

the Greater Manchester  
**Pathology**  
(Laboratory Medicine) Network

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## Strategic Outline Case

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### 20:20 – The Emerging Vision

### A Feasibility Study for the Redesign of Pathology Services in Greater Manchester

### *Meeting the Quality and Productivity Challenge*

### Conducted by Greater Manchester Pathology (Laboratory Medicine) Network

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## Section 1 Executive Summary

A Pathology Modernisation programme was launched by Department of Health (DH) in 1999. The policy direction was to develop better pathology services to support clinical services in meeting key priorities and targets. A consultation paper Pathology -The Essential Service in 2002 promoted the development of Pathology Networks.

An independent Review of Pathology Services (2005), chaired by Lord Carter of Coles, was asked to determine the feasibility of and benefits from wide scale service reconfiguration. Two reports were produced (August 2006 and December 2008) with 20 specific recommendations focussing on three main themes: improving quality and patient safety; improving efficiency; identifying the mechanisms for change. The review identified potential savings of between £250 million and £500 million through efficiency gains and by consolidating pathology services.

Greater Manchester Pathology Network was formed in 2006. It has clear accountability to Acute and Primary Care Trusts who retain executive decision making and is jointly chaired by two CEOs. Its Board is made up of key stakeholders across the 10 PCT areas of Greater Manchester including clinical directors, healthcare scientists, managers and the Health Protection Agency and RCPATH. (See appendix A)

In May 2009 the Chief Executive community (Commissioner and Provider) set the Network the challenge of undertaking a professionally led feasibility study for the future of Pathology Services in Greater Manchester.

The objectives were:

- ✓ ***The achievement of efficiency savings of 20%***
- ✓ ***Measurement and improvement of quality by 20%***
- ✓ ***Sustaining on-site presence of necessary personnel and services at each Trust***
- ✓ ***Ensuring sustainability of future pathology services in Greater Manchester***

The Network was keen to ensure the feasibility study used the established discipline specific Network Advisory Groups (NAGs) and cross-discipline Priority Action Groups (PAGs). For some meetings independent facilitation was used and over 250 members and stakeholders were consulted over the study. There was an e-room discussion forum and two newsletters were produced describing progress and opportunities to contribute. We also undertook a listening event with primary care to ensure all priorities were identified. A mini-benchmarking exercise was undertaken across Greater Manchester to give headline staffing, finance and workload figures. We have also initiated work streams on enabling issues, for example, the development of a strategic outline case for a single laboratory information system for GM.

As the implications of the recession develop and pressure builds on NHS finances, the Treasury are keen to realise the £500 million savings outlined by Lord Carter. NHS Northwest has been challenged with realising a share of this figure in productivity gains from 2011 onwards and the share for Greater Manchester would be £20-£25m. It is estimated that current expenditure on pathology services across Greater Manchester is approximately £120 million.

Pathology is now identified as a national priority QIPP work stream and the NHS Northwest is keen to ensure transformation through a 'whole systems approach'. Greater Manchester is one of the seven sub regional health economy (footprint) groupings identified in the North West. The DH expectations are that SHAs will have robust transformation plans by June 2010. Greater Manchester is recognised nationally and regionally to be 'ahead of the game' in developing the emerging vision.

### **Three options for future service re-design have emerged.**

#### **Option A - Collaborative Model**

Continue to collaborate across Greater Manchester improving the harmonisation and effectiveness of services. Services would effectively function as individual laboratories providing pathology services, operating as distinct services managed by individual Acute Provider Trusts. Suggestions

have been made that greater accountability could be vested in Network arrangements to improve and centralise the governance and procurement of enabling functions, for example, IM&T, transport, capital estate and equipment.

### **Option B - Consolidated Model**

Consolidate services, ensuring that each acute hospital has essential pathology services on site in an Essential Services Laboratory (ESL), with appropriate 24/7 cover to support acute clinical activity. All remaining activity would be processed in Centralised Services Laboratories (CSLs). All CSLs will also provide ESL functions for the local acute site.

### **Option C - Centralised Primary Care Model**

Consolidate primary care pathology services to a single provider on either single or multiple sites. This leaves responsibility for secondary care provision with each Provider Trust.

Through an appraisal process the 3 models were scored by the Strategy Group for their relative ability to deliver a number of benefits which represented the four key objectives set, including key stakeholder benefits.

<b>Challenge Model</b>	<b>Improve Quality</b>	<b>Reduce Cost</b>	<b>Sustain presence</b>	<b>Sustaining future</b>	<b>Total</b>
<b>Option A</b>	<b>17.3</b>	<b>14.5</b>	<b>13.3</b>	<b>13.4</b>	<b>58.4</b>
<b>Option B</b>	<b>20.8</b>	<b>20.1</b>	<b>21.5</b>	<b>25.2</b>	<b>87.5</b>
<b>Option C</b>	<b>12.5</b>	<b>11.9</b>	<b>11.3</b>	<b>13.8</b>	<b>49.4</b>

### **Preferred Option**

The Strategy Group scored **Option B – Consolidated Model** - significantly higher than the other options. The Strategy Group felt Option A – would not meet the challenge and neither would Option C as it could destabilise on-site hospital pathology services. Option B is in line with Lord Carter’s recommendation *“consolidation enhances quality by creating critical*

***mass and by delivering better value for money through economies of scale”.***

In the North East of Greater Manchester, Pennine Acute Trust consolidated services across 4 laboratories some two years ago and evidenced a number of quality and cost improvements. Pennine’s current expenditure on laboratory services suggests this reconfiguration made significant financial savings.

Greater Manchester, based on current demand and in line with national indicators, may lend itself to considering consolidation of services around more than one CSL in inter-dependent clusters. However, all consolidated models are predicated on the need for a delivery or implementation model that gives greater operational and organisational governance ceded to one organisation which would lead on behalf of all key stakeholders.

We have through the study concentrated on describing the function required from the services rather than the form however, for illustrative purposes, the following arrangements could be considered.

### **Option B1 – One Cluster**

In this model, Greater Manchester would operate with 1 CSL and 15 ESLs. Capital investment would be required to develop a CSL capable of delivering services for all work not required to turnaround in less than 4 hours.

### **Option B2 – Two Clusters**

In this model, services would be consolidated in two sectors. This could mean the development of 2 CSLs and 14 ESLs. Sector arrangements could be North and South.

- **North** – Bolton, Salford, Wigan (inc Leigh and Wrightington), Pennine and Tameside
- **South** – Stockport, South Manchester, Central Manchester (inc Children’s), Trafford and Christie.

### **Option B3 – Three Clusters**

In this model services would be consolidated in three sectors. This would be broadly in line with current clinical reconfiguration considerations of 3 clusters in Greater Manchester. This could lead to development of 3 CSLs and 13 supporting ESLs.

- **North West** – Bolton, Salford and Wigan (inc. Leigh and Wrightington)
- **North East** – Pennine (inc. Oldham, North Manchester, Rochdale and Bury) and Tameside
- **Central and South** – Stockport, Central Manchester (inc. Children's), South Manchester, Christie and Trafford.

### **Option B4 – Four Clusters**

In this model services would be consolidated in four sectors. This could lead to development of 4 CSLs and 12 supporting ESLs.

- **North West** – Bolton, Salford and Wigan (inc. Leigh and Wrightington)
- **North East** – Pennine (inc. Oldham, North Manchester, Rochdale and Bury).
- **South East** – CMFT (inc. Children's), Tameside and Stockport
- **South West** - South Manchester, Christie and Trafford.

The above options are for discussion and are not mutually exclusive in that they can be considered to be steps or phases in the consolidation of pathology services.

During implementation phase the best configuration for each individual pathology discipline and sub-discipline would be determined based on needs for Greater Manchester services and guided by the professional advice of the Network Advisory Groups (NAGs). Within any cluster we would also need to consider the appropriate distribution of work by discipline or sub-discipline.

### **Conclusions**

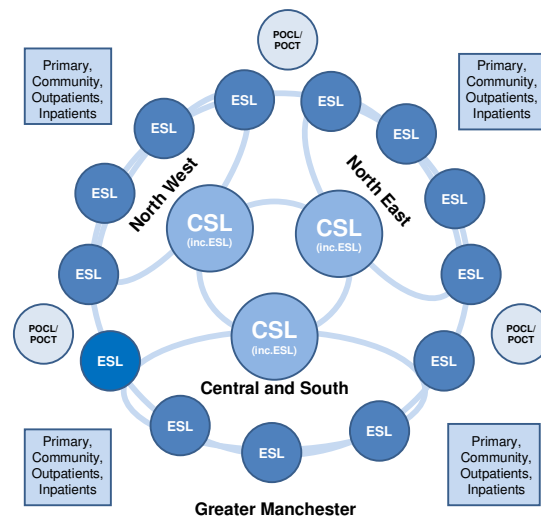
This professionally led feasibility study on the emerging vision for future pathology services concluded that consolidation of services across Greater Manchester is the only realistic option to meet all four objectives set by CEOs.

We believe from the study:

1. 20% quality gain can be achieved (e.g. through standardisation, harmonisation, appropriate and timely testing and reporting, and critical mass of expertise).
2. 20% saving can be achieved (this is the suggested level of saving from Pennine's expenditure data and Carter Review).
3. Protection of essential on-site services can be achieved (e.g. responsive on-site clinical services appropriate to need).
4. Sustainability of GM pathology services can be achieved (e.g. planned and managed change, appropriate skill mix, job redesign, adjustment of the working day and risk management).
5. But all of these can **ONLY** be achieved through reconfiguration to a consolidated pathology service for Greater Manchester.

### **Recommendations**

1. The Network recommends the consolidated model as the best way forward for pathology services in Greater Manchester.
2. CEOs are asked to endorse conclusion points 1 to 5 and to agree a second phase of work which is to produce economic and capacity modelling, governance proposals and an implementation plan. This work will need to be resourced.



## Section 2 Background

### 2.1 History of the pathology modernisation programme

The programme began in 1999. Its key goals have been to improve the quality and efficiency of NHS pathology services, and to encourage the introduction of new technologies and practices to deliver high quality care for patients.

Between 1999 and 2002 capital funding of £28 million was invested in 39 demonstration modernisation projects across England. Based on learning in this period, pathology professionals helped the Department of Health (DH) develop a document (published in 2004) called *Modernising Pathology Services*. This proposed the development of managed pathology networks to help the NHS to build pathology capacity, and provided advice on modernisation strategies to support this.

Ministers and senior NHS managers were subsequently dissatisfied with the resulting pace of change within pathology services. The *Independent Review of NHS Pathology Services* was established, chaired by Lord Carter of Coles. Its remit was to determine the feasibility of and benefits from wide-scale service reconfiguration. The Review published two reports in August 2006 and December 2008.

The Review's second report made 20 specific recommendations and focused on three main themes:

- improving quality and patient safety
- improving efficiency
- identifying the mechanisms for change.

(see Appendix F)

The Review estimated that potential savings of between £250 million and £500 million could be realised through efficiency gains and by consolidating pathology services.

The DH response welcomed the Review's approach and the undertakings made by three SHAs (East of England, South East Coast and Yorkshire and the Humber) to trial the review recommendations so as to help the NHS in England understand more fully the likely transition costs involved. The aim was to ensure that the resulting evidence was fed into a published Impact Assessment in 2009 that would help establish realistic expectations of the costs, benefits and time scales for change at national level. The reports from these SHAs are awaited.

To contribute to the modernisation challenge the DH Pathology Programme team took forward three key work streams with the NHS, professional bodies, patients and industry to support new ways of working and delivering services under the titles 'quality, IT and delivering change.'

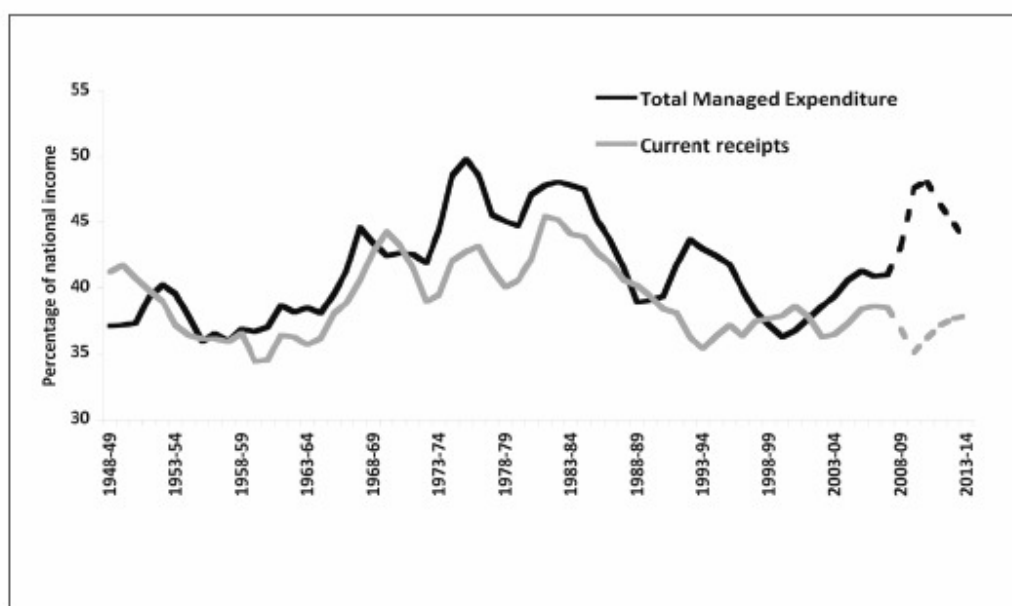
Key programmes include development of a clinical leadership networks, workforce re-profiling, service improvement (LEAN), accreditation (including for pathology point of care testing in the community), test standardisation and benchmarking, and a review of specialist pathology services.

