Compromises breastfeeding</li> <li>- Best service for babies is colocation of maternity and children's hospital</li> </ul>	✓		✓	
49.	Johann Lamont MSP <ul style="list-style-type: none"> <li>- Professor Reid process gives confidence, key issues have been rigorously and independently examined</li> <li>- Accepts three to two professional consensus and that two should be PRMH and SGH</li> <li>- Focus resources on vulnerable mothers in communities</li> </ul>		✓		✓
50.	North Lanarkshire Council <ul style="list-style-type: none"> <li>- Concern about impact on PRMH</li> <li>- Not satisfied that three to two is required</li> </ul>				
51.	REACH Community Health Project and AMINA Muslim Resource Centre <ul style="list-style-type: none"> <li>- SGH location more convenient</li> <li>- State of fabric an issue in both hospitals</li> <li>- Loss of SGH would disadvantage southside</li> <li>- Accessible local services is most important</li> <li>- Language and gender barriers are critical</li> <li>- Transport and parking are major issues</li> </ul>				
52.	Mansewood and Hillpark Community Council <ul style="list-style-type: none"> <li>- Object to Southern General closure</li> <li>- Highlight requirement of on site intensive care</li> </ul>				✓

**INDIVIDUAL RESPONSES: SUMMARY**

We received 171 individual responses to the public consultation. These responses highlighted a wide range of issues. Summarised below are those points which consistently emerged. The vast majority of responses oppose the closure of the QMH, many have had care there or at the RHSC.

- Many of the responses make a single statement that they oppose the closure of the QMH.
- Similarly many highlight their view of the importance of the RHSC/QMH link.
- The majority of responses suggest we should retain three units.
- There is a clear perception that this is a cost saving exercise not about safe and sustainable services.
- The issues of risk to babies and separation of mothers and babies are repeatedly raised.
- Criticisms of the preconsultation and consultation process.
- The case for a move from three to two units is not accepted by most respondents nor is our assessment of the future birthrate.
- Closure of QMH is first step to closing the whole site.
- North West of city must have a maternity unit.
- Issues about transport and access from West Glasgow to the Southern General are highlighted.
- PRMH and QMH as two units offer the best choice and mix of services for mothers and babies.
- Real risks to national services at RHSC and QMH.
- A number make suggestions to use the spare capacity at the QMH for other services.
- Many highlight positive experiences at the QMH and RHSC.
- Suggestion that two large units will be mechanistic and impersonal.
- Decision should be made nationally - this is not a local issue.
- Safety of babies is more important to mothers than their own safety.
- A number of West Dunbartonshire residents see the QMH as the most accessible hospital.
- We are not listening to the overwhelming majority of eminent clinicians.
- Significant problems with parking at the sites.
- Challenge the planning which underpinned the Rottenrow closure and PRMH capacity.
- Many responses also suggest we are intent on closing the RHSC.

In addition to these individual responses, two major petitions were generated during the consultation process. The first run by the Evening Times attracted 150,463 signatures supporting the statement:

“I the undersigned call on Malcolm Chisholm, Minister for Health and Community Care, to reject any move to close services at Yorkhill and to retain the Queen Mother’s Maternity Hospital and the Royal Hospital for Sick Children at the Yorkhill site.”

The second run by Sandra White MSP generated 1,620 signatures supporting the statement:

“We the undersigned note with concern the threat to the Queen Mother’s Maternity Hospital and Yorkhill Hospital due to the Maternity services review currently ongoing by NHS Greater Glasgow, further notes the special link between the Queen Mother’s and Yorkhill Hospital and calls for retention of both hospitals.”

## THEMES FROM PUBLIC MEETINGS

This summarises the issues raised in public meetings which were held as follows:

- Central Glasgow
- Yorkhill and Kelvingrove Community Council
- Shettleston Halls
- Woodside Halls
- Open Gate, Drumchapel
- Clydebank Town Hall
- Castlemilk
- Pierce Institute, Govan

The issues raised were:

1. Would better planning not have predicted spare capacity and doctors hours problems.
2. Land sales not clinical services are driving the decision.
3. Regional planning has been inadequate.
4. Were Yorkhill forced to withdraw their leaflet.
5. Birthrate might rise again.
6. The Board has misquoted policy guidance.
7. How will the public's views be taken into account.
8. Decision should be national because of services QMH provides.
9. Major concerns about separation of mothers and babies.
10. Concerns about fetal medicine, metabolic and lactation services.
11. Keep all three hospitals - babies safety more important than mothers.
12. Risks of neonatal transfers.
13. Women will need to be transferred from intensive care from any hospital site;
14. Put intensive care in QMH.
15. Have access issues been considered including the Clyde Tunnel.
16. Concern that closure of the QMH would be the death knell for the RHSC.
17. No evidence that the QMH is not safe.
18. Need all the current facilities - sometimes they are too busy.
19. More detailed work should have been done before consultation.
20. Need extra capacity for Vale of Leven births.
21. The decision has already been made and consultation is a sham.
22. How will closure improve services.
23. How can it be better to transfer more babies than mothers.
24. Would lose national centre of excellence for an ordinary service.
25. Choice to deliver next to a children's hospital being taken away from women.

## MATERNITY PLANNING GROUP: FINAL REPORT

### 1. Summary

1.1 This paper describes the work of the Maternity Planning Group which the Board established to test our proposal to close the QMH. The report describes current patterns of service, how services would be organised if the QMH closed, including neonatal transfer arrangements.

