

‘RESHAPING PATHOLOGY’

THE PATH LINKS INNOVATION & IMPROVEMENT PLAN 2010 – 2014

**PATH LINKS MANAGEMENT BOARD
FINAL DRAFT PAPER ON RECOMMENDATION PROPOSALS
OCTOBER 2010**

THE PATH LINKS INNOVATION & IMPROVEMENT PLAN 2010 – 2014 CONTENTS & SUMMARY OF RECOMMENDATIONS

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THE PATH LINKS INNOVATION & IMPROVEMENT PLAN 2010 – 2014

EXECUTIVE SUMMARY

Background:

This report summarises the findings and recommendations of the Path Links Management Board (PLMB) in responding to the challenge of achieving a cost reduction efficiency target of £3.8 million whilst ensuring sustainability of future pathology services in greater Lincolnshire.

Process and Resources:

Path Links management, through the Operational Management Group (OMG), initiated open communications with staff through presentations, 'question & answer' sessions and the provision of information resource packs. At the direction of the PLMB, a detailed analysis of cost reduction opportunities across all service areas has been concluded by the OMG, in conjunction with key internal stakeholders where appropriate. Subsequent findings and recommendations have been made available to the PLMB for approval and ratification.

A formal consultative process on the detail of recommendations will be undertaken with:

- All Path Links staff affected by the proposals
- Primary Care and Secondary Care service commissioners
- Service users
- Public and patient representative groups

Key General Principles/Recommendations:

Recognising that Path Links has followed a continuous process of service reconfiguration and modernisation for many years, identifying further opportunities for significant cost reduction is a major challenge. The key to meeting the challenge is to increase productivity levels at a lower unit cost i.e. we must be able to maintain services, keeping pace with rising demand, with real reductions to pay and non-pay expenditure. Against this backdrop, there are three core elements to the proposals made:

1. Workforce re-design
2. Process re-design
3. Further enactment of the 2004 Path Links Capacity Plan

The principle focus of workforce re-design, in keeping with the National Modernising Scientific Careers Programme, is towards achieving a 'best fit' between future service requirements and the workforce delivering it. Process re-design, through deployment of Lean principles and practice across the organisation, will compel services towards significant skill mix changes with greater emphasis on task based staff competencies. Addressing skill mix is therefore a core feature of the proposed recommendations and a common theme throughout. Further enactment of the Capacity Plan, by concentrating the majority of Primary Care activity onto one or two sites, will provide the capability necessary to support delivery of a re-profiled workforce correctly aligned to future service requirements.

Configuration and Manpower implications:

1. There is a requirement to divert Primary Care activity to either Grimsby or Grantham (as appropriate) without detriment to future service capacity or quality. Whilst predominantly affecting 'Blood Sciences' (Haematology and Chemical Pathology), other services will similarly be affected to a lesser degree by altered GP specimen flows and required to respond accordingly.
2. Provision of 24/7 diagnostic facilities, where currently available, must be maintained.

3. Skill mix adjustments and workplace competency proposals represent a major internal staff training commitment with an extended period for completion (c3-4 years). Maintaining high quality service provision levels throughout a transitional period is of critical importance.
4. Skill mix adjustments will have a variable impact on staff grades across the service. Where staff grade establishment reductions are required, e.g. through natural wastage or redundancy, maintenance of service continuity, and particularly for out of hours services, is similarly of critical importance.

Specific Recommendations:

In addition to core recommendations of workforce (skill mix) and process (Lean) re-design, there are specific recommendations for each of the Clinical Directorates including the following:

1. Chemical Pathology and Haematology combine to form a single integrated 'Blood Science' service. Service provision is maintained on all five sites (Boston, Grantham, Grimsby, Lincoln, Scunthorpe). Primary Care activity will predominantly be undertaken by the Grimsby and Grantham laboratories with those at Boston, Lincoln, and Scunthorpe focused exclusively on the provision of high quality responsive services better suited to supporting local hospital needs. Inclusive within the development of a Blood Science service is the development of a highly skilled and competency based multi-disciplinary workforce with full integration, including out of hours working arrangements, of Chemical Pathology, Haematology and Blood Transfusion functions. Significant cost reduction and productivity gains are achievable through major service reconfiguration, role re-design and skill mix adjustments as proposed.
2. Microbiology service provision remains unchanged with 24/7 Bacteriology services provided from Boston and Scunthorpe and Non-Culture Microbiology (Serology) maintained in Grantham and Grimsby. Changes to Serology service provision will encompass service development with expansion of molecular diagnostic testing at Grantham. This in turn will unlock significant cost benefit from the repatriation of currently referred, high cost, test activity. Further cost reduction opportunities arise from role re-design and skill mix adjustments as proposed.
3. Cellular Pathology (Histopathology, Cytology, Mortuary) remain as currently configured. Cost efficiency and productivity gains arise from internal reconfiguration proposals that allow for closer integration between departments, consolidation of duplicate functions and extended Biomedical Scientist roles to release Consultant Cellular Pathologist reporting capacity.
4. Immunology remains as currently configured with cost reduction opportunities arising from role re-design and skill mix adjustments as proposed.