There is also national work to align effort with the new quality agenda, development of better commissioning of pathology services, and tariff issues. In IT, work is underway on order communications for GPs (including electronic reporting of results), lab to lab systems, clinical dashboards, Choose and Book phlebotomy, development of a national laboratory medicine catalogue, and improvements to patient access to pathology results.

## 2.2 National and Regional Context

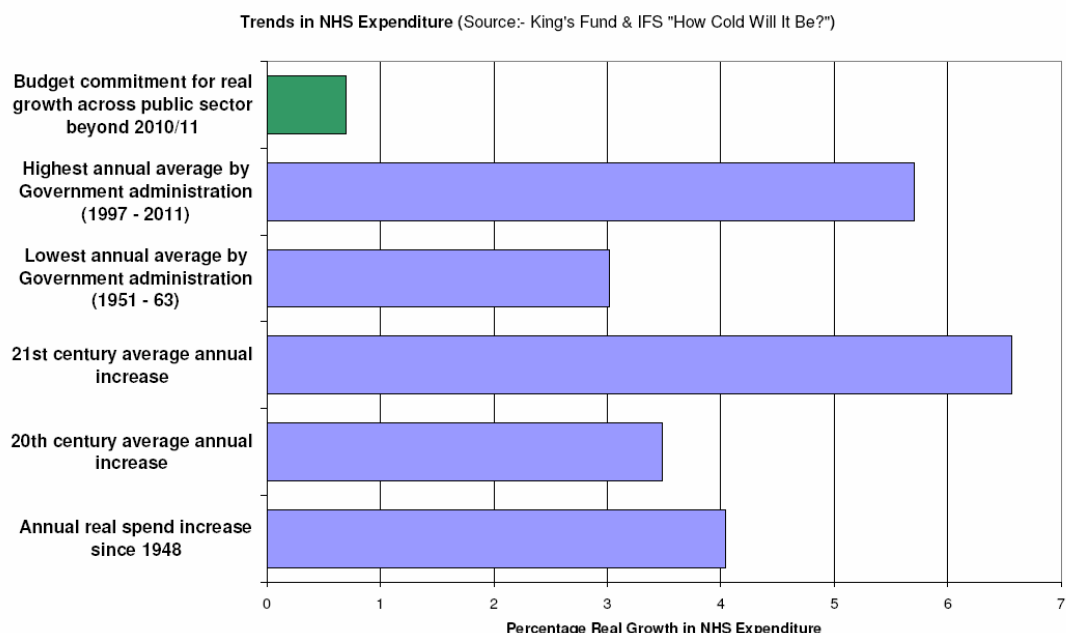
More recently, the global financial crisis and resulting economic downturn have made reductions in UK public spending inevitable.

**Figure 2.1 Total Managed Expenditure vs. current receipts**



NHS Chief Executive, David Nicholson has been explicit about the need for the NHS to deliver real savings of between £15 billion and £20 billion whilst at the same time improving quality, innovation, productivity and prevention (QIPP). This approach requires a transformation in the way health and social care is delivered. From 2010 NHS growth will be <1%. As illustrated in Figure 2.2, this is by some distance the lowest ever level in the history of the NHS and in sharp contrast with the generous growth budgets which have been the norm over the past decade.

**Figure 2.2 – Trends in NHS Expenditure**



As the implications of the recession develop and pressure builds on NHS finances, the Treasury are keen to realise the £500 million savings outlined by Lord Carter. NHS Northwest has been challenged with realising a share of this figure in productivity gains from 2011 onwards. Pathology has been identified as a priority workstream for QIPP nationally and, in line with the recommendations of the Carter Review, this is likely to include some consolidation of services. The NHS Northwest is keen to ensure transformation through a 'whole systems approach' and is due to establish a Pathology Transformation Group, led by SHA Medical Director, Dr. Mike Cheshire. The DH's expectations are that SHAs will have robust transformation plans by June 2010.

Lord Darzi's report *High Quality Care for All* (June 2008) set out his vision of quality becoming the organising principle of the NHS with the drive for improvement coming from NHS staff, based on a conviction about the power of quality as a driver for change.

As part of its response to the quality and productivity challenge, the NHS North West region has identified seven sub regional health economy groupings within its footprint, of which Greater Manchester is one. It is within these Level 3 health economies that the regional QIPP plans will be developed, supported by the newly formed Advancing Quality Alliance (AQuA). Over the next five years it is anticipated that the greatest contribution to efficiency and productivity gain will be made at Level 3 (see Figure 2.3). In order to deliver at this level it will be necessary for organisations to work collaboratively for the benefit of patients across the health economy footprint. Pathology is embedded in clinical pathways and can play a significant role in keeping patients out of hospital, as well as supporting delivery of a wide range of clinical programmes (e.g. cancer, vascular, diabetes, renal). When this is considered alongside patient flows across Greater Manchester, it would seem sensible to consider redesign of pathology services at Level 3. This view is supported by the requirement in the NHS Operating Framework 2010/11 for local clinicians and managers to work together across organisational boundaries and think outside of organisational and professional interests.

**Figure 2.3 – Contribution to Efficiency and Productivity Gain**

<b>Year →</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Levels</b> ↓ % share	<b>1</b>	1	1	1	1	1
	<b>2</b>	2	2	2	2	2
	<b>3</b>	3	3	3	3	3
	<b>4</b>	4	4	4	4	4
	<b>5</b>	5	5	5	5	5

The Carter report has been accepted by the DH as a template for pathology services in England. Since there has been this independent, evidence-based review, pathology services are being viewed nationally as a benchmark for wider system reform.

## 2.3 Strategic Alignment

The Department of Health (DH) launched a ten-year Pathology Modernisation Programme in 1999 and issued a consultation paper *Pathology - The Essential Service – Draft Guidance on Modernising Pathology Services* in 2002.

The policy direction in *Modernising Pathology Services* was to develop better pathology services to support clinical services in meeting key priorities and targets. This was to be delivered through the establishment of managed pathology networks identifying local leaders and appointing and resourcing network directors and clinical champions.

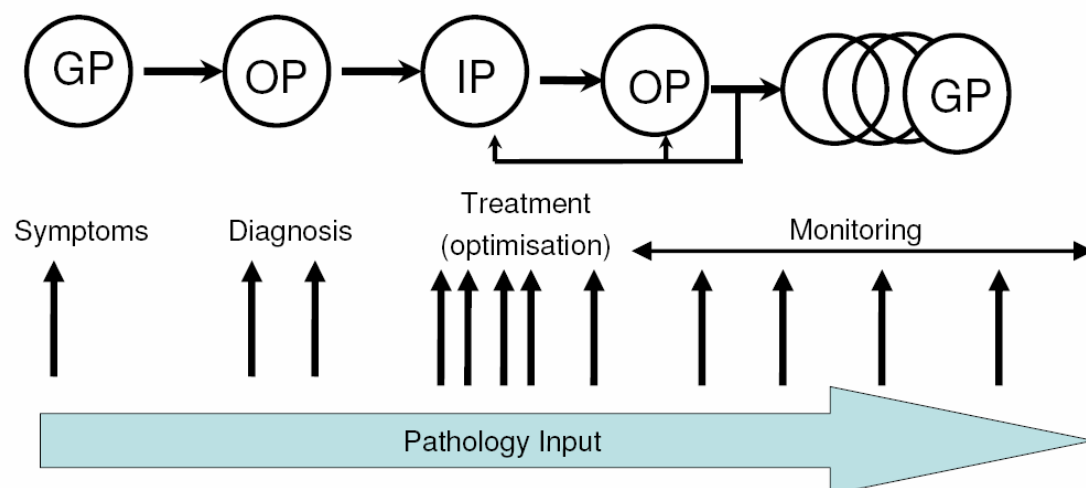
In the autumn of 2005 the DH initiated an *Independent Review of Pathology Services* chaired by Lord Carter of Coles (The Carter Report).

The report of this review was published in August 2006 and made a number of key recommendations for the future delivery of pathology services including:

Pathology screening, testing and reporting are critical to meeting key NHS targets including the 18 week pathway, A&E and healthcare acquired infections (MRSA, C.Difficile). Nationally, a clinical director for pathology, Dr Ian Barnes has been appointed within Sir Bruce Keogh's medical directorate at the DH. Pathology adds 'end-to-end' value to patient pathways, as illustrated in Figure 2.4, and can be seen as a key facilitator for better outcomes. The following pathology priorities have been identified by Dr Ian Barnes:

- Improve productivity, efficiency and quality
- Reduce costs
- Keep patients out of hospital
- Reduce bed stay
- Appropriate testing – potentially increasing testing to help clinical programmes deliver their agenda (e.g. cancer, vascular, renal, diabetes, primary care health checks)
- Integrated care pathways

**Figure 2.4 Pathology end to end across the patient pathway**



The Network recognises that all NHS service commissioners and providers will need to demonstrate credible proposals in terms of how all future services will be designed and delivered paying cognisance to increasing demand, expectation and patient choice.

‘We have asked NHS pathology services to transform the way services are organised and delivered, so that modern, high-quality care is supported effectively by a modern laboratory medicine service’ (*NHS 2010–2015: from good to great. preventative, people-centred, productive*).

Pathology is an essential clinical service and the Network believes this work will ensure flexible, adaptable and responsive pathology services for Greater Manchester which can facilitate wider clinical service redesign. Cross boundary pathology provision will reflect patient pathways and facilitate cross boundary clinical services e.g. 'Making it Better'.

As highlighted in the *NHS Operational Framework for 2010/11*, by using 2010/11 to make radical changes to deliver the challenges set out in *NHS 2010-2015*, we will be better placed when funding becomes tighter from 2011.

## **2.4 Greater Manchester Pathology (Laboratory Medicine) Network**

Greater Manchester has one of the largest Pathology Networks in the UK and one of the first to take a 'holistic' view of services. It aims to deliver high quality patient centred pathology with access to appropriate services at the right time and in the right setting. Faster reports and improved accuracy will result in less inappropriate testing and retesting and more evidence based testing and interpretation. This should lead to fewer admissions and improved patient diagnosis closer to home. The Network has a key role to play in the facilitation of 'end to end services' and was recognised as the National 'New Network of the Year' in 2007/08.

The work programme of the Network is driven by the two independent Carter and Darzi reviews. It has had several notable successes since its inception in 2006 through ensuring clinical and managerial engagement across the system in supporting developments in cancer diagnosis, control of infection, the standardisation of test profiles, reference ranges and testing guidelines and improved IT connectivity through GP order requesting and reporting and laboratory to laboratory links.

Over the past 4 years this has proven to be a model of building trust, engagement and respect and a powerful way of facilitating change. It has enabled barriers to be broken down between primary, secondary and tertiary care focussing solutions on patient pathways rather than organisations.

The Network Board (Appendix A) is made up of key stakeholders across the 10 PCT areas of Greater Manchester including clinical directors, healthcare scientists, managers, Health Protection Agency and RCPATH. It has clear accountability to Acute and Primary Care Trusts who retain executive decision making authority. The Network structure and arrangements are detailed in Appendix C.

The Board is accountable to Greater Manchester PCT and Acute Chief Executives and is jointly chaired by Dr Mike Burrows, Chief Executive, NHS Salford and Mr Andrew Foster, Chief Executive, Wrightington, Wigan and Leigh NHS Foundation Trust. The core management team for the clinically led Network is made up of the two Chief Executives, two Clinical Leads who share 5 sessions, Mr Jeff Seneviratne and Professor Keith Hyde and the Network Director (0.5 WTE), Mr Neil Jenkinson and Business Manager, Mrs Rachel Pearson.

The Network is funded by the 10 Greater Manchester PCTs and receives £150k per year to support staffing and infrastructure costs.

Over the past 12 months the Network has met with a variety of colleagues across primary care including GPs, Practice Based Commissioners, PCT Commissioners and PEC Chairs. A number of common issues have emerged from these conversations as key priorities:

- Advice and support
- Point of Care
- Appropriateness of Testing
- Phlebotomy Services (inc. Transport)
- Anticoagulation Services

- IT Links (Requesting and Reporting)

The Network organised a Primary Care 'Listening Event', with workshops on a number of these issues in October 2009 (see Appendix H).

The Network has also been involved in the NHS North West Clinical Leaders Network and the Clinical Pathway Groups, taking forward 'Healthier Horizons' the SHA's response to Lord Darzi's review.