1.2 At headline level the report concludes:

- the closure of the QMH would generate around 150 extra transfers each year - we propose an additional transfer vehicle to ensure these can be safely and expeditiously undertaken;
- we can put in place arrangements to ensure that mothers would not routinely be separated from their baby if it required admission to the RHSC;
- a consolidated fetal medicine service at the PRMH operating in a structured clinical network with the RHSC can continue to provide high quality antenatal and perinatal care and well planned and organised care for babies with prenatally diagnosed abnormalities;
- the development of a critical care floor at the RHSC with paediatric intensive care specialists, neonatal surgeons, neonatologists and cardiologists, working as a team, can deliver safe and quality care;
- the ECLS service, which provides advanced life support to very ill babies, can continue to be provided within the RHSC as part of the service supported by clinicians in the critical care services;
- the proposed model of service is affordable within current costs including the investments required to deliver the services outlined above.

### 2. Introduction

2.1 The Maternity Planning Group was established to lead and co-ordinate further work during the public consultation process to outline how our proposed pattern of services could be delivered. The preconsultation process provided a clear framework of service proposals and the analysis which underpinned them. The Maternity Working Group explicitly highlighted a number of important consequential service issues related to their recommendation which set the agenda for the Planning Group.

2.2 The Group was chaired by the Board's Medical Director and it included members from all three Trusts. Its brief was to look at a number of elements of service:

- a consolidated fetal medicine service;
- specialist paediatrics;
- consequential changes for the RHSC;
- national and West of Scotland clinical patterns;
- neonatal transfers;
- QMH service re-provision.

In addition the Group was tasked with workforce modelling and financial modelling of the consultation option.

### **3. Work Programme**

3.1 The work of the Group had a number of different strands:

- detailed clinical input from a range of staff across maternity, neonatal and paediatric services;
- numeric analysis;
- establishment of sub-groups on:
  - specialist paediatrics;
  - aspects of fetal-maternal medicine;
  - workforce;
- visits to other services that do not provide colocated maternity and specialist paediatrics.

This report draws conclusions from all of that analysis and review.

3.2 The first meeting of the Group established three important working assumptions:

- PRMH would be the focal point for pregnant women and neonates likely to require specialist maternal, fetal and neonatal services - from inside and outside Glasgow. This links to the proposed consolidation of fetal medicine;
- clinical organisation between the RHSC and the PRMH should deliver services which are as close as possible to what is presently achieved by colocation;
- services should be designed to minimise the need for neonatal transfer.

The purpose of the Group was not to develop highly detailed implementation plans, which would be quite inappropriate during an open consultation exercise. Our aim was to test the major issues about service provision if the QMH closed, to demonstrate, at headline level, whether and how services could be safely delivered with maternity services at the Southern General and PRMH sites, fetal medicine at the PRMH and specialist paediatrics at the RHSC.

The data in this report has been drawn from the detailed programme of work to date. An audit of casenotes is presently underway to provide comprehensive clinical data to further support this report and any future implementation planning.

### **4. A Consolidated Fetal Medicine Service**

4.1 The fetal medicine team at the QMH produced a detailed review of their current workload and clinical relationships. This section briefly summarises the key elements of that review in the context of evaluating the required model for a consolidated service. Related paediatric, surgical and specialist issues are dealt with in Section 4.

Our conclusions are also informed by visits to three major maternity units, in Liverpool, Bristol and Birmingham, which provide regional fetal medicine services for larger populations than the QMH but are not on the same site as the children's hospital to which they are clinically linked.

4.2 The key elements of fetal medicine are outlined below. In essence, referrals are made from other maternity services across Scotland for the expert diagnostic skills of the QMH fetal medicine team and the structured input of a range of other specialists, most particularly paediatric surgeons, cardiologists and clinical geneticists. The small numbers of women whose diagnostic care highlights an abnormal fetus which will require surgical or cardiac input soon after birth, are booked for delivery at the QMH.

4.3 Fetal medicine is mainly an out-patient based specialty which sees women in a planned way throughout their pregnancy. The key features are a high level of diagnostic skills, including ultrasound, biochemical and clinical assessments; counselling and support; and multidisciplinary working. At present the service in the QMH can be analysed as detecting the groups of anomalies below where pregnancies are continued, approximate numbers per annum:

•	Gastrointestinal	40
•	Cardiovascular	40
•	Thoracic	10

In addition to these main diagnostic areas there are approximately a further 15 patients diagnosed with a range of other problems requiring the input of other specialists.

4.4 Beyond the diagnostic and prenatal care to these women, the QMH fetal medicine service also provides interventional therapy including:

- the national intrauterine transfusion service for rhesus immunisation, parvovirus infections or neonatal alloimmune thrombocytopenia. This service relies on the clinical skills of fetal medicine specialists, genetics input and the supply of blood from the SNBTS at Gartnavel General;
- the relatively rare procedures of intrauterine shunting for lung pathologies and obstructed fetal bladders are performed mainly by fetal medicine specialists with occasional input from paediatric surgeons.

In addition, there is an aspiration to provide novel laser treatments for fetotransfusion syndrome which are presently being provided in London for the whole of the UK - these laser treatments could be developed without colocation with children's services although there will be issues about whether Scotland has the required critical mass .

4.5 How would a consolidated service work? A high quality consolidated service would require:

- the transfer of the QMH team to join the team at the PRMH;
- structured input of paediatric cardiologists to the outpatient service at the PRMH. In the services we visited this was generally for two sessions each week which included input to NNICU. The arrangements for surgical input were similar although less frequent;
- input from clinical genetics to the PRMH service;
- the continuation of the current perinatal meeting bringing together all of the specialists relating to fetal medicine;
- structured liaison between the two sites to ensure that patients can visit the RHSC before delivery.