Conclusion:

A further reorganisation of the Path Links pathology service is essential to ensuring future service viability. Reconfiguration of services as proposed will have a major impact, internally, on the workforce required to deliver those services into the future. Effective planning and attention to detail is critical to ensuring a successful outcome, particularly through a transitional phase. Both workforce and process re-design, implemented appropriately, will ultimately deliver enhanced quality and more cost effective services in the future;

- **Without detriment to service quality**
- **Without any cuts to service availability or provision**

INTRODUCTION

The 'NHS 2010-2015: From Good to Great', December 2009, creates the vision for meeting the challenge of achieving high-quality care through innovation and prevention in a leaner financial climate.

Spending on the NHS has more than doubled in real terms since 1997. With funding levels now comparable to health systems in other developed countries, they will now stabilise. The challenge for the NHS is to adjust the system to this period of lower funding growth whilst responding to the six challenges faced by all modern healthcare systems: ever higher patient expectations; an ageing society; the dawn of the information age; the changing nature of disease; advances in treatments; and a changing workforce.

With future NHS funding only likely to increase in line with inflation at best, meeting the future quality and productivity challenge will require delivery of £15-£20 billion in efficiency savings over the three year period from April 2011.

This will mean widespread change to the way that the NHS will look and feel. More care will be provided closer to people's homes with services better integrated around people's needs. Hospital-based care will be re-structured to support this change and concentrate on providing care for the sickest patients.

The drive to improve quality and productivity through a focus on innovation and prevention is led by the NHS Chief Executive through the NHS Quality, Innovation, Productivity and Prevention (QIPP) programme, underpinned by alterations to the commissioning framework aimed towards driving change through incentives and penalties in income and payments.

THE QUALITY, PRODUCTIVITY & FINANCIAL CHALLENGE

As with the rest of the NHS, Pathology services nationally are facing significant financial challenges as a result of a number of contributory factors:

1. The impact of the 'credit crunch', global recession and record national debt, with the inevitable consequences for public spending, will result in a significant contraction in NHS funding growth from 2010 onwards. Since 1991 the NHS has averaged real expenditure growth of 5.6% a year. Any reduction in funding growth will result in a spending deficit; for the NHS the deficit is the difference between the available cash and the projected resources required, based on past funding growth, to meet the inexorable rise in demand and consistent above inflation increases in NHS costs. Even if the rate of funding growth was reduced to just 1%, which is higher than the general growth rate for public spending of 0.7%, by 2013-14 the NHS deficit would be about £15 billion per year. If there were a real reduction in funding of 1% per year, then the deficit would be nearer £21 billion.
2. Despite the near doubling in revenue over the last decade, coupled with more than £30 billion invested in capital assets, there has been only a very modest improvement in NHS unit costs and in some areas unit costs have got even worse. On almost every measure, the productivity of the NHS system is either flat or improving only marginally. If all hospitals were enabled to meet the levels of staff productivity currently achieved by the best, annual savings of up to £3.5 billion could be delivered. Unless the NHS can improve its performance to an unprecedented extent, then significant service cuts are inevitable. However, 'simplistic' cuts such as ward closures and

the almost immediate impact on waiting lists and waiting times would prove unacceptable to the public. Nothing short of a transformation in the NHS' productivity is required, maintaining (*and improving*) core service standards but with significantly lower unit costs.

3. The Independent Review of NHS Pathology Services in England, Chaired by Lord Carter of Coles, concluded that; "Based on these models (*of consolidating services*), we estimate that potential savings of between 10 and 20 per cent could be achieved. At a national level, this would imply annual savings of between £250 and £500 million in total, based on figures for 2005. If savings from rationalisation of the estate were included, these figures would be even larger". Current thinking within the DoH appears to be focused on the delivery of a £500 million savings target.