## **2.5 The ‘Challenge’ set by GM Chief Executives**

In early 2009 the Network Director and Clinical Leads met individually with the Clinical Directors of Pathology at each Acute Trust. Whilst recognising the successes of the Network to date, there was general agreement of the need for a vision for Greater Manchester pathology services for the future and the recognition that this should be developed by the professionals within the service.

In order to take the emerging vision to the next stage the Network established a Strategy Group (Appendix B) as a sub-group of the Network Board. At the May 2009 series of Chief Executives’ meetings proposals were supported by the Chief Executive community to review the emerging vision for pathology within Greater Manchester in line with the recommendations of the Carter Report.

The paper considered set out a challenging agenda for pathology including:

- ✓ **The achievement of efficiency savings of 20%**
- ✓ **Measurement and improvement in quality by 20%**
- ✓ **Sustaining on-site presence of necessary personnel and services in each Trust**
- ✓ **Ensuring sustainability of future pathology services in Greater Manchester.**

The Network accepted this challenge as an opportunity for pathology services to be proactive. Since the challenge was set in May 2009, the consequences of the economic downturn for the NHS have become more apparent and embarking on this challenge has placed pathology services in Greater Manchester ‘ahead of the game’. The equal weighting given to quality and efficiency is in line with the QIPP agenda.

## Section 3 Project Description

### 3.1 Project Stages

The project, professionally led through the Network identified 4 key stages:

**Stage 1 - Generation and evaluation of options for future services (July 09 to Feb 10) through a professionally led feasibility study.**

**Stage 2 – CEO determination of preferred model/option (Feb 10 – May 10).**

**Stage 3 - Economic and capacity modelling and determination of governance models and implementation plan (May - July 10)**

**Stage 4 - Implementation Programme (~FY 2010/11 onwards).**

### **3.2 Stage 1 - The Feasibility Study Process (July 09 – Feb 10)**

The Network was keen to ensure the feasibility study was a professionally led process, using the well established discipline specific 6 Network Advisory Groups (NAGs) and 7 cross-discipline Priority Action Groups (PAGs). The meeting schedule is attached as Appendix D.

The Network made an initial request of £67k from the Process for Investment and Reform (AGM PCTs) to support the first stage of this project. This was to secure independent facilitation skills (including e-Room facility for web-based discussion), the costs of the benchmarking exercise across Greater Manchester and initiate economic modelling. To date a sum of £30k has been received from AGM PCTs for the benchmarking exercise. Project management and facilitation have been sourced from the Network.

The DH improvement and modernisation teams were approached to provide support on facilitation, unfortunately due timescales and capacity this was not realised. The NW Improvement Alliance has offered 6 hours support on the development of quality metrics.

The Network Groups meet every two months. In the first half of 2009, each of the NAGs and the Network Board carried out a SWOT (strengths, weaknesses, opportunities, threats) analysis on the implications of the Carter and Darzi reports. Following the establishment of the Strategy Group, we used the next meetings in July 09 to give all key stakeholders a background briefing and context to the feasibility study as well as time to prepare for the autumn meetings.

The September meetings were used to develop this early thinking a start to look at how future services may look in terms of technology, demand and workforce.

The e-Rooms were established to share information and run on-line discussions with topics being posted at regular intervals.

In November we started to focus these discussions and requested members to consider the most appropriate model of service for their discipline by considering the population and geography of Greater Manchester and to discuss the advantages and disadvantages of each model. We also requested that each discipline derive 5 key quality metrics, one of which would be on turnaround time, taking into account the Darzi quality parameters of safety, outcomes and patient experience.

### **3.3 Enablers**

The Network recognised on scoping the project that there were a number of key enablers to ensure the success of the whole project. Where possible within current Network resources work has been initiated in the following areas:

#### **IM&T**

The importance of IT connectivity was emphasised in both Carter reports. Significant work to secure capital investment to develop and roll out requesting and reporting to primary care and development of Laboratory to Laboratory (LAB2LAB) links for referred work i.e. immunology, microbiology and biochemistry. A business case for the development of a Greater Manchester Laboratory Information Management System (LIMS) is currently in development in conjunction with GM ICT Board. This aims to ensure the appropriate IMT infrastructure for any future redesign work so that IMT capability will not be, or be perceived to be, an inhibitor of redesign.

## **Benchmarking**

Lord Carter's Second Stage Review of Pathology Services recommends that Pathology laboratories in England engage in benchmarking. This will provide laboratories, Trusts and PCTs with corporate assurance regarding the efficiency and quality of their pathology services. The National Pathology Benchmarking Service at Keele University was established in 1994 and has been developed in consultation with clinicians in each pathology discipline. It is a non-competitive programme which promotes the sharing of best practice information, designed so that laboratories can identify their strengths and weaknesses, and use the data to help improve their service delivery. The Benchmarking service includes the collation of data and analysis tools.

As part of the feasibility study it was essential to determine a baseline of staffing, activity and costs in pathology across GM from which to show improvement. In recognition of the effort required to complete the full Keele Benchmarking questionnaire, Trusts were requested to complete a shortened version of the questionnaire in September 2009, which focused on key measures of:

- Staffing
- Finance
- Workload

This should also help meet the future DH requirements for rebasing the 2006/07 Carter Report. Responses were received from all 10 Trusts by February 2010. The data from some Trusts was incomplete.

## **Mapping of Current Services**

A short one page request was made to Trusts to highlight their current repertoire of pathology services and additional sites, to ensure satellite or cottage hospital

facilities were included. We also requested whether the Trust received referred tests from other Trusts and what point of care work the laboratory supports both within the Trust and in primary care.

## **Transport**

A transport PAG was established by the Network and this drew up plans for inter-lab transport unfortunately the work could not be progressed due to current transport arrangements not being solely owned by Pathology. This is a key enabler for any future redesign of services, well recognised in Carter recommendations that Pathology should take ownership of end to end transportation of samples.

Any redesign of laboratory services would be highly dependent on good specimen transport.

## **Procurement**

A procurement PAG was established by the Network and this was successful in developing a best buy guide for laboratory consumables. As each individual laboratory has complex and lengthy managed service agreements for equipment it was not possible to generate further savings via procurement in the current arrangements. Lord Carter's report identifies economies of scale around the purchasing of equipment and consumables, as well as opportunities for better utilisation of equipment and more efficient management of workload. Any redesign of services would facilitate opportunities for procurement savings, which would in turn support standardisation.

## **Workforce**

A workforce PAG was established by the Network and this links with the NW Healthcare Science Network and the Modernising Scientific Careers agenda. Last week the department published the 'England Action Plan' for MSC. The arrangements in Greater Manchester should ensure we are well placed to implement these recommendations in a structured way. Discussions have also been held with the Pathology workforce lead at NHS North West, Neil McLauchlan. There is currently no coordinated workforce planning for pathology. Current data suggests variation in staffing arrangements. As part of the service redesign we would ensure that staffing arrangements make the most efficient and cost-effective use of staff time and expertise.

## **Communications**

A communications PAG was established by the Network in recognition of the essential role of communications in raising the profile of pathology services and engaging with commissioners. Through this group a Network website has been developed ([www.gmpath.net](http://www.gmpath.net)). The communications function would need to be strengthened in subsequent stages of the project. The Network communications strategy is detailed in Appendix G.

## Section 4 Options Appraisal

### 4.1 Current situation

Greater Manchester has a population of 2.5 million, with 10 PCTs and 10 Acute Trusts and 15 hospitals providing pathology services. These include the traditional departments of clinical biochemistry, haematology, microbiology, histopathology, cytology and transfusion medicine. There are two departments of Immunology and one of the microbiology departments provides Health Protection Agency (HPA) services for the North West. See Appendix I for definition of the larger pathology services. It is estimated that current expenditure on Pathology services across Greater Manchester is approximately £120 million.

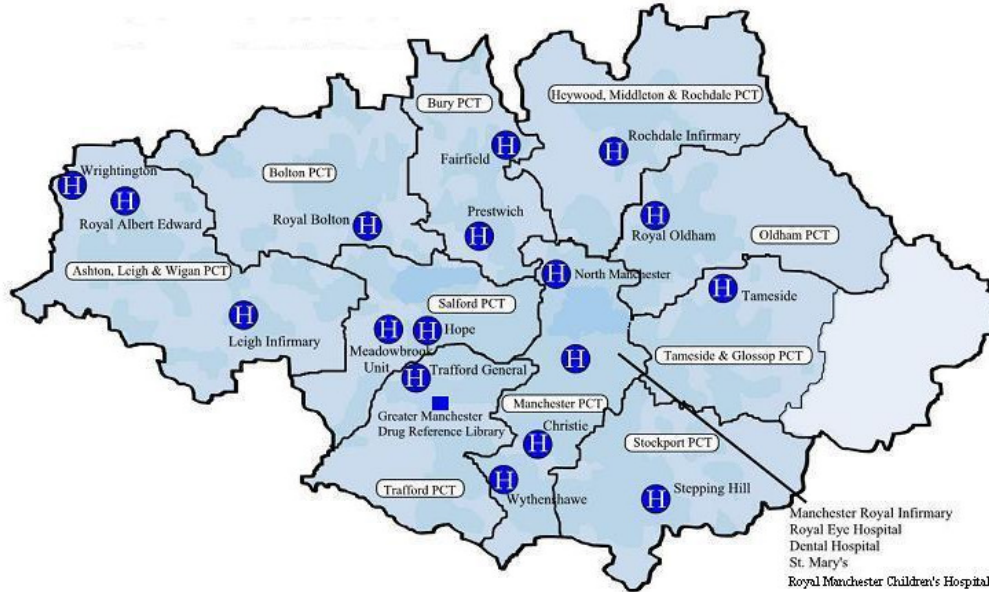
**Table 4.1 Current Services**

	Bio-chemistry	Haematology/ Blood Transfusion	Microbiology	Virology	Histo-pathology	Cervical Cytology <sup>1</sup>	Non-gynae cytology	Immunology	Cyto-genetics <sup>5</sup>	GP work
Bolton	●	●	●		●	●	●			●
CMFT	●	●	●	●	●	●	●	●		●
Christie	●	●			●				●	
Pennine										
Oldham	●	●	●		●	●	●			●
Bury	●	●								
Rochdale		●								
NMGH	●	●								
Salford	●	●	●	●	●		●	●		●
Stockport	●	●	●		●	●	●			●
Tameside <sup>2</sup>	●	●	●		●	●	●			●
Trafford	●	●	●		<sup>1</sup> ●		●			●
UHSM <sup>2</sup>	●	●	●		●		●			●
WWL										
RAEI	●	●	●		●		●			●
Leigh		<sup>3</sup> ●								
Wrightington		●						<sup>4</sup> ●		

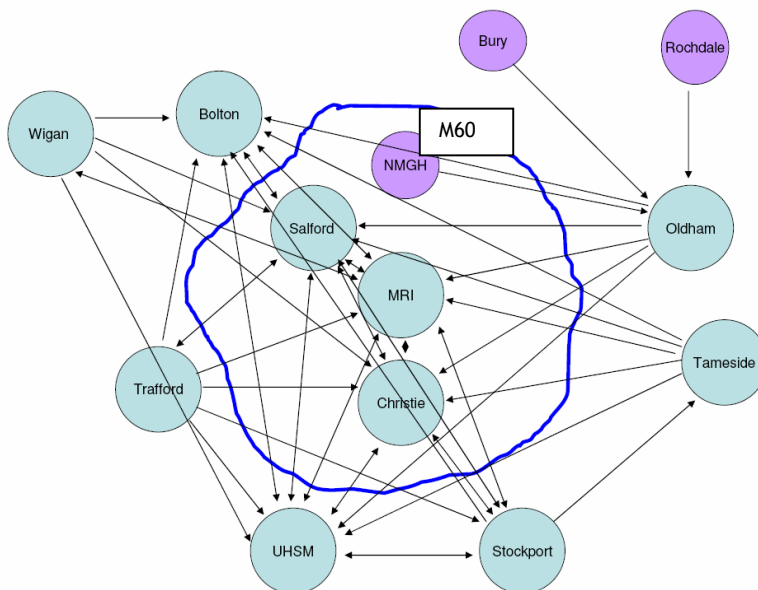
**Notes**

- <sup>1</sup> Subject to change outside this process– formal procurement underway.
- <sup>2</sup> Mapping data not provided – assumptions made
- <sup>3</sup> No blood transfusion. Limited haematology service supporting clinical haematology clinics
- <sup>4</sup> Local service – does not receive referred work from other sites.
- <sup>5</sup> There are a number of related services in Greater Manchester which are outside the remit of existing pathology laboratories. These include cytogenetics, genetics, histocompatibility and immunogenetics.

**Figure 4.1 Greater Manchester Area – showing PCTs and hospitals**



**Figure 4.2 – Pathology referrals across Greater Manchester**



Data collected as part of the Lab2Lab project suggests around 300,000 referrals per year between pathology laboratories in Greater Manchester.

There is an additional administrative burden associated with the current arrangements in terms of contracting, finance and laboratory management time. Service redesign would release laboratory management time to focus on the clinical interface to both Acute and Primary Care, leading to the delivery of a better quality service.