- 4.6 Particular issues have been raised by QMH clinicians about the national fetal transfusion service and other interventional fetal procedures. The three regional services we reviewed provide such services without colocation with a children's hospital.

In addition, the concern has been raised that referrals presently made because of the colocated service would not come to Glasgow if a clinical network between the PRMH and RHSC replaced that colocation. Other centres consistently reported strong regional referral patterns despite the absence of on site paediatrics. Those referral patterns reflect the significant clinical advantages of structured and planned management between fetal medicine and paediatric specialists which can be achieved between a regional centre and a children's hospital but could not be replicated with all maternity units.

- 4.7 Concerns have also been raised about risks to research and training. If the service was provided as outlined above, at the PRMH, it is not clear that there would be any risk to training or research status as we would be providing a similar service, with similar clinical collaboration and skills to the present arrangements and the service would be dealing with the same patient numbers and problems. Clearly operation of two sites would require some reorganisation of training locations but should not affect the quality of training. The QMH submission on fetal medicine highlighted a network of research links, within Glasgow and internationally. It is not clear why these could not continue and on the positive side a single team would provide a larger pool of specialist fetal medicine clinicians.

- 4.8 The unstructured ease of access which is available between the RHSC specialists and the QMH team could not be replicated. It is not clear that represents a significant clinical or quality diminution, where there is high potential to plan patient interactions.

The introduction of detailed 20 week scanning, presently not provided for Greater Glasgow residents, which it is recommended we introduce in implementing this review, will produce an even greater level of prenatal diagnosis, predictability and the potential to plan care.

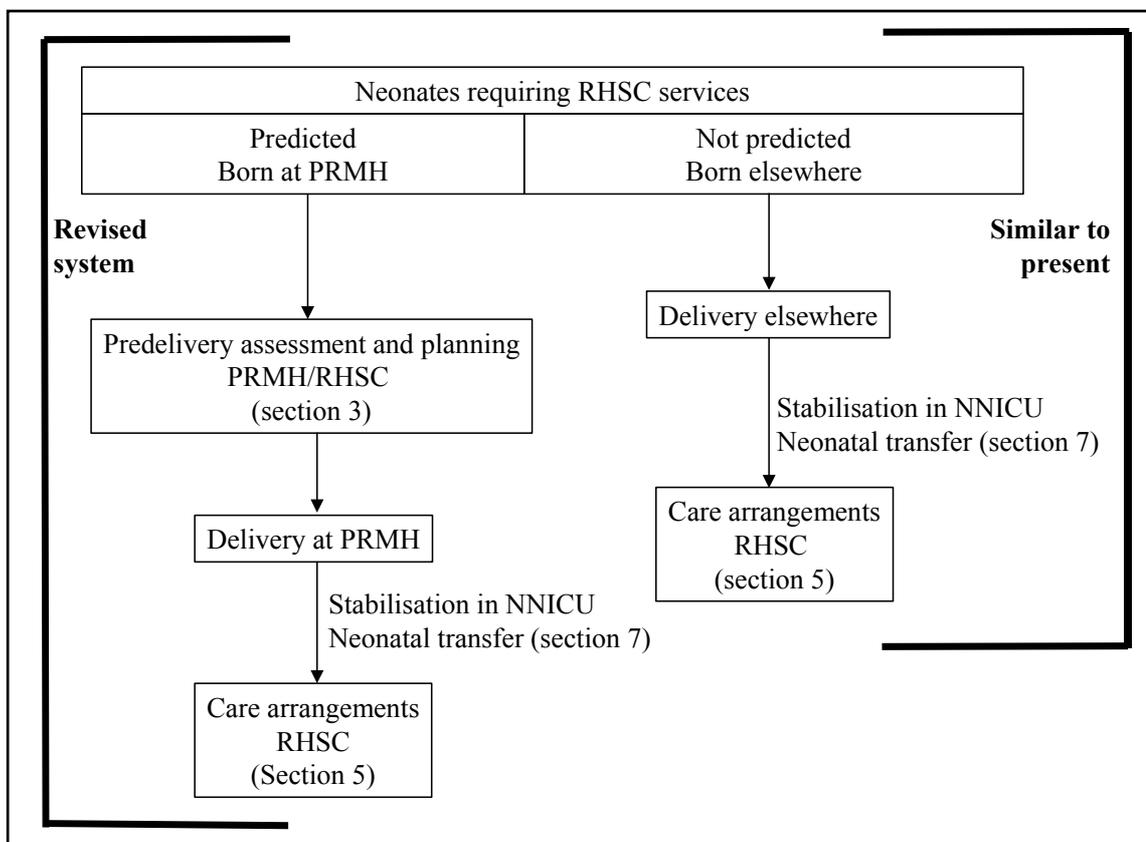
A final, important point is that paediatric surgeons, clinical geneticists and paediatric cardiologists already provide outpatient services across the West of Scotland. This offers the potential to review clinical commitments to support this proposed networked approach particularly given the requirement to review consultant job plans in implementing the new contract.

## **5. Specialist Paediatric Services**

- 5.1 This section sets out the issues and our proposals for the major elements of specialist paediatric services which relate directly to neonates and would require significant change if the QMH closed.

The focus is on those neonates whose need for services at the RHSC is identified before birth, which, at present, enables them to be born at the QMH. The care arrangements for those neonates who are presently born elsewhere and already transferred in, are outlined in section 5 and are not substantially different from the present pattern of care. The diagram below illustrates the care pathways for these two groups.