Given the national economic situation and its projected impact upon future public spending, Path Links, as with all other NHS services, is challenged with improving quality service standards whilst simultaneously reducing costs.

Cash releasing efficiency savings for the Trust is forecasted to be 16.5% (£53 million) over the next 3 years. For Path Links, this equates to doing the same work we do now, but with nearly £3.8 million per year less. Note, however, that this figure does not include any financial impact arising from implementation of recommendations of the Carter Review.


THE PATH LINKS CHALLENGE

Path Links was founded on the principles of delivering "high quality, cost effective services". A relentless pursuit for improving the quality and value of services that we provide has led to many changes over time.

Over the past 10 years, by following a modernisation agenda, Path Links has been successful in delivering significant financial and productivity gains. However financial challenges still remain and cannot be mitigated within the context of the wider Trust savings target.

At a regional (SHA) and national level, Path Links will endeavour to influence the apportionment of Carter Review savings in order to minimise the financial impact on the service. An indiscriminate apportionment of the £500m savings target would have a disproportionate effect and jeopardise Path Links' ability to progress as a national model for future service provision across the UK.

LORD CARTER OF COLES
Chairman, Independent Review of NHS Pathology Services



Looking around the UK, is there an ideal model for pathology services of the future?
"Path Links in Lincolnshire comes closest. It is an alliance of the willing, producing creative solutions to sort out their own problems, producing benefits to the local NHS in terms of quality and efficiency. Recruitment and satisfaction is good, since the service is stable".

Royal College of Pathologists Bulletin, 141, January 2008

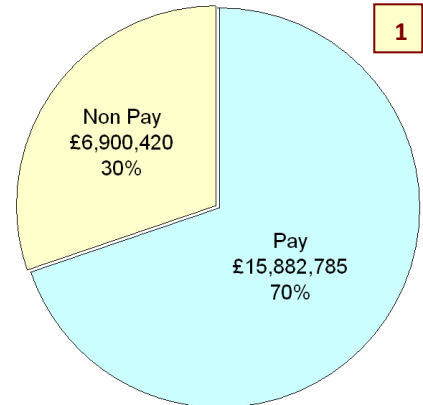
As yet there is little clarity as to how the £500m savings will be achieved. SHA's are being asked to consider a variety of proposals including the establishment of regional 'core' laboratories as a preferred approach whilst, in parallel, shrinking down hospital laboratories effectively to 'hot' labs where required. (See Annexe A: 1. letter, 3rd June 2010, to each SHA from the National Clinical Director for Pathology, Dr Ian Barnes; 2. East Midlands SHA proposals; 3. Yorkshire & Humber SHA proposals).

Although consideration of such an approach is beyond the remit of this document, one would question the ability of NHS pathology services collectively to deliver such a major reorganisation on a national scale over a relatively short timescale. This in itself would lead to the realisation of a

potential for future independent sector involvement with multi-national companies such as Quest, Serco, and Sonic, already established in the UK, providing alternative solutions.

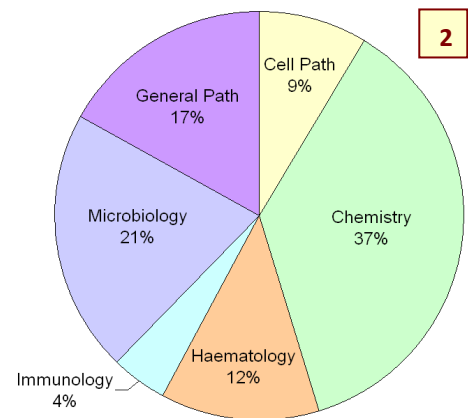
The principle challenge for Path Links is therefore one of continuously improving the quality of service delivery against a backdrop of identifying further significant savings opportunities to meet Trust requirements over the next three years, and surviving a changing national landscape.

With a total operating budget of approximately £23 million per annum, the expenditure split between pay and non-pay is 70:30 [1].



Non-pay expenditure, for equipment, materials and consumables required to deliver the service, equates to approximately £7 million per annum. Approximately half of all non-pay expenditure (49%, £3.5 million) is associated with the 'Blood Science' Directorates of Chemical Pathology and Laboratory Haematology [2].