## 4.2 Benchmarking

In September 2009 the Network requested information on a mini-Keele exercise for 2008/09 data. By January 2010 the majority of the data had been received. Below we have identified some of the key data at a Greater Manchester level.

### Workforce

WTE	Biochemistry	Haematology	Histopathology/ Cytology	Microbiology	Total
Medical Staff (laboratory time)	8.4	5	82.08	32.23	<b>127.71</b>
Clinical Scientists	29	2	5	7	<b>43</b>
Biomedical Scientists	179.8	193.4	92.76	193.94	<b>659.9</b>
Medical Laboratory Assistant	73.8	82.5	34.31	131.33	<b>321.94</b>
Admin & Clerical Staff	-	15.7	45.11	34.76	<b>95.57</b>
Advanced Practitioners	-	-	1	-	<b>1</b>
Cyto-Screeners	-	-	23.72	-	<b>23.72</b>
<b>Total WTE</b>	<b>336.1</b>	<b>336.4<sup>3</sup></b>	<b>283.98</b>	<b>422.32</b>	<b>1378.8</b>
<b>Total £ (m)</b>	<b>11.9<sup>3</sup></b>	<b>11.3<sup>4</sup></b>	<b>17.7</b>	<b>13.6<sup>3</sup></b>	<b>54.5</b>

### Notes

<sup>3</sup> No data from 2 laboratories

<sup>4</sup> No data from 3 laboratories.

### **Activity**

Millions	Biochemistry	Haematology	Histopathology /Cytology	Microbiology	Total
Requests	5.0	2.8 <sup>1</sup>	0.2	3.2	11.2
Tests	36.2	5.1 <sup>2</sup>	-	3.2	44.5
Blocks	-	-	0.5	-	0.5
Slides	-	-	1.1	-	1.1

### **Notes**

<sup>1</sup> No data from 2 laboratories

<sup>2</sup> No data from 1 laboratory

### **Cost (excluding capital charges and overheads)**

Please note the total costs below have been derived from data gathered from the mini-Keele exercise with missing data added from DH/SHA exercise.

	Biochemistry	Haematology	Histopathology /Cytology	Microbiology	Total
<b>Total Pay and Non Pay £ (m)<sup>4</sup></b>	<b>25.3<sup>1,2</sup></b>	<b>23.1<sup>2,3</sup></b>	<b>22.7<sup>2,3</sup></b>	<b>26.3<sup>2,3</sup></b>	<b>97.4</b>

### **Notes**

<sup>1</sup> No non-pay data from 3 laboratories

<sup>2</sup> Total cost data derived from SHA data for 2 laboratories

<sup>3</sup> No non-pay data from 2 laboratories

<sup>4</sup> Excludes capital charges and overheads

The data below derived from the benchmarking exercise simply highlights the variation across Greater Manchester laboratories against key organisational comparisons. It must be noted that not all laboratories serve equivalent types of hospital or clinical portfolios nor population demography therefore workload and activities can vary. As with all benchmarking data this is for indicative purposes only, to suggest areas for further investigation, clarification, improvement and best practice. The national average is derived from laboratories who contribute to the Keele benchmarking scheme.

### **BIOCHEMISTRY**

<b>Measure</b>	<b>GM Average</b>	<b>GM Lowest</b>	<b>GM Highest</b>	<b>National Ave.</b>
Requests per WTE Staff	10,797	7,482	26,049	14,818
Requests per WTE BMS	27,886	15,999	34,164	30,034
Tests per WTE Staff	107,634	71,947	225,513	106,673
Tests per WTE BMS	201,199	105,848	337,257	196,601
Total Pay Cost per Request	3.29	1.69	4.89	3.38
Total Pay Cost per Test	0.39	0.19	0.58	0.44
Total Non-Pay Cost / Request	2.38	0.88	4.68	2.56
Total Non-Pay Cost per Test	0.28	0.10	0.47	0.34
Total Cost per Request	5.67	2.57	9.56	5.82
Total Cost per Test	0.67	0.30	1.03	0.74

### **HAEMATOLOGY**

<b>Measure</b>	<b>GM Average</b>	<b>GM Lowest</b>	<b>GM Highest</b>	<b>National Ave.</b>
Requests per WTE Staff	8,694	5,703	13,223	11,202
Requests per WTE BMS	15,218	9,365	21,113	18,104
Tests per WTE Staff	13,850	9,417	18,978	17,403
Tests per WTE BMS	24,092	12,768	30,506	28,456
Total Pay Cost per Request	4.49	2.73	6.96	4.41
Total Pay Cost per Test	2.78	1.44	4.38	2.84
Total Non-Pay Cost / Request	1.71	0.56	5.52	2.05
Total Non-Pay Cost per Test	1.42	0.32	6.23	1.29
Total Cost per Request	6.53	3.95	9.57	6.74
Total Cost per Test	4.74	2.37	9.65	4.17

### **HISTOPATHOLOGY**

<b>Measure</b>	<b>GM Average</b>	<b>GM Lowest</b>	<b>GM Highest</b>	<b>National Ave.</b>
Requests per WTE Staff	480	252	1,608	1,273

Requests per WTE Med Cons	2,719	942	3,252	3,697
Requests per WTE BMS	2,104	813	5,420	2,025
Total Pay Cost per Request	94.62	75.62	214.82	40.06
Total Non-Pay Cost / Request	11.64	9.24	29.03	7.61
Total Cost per Request	114.79	96.77	243.85	51.33

### **MICROBIOLOGY**

<b>Measure</b>	<b>GM Average</b>	<b>GM Lowest</b>	<b>GM Highest</b>	<b>National Ave.</b>
Requests per WTE Staff	7,460	6,110	9,751	7,304
Requests per WTE BMS	16,244	14,997	20,655	14,739
Total Pay Cost per Request	4.93	3.61	5.90	6.23
Total Non-Pay Cost / Request	3.58	1.16	4.74	3.50
Total Cost per Request	8.51	5.53	9.99	9.18

### 4.3 Options for service redesign

The second Carter Report highlighted that from the evidence collected there was a strong case for consolidation of pathology services. More recently, Clinical Support Rationalisation (Pathology initially), led by Dr Ian Barnes has been identified as one of twelve National QIPP work streams and will focus on implementation of the updated Carter Review recommendations. It has been identified that a decision on how to centralise pathology activity is key. Dr Ian Barnes has visited the Network Team and had several discussions with the Board. He has been very supportive of the approach taken in Greater Manchester.

**Carter identified the characteristics of a good consolidated service would be end-to-end management of the service including transport and logistics, IT connectivity, efficient and effective use of resources including people. There should be a concentration of non-urgent and specialist work in one or more centralised and accredited core laboratories where throughput is sufficient to ensure high quality results. Only tests/investigations requiring a rapid turnaround on clinical grounds would be processed on site.**

The Network through this engagement process has continued to be mindful of the original terms of reference and to focus on what is the function of future pathology services to determine the optimum model for patients served in Greater Manchester.

In order to do this we have worked with each pathology discipline to define what activities and workload for both advice and analytical testing needs to be retained on an acute hospital site to support acute clinical activity.

This is often called an **Essential Services Laboratory (ESL)**. In most areas, including Pennine Acute Trust in Greater Manchester, ESLs are laboratories on which results are required to be reported within 4 hours.

We can see from the national, regional and local reviews there is however considerable scope for consolidation of some activity, where quick turnaround is not required, into larger **Centralised Services Laboratories (CSLs)**.

The number of **Centralised Services Laboratories (CSLs)** across Greater Manchester would need to be determined by considerations of service resilience, logistics and to optimise economies of scale and there will be different considerations for each discipline.

We have also taken cognisance that with continual advancements in technology some on-site provision may be able to be provided through **Point of Care Testing (POCT)** and this might extend to include a concentration of such equipment in a **POC Laboratory (POCL)** in an acute or community setting.

Firstly we considered what laboratory testing needs to be provided on site and what tests could be consolidated. We recognise that Consultants providing clinical advice and support on site through clinics, ward rounds and multidisciplinary team meetings will need to have a presence in local hospitals.

The following table is not exhaustive, and due recognition would need to be taken of the clinical services to be supported.

<b>Discipline</b>	<b>Essential Services Laboratory (&lt;4hrs) ~ needs to be provided on site</b>	<b>Centralised Services Laboratory (&gt;4hrs) ~ could be on or off site</b>	<b>Point of Care Laboratory</b>	<b>Point of Care Testing</b>
<b>Biochemistry</b>	U&E profile, liver profile, calcium, amylase, magnesium, CRP, Troponin, HCG, salicylate, paracetamol	All GP work and most, if not all outpatient work. Screening Specialist biochemistry e.g. electrophoresis, toxicology.		Glucose Blood Gas
<b>Haematology</b>	Blood transfusion FBC, Coag screen, sickle screen, d-dimer, malaria parasite.	Haematinics Specialist Haematology Screening	FBC Coagulation screen	HbA1c INR FBC
<b>Microbiology/ Virology</b>	There are no Microbiology/ Virology tests that need to be performed in an ESL on an individual hospital site. All samples can be sent to the CSL and testing commenced on urgent samples within 4 hours of the sample being collected	All Microbiology/ Virology tests in their entirety from all requesting sources can be undertaken in the CSL without any detriment to quality or performance.	Maybe opportunities in the future as technology develops for a POCL undertaking e.g. HIV, Norovirus, RSV, Pregnancy testing	Urine dipstick Rapid MRSA
<b>Immunology</b>		All tests		
<b>Histopathology</b>		HER2 Most laboratory work	?Frozen sections	Limited at present
<b>Non-gynae Cytology</b>		Most laboratory work	FNA - Rapid access clinics e.g. head and neck	Limited at present
<b>Specialised services etc.</b>	Mortuary – body storage	Mortuary – autopsy Andrology EM		

## **List of Specialist Services/Sub Specialisms**

### **Andrology**

This at present sits with a number of disciplines e.g. cytology, microbiology and histology. Workload is unclear. Consideration should be given to making this a single service.

### **Mycology**

Currently Regional Mycology Centre, serving NW footprint based at Wythenshawe Hospital. This represents low volume specialist workload circa 6000 tests per year.

### **Electron Microscopy**

Currently two units located at MRI and Salford Royal where they are mainly, but not exclusively, supporting renal diagnostic work and HPA activity.

Electron microscopy services in Greater Manchester could be centralised into a single facility, but considerable investment in new equipment, particularly new electron microscopes would be necessary to maintain a long term availability of this technique. Should this be considered on NW footprint?

### **Mortuary**

Provided on all sites currently, could be considered as a GM wide arrangement.

- Distinguish between storage of the deceased and post mortem requirements
- Unify charges to the four Coroners' – several of the hospitals within the individual Trusts all charge differently.
- Single ordering point for both consumables and capital purchases – this would result in cost savings for GM
- A bank of qualified staff, no need for locum cover
- Rotation of staff to keep skill mix levels current
- Single management structure
- Reduce the need for BMS involvement

- Scope for career progression without having to change jobs
- Quality accreditation to cover all sites i.e. ISO 9001
- Single SOPs, RAs, policies and procedures for all sites
- Examine the number of mortuaries needed for consolidation
- Increase in excess body storage capacity, no need for hiring of equipment etc – one Trust can be struggling for storage and having to invest in temporary solutions when another neighbouring Trust have excess capacity and could have shared.
- Specialised mortuaries i.e. Bariatric facility, Forensics etc.

### **Dermatopathology**

SRFT is a tertiary reference centre for psoriasis, cutaneous lymphoma, paediatric dermatopathology, MOH's surgery and photobiology. The laboratory also provides the skin immunofluorescence service for laboratories across GM and beyond. Laboratory is as a referral centre for complex skin disease diagnosis across GM.

### **Neuropathology service**

The regional Neuropathology service is based at SRH in conjunction with the Regional Neuroscience services also based at SRH. There is close correlation between the physicians, surgeons and the Neuropathology department. Neuropathology at SRH has formal links with two other regional Neuropathology services and mutual support/cover is provided via these links. .

A number of other specialist service areas have been identified and will need to be considered in the design of future pathology services namely:

- Genetics/Willink - Out of scope
- Paediatrics
- Virology - already centralised
- Molecular Diagnostics

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- Cytogenetics
- Histocompatibility and Immunogenetics - Out of scope
- Referral for Second Opinions

In defining what functions are required on-site led to generation of 3 main options for future service re-design.

### **Option A – COLLABORATIVE MODEL**

Continue to collaborate across Greater Manchester improving the harmonisation and effectiveness of services. Services would effectively function as individual laboratories providing pathology services, operating as distinct services managed by individual Acute Provider Trusts.

Suggestions have been made that greater accountability could be vested in Network arrangements to improve and centralise the governance and procurement of enabling functions, for example, IM&T, transport, capital estate and equipment.

### **Option B – CONSOLIDATED MODEL**

Consolidate services, ensuring that each acute hospital has essential pathology services on site in an Essential Services Laboratory (ESL), with appropriate 24/7 cover to support acute clinical activity. All remaining activity would be processed in Centralised Services Laboratories (CSLs). All CSLs will also provide ESL functions for the local acute site.