### Care Pathway without QMH



There are three main services on which the planning group has focused because these cover the majority of the clinical arrangements that would need to change. These are:

- neonatal surgery;
- paediatric cardiac services;
- paediatric radiology.

#### 5.2 Neonatal Surgery

The focus of this section is on arrangements for the management of neonates with a prenatal diagnosis who would have been born in the QMH. The neonatal surgical service at the RHSC is based in Ward 2B which includes intensive and high dependency care.

Neonatal surgeons also provide input to the QMH fetal medicine service - arrangements for this are described in more detail in section 3.

- 5.3 The section on fetal medicine identified that approximately 50 women each year will have a fetal abnormality detected, which will require neonatal surgery (cardiac interventions are covered at paragraph 4.5) soon after delivery, and elect to continue with their pregnancies. At present, these women usually deliver at the QMH. The rest of this section outlines the key clinical conditions and how these patients would be managed if the QMH closed.

**Diagnosis requiring surgical intervention (approximate figures)**

Gastroschisis	13
Exomphalus	8
Atresia and meconium disease	10
Thoracic abnormalities (CDH)	9
<b>Total</b>	<b>40</b>

Given these conditions are prenatally diagnosed and would continue to be jointly managed by fetal medicine and surgical specialists, it would still be possible to plan delivery, as at present. These women would be delivered at the PRMH, the baby stabilised in the NNICU there and transferred to the RHSC for surgery. The proposed addition of a second neonatal transport ambulance would ensure guaranteed access to expert transfer.

Where there are optimal short times from delivery to surgery these should continue to be achievable because of the planned nature of the transfers, the predelivery collaboration and the proximity of the RHSC and PRMH. This is particularly significant for gastroschisis where short delivery to operative times may influence outcomes.

It has been suggested that there are neonates who require immediate surgery after delivery. These were described as falling into two categories:

- Group 1: neonates with congenital diaphragmatic hernias who may benefit from ECLS;
- Group 2: neonates with airway problems who require surgery before separation from the placenta, known as an EXIT procedure.

Dealing with the first group. Yorkhill described practice for some babies born with CDH (perhaps 2 per annum) receiving immediate ECLS, which is only available at the RHSC. We have not been able to identify similar practice in another centre. On our visits the advice was NNICU stabilisation would be required before ECLS or surgery. However, if there is a local case for immediate ECLS in particular cases, with a full assessment of maternal risk, we have discussed the potential to plan to have full obstetric, anaesthetic and intensive care expertise available at the RHSC to enable an elective caesarean delivery on that site. A key implementation question will be to establish the clinical case for immediate ECLS, the time, even within the Yorkhill campus, which is required to prepare the treatment and the degree of predictability of the benefits of ECLS. The other alternative, which could be considered further as part of implementation planning, would be to consider the possibility of developing an ECLS transfer capability - which may also have benefits for other infants, presently born outside the QMH. This links to the proposition that a second transfer ambulance should be considered.

For the second group, with major airway problems requiring EXIT procedures, accepted practice is to provide the required paediatric expertise into the maternity facility to undertake immediate surgery. This service may be required for one or two cases each year and would be organised between an RHSC paediatric specialist team and the PRMH.

#### 5.4 Paediatric Radiology

The present pattern of services in Glasgow has a number of different components:

- at both PRMH and SGH neonatal units cranial ultrasounds are undertaken by the neonatologists. PRMH has a session of paediatric radiologist each week to undertake ultrasounds and report films. In SGH films are read by an adult radiologist;
- specialist investigations, ie, CT, MRI and contrast studies are only undertaken at RHSC. Around 100 babies per annum transfer from the QMH to the RHSC for those services;
- all radiology to the QMH neonatal unit is undertaken by the RHSC staff in the QMH.

At a headline level we would want to achieve the following pattern of services:

- an increased paediatric radiologist presence at the PRMH beyond the current single session, if that is required to reflect increased workload and casemix - an option might be similar sessional input but a teleradiology link, for which capital funding has been secured;
- further exploration of the potential to develop additional, more specialist radiology at the PRMH, either through access to existing equipment by paediatric radiologists or by provision of dedicated equipment, eg, neonatal MRI, as part of the PRMH facilities;
- telemedicine capability to enable paediatric radiologist assessment of imaging undertaken within the SGH NNICU.

The key issue in terms of service change is to assess the additional transfer requirement if the babies presently delivered at the QMH are delivered in an alternative site. We know that 100 neonates are transferred from the QMH to the RHSC for specialist radiology each year but under a PRMH/RHSC model at least 25% of these would be included in our estimates of transfers for procedures.

#### 5.5 Paediatric Cardiac Services

The section on fetal medicine outlined the referral routes and prenatal diagnosis for fetuses identified as having potential cardiac problems.

Around 30/40 women each year will be diagnosed antenatally as carrying a fetus with a significant cardiac abnormality, requiring cardiology input and potentially cardiac surgery. Around 35 cases each year will not be prenatally diagnosed and will be transferred after birth to the RHSC for investigation and any required further treatment.