The majority of non-pay expenditure is bound into long term contracts, typically spanning the next 5 – 10 years. Additionally, a number of the larger contracts incorporate a 'Managed Service Facility' whereby VAT is recoverable to provide maximum savings benefits. Non-pay savings opportunities are therefore extremely limited but cost reductions in the region of £0.3 million (8% of savings target) could potentially be achieved by extending the scope of Managed Service Facility contracts.



Given the position on non-pay expenditure, the main focus for savings opportunities inevitably must arise from reducing pay expenditure.

The following charts provide a breakdown of the Path Links annual expenditure on pay.

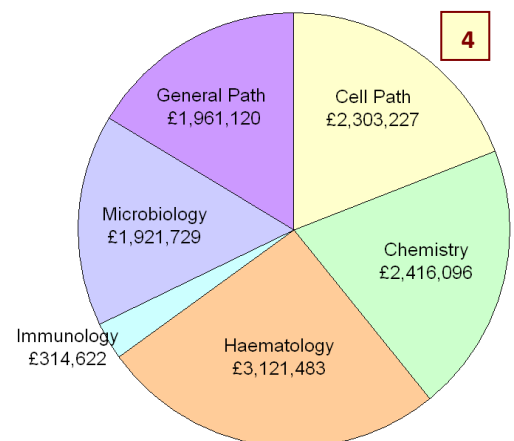
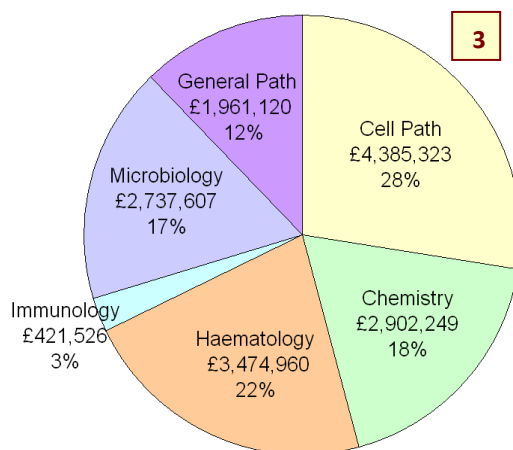


Chart [3] represents total expenditure for all staff, including medical/clinical; Chart [4] represents expenditure for all non medical/clinical staff i.e. Biomedical Scientists, Medical Laboratory Assistants, and ancillary support staff.

Given previous achievements on implementing clinical cross cover arrangements, and mindful of the requirement to maintain clinically led accredited services, there is only limited scope or opportunity to reduce medical cover further. The majority of opportunities must therefore arise from the remainder of staff groups which represents approximately 76% of total pay expenditure. Again, as with non-pay expenditure, approximately half of this (46%) is associated with the 'Blood Science' Directorates of Chemical Pathology and Laboratory Haematology.

Additionally, The Biomedical Science Staff Workforce, nationally, has achieved a significant step forward with the introduction of Agenda for Change Terms and Conditions in 2004. This has allowed the profession to 'catch up' much of the ground lost after the 20 year exclusion from the national pay review body with graduate BMS 1 staff typically banded at Band 5 & 6 and experienced Senior staff banded at Band 7. However, with the withdrawal of central funding for Agenda for Change annual incremental uplifts it has left the NHS with an unaffordable staff structure which continues progressing up incremental pay spines over the next 3-5 years. This situation needs to now be addressed through workforce redesign which, in the context of Pathology both nationally and locally, means a review predominantly, though not exclusively, of qualified posts and the skills and job descriptions needed to undertake work in redesigned efficient departments providing 24 hour 7 days a week services.

Significant reductions in pay expenditure, whilst continually improving quality and productivity levels, will only be achieved from considerable changes to the workforce establishment and working arrangements through:

- Service re-design and integration of functions, including multi-disciplinary working arrangements
- Process re-design through the application of Lean principles and methodologies
- Redefining roles towards achieving maximum utilisation of skills and extended scope of practices where appropriate
- Skill mix adjustments
- Revised Out of Hours arrangements towards restricting working to staff at AfC Band 6 and below
- Reduction in staffing levels as a result of greater efficiencies achieved through consolidation of services and process improvement

Greater cost reduction opportunities from implementation of the above are more likely to be realised in the more automated areas of activity e.g. Haematology & Chemical Pathology, as compared with those associated with more labour intensive activities e.g. Histology.