### **Option C - CENTRALISED PRIMARY CARE MODEL**

Consolidate primary care pathology services to a single provider on either single or multiple sites. This leaves responsibility for secondary care provision with each Provider Trust.

## 4.4 Options Appraisal

In order to appraise the proposed models the Strategy Group were requested to score against the highlighted benefits. The benefits were derived from the key areas of challenge and identified stakeholder requirements.

Challenge	Stakeholder	Benefits	A	B	C
Measure and improve quality by 20%	Patients	Achieve turnaround times	3	3	2
		Reduction in adverse incidents	2	3	2
	Users	Access to patient information avoiding duplication of tests	2	3	2
		Improve access to requests/results/reports through IT	2	3	2
		Improve diagnostic accuracy	2	2	1
		Facilitate access to professional advice	3	3	1
		Ensures CPA accredited services	3	3	2
		Meets National clinical targets	2	2	1
		Improved transport and logistics	2	3	2
		Improved access to POCT	2	3	1
Sustain on-site presence of necessary personnel	Workforce	Coordinated phlebotomy services	2	2	2
		Coordinated anticoagulation services	1	2	2
		Acceptability to staff	3	2	1
		Allows sub-specialisation	1	3	1
		Improves recruitment and retention	2	2	1
		Improves integrated working relationships	2	3	1
		Critical mass of staff/optimum use of resources	2	3	2
		Modernisation of existing practices	2	3	2
		Training, development and education	2	3	1
		Career development opportunities	2	3	1
Sustain pathology services across Greater Manchester	Workforce	Research opportunities	2	3	1
		Develop professional and technical expertise	2	3	2
		Improve academic links	2	2	1
		In line with National strategy	1	3	2
		Meets efficiency targets	1	3	2
		Reduce management costs	2	3	2
		Optimum use of estate/space	2	3	2
		Optimum use of resources/skill mix/working patterns – 24/7 365	1	3	2
		Optimum procurement of equipment	1	3	2
		Meet the needs of future clinical reconfigurations	2	3	1
Achieve efficiency savings of 20%	Commissioner And Provider Organisations	Improve appropriate testing/demand management	2	3	1
		Consistent use of technology	1	3	2
		Decommission redundant services	2	3	2

- 3 - Good chance will achieve intended benefit
- 2 - Will possibly achieve intended benefit
- 1 - Won't meet intended benefit

### Summary

Option	Description	Totals
A	Collaborative Model	59
B	Consolidated Model	87
C	Centralisation Model	50

## 4.5 Preferred Option – Consolidation of services

The Strategy Group scored Option B – Consolidated Model - significantly higher than the other options. The Strategy Group felt Option A – would not meet the challenge and neither would Option C as it could destabilise on-site hospital pathology services. Option B is in line with Lord Carter’s recommendation *“consolidation enhances quality by creating critical mass and by delivering better value for money through economies of scale”*.

In order to explore this option further and considering the identified needs of each discipline it was suggested that Greater Manchester based on current demand lends itself to considering consolidation of services on a Sector or Cluster model.

Pennine Acute Trust currently has a Centralised Services Laboratory (CSL) in Oldham that supports Essential Services Laboratories (ESLs) in Bury, Rochdale and North Manchester hospitals. This model has been operating successfully for two years. There is evidence that this reconfiguration made significant quality benefits and financial savings across the four laboratories in the area. A key enabler was the 4 former laboratories were managed by one organisation.

All future consolidated models are predicated on the need for a delivery or implementation model that cedes greater operational and organisational responsibility with a lead organisation on behalf of all key stakeholders. All pathology disciplines provided across Greater Manchester will need to be operationally managed so that both CSLs and ESLs can be tailored to meet the needs of the demography and clinical services provided on-site ensuring harmonisation and best use of all resources. All CSLs and ESLs will need to work to harmonised standards and protocols.

It is well recognised all future pathology services will need to be flexible, functional and adaptable to meet changing clinical circumstances and reconfiguration plans.

Please refer to Section 8 for possible delivery models for discussion by Chief Executives.

We have through the study concentrated on describing the function required from the services rather than the form however, for illustrative purposes, the following arrangements could be considered.

### **Option B1 – One Cluster**

In this model, Greater Manchester would operate with 1 CSL and 15 ESLs. Capital investment would be required to develop a CSL capable of delivering services for all work not required to turnaround in less than 4 hours.

### **Option B2 – Two Clusters**

In this model, services would be consolidated in two sectors. This could mean the development of 2 CSLs and 14 ESLs. Sector arrangements could be North and South.

- **North** – Bolton, Salford, Wigan (inc Leigh and Wrightington), Pennine and Tameside
- **South** – Stockport, South Manchester, Central Manchester (inc Children's), Trafford and Christie.

### **Option B3 – Three Clusters**

In this model services would be consolidated in three sectors. This would be broadly in line with current clinical reconfiguration considerations of 3 clusters in Greater Manchester. This could lead to development of 3 CSLs and 13 supporting ESLs.

- **North West** – Bolton, Salford and Wigan (inc. Leigh and Wrightington)
- **North East** – Pennine (inc. Oldham, North Manchester, Rochdale and Bury) and Tameside
- **Central and South** – Stockport, Central Manchester (inc. Children's), South Manchester, Christie and Trafford.

### **Option B4 – Four Clusters**

In this model services would be consolidated in four sectors. This could lead to development of 4 CSLs and 12 supporting ESLs.

- **North West** – Bolton, Salford and Wigan (inc. Leigh and Wrightington)
- **North East** – Pennine (inc. Oldham, North Manchester, Rochdale and Bury).
- **South East** – CMFT (inc. Children's), Tameside and Stockport
- **South West** - South Manchester, Christie and Trafford.

The above options are for discussion and are not mutually exclusive in that they can be considered to be steps or phases in the consolidation of pathology services.

During implementation phase the best configuration for each individual pathology discipline and sub-discipline would be determined based on needs for Greater Manchester services and guided by the professional advice of the Network Advisory Groups (NAGs). Within any cluster we would also need to consider the appropriate distribution of work by discipline or sub-discipline.

## Section 5 Business and Operational Risks

All options appraised will have significant operational and business risks to the current provider arrangements. Full operational and financial impact assessments would need to be conducted for all current providers. Suggested models will need full economic modelling and impact assessments in terms of current capital estate.

This work should most sensibly be carried out by the Greater Manchester Commissioning Business Service (CBS). The CBS Business Intelligence team is providing modelling support to similar major GM reform programmes and is a key partner for PCTs in predictive modelling and in supporting the advancing quality programme run by the SHA.

## Section 6 Project Risk Assessment

### 20:20 – The Emerging Vision - A Feasibility Study for the Redesign of Pathology Services in Greater Manchester.

A risk assessment was carried out for the first stage of the project:

Identified Risk	Description	Mitigation	Probability	Impact
Acute Trust buy in	Pathology services currently owned by Acute Trusts (mostly FTs), so will need CEO buy-in to any service redesign.	Clear process for future decision making. Clear impact assessment and agreed share of any savings. Robust plans for future services.	Medium	High
PCT buy in	PCTs may, individually or collectively, choose to tender pathology services if not bought into redesign	Clear process for future decision making. Clear impact assessment and agreed share of savings.	Medium	High
Communication	Need to ensure effective and	Clear communications strategy	Medium	High

s	timely communications with all stakeholders including laboratory staff, Acutes, PCTs, SHA and DH	and plan once decision taken.		
Clinical Reconfiguration s/Redesign	Wider redesign of clinical services across GM currently under consideration	Clear Implementation programme and complementary to clinical redesign work.	Medium	High
Implementation and Programme Management	Major project will need appropriate resource	Clear programme management structure (including resources) for delivery with clear accountability arrangements to key stakeholders.	High	High
IMT	Key enabler to ensure turn around times are met	Separate project underway on business case for single IT system	Medium	High
Financial and business support	Full impact assessments required to assure transition plans robust		High	High
CE Level Support		Continued engagement at CE level for both Acute and PCT. Conflict of interest issues need to be considered.	High	High
Transport	Current systems have evolved on an ad-hoc basis. Arrangements are complex and funding is unclear			High
Benchmarking	Data not forthcoming from all Trusts	Escalated to CEOs		High
Mapping	Data not forthcoming from all Trusts	Assumptions made on basis of available information		High
Short-term local activity	Cost-saving initiatives by individual Acute Trusts and/or PCTs may be counterintuitive to overall emerging vision project			

## Section 7 Cost / Benefit Analysis

It was identified as part of the risk assessment that limited economic modelling exists on pathology reconfiguration. It was envisaged that this work would be done following the agreement in principle of the model for Greater Manchester. Nationally, the modelling work undertaken by Collinson Grant Healthcare, that underpinned the Carter Review, has not been shared. However the DH has indicated savings of £500 million nationally.

Carter projected £250 million could come from local efficiency improvements however the other £250 million would need to come from Pathology consolidation.

How this £500 million is distributed across the regions, either equally or by population weighting would mean a figure of between £50 million - £67 million for the North West and £20 million - £25 million for Greater Manchester.

This would mean the 11 core labs would need to make individual savings of:

- Smallest laboratory = £1.2 million
- Medium Laboratories = £1.5 million - £2 million
- Larger laboratories = £3 million to £5 million

It is clear from these figures, current services cannot be sustained with this level of disinvestment from individual laboratories therefore a system redesign is required.

Nationally, quality metrics are being developed to ensure these cost drivers do not have a deleterious effect on the quality of services. We have done some early work to ensure we have measures in place prior to any redesign.

## 7.1 Quality Metrics

Challenge	Stakeholder	Benefits	Performance Indicator	Method of Measurement	Measure
Measure and improve quality by 20%	Patients	Achieve turnaround times	Urgent within 1 hour ASAP within 4 hours Routine – next day	Routine data collection Emergency Services	Meets trolley wait in A&E. GP for routine <24hrs
		Reduce adverse incidents	Increase in incident reporting Reduction in serious events	Routine data collection through significant events reporting system	Number of Incidents Number of significant events.
		Access to patient information avoiding duplication of tests	Reduction in number of specific tests	Routine data collection	5% reduction in tests?
		Improve access to requests/results/reports through IT	User satisfaction	User survey	% number of practices on ordering and reporting.
		Improve diagnostic accuracy	Meet national standards	National statistics	% Improvement in accuracy
	Users	Facilitate access to professional advice	Effective MDTs Availability of Consultant and Scientific Staff	Attendance at MDTs	MDTs attended User satisfaction
		Ensures CPA accredited services	CPA accreditation	CPA Assessment	Full unconditional
		Meets National clinical targets	Waiting list targets	Routine data	Targets for inpatients/outpatients achieved
		Improved transport and logistics	Strategy and plan	Routine data collection on times delivered and received	Achieve planned turnaround targets

Sustain on-site presence of necessary personnel	Workforce	Improved access to POCT	Availability of POCT	Routine data collection	% of POCT available
		Coordinated phlebotomy services	Equitable services	User Surveys	User Satisfaction
		Coordinated anticoagulation services	Equitable services Improved patient mgt.	User Surveys	User Satisfaction
		Acceptability to staff	Recruitment and Retention	Turnover statistics	Staff Survey
Sustain pathology services across Greater Manchester	Organisation	Allows sub-specialisation	Occurs	Improved diagnosis	Reduction in second opinions
		Improves recruitment and retention	Vacancy figures Sickness and absence	Staff survey New post created	Acceptable levels of turnover Reduced sickness absence
		Improves integrated working relationships	Design of CSLs/ESLs/POCLs/POCT	Shared accommodation	Effective staff rotation/reduced vacancies
		Critical mass of staff/optimum use of resources	Increased efficiency	Reduction in establishment	Reduction in establishment
		Modernisation of existing practices	Allows modernisation of existing practices	Extensive use of automation	
		Training, development and education	Training and development strategy	Personal development plans	Achievement of training plans/qualifications
		Career development opportunities	Improve development opportunities	Creation of new posts	New posts filled
		Research opportunities	Increase in research undertaken	Number of research projects	Increase in number and funding
Achieve efficiency savings of 20%		Develop professional and technical expertise	Critical mass of clinicians	Recruitment to establishment	Retention %
		Improve academic links	Strong links with established		Number of students undertaking degree

		Universities.		Increase in SpRs
	In line with National strategy	Conforms to National Strategy	SHA and PCT assessment	Progress reports to SHA/DH
	Meets efficiency targets	QIPP target	Reduction in expenditure	20% cost saving
	Reduce management costs	QIPP target	Reduction in management posts	20% reduction in management costs
	Optimum use of estate/space	Capital utilisation	Reduced capital costs	20% reduction in capital charges/overheads
	Optimum use of resources/skill mix/working patterns – 24/7 365	Service available 24 hours a day, 365 days per year.	Continuous service provision	Reduction in complaints Compliance with EWTD Out of hours service
	Optimum procurement of equipment	Managed service contracts and joint procurement	Consolidation of managed service contracts	20% saving in procurement
	Meet the needs of future clinical reconfigurations	Flexible plans	Influence and improve pathway design	Added value to patient pathway
	Improve appropriate testing/demand management	Influence appropriate testing	Influence and improve advice to users	User survey Reduction in tests
	Consistent use of technology	Modernisation of practices	Adoption and adherence to SOPs	Adoption and adherence to SOP
	Decommission redundant services/tests	Strategy for review	Number of services/tests decommissioned	How many services decommissioned? Complaints

## **7.2 Capital Investment**

### **Estate**

Further work is required to ascertain the functionality and longevity of the current capital estate across Greater Manchester.