The model of service for those women with a prenatal diagnosis would be:

- joint antenatal planning and care as outlined in the fetal medicine section of this paper;
- planned delivery, stabilisation and transfer for investigation or surgery

Those neonates presently transferred for investigation and surgery after delivery would receive care similar to the present arrangements as outlined in section 5. The establishment of teleradiology to other maternity units may reduce the current transfer numbers and cardiologist input to PRMH NNICU could also reduce transfers

## 5.6 The ECLS Service

The RHSC is the Scottish Centre for ECLS which provides extracorporeal circulation and gas exchange to offer temporary life support in babies with cardiac, respiratory and pulmonary failure. The service is provided in three other UK centres - Great Ormond Street, Glenfield Hospital in Leicester and at the Freeman Hospital in Newcastle (none colocated with a maternity hospital). The RHSC service is uniquely provided in two areas of the hospital - PICU and the neonatal surgical ward. For the former, clinical care is provided by a neonatal surgeon, paediatric anaesthetists and for the latter by the surgeon and neonatologists. Nursing care is provided from a single pool. Revised working arrangements reflecting the shift in responsibilities outlined earlier in this section, would be required to reflect changes to the neonatology staffing if the QMH closed. The services at GOS, Glenfield and Freeman are run by paediatric intensivists and/or anaesthetists working closely with paediatric cardiac surgeons. The GOS service has one neonatologist working as part of the intensivist team. The other centres have some input from offsite neonatologists. This would suggest there is no basis to see the closure of the QMH as undermining the ECLS service.

## 6. Consequential Changes for the RHSC

6.1 The focus of this part of our work was to identify how care could be provided to those neonates requiring transfer to the RHSC for intervention, soon after delivery, who may presently have part of their care provided in the neonatal facilities within the QMH or have input to their care from QMH neonatologists. An important part of the Group's brief, therefore, was to consider how services at the RHSC would be effected if the QMH closed.

Our approach to this area of work was to agree, at our first end of November meeting, that Yorkhill Trust planning group members would produce an analysis of "consequential" service issues.

The paper produced by the Trust identified the critical issue as the provision of care to neonates born in the QMH and referred to the RHSC for surgery or cardiac intervention. The Trust proposal is that the only acceptable model of care would be the creation of a new, eight bedded NNICU within the RHSC, with full consultant and junior staffing - this is in line with the view of the Neonatal Subcommittee. However the Neonatal sub committee response also states that such an arrangement is:-

- "inefficient and unlikely to be sustainable"

The Maternity Working Group considered the issue of support to neonatal surgery, in its deliberations, and received similar advice from local clinicians, that a full NNICU is the only appropriate model of care. The Working Group report notes that the integration of maternity and the full range of neonatal services is the ideal model of care. However, the Working Group, with advice from an external paediatric anaesthetist and neonatologist, concluded that, for the small numbers of neonates who would be treated at the RHSC, a full NNICU was not necessary to provide a clinically safe and quality service. Their report does highlight the need for NNICU expertise at the RHSC. There has been a widespread suggestion that the group recommended neonatal post operative care was not provided at the RHSC. This is not the case.

6.2 In order to anchor our proposals about how these issues can be addressed it is important to describe the present model of service. The rest of this section describes:

- current service organisation;
- a proposed service model.

### 6.3 Current Service Organisation and Facilities

There are presently different arrangements in place for:

- **neonates requiring RHSC surgical or cardiac intervention born in the QMH.** These neonates number around 70 per annum. After stabilisation in QMH NNICU, depending on their particular condition, birth weight and prematurity, these babies are currently transferred to the RHSC for intervention, with pre and post operative care within one of the three facilities outlined later in this section. A small number receive some of their post operative care in the QMH NNICU;
- **neonates transferred in to Yorkhill campus for RHSC intervention.** The majority of these neonates are admitted to one of the facilities in the RHSC described below. A small number are admitted to the QMH NNICU, mainly those who require cardiac investigations.

6.4 Three facilities in the RHSC currently provide care for neonates requiring surgical and cardiac intervention:

- **neonatal surgical ward** - this provides the majority of care for neonates requiring paediatric surgery. Lead clinical responsibility lies with paediatric surgeons - junior staff have neonatal paediatric experience and the Trust response, reports increasing involvement of consultant neonatologists in the last two years. The ward provides a number of intensive care and high dependency beds and part of the ECLS service. The nursing staff in the ward have substantial neonatal expertise and experience in dealing with premature and low birthweight babies;
- **paediatric intensive care** - providing care for a range of neonates pre and post surgically including preterm infants with airway problems and most of the cardiac surgery neonates, who are mainly born at term. The ECLS service for cardiac patients is provide in PICU. Clinical responsibility lies with the paediatric intensive care specialists and their junior staff who will all have neonatal medical experience;
- **cardiac surgery and cardiology ward-** Ward 5A is an 18-bed combined ward incorporating a high dependency area with integrated, wall-mounted monitoring equipment, a patient activity area suitable for all age ranges.

### 6.5 Proposed Service Model

If a neonatal intensive care facility is not a clinically viable or economic option how can the RHSC function without a NNICU on site? There are two important points of context:

- the present paediatric intensive care unit is being redeveloped adjacent to the neonatal surgical ward, alongside a new HDU facility;

- the services at Birmingham and Great Ormond Street treat this group of neonates, requiring intervention, in neonatal surgical, cardiac and paediatric surgical facilities. In the case of Birmingham, the service is provided without structured neonatologists input and in the case of Great Ormond Street with one neonatologist working as part of the paediatric intensive care consultant team. Alder Hey and Bristol had similar arrangements but with a marginally greater pattern of post operative discharge back to maternity hospitals with NNICUs.

Our proposal is that the redevelopment of PICU and HDU alongside the neonatal surgical facility enables the creation of an integrated critical care facility, with a more consistent role for paediatric intensivists across the range of surgical and interventional facilities, providing care in partnership with paediatric surgeons and cardiologists. Within such a facility a single ECLS service should be created. We accept the conclusion that structured neonatal input to such a facility does offer benefits to clinical quality and the redesign of the neonatologist workforce needs to include provision for a regular consultant presence, on a daily basis. Junior staffing of these facilities should be delivered with the present pool of RHSC staff and skills including paediatric anaesthetists, neonatology and paediatric surgery and with the development of advanced neonatal nurse practitioner roles across Glasgow.

It is clear that paediatric intensive care specialists, working with nursing staff with neonatal expertise and with structured neonatologist input, can provide high quality perioperative care in the range of cases which would need to be treated at the RHSC. The input of paediatric intensivists to the neonatal surgical facility would support the care of neonates in that ward, with a single pool of junior staff operating across the critical care floor. This arrangement of service would provide an even stronger multidisciplinary model of care than is available in other, major standalone children's hospitals.

In detailed planning of the model of care there are a number of issues we would need to consider:

- the occupancy levels of the current facilities and their capacity to deal with a marginal element of additional activity particularly the need to handle peaks in activity which is largely non elective;
- linked to the above point staffing and skills issues to provide an extended pattern of care;
- with NSD, pressures on the RHSC PICU related to the imbalance of beds in relation to demand between the RHSC and the Edinburgh Children's Hospital to ensure PICU capacity is available to support neonatal services;
- additional input from paediatric specialists will be required - for small numbers of babies in the NNICU at the PRMH.

6.6 The tables below show the cases presently transferred into the QMH neonatal unit for part of their care which would be additional activity for an RHSC critical care floor and those whose care would be provided in the regional NNICU at the PRMH. A detailed casenote review is underway to enable the precise capacity issues to be defined and addressed.

All of the data in these tables has been provided by the regional neonatal transport services - it covers a period of eleven months.

**Transfers into QMH requiring RHSC Capacity**

Reason	Glasgow		Non Glasgow		Total		Total
	Emergency	Elective	Emergency	Elective	Emergency	Elective	
Cardiac	4	2	17	7	21	9	<b>30</b>
Cont care	0	1	2	0	2	1	<b>3</b>
ECMO	0	0	2	0	2	0	<b>2</b>
Imaging/Invx	1	1	0	3	1	4	<b>5</b>
Surgery	3	5	2	2	5	7	<b>12</b>
<b>Total</b>	<b>8</b>	<b>9</b>	<b>23</b>	<b>12</b>	<b>31</b>	<b>21</b>	<b>52</b>

**Transfers into QMH requiring PRMH Capacity**

Reason	Glasgow		Non Glasgow		Total		Total
	Emergency	Elective	Emergency	Elective	Emergency	Elective	
ITU	0	0	4	0	4	0	<b>4</b>
Prem/RDS	0	0	2	0	2	0	<b>2</b>
Specialist Op	0	2	6	9	6	11	<b>17</b>
<b>Total</b>	<b>0</b>	<b>2</b>	<b>12</b>	<b>9</b>	<b>12</b>	<b>11</b>	<b>23</b>

6.7 In addition to the issue of clinical facilities and skills for pre and post operative care the issue of support to the ECLS service has been raised as significant. At present, the neonatologists work with the paediatric surgeons to support this service. Three of the four UK centres are not colocated with neonatology. Paragraph 5.6 gives more detail on this issue.

6.8 A very small but important patient group which require consideration with particular care are neonates with necrotising enterocolitis (NEC). This condition is a feature of prematurity, becoming apparent after birth, often in low birthweight babies. These neonates, around 10/12 per annum, would presently be transferred to the Yorkhill campus where their condition can be regularly appraised by surgeons and decisions made on whether operative intervention is appropriate. Access to specialist radiology - only available at the RHSC, is also likely to be important in the care of these neonates. This arrangement could continue with transfer into the critical care facility at the RHSC for regular review. The alternative, if 24 hour consultant led, neonatal intensive care was required, would be surgical review in the PRMH NNICU.

It is also possible that the decision on which of these options is most appropriate should be made on a case by case basis. Similarly, in terms of post operative care there are two options - transfer back to NNICU, offsite at an appropriate point after surgery, or a longer post operative care period within the RHSC. Again, the decision on the most appropriate option can be made on individual cases.

6.9 We have recently received comments from Yorkhill on arrangements for the specialist adult female metabolic clinic (PKU) and maintaining a lactation bank if the QMH closed, important issues raised in public consultation. Our view is that

- the metabolic service is out-patient based and requires the structured organisation of a range of clinical staff that can still be achieved if the QMH closes;
- a breastmilk bank can be provided at the RHSC.

6.10 A further important issue is the potential separation of mothers and babies where the delivery takes place at another hospital, the baby requires transfer to the RHSC and the present ability to transfer the mother for postnatal care at the QMH is not possible. This has been a major issue in consultation and a serious cause of public concern. In our view a facility for mothers to stay in at the RHSC immediately after delivery should be put in place. Postnatal care would be provided by the local community midwives at the RHSC. If there are particular and exceptional circumstances where a substantially higher level of midwifery input is required it would be possible to put in place “special” one to one care arrangements. This is likely to be for 50/60 women per annum. This model is already operational in other sites where maternity and children’s services are not together. For women who are extremely ill after delivery and whose condition is unstable the present situation where their transfer to join their baby is only possible after further medical care in the delivery hospital would continue. Facilities at Ronald McDonald House would continue to be available for women not requiring maternity care.

## **7. National and West of Scotland Clinical Patterns**

7.1 Other sections of this paper have outlined how the following national services will be sustained if the QMH closed:

- paediatric cardiology and cardiac surgery;
- ECLS;
- interventional fetal medicine.

A further critical issue is to ensure that the pattern of referral into Glasgow of fetal abnormalities continues. In our view this will depend on our ability to ensure the PRMH/RHSC service is seen as an integrated service provided on two sites. The centres we visited which were not colocated reported a strong pattern of regional referral.