### **Collaborative Procurement**

There is great potential for collaborative procurement to drive significant efficiencies across Greater Manchester and to contribute to the substantial reductions in cost and increases in quality outlined by the Acute and PCT Chief Executives.

Ultimately the reconfiguration will identify how pathology services will operate across the region. Procurement can take this to the market in the form of an output based specification and deliver contracts required to put the new service model into operation. A reconfiguration will eliminate wasted capacity within Pathology Services and increase equipment utilisation. This should result in a significant reduction in costs across GM.

Centralised collaborative procurement will also enable:

- Economies of scale – leverage in the market place
- Consensus purchasing of value for money products and services
- Facilitate a move towards standardised testing methods and a resulting increase in quality
- Standardised prices across the region – each trust paying the same cost per test
- GM wide managed service(s) – improved service delivery allowing NHS to focus on core deliverables of the pathology service
- VAT recovery – subject to HMRC approval

### **IMT**

The Network is working closely with the GM ICT Board to develop the strategic outline case for a Laboratory Information Management System (LIMS) for Greater Manchester. Although early indications are that this will need considerable investment a reduction in duplicate testing and consolidation of resources will lead to savings.

### **Transport**

It is felt that considerable improvements can be made to transport and logistics services across Greater Manchester. Clearly ownership of transport arrangements will be key to the success of the future vision. It is envisaged funding will be successfully released from improved transport commissioning.

### 7.3 Early Wins

There are a number of changes that could be implemented quickly which would generate cost savings, within Pathology and/or elsewhere in the patient pathway.

			Cost saving	Quality Benefit
1	Adopt harmonised reference values, where possible	Remove inconsistencies between laboratories and reduce unnecessary follow-up.	✓	✓
2	Standardise test profiles	e.g. Liver function tests Revise Thyroid Strategy so that TSH is first line test	✓	✓
3	Decommission redundant tests	e.g. FOB which is now part of the Bowel Cancer screening programme and should not be used to investigate symptoms	✓	✓
4	Introduce new tests that will deliver savings in the pathway e.g. by preventing outpatient attendances or inpatient admissions	e.g...BNP to avoid echocardiographs in suspected heart failure. Over 50% of BNP requests do not proceed to echo, avoiding cost and improving patient care	✓	✓
5	Lean working	Streamlining processes will save costs and improve quality	✓	✓
6	Full electronic requesting from wards and primary care	<ul style="list-style-type: none"> <li>• Accurate patient identification</li> <li>• Facilitates demand management by guiding the requesting</li> <li>• Audit trail of requests and results.</li> <li>• Gives the GP access to results on their patients including in and out patient episodes, removing the need to reinvestigate the patient and saves both time and money.</li> <li>• As of January 2010, 43% of GP Practices in Greater Manchester are requesting tests electronically and have access to previous test results from secondary care.</li> </ul>	✓	✓
7	Harmonise working day and out of hours arrangements, including payment systems		✓	
8	Out of hours consultant cross cover		✓	✓
9	Procurement	Savings to be made on managed services contracts and joint procurement of consumables	✓	
10	Demand management	<ul style="list-style-type: none"> <li>• Develop the role of 'Pathology Advisor' to work closely with clinical users of the service to ensure appropriate use of the service.</li> </ul>	✓	✓

		<ul style="list-style-type: none"> <li>• Provide standard advice across GM for more complex investigations, eg Immunology</li> <li>• Develop common test protocols for clinical areas e.g. A&amp;E</li> </ul>		
<b>11</b>	Clinical Pathway Design	Key role for pathology in highlighting its value in shortening patient pathways and saving costs in the health economy e.g. Anticoagulation monitoring, Phlebotomy and use of point of care testing.	✓	✓
<b>12</b>	Redesign of cervical cytology laboratory services	A formal procurement is currently underway to ensure that national quality standards are maintained	✓	✓
<b>13</b>	GM tariff	To develop a single price for primary care pathology work.	✓	

## **Section 8 Delivery Models**

If supported, early consideration on a delivery model is suggested. Criteria would be governance, sovereignty and equity.

**A – Partnership/Shareholding Model between providers with lead trust**

**B – PCT Commissioning Led Model for primary care work**

**C – Private/Public Sector Partnership Model**

**D – Social Enterprise**

## Section 9 Conclusions & Recommendations

### 9.1 Conclusions

This feasibility study, conducted with professionals working across pathology services, on behalf of the Chief Executive community across Greater Manchester concludes that the consolidation of services is a prerequisite to achieving the efficiency gains identified by the Carter Report.

The Strategy Group scored this option significantly higher overall than the other options proposed. On further exploration this leads to opportunities for consideration of one to four clusters for Greater Manchester. The number of Centralised Services Laboratories and Essential Services Laboratories required for Greater Manchester needs detailed work at the next stage to look at economic and capacity modelling.

The feasibility study has identified what functions are required by each discipline and if the principle for consolidation is accepted then work now needs to translate this into what this would mean for Greater Manchester services. To deliver a consolidated model will require the responsibility for governance and change management to be ceded with a lead organisation to ensure a managed approach to redesign.

If this feasibility study is taken forward the AGM PCTs and Acute Trusts will be responsible and accountable for the implementation programme and establishing the requisite project management accountability structures in line with the QIPP programme. The Network Board or reconstituted Modernisation Board will be responsible for overseeing the delivery and performance management of the next stages of the programme.

This professionally led feasibility study on the emerging vision for future pathology services concluded that consolidation of services across Greater Manchester is the only realistic option to meet all four objectives set by CEOs.

We believe from the study:

1. 20% quality gain can be achieved (e.g. through standardisation, harmonisation, appropriate and timely testing and reporting, and critical mass of expertise).
2. 20% saving can be achieved (this is the suggested level of saving from Pennine's expenditure data and Carter Review).
3. Protection of essential on-site services can be achieved (e.g. responsive on-site clinical services appropriate to need).
4. Sustainability of GM pathology services can be achieved (e.g. planned and managed change, appropriate skill mix, job redesign, adjustment of the working day and risk management).
5. But all of these can **ONLY** be achieved through reconfiguration to a consolidated pathology service for Greater Manchester.

## 9.2 Recommendations

1. The Network recommends the consolidated model as the best way forward for pathology services in Greater Manchester.
2. CEOs are asked to endorse conclusion points 1 to 5 and to agree a second phase of work which is to produce economic and capacity modelling, governance proposals and an implementation plan. This work will need to be resourced.

## Section 10 Next Steps

14<sup>th</sup> April 2010 – Greater Manchester Pathology Network Board

16<sup>th</sup> April 2010 – Greater Manchester Chief Executives

May – July 2010 – Work on economic and capacity modelling, governance arrangements and implementation plan.

June 2010 – North West NHS to feedback to DH on progress in meeting Carter recommendations.

## Appendices

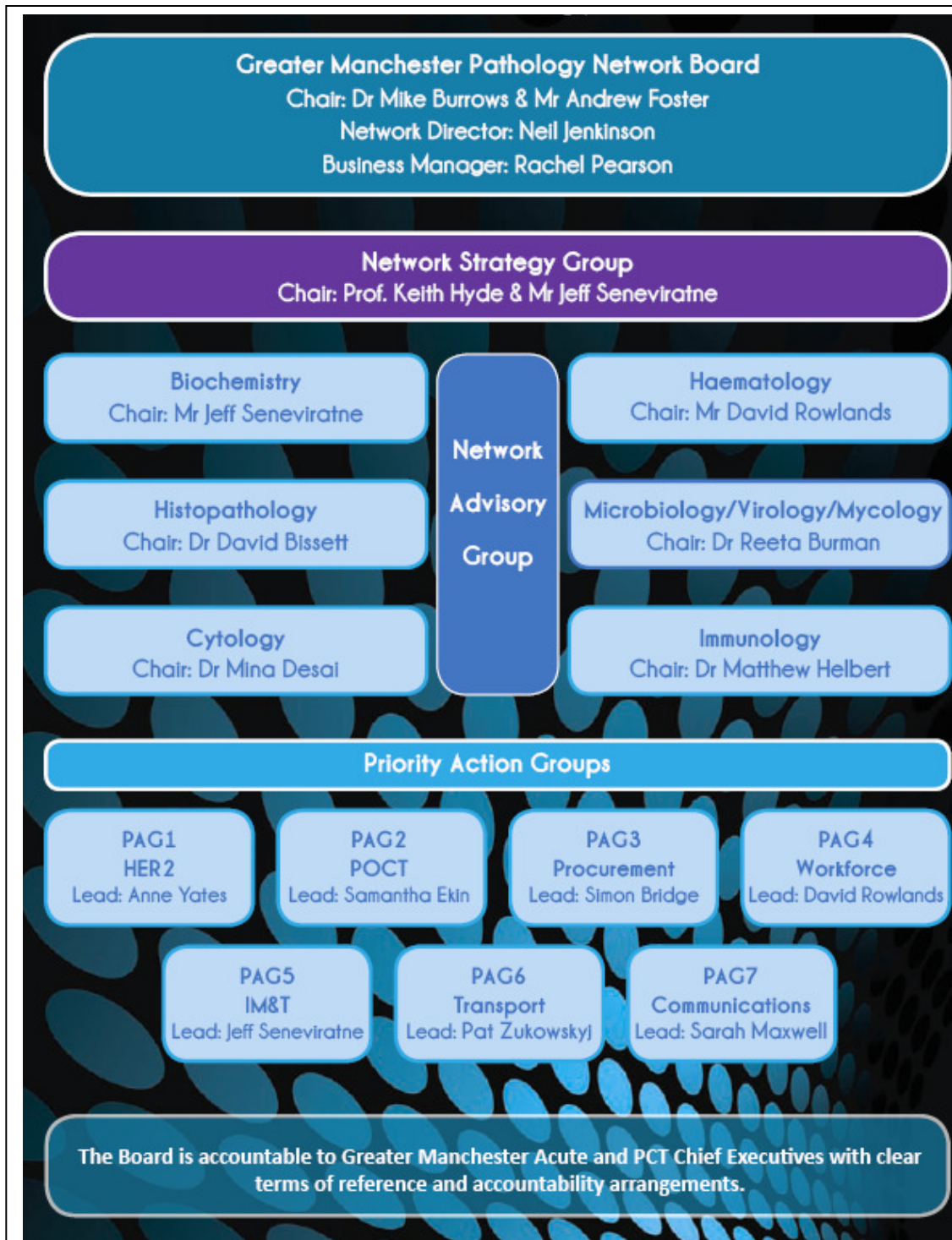
### Appendix A - Greater Manchester Pathology (Laboratory Medicine) Network Board

<b>Name</b>	<b>Role</b>	<b>Organisation</b>
Dr David Alderson	Clinical Director	Trafford Healthcare NHS Trust
Dr Mohammad Al-Jafari	RCPATH Regional Council Chair	Warrington and Halton Hospitals NHS Foundation Trust
Dr Gordon Armstrong	Clinical Director	Salford Royal NHS Foundation Trust
Dr Brian Benatar	Clinical Director	Pennine Acute Hospitals NHS Trust
Dr David Bisset	Histopathology NAG Chair	Royal Bolton Hospital NHS Foundation Trust Central Manchester University Hospitals NHS Foundation Trust
Prof. Eric Bolton	Clinical Director Microbiology NAG Chair	Pennine Acute Hospitals NHS Trust
Dr Reeta Burman	Chief Executive Clinical Director/Biochemistry NAG Chair	Salford Primary Care Trust
Dr Gillian Burrows	Clinical Director (Children's)	Stockport NHS Foundation Trust Central Manchester University Hospitals NHS Foundation Trust
Mr Trevor Carr	Clinical Director	Tameside Hospital NHS Foundation Trust Central Manchester University Hospitals NHS Foundation Trust
Dr Mina Desai	Cytology NAG Chair	Salford Royal NHS Foundation Trust
Ms Jackie Elliott	Pathology Manager	Wrightington, Wigan and Leigh NHS Foundation Trust
Mr Andrew Foster	Chief Executive	Wrightington, Wigan and Leigh NHS Foundation Trust
Ms Susan Gillespie	Clinical Director	Central Manchester University Hospitals NHS Foundation Trust
Dr Matthew Helbert	Immunology Lead	Royal Bolton Hospital NHS Foundation Trust Greater Manchester Pathology Network Central Manchester University Hospitals NHS Foundation Trust
Dr Andrew Hutchesson	Clinical Director	University Hospital of South Manchester NHS Foundation Trust
Prof. Keith Hyde	Clinical Lead	Greater Manchester Pathology Network
Dr Sezgin Ismail	Clinical Director	The Christie NHS Foundation Trust
Mr Neil Jenkinson	Network Director	Greater Manchester Pathology Network
Dr Lia Menasce	Clinical Director	Greater Manchester Pathology Network
Mrs Rachel Pearson	Business Manager Haematology NAG Chair	Salford Royal NHS Foundation Trust
Mr Roman Pylypczuk	Clinical Lead	Greater Manchester Pathology Network Central Manchester University Hospitals NHS Foundation Trust
Mr Jeff Seneviratne	Virology Lead	Wrightington, Wigan and Leigh NHS Foundation Trust
Dr Andrew Turner	Pathology Manager	
Mr Allan Wilcox		