## **8. Neonatal Transfers**

8.1 This section is based on three important premises:

- that specialist transfer of neonates who have been stabilised in an intensive care unit is safe (this issue is covered in more detail in the Board paper);
- that we should minimise the need for transfer - ie, only neonates who require specialist investigation or treatment only available at the RHSC should be physically transferred;
- that the development of a strong clinical network between the RHSC and PRMH will sustain patterns of paediatric referral into Glasgow ensuring that additional journeys are short and as planned as possible.

Implicit in these assumptions is a change to the patterns of clinical activity of paediatric specialists to offer additional input to the PRMH neonatal unit rather than transferring neonates where specialist advice is required.

8.2 The neonatal transfer service was formally established in March 2003. At that point dedicated medical and nursing time were funded with the availability of a specialist ambulance and driver. Similar teams are established for northern and eastern regional groupings.

- 8.3 In its first year the West Team will have undertaken around 550 transfers, around 1.5 transfers each day, with one third emergencies and two thirds elective transfers. Data below is based on the first 11 months of the transfer service. The pattern of activity was as follows:

<b>Emergency Transfers</b>		
158 in Total		
Surgery	59	37%
Cardiac	36	23%
RDS/Prematurity	16	10%
ECMO	14	9%
Intensive care	09	6%
Specialist opinion	10	6%
Continuing care	12	8%
Imaging/Invx	2	1%

<b>Elective Transfers</b>		
345 in Total		
Return to Base	220	63%
Imaging/Invest	52	15%
Surgery	28	8%
Cardiac opinion	28	8%
Specialist opinion	19	5%
Continuing care	4	1%

#### 8.4 Transfers into QMH

It is important to note this pattern of transfers is for neonates not prenatally diagnosed with surgical or cardiac problems and that the cases presently transferred to the QMH for prematurity, respiratory distress syndrome, ITU and some specialist opinions would be transferred to the regional NNICU at PRMH, if the QMH closed.

#### **Current Transfers into the Yorkhill Campus**

Reason	Glasgow		Non Glasgow		Total		Total
	Emergency	Elective	Emergency	Elective	Emergency	Elective	
Back to base	1	0	0	1	1	1	2
Cardiac	4	2	17	7	21	9	30
Cont care	0	1	2	0	2	1	3
ECMO	0	0	2	0	2	0	2
Imaging/Invx	1	1	0	3	1	4	5
ITU	0	0	4	0	4	0	4
Prem/RDS	0	0	2	0	2	0	2
Specialist Op	0	2	6	9	6	11	17
Surgery	3	5	2	2	5	7	12
<b>Total</b>	<b>9</b>	<b>11</b>	<b>35</b>	<b>22</b>	<b>44</b>	<b>33</b>	<b>77</b>

Our assessment of the additional transfers which would be required if the QMH closed are shown below with a short commentary:

- **neonatal surgery** - because we propose a network fetal medicine service between the PRMH and RHSC the time of delivery and transfer arrangements for these 40 cases should be urgent but planned;
- **cardiac services** - for the 30 cases identified in section 5 we would expect the same pattern as for neonatal surgery to apply;
- **radiology** - at present 96% of transfers for imaging are elective - we would expect a similar pattern for the maximum of 75 radiology transfers not associated with other specialist care.

All of these cases will have short journey times within Greater Glasgow. An important element of detailed implementation work will be to assess whether these additional journeys require an expansion in capacity to a second ambulance or are sustainable within the current service. We have assumed in the financial modelling that a second transfer vehicle is required.

## **9. QMH Service Reprovision**

- 9.1 The assumption is that community based maternity services would not be affected by the closure of the QMH based on the development of a maternity day care centre in West Glasgow. Our work under this heading has focused on developing our proposals for catchment areas, as set out below. At present these are illustrative and would require further local discussion. They define the coverage of community services but do not remove the choice for women to deliver at whichever unit they wish.

**Proposed Catchment Areas**

<b>Area of Residence</b>	<b>PRMH</b>	<b>Area of Residence</b>	<b>SGH</b>	<b>Total Deliveries</b>
<b>All</b>	<b>6239</b>	<b>All</b>	<b>4920</b>	<b>11159</b>
<b>Non GG</b>	<b>1426</b>	<b>Non GG</b>	<b>658</b>	<b>2084</b>
<b>Total</b>	<b>4813</b>	<b>Total</b>	<b>4262</b>	<b>9075</b>
G1	19	G11	140	
G15	185	G12	207	
G2	7	G13	297	
G20	323	G14	219	
G21	473	G41	409	
G22	192	G42	380	
G23	78	G43	202	
G3	140	G44	270	
G31	256	G46	291	
G32	345	G51	308	
G33	424	G52	238	
G34	128	G53	345	
G4	60	G60	72	
G40	109	G76	220	
G45	185	G77	243	
G5	105	G78	3	
G64	201	G81	418	
G65	27			
G66	357			
G69	261			
G71	29			
G72	250			
G73	315			
G61	250			
G62	94			

This assumes around 200 Vale of Leven deliveries in Glasgow - we will test further this assumption with Argyll and Clyde.

- 9.2 The delivery services in the QMH would be replaced at the SGH and PRMH. The fetal medicine service would be consolidated at the PRMH and the SGH and PRMH early pregnancy services would be expanded to meet the additional workload.
- 9.3 For those women with higher risk pregnancies who have their antenatal, day care and inpatient admissions at the QMH these services would be provided at the PRMH and SGH, depending on catchment and at a maternity day care centre we will locate in an accessible location in the west of the city in the model of existing centres at Rutherglen and Millbrae.