**Appendix B – Network Strategy Group**

<b>Member</b>	<b>Name</b>	<b>Organisation</b>	<b>Deputy</b>	<b>Organisation</b>
Acute Chief Executive	Andrew Foster	WWL NHS Foundation Trust		
PCT Chief Executive	Mike Burrows	Salford PCT		
Network Clinical Lead	Keith Hyde	GM Pathology Network		
Network Clinical Lead	Jeff Seneviratne	GM Pathology Network		
Network Advisory Group reps.				
Biochemistry	Lance Sandle	Trafford Healthcare NHS Trust	Gilbert Wieringa	Royal Bolton Hospital NHS Foundation Trust
			Chris Chaloner	CMFT NHS Trust
Cytology	Mina Desai	CMFT NHS Trust	Brian Benatar	Pennine Acute Hospitals NHS Trust
Haematology	Roman Pylypczuk	Salford Royal NHS Foundation Trust	David Rowlands	UHSM NHS Foundation Trust
Histopathology	David Bisset	Royal Bolton Hospital NHS Foundation Trust	Richard Hale	Stockport NHS Foundation Trust
Immunology	Matthew Helbert	CMFT NHS Trust		
Microbiology	Reeta Burman	Pennine Acute Hospitals NHS Trust	Eric Bolton	HPA NW
Pathology Managers Forum rep.	Jackie Elliott	Salford Royal NHS Foundation Trust		
SHA representative	Steve Ryan	NHS North West		
PIR/Finance representative	Steve Downing	Association of GM PCTs		
SHA System Management Team representative	TBC	NHS North West		
Network Director	Neil Jenkinson	GMPN		
Network Business Manager	Rachel Pearson	GMPN		
Cancer Network	Toni Mathie	Cancer Network		
Primary Care user	TBC			
Patient rep.	TBC			

Appendix C – Network Structure





## Appendix E – Network Membership and Network Stakeholder List

	<b>Name</b>	<b>Organisation</b>
1	Khalid Ahmed	Pennine Acute Hospitals NHS Trust
2	Hana Alachkar	Salford Royal NHS Foundation Trust
3	David Alderson	Trafford Healthcare NHS Trust
4	Samer Al-Habba	Pennine Acute Hospitals NHS Trust
5	Kweku Baiden Amissah	Pennine Acute Hospitals NHS Trust
6	John Ardern	Central Manchester NHS Foundation Trust
7	Peter Arkwright	Central Manchester NHS Foundation Trust
8	Gordon Armstrong	Salford Royal NHS Foundation Trust
9	Pam Atkinson	Central Manchester NHS Foundation Trust
10	Gwen Ayers	Central Manchester NHS Foundation Trust
11	David Barker	WWL NHS Foundation Trust
12	Louise Bell	Salford Royal NHS Foundation Trust
13	Brian Benatar	Pennine Acute Hospitals NHS Trust
14	Robert Berry	Tameside Hospital NHS Foundation Trust
15	Deepak Bhatnagar	Pennine Acute Hospitals NHS Trust
16	Sadhna Bhatnagar	Pennine Acute Hospitals NHS Trust
17	Paul Bishop	UHSM NHS Foundation Trust
18	David Bisset	Royal Bolton Hospital NHS Foundation Trust
19	Malcolm Blower	The Christie NHS Foundation Trust
20	Eric Bolton	Central Manchester NHS Foundation Trust/ Health Protection Agency
21	Joanna Borzomato	WWL NHS Foundation Trust
22	David Brayshaw	Central Manchester NHS Foundation Trust
23	Michelle Brereton	Central Manchester NHS Foundation Trust
24	Gail Buggy	Pennine Acute Hospitals NHS Trust
25	Nick Bullough	Tameside Hospital NHS Foundation Trust
26	Reeta Burman	Pennine Acute Hospitals NHS Trust
27	Gillian Burrows	Stockport NHS Foundation Trust
28	Richard Byers	Central Manchester NHS Foundation Trust
29	Gwyneth Cadman	Pennine Acute Hospitals NHS Trust
30	Ivan Cartmill	Pennine Acute Hospitals NHS Trust
31	Peter Chadderton	Royal Bolton Hospital NHS Foundation Trust
32	Paul Chadwick	Salford Royal NHS Foundation Trust
33	Bipasha Chakrabarty	The Christie NHS Foundation Trust
34	Christopher Chaloner	Central Manchester NHS Foundation Trust
35	Silvia Chernigoy	WWL NHS Foundation Trust
36	Susan Clark	The Christie NHS Foundation Trust
37	Paul Connor	Central Manchester NHS Foundation Trust
38	Steven Craig	UHSM NHS Foundation Trust
39	Mairi Cullen	UHSM NHS Foundation Trust
40	Tony Cumming	Central Manchester NHS Foundation Trust

20:20 – The Emerging Vision - A Feasibility Study for Redesign of  
Pathology Services in Greater Manchester.

41	Alan Curry	Central Manchester NHS Foundation Trust
42	Neha Dalal	Tameside Hospital NHS Foundation Trust
43	Denise Darby	The Christie NHS Foundation Trust
44	Diane Dean	Pennine Acute Hospitals NHS Trust
45	Colin Dennett	Central Manchester NHS Foundation Trust
46	Mike Dennis	The Christie NHS Foundation Trust
47	Madhuri Deolekar	Pennine Acute Hospitals NHS Trust
48	Sudha Desai	Salford Royal NHS Foundation Trust
49	Mina Desai	Central Manchester NHS Foundation Trust
50	Kiran Dhir	Pennine Acute Hospitals NHS Trust
51	Andrew Dodgson	Central Manchester NHS Foundation Trust
52	Kirsty Dodgson	Central Manchester NHS Foundation Trust
53	Angela Downes	Health Protection Agency
54	Margaret Drury	Stockport NHS Foundation Trust
55	Erika Duffell	Health Protection Agency
56	Amanda Eckersley	Pennine Acute Hospitals NHS Trust
57	Jackie Elliott	Salford Royal NHS Foundation Trust
58	Dave Ellis	Health Protection Agency
59	Barzo Faris	Trafford Healthcare NHS Trust
60	Camelia Faris	WWL NHS Foundation Trust
61	George Fielding	Stockport NHS Foundation Trust
62	Len Fielding	Pennine Acute Hospitals NHS Trust
63	Michael France	Central Manchester NHS Foundation Trust
64	Maged Gharib	Central Manchester NHS Foundation Trust
65	Susan Gillespie	WWL NHS Foundation Trust
66	Wayne Goddard	Trafford Healthcare NHS Trust
67	Karen Graham	The Christie NHS Foundation Trust
68	John Grainger	Central Manchester NHS Foundation Trust
69	Mark Grey	Royal Bolton Hospital NHS Foundation Trust
70	Najib Haboubi	Trafford Healthcare NHS Trust
71	Richard Hale	Stockport NHS Foundation Trust
72	Cath Hall	Central Manchester NHS Foundation Trust
73	David Hamer	Royal Bolton Hospital NHS Foundation Trust
74	Martin Hamer	The Christie NHS Foundation Trust
75	Mike Hammer	Pennine Acute Hospitals NHS Trust
76	James Harrison	WWL NHS Foundation Trust
77	Ibrahim Hassan	UHSM NHS Foundation Trust
78	Katharine Hayden	Central Manchester NHS Foundation Trust
79	Michael Heaton	Pennine Acute Hospitals NHS Trust
80	Matthew Helbert	Central Manchester NHS Foundation Trust
81	Elizabeth Herd	Pennine Acute Hospitals NHS Trust
82	Christine Hill	Trafford Healthcare NHS Trust
83	Rod Hinchliffe	Central Manchester NHS Foundation Trust
84	Subhendu Hom-	Pennine Acute Hospitals NHS Trust

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Pathology Services in Greater Manchester.

	Choudhury	
85	Graham Horsman	UHSM NHS Foundation Trust
86	John Houghton	Salford Royal NHS Foundation Trust
87	Vicki Howarth	Stockport NHS Foundation Trust
88	Miles Howe	UHSM NHS Foundation Trust
89	Yvonne Hughes	Central Manchester NHS Foundation Trust
90	Nigel Humble	Tameside Hospital NHS Foundation Trust
91	Roger Hunt	Stockport NHS Foundation Trust
92	Andrew Hutchesson	Royal Bolton Hospital NHS Foundation Trust
93	Keith Hyde	Central Manchester NHS Foundation Trust
94	Azhar Iqbal	Royal Bolton Hospital NHS Foundation Trust
95	Barbara Isalska	UHSM NHS Foundation Trust
96	Sezgin Ismail	UHSM NHS Foundation Trust
97	Neil Jenkinson	GM Pathology Network
98	James Jip	Royal Bolton Hospital NHS Foundation Trust
99	Simon Jowitt	Salford Royal NHS Foundation Trust
100	Ed Kaczmariski	Health Protection Agency
101	John Kane	Salford Royal NHS Foundation Trust
102	Maeve Keaney	Salford Royal NHS Foundation Trust
103	Brian Keevil	UHSM NHS Foundation Trust
104	Anne-Marie Kelly	UHSM NHS Foundation Trust
105	Anna Kelsey	Central Manchester NHS Foundation Trust
106	Roy Kettle	Central Manchester NHS Foundation Trust
107	Rizwan Khan	Royal Bolton Hospital NHS Foundation Trust
108	Naeem Khattak	Pennine Acute Hospitals NHS Trust
109	Peter Kinsella	Royal Bolton Hospital NHS Foundation Trust
110	Paul Klapper	Central Manchester NHS Foundation Trust
111	Krystyna Kornecki	UHSM NHS Foundation Trust
112	Richard Lambert	Pennine Acute Hospitals NHS Trust
113	Neil Laurie	Trafford Healthcare NHS Trust
114	Geoff Lavelle	Tameside Hospital NHS Foundation Trust
115	Gwynne Lloyd	Stockport NHS Foundation Trust
116	Paul Loy	Pennine Acute Hospitals NHS Trust
117	Richard Mallard	Health Protection Agency
118	John Mansley	Pennine Acute Hospitals NHS Trust
119	John Martin	Royal Bolton Hospital NHS Foundation Trust
120	Penny Martin	Royal Bolton Hospital NHS Foundation Trust
121	Richard Mathias	Salford Royal NHS Foundation Trust
122	Sarah Maxwell	Stockport NHS Foundation Trust
123	David May	Tameside Hospital NHS Foundation Trust
124	Steven McCann	Stockport NHS Foundation Trust
125	Lorna McWilliam	Central Manchester NHS Foundation Trust
126	Rita Melliush	Stockport NHS Foundation Trust
127	Lia Menasce	The Christie NHS Foundation Trust

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Pathology Services in Greater Manchester.

128	Stephen Mills	WWL NHS Foundation Trust
129	Kate Morgan	Stockport NHS Foundation Trust
130	Ken Mutton	Health Protection Agency
131	Robert Nelson	WWL NHS Foundation Trust
132	Melanie Newbould	Central Manchester NHS Foundation Trust
133	Sheila Norris	Pennine Acute Hospitals NHS Trust
134	Lynn O'Connor	Tameside Hospital NHS Foundation Trust
135	David Osborne	Pennine Acute Hospitals NHS Trust
136	Antonio Paiva-Correia	Pennine Acute Hospitals NHS Trust
137	Hari Panigrahi	Pennine Acute Hospitals NHS Trust
138	Mark Pearson	Royal Bolton Hospital NHS Foundation Trust
139	Kate Pendry	Central Manchester NHS Foundation Trust
140	Angela Pledger	Trafford Healthcare NHS Trust
141	Rick Pope	Central Manchester NHS Foundation Trust
142	Susan Priestnall	Stockport NHS Foundation Trust
143	Paul Purnell	UHSM NHS Foundation Trust
144	Roman Pylypczuk	Salford Royal NHS Foundation Trust
145	Ahmed Qamruddin	Central Manchester NHS Foundation Trust
146	Irfan Qureshi	Tameside Hospital NHS Foundation Trust
147	Sarah Ramsden	Pennine Acute Hospitals NHS Trust
148	Bill Randall	The Christie NHS Foundation Trust
149	Madhu Rao	Pennine Acute Hospitals NHS Trust
150	Craig Rogers	WWL NHS Foundation Trust
151	Martin Rowlands	Pennine Acute Hospitals NHS Trust
152	David Rowlands	UHSM NHS Foundation Trust
153	Aram Rudenski	Salford Royal NHS Foundation Trust
154	Kate Ryan	Central Manchester NHS Foundation Trust
155	Kate Ryan	Salford Royal NHS Foundation Trust
156	Lance Sandle	Trafford Healthcare NHS Trust
157	Debasis Sanyal	Central Manchester NHS Foundation Trust
158	Steve Scarisbrick	Salford Royal NHS Foundation Trust
159	Michael Scott	UHSM NHS Foundation Trust
160	Vivek Sen	Pennine Acute Hospitals NHS Trust
161	Jeff Seneviratne	GM Pathology Network
162	Jonathan Shanks	The Christie NHS Foundation Trust
163	Chandrashekar Shetty	WWL NHS Foundation Trust
164	Caroline Shiach	UHSM NHS Foundation Trust
165	Maurice Sidorczuk	Pennine Acute Hospitals NHS Trust
166	Kanwal Sikand	The Christie NHS Foundation Trust
167	Robert Smith	WWL NHS Foundation Trust
168	Denise Smith	Royal Bolton Hospital NHS Foundation Trust
169	Sue Spilsbury	Stockport NHS Foundation Trust

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Pathology Services in Greater Manchester.