## 10. Workforce and Finance

- 10.1 The Workforce subgroup has reviewed the medical, midwifery and administrative staffing required to run two sites and the financial modelling shown at paragraph 10.2 is based on its work.
- **Midwifery staffing.** Heads of Midwifery reviewed current midwifery staffing across Greater Glasgow NHS using a validated workforce planning model. This suggests that there are marginally less staff than are required to run the current sites - enough to support a maternity centre type facility.
  - **Neonatal nursing.** Assuming the present number of ICU (24) and SCIBU (58) cots are reprovided in two sites, we have assumed the present staffing levels remain. The actual number of cots and occupancy would require further analysis during implementation of any agreed change and review in the light of emerging guidance from a Department of Health review of neonatal services and the development of advanced neonatal nurse practitioner roles, replacing junior doctors. Staffing levels need to reflect the increased regional and national role for the PRMH NNICU, networked with specialist services at the RHSC.
  - **Medical staffing.** The analysis below illustrates the impact on medical staffing of a two site option, compared to the current arrangements. The challenges of the EWTD and consultant contract are not included in these figures but would be even more significant if we were not moving to two sites.
- 10.2 Our financial modelling had the objective of ensuring that the Board's final decision could be made with a clear estimate of the cost of revised pattern of services including the costs of any associated changes at the RHSC. Summarised below is the outcome of that work, linked to the workforce analysis outlined at the start of this section

	(Saving)/Cost £000	
<b>SALARIES</b>		
Medical:		
Consultant Obstetricians		Status quo
Junior Obstetricians	(1,077)	Reduction in rotas across obs & gyn
Consultant Neonatologists	90	1 additional consultant required
Junior Neonatologists	346	6 additional juniors required - costed at SHO Band 2A Rotas
Nurse Practitioners		Status quo
Anaesthetics (all grades)	(300)	Saving of 8 Consultant sessions & 4 SHOs Band 2A Rotas
Nursing		
Obstetric		Status quo
Neonatal		Status quo
Other professional & technical		Status quo
Physiotherapy		Status quo
Support		Status quo
<b>Total Salaries</b>	<b>(941)</b>	
<b>NON SALARY COSTS</b>		
Supplies & Allocated Costs	(500)	
Capital Charges	(495)	
<b>Total Non-Salaries</b>	<b>(995)</b>	
<b>TOTAL (SAVING)/COST</b>	<b>(1936)</b>	
<b>ADDITIONAL COSTS</b>		
Additional Paediatric Specialist Consultant Sessions	118	
Additional Cost of Neonatal Transfer Service	37	Total £185k - service funded nationally by Arbutnott - GGNHSB approx 20%
Information Technology Improvements	100	
Fetal Anomaly Screening	100	
<b>Total Additional Costs</b>	<b>355</b>	
<b>NET (SAVING)/COST</b>	<b>(1,581)</b>	

Against these savings Yorkhill advised that, in their view, none of the costs below can be reduced.

	<b>£000</b>	
OMH Capital Charge	297	
Allocated costs only released on demolition	279	
Allocated clinical salaries	473	Includes £168k paramedical and £129k labs
Allocated clinical supplies	919	Includes £659k labs (variable costs of £116k released)
Allocated non-clinical salaries	148	Laundry, linen, portering etc
Allocated non-clinical supplies	457	Includes £261k catering, £75k laundry, £78k building & engineering m'ene
Allocated capital charge	685	
<b>Total</b>	<b>3258</b>	

Our view is that it is reasonable to assume that, in the context of a number of savings and staff reduction programmes across Glasgow, at least half of these costs can be saved - offering an overall breakeven position for our proposal.

- 10.3 Improvements to information technology to support this more community orientated model of care will be an important component of service change. Our revenue cost includes an allowance for this factor.
- 10.4 Yorkhill have also suggested two further costs if the QMH is to be vacated and demolished:
- reprovision of non maternity accommodation including pharmacy, accommodation and university facilities which occupy about a third of the building;
  - the cost of demolition (one off).

The future use of the QMH will require a more detailed appraisal in implementing any decision on maternity services including a full assessment of the economics of retaining the building which has a low capital charge but is suggested to have high demolition and reprovision costs. This appraisal would need to include a rigorous review of the options for reprovision - for example, reducing staffing accommodation, reviewing with Glasgow University their contribution to facilities and considering alternative arrangements for pharmacy. On this latter point - the North Glasgow Operating Division is already doing an initial scoping exercise on the potential efficiency of a single, off site pharmacy service.

The objective of the economic appraisal will be to avoid any additional, recurring costs.

**11. Conclusion**

We have worked to the brief defined by the NHS Board to describe how the pattern of services proposed for consultation could be delivered in a safe and sustainable way.

**Report agreed by:**

- **Dr Brian Cowan, Board Medical Director and Group Chair**
- **Dr Bill Anderson, NGUHD Medical Director**
- **Dr David Stewart, SGUHD Associate Medical Director**
- **Lynn Wojciechowska, SGUHD Head of Midwifery**
- **Mary McGinley, NGUHD Head of Midwifery**
- **Rosslyn Crockett, Board Nurse Director**
- **Catriona Renfrew, Director of Planning and Community Care**

**Report not agreed by:**

- **Morgan Jamieson, Medical Director, Yorkhill Division**
- **Eleanor Stenhouse, Head of Midwifery, Yorkhill Division**
- **Linda Fleming, Director of Planning, Yorkhill Division**