170	Felicity Stewart	Salford Royal NHS Foundation Trust
171	Chinari Subudhi	Salford Royal NHS Foundation Trust
172	Pete Taft	Salford Royal NHS Foundation Trust
173	Moira Taylor	Stockport NHS Foundation Trust
174	Ann Taylor	Royal Bolton Hospital NHS Foundation Trust
175	Nick Telford	The Christie NHS Foundation Trust
176	Christina Tennant	Royal Bolton Hospital NHS Foundation Trust
177	Lesley Tetlow	Central Manchester NHS Foundation Trust
178	Tony Tetlow	Tameside Hospital NHS Foundation Trust
179	David Tierney	UHSM NHS Foundation Trust
180	Malcolm Timmins	Stockport NHS Foundation Trust
181	Sami Titi	Pennine Acute Hospitals NHS Trust
182	Andrew Turner	Central Manchester NHS Foundation Trust
183	Philip Unsworth	Tameside Hospital NHS Foundation Trust
184	Colin Wallbank	WWL NHS Foundation Trust
185	David Walsh	WWL NHS Foundation Trust
186	Emma Watson	Stockport NHS Foundation Trust
187	Alan Webster	UHSM NHS Foundation Trust
188	Pauline Westbrook	Trafford Healthcare NHS Trust
189	David Weston	Health Protection Agency
190	Claire Whitehead	Central Manchester NHS Foundation Trust
191	Keith Wiener	Pennine Acute Hospitals NHS Trust
192	Gilbert Wieringa	Royal Bolton Hospital NHS Foundation Trust
193	Allan Wilcox	WWL NHS Foundation Trust
194	Patricia Willis	Royal Bolton Hospital NHS Foundation Trust
195	Sarah Wilson	The Christie NHS Foundation Trust
196	Godfrey Wilson	Central Manchester NHS Foundation Trust
197	Tom Wilson	Pennine Acute Hospitals NHS Trust
198	Bernard Wood	Central Manchester NHS Foundation Trust
199	Anne Yates	Salford Royal NHS Foundation Trust
200	Patricia Zukowskyj	Trafford Healthcare NHS Trust

## APPENDIX F - Independent Review of NHS Pathology Services

Report focuses on three main themes:

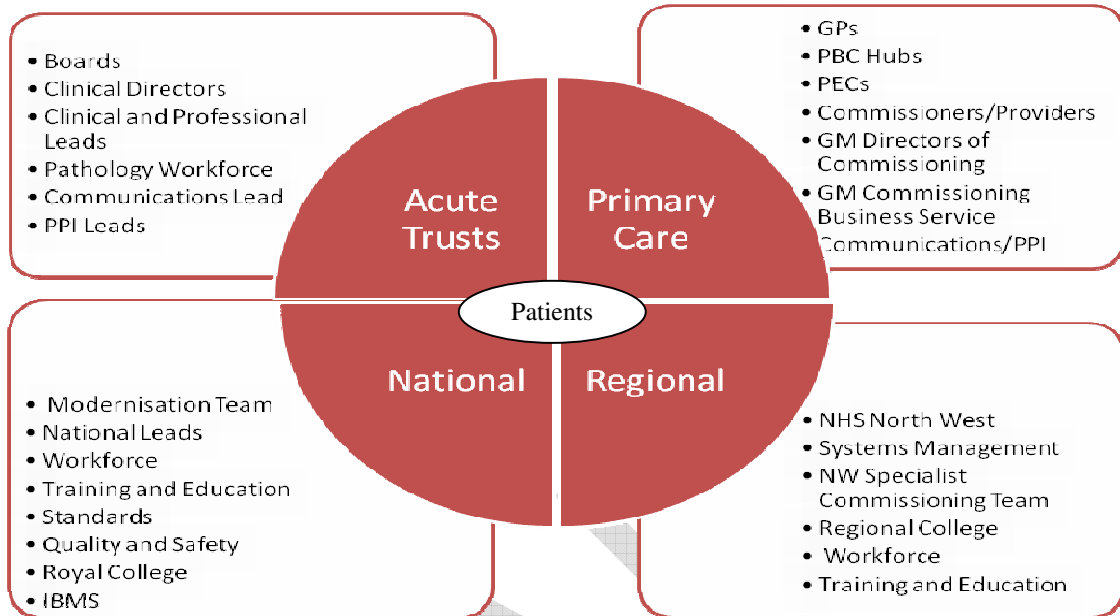
- **Improving quality and patient safety**
- **Improving efficiency**
- **Identifying the mechanisms for delivering change.**

Based on the evidence collected there is a strong case for consolidation of pathology services. The characteristics of a good consolidated service would be end-to-end management of service including transport and logistics, IT connectivity, efficient and effective use of resources including people, and concentration of non-urgent and specialist work in one or more centralised and accredited core laboratories where throughput is sufficient to ensure high quality results. Only tests/investigations requiring a rapid turnaround on clinical grounds would be processed on site.

### Summary recommendations:

- 1 Objective and measurable quality standards (from sample request to interpreted result).
- 2 Independent accreditation process to inspect against standards (including POCT).
- 3 IT connectivity
- 4 Pathology more responsive to users i.e. phlebotomy and sample collection services made more accessible.
- 5 DH should ensure more information is available to users about quality and safety
- 6 Specialist services should be consolidated through referral to specialist testing centres
- 7 Pathology Networks should be established. Examples could include:
  - a. *Consortium arrangements – where provider trusts cede responsibility for provision to the consortium which then manages the combined service in accordance with an SLA.*
  - b. *Commissioning arrangement – where commissioners employ the Network Director and Clinical Director to work with provider Trusts and other potential providers, in accordance with a SLA/legally binding contract.*
  - c. *A contracted out model – where service provision is outsourced to another organisation, either wholly to the independent sector or via a joint venture.*
- 8 Each consolidated Network should have a single management structure, including clinical director, commercial director, providing clear leadership and accountability.
- 9 A National Clinical Director for pathology should be appointed working with a National Commercial Director.
- 10 Proposals should be reflected in DH Operating Framework for NHS.
- 11 NHS pathology workforce should be reformed
- 12 Through DH guidance and support each SHA should require PCTs to take the lead with Providers in their areas to draw up cost effective plans for implementation of this report's proposals.
- 13 DH to do further work to develop a tariff for community based and specialist pathology.
- 14 DH to determine coverage and format of benchmarking data to be collected from all providers and procure collection of such data.
- 15 DH should develop commissioning guidance as a priority
- 16 DH should consider development of model contracts for pathology
- 17 DH should ensure a "formulary" equivalent to that used for medicines is introduced.
- 18 DH should identify ways to facilitate the adoption of innovation in pathology.

Appendix G – Communications Strategy



DRAFT

Appendix H – Primary Care Listening Event Programme

**Listening Event - Meeting the needs of Primary Care**

20:20 Vision - Quality Drives Cost

**Wednesday 7<sup>th</sup> October 2009**

Bredbury Hall Hotel, Stockport SK6 2DH

8.45am	Registration and Refreshments <i>including bacon butties</i>									
9.15am	Chair's Welcome/Overview of day and aims Prof. Keith Hyde - Joint Clinical Lead Greater Manchester Pathology Network									
9.30am	<u>Keynote Speaker</u> Dr Richard Fitton - General Practitioner NHS Tameside and Glossop <b>Quality Beyond Pathology:</b> <b>What does Primary Care need from GM Pathology Services?</b>									
10am	Parallel Workshops - Service Models:									
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Group 1</th> <th style="width: 33%;">Group 2</th> <th style="width: 33%;">Group 3</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><b>Phlebotomy</b></td> <td style="text-align: center;"><b>POCT</b></td> <td style="text-align: center;"><b>Advice</b></td> </tr> <tr> <td>Pat Houghton - Phlebotomy Manager - Wrightington, Wigan and Leigh NHS Foundation Trust</td> <td>Samantha Ekin - Point of Care Testing Coordinator - Stockport NHS Foundation Trust</td> <td>Dr Sarah Maxwell - Consultant Microbiologist - Stockport NHS Foundation Trust</td> </tr> </tbody> </table>	Group 1	Group 2	Group 3	<b>Phlebotomy</b>	<b>POCT</b>	<b>Advice</b>	Pat Houghton - Phlebotomy Manager - Wrightington, Wigan and Leigh NHS Foundation Trust	Samantha Ekin - Point of Care Testing Coordinator - Stockport NHS Foundation Trust	Dr Sarah Maxwell - Consultant Microbiologist - Stockport NHS Foundation Trust
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<b>Phlebotomy</b>	<b>POCT</b>	<b>Advice</b>								
Pat Houghton - Phlebotomy Manager - Wrightington, Wigan and Leigh NHS Foundation Trust	Samantha Ekin - Point of Care Testing Coordinator - Stockport NHS Foundation Trust	Dr Sarah Maxwell - Consultant Microbiologist - Stockport NHS Foundation Trust								
11-11.30am	Break - refreshments - visit stalls/displays									
11.30-12.30	Feedback from Workshops									
12.30pm	Networking Lunch/Best Practice Forum - visit stalls/displays									
1.30pm	Parallel Workshops - Delivery Mechanisms:									
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Group 4</th> <th style="width: 33%;">Group 5</th> <th style="width: 33%;">Group 6</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><b>IT</b></td> <td style="text-align: center;"><b>Demand Management</b></td> <td style="text-align: center;"><b>Lean</b></td> </tr> <tr> <td>David Slater - Project Manager - Greater Manchester Pathology Network</td> <td>Dr Nigel Guest - General Practitioner - NHS Trafford</td> <td>David Hamer - Blood Sciences Service Manager - Royal Bolton Hospital NHS Foundation Trust</td> </tr> </tbody> </table>	Group 4	Group 5	Group 6	<b>IT</b>	<b>Demand Management</b>	<b>Lean</b>	David Slater - Project Manager - Greater Manchester Pathology Network	Dr Nigel Guest - General Practitioner - NHS Trafford	David Hamer - Blood Sciences Service Manager - Royal Bolton Hospital NHS Foundation Trust
Group 4	Group 5	Group 6								
<b>IT</b>	<b>Demand Management</b>	<b>Lean</b>								
David Slater - Project Manager - Greater Manchester Pathology Network	Dr Nigel Guest - General Practitioner - NHS Trafford	David Hamer - Blood Sciences Service Manager - Royal Bolton Hospital NHS Foundation Trust								
2.30pm	Feedback from Workshops									
3.30pm	Open discussion forum: Meeting the needs of Primary Care									
4pm	Close Meeting the quality and productivity challenge									

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## Appendix I

### What is pathology?

Pathology is the science that underpins clinical medicine. Pathology is about understanding disease and disease processes. Although much of the work is laboratory-based, many pathologists undertake direct care of patients as a major part of their role. The main disciplines are as follows:

- **Clinical Biochemistry** – the study of changes in chemical composition of body fluids in the diagnosis and monitoring of disease processes, e.g. blood glucose in diabetes mellitus, cholesterol and hormone measurements
- **Cytopathology** – the study of abnormal cells in body fluids, smears and tissue aspirations, e.g. cervical smears for the detection of pre-cancerous changes in the cervix.
- **Haematology and transfusion medicine** – the diagnosis and treatment of diseases of the blood, e.g. anaemia, leukaemia and haemophilia and the organisation of blood transfusion.
- **Histopathology** – the study of diseased tissue including examination under the microscope, e.g. biopsies, breast lumps or bowel resections for cancer.
- **Immunology, histocompatibility and immunogenetics** – the study of the body's self-surveillance mechanisms and their disorders, e.g. allergies, rheumatoid arthritis, tissue matching for organ transplants.
- **Microbiology, virology and infection control** – the isolation and characterisation of bacteria, fungi, parasites and viruses that cause diseases, detection of antibody responses and DNA/RNA and the monitoring of treatment of infections, e.g. MRSA, C difficile, Legionnaires' disease, thrush, dysentery, hepatitis and AIDS.
- **Toxicology** – the science of poisons, e.g. measuring blood levels of drugs after an overdose and monitoring drug treatment and abuse.