THE PATH LINKS PROPOSALS

[A] TRUST INITIATIVES & PAY REDUCTION PROPOSALS

1. Voluntary Release Scheme (VRS)

This scheme was launched Trust wide in March 2010 as a Cost Improvement Plan required to close the Trust financial gap. It covers both Voluntary Early Retirement and Voluntary Redundancy. Approximately 45 Path Links staff have requested consideration for VRS by the end of April 2010 when the scheme closed. In considering these requests, in discussion with line managers and service managers, several of these applicants occupy posts that must be replaced “like for like” and so redundancy cannot be considered. These staff have already been informed that their application will not be taken further. All other applicants have been reviewed and prioritised in terms of financial benefit as a Trust wide exercise for consideration and offers made.

It must be noted that the Voluntary Release Scheme is a cost reduction exercise focused on saving money by reducing the staff headcount on a voluntary basis – plain and simple. Any of the VRS applications that cannot deliver short to mid term savings have not been taken forward. This is because a compulsory redundancy elsewhere in the organisation would be a better financial option through the Trust wide Workforce Redesign projects. Even at this stage it is not thought that the number of affordable VRS applicants will be enough to cover the expected Trust deficit and savings target. All VRS applicants are in the process of receiving feedback and Path Links will consider between 12 to 20 of the original applicants as potential VRS savings over 2 years. However it is not expected that the final uptake through VRS will be large as many staff expressed their interest in order to inform their own personal planning without having to make a firm and final commitment.

Recommendation A1:

Path Links management support the IIP Board led VRS Scheme

2. Vacancy Control

The Trust is keen to minimise the number of compulsory redundancies needed to achieve its cost reduction target, and has therefore considered a number of different approaches, in addition to the VRS Scheme. Discussions with the trade unions, designed to build in some flexibility in pay uplifts generally for 2010/11, was constrained by the fact that all staff are subject to national pay awards. The Trade Unions rejected consideration of any change to national terms and conditions, and therefore the pay uplift for 2010/11 was upheld, leading to the requirement for the Trust exploring alternative approaches as a matter of urgency.

One of the approaches, introduced with effect from March 2010 and for an indefinite period, is to further tighten recruitment controls to build upon the Vacancy Management Process that has already been put into place since early in the New Year. Whilst reluctant to take this step, the Trust, however, wishes to prioritise the preservation of jobs for currently employed staff as far as possible by minimising the appointment of new staff.

Therefore when any post becomes vacant, or a new post is proposed due to expansion, each area seeking to fill the post needs to complete the Trust Vacancy Management process. This approach applies to all Trust staff, including medical staff.

The process includes:

- Justifying the need for the post to be filled
- Considering a range of options including review of skill mix
- Whether the post could work on reduced hours
- Consideration of a flexible use of existing staff, temporary appointments etc

Under the revised scheme there is an expectation that, where feasible, this process will not result in a request being submitted for reappointment to the vacant post. Any posts that do result in a request to fill will have to be authorised initially by the Director responsible for that area, and will then be subject to peer review by another Director from a different area.

The only criteria that will result in any post being considered are as follows:

- evidence of direct impact on quality, safety or delivery of targets relating to patient care;
- evidence of an invest to save opportunity
- evidence of a requirement to deliver contracted values of activity

This process will apply for the foreseeable future and it is anticipated that only a minimal number of vacancies will be filled. Outcomes of recruitment to vacancies will be monitored on an ongoing Trust wide basis through the IIP Board.

[Appendix I Trust Vacancy Control Flowchart](#) describes the vacancy management process

[Appendix II Trust Vacancy Process Flowchart](#) describes the process following vacancy approval to prioritise recruitment for staff 'at risk' across the Trust and local health community

[Recommendation A2:](#)

Path Links management support the IIP Board led Vacancy Control Scheme

3. Agenda for Change Out Of Hours (OOH) Terms & Conditions

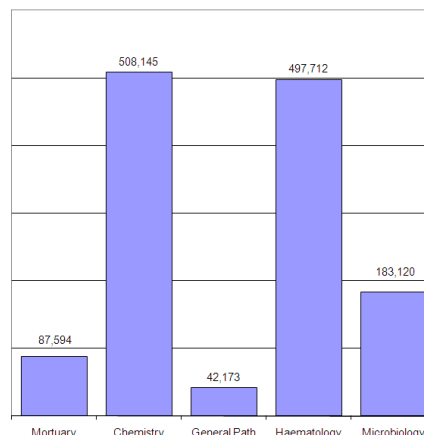
Terms & Conditions are set out under Section 2, 'Maintaining round the clock services', of the NHS Terms and Conditions of Service Handbook : amendment number 17, 2010. Against these, staff will receive a percentage enhancement for their work in standard hours which is done at the times shown in the following table:

Column 1	Column 2	Column 3
Pay band	All time on Saturday (midnight to midnight) and any week day after 8 pm and before 6 am	All time on Sundays and Public Holidays (midnight to midnight)
1	Time plus 50%	Double Time
2	Time plus 44%	Time plus 88%
3	Time plus 37%	Time plus 74%
4-9	Time plus 30%	Time plus 60%

The enhanced rates shown in column 2 will be paid for all unsocial hours worked on a Saturday (midnight to midnight) or on weekdays between 8 pm and 6 am. The rates shown in column 3 will be paid for all hours worked on Sundays and public holidays (midnight to midnight).

Since its introduction, Pathology has been exempt from these arrangements [Section 2 (2.8 – 2.30)] with continuing retention of existing local OOH provisions being enshrined within the Terms & Conditions Handbook. This arrangement will continue and be protected until 31 March 2011. Plans for a national implementation of Section 2 (2.8 – 2.30) of the Agenda for Change Terms & Conditions is envisaged thereafter (subject to national negotiation & agreement).

Across Path Links, approximately 11% (£1.3m) of pay expenditure is associated with OOH payments. Implementation of AfC terms & conditions would effectively achieve a 40% cost reduction (c£0.5m).



A further cost reduction will be realised from changes to skill mix and revised OOH working arrangements as proposed. For example, restricting OOH working of laboratory duties to Band 6 grades and below, and substituting 20% of BMS grades with the same number of Band 3 grades in Blood Sciences would generate a further c£100k savings as a consequence of a lower standard hourly rate.

Whilst there are no immediate plans for implementation of Section 2 (2.8 – 2.30) of the AfC terms & conditions for OOH payments outside of a national agreement, Path links management will, in the interim, develop detailed proposals for a transition towards implementing harmonised AfC terms & conditions across the Division. The position will be reviewed in the event of the failure of a national agreement being reached by 31st March 2011 with an option to progress locally pending Trust agreement and conclusion of statutory staff consultation.

Recommendation A3:

Path Links management endorse recommendations of the OMG to:

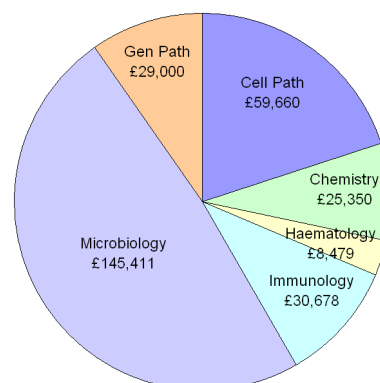
- i. Defer implementation of Agenda for Change Terms & Conditions, Section 2 (2.8 – 2.30), for Out of Hours payments for BMS staff pending the outcome of national agreement scheduled for 31st March 2011
- ii. Pending Trust agreement, support the option to progress with full implementation of Agenda for Change Terms & Conditions for Out of Hours payments for BMS staff post 31st March 2011 in the absence of a national agreement.
- iii. Restrict OOH working of laboratory duties to Band 6 grades and below across all Clinical Directorates

[B] NON PAY PROPOSALS

5

1. EXTENSION OF MANAGED SERVICE CONTRACTS (MSC)

Much of the £7m non pay expenditure total is already covered by MSC agreements including Haematology (Horiba, IL, Ortho), Chemical Pathology (Abbott, Tosoh), Serology (Bio-Rad), General Pathology (Greiner) and POCT (IL). Converting all other non-pay expenditure to a MSC would maximally save c£300,000 although £200,000 is a more likely achievable figure [5].



Recommendation B1:

Path Links management will pursue a procurement process to extend the availability of MSC's to all non-pay consumable items or services where applicable with particular emphasis on areas with the greatest opportunities i.e. Microbiology, Cellular Pathology and Immunology.

2. REFERRED ACTIVITY

Approximate 12% of non-pay expenditure is associated with samples referred to other NHS laboratories for testing. A total of £858,000 was spent in the last year on referred activity.

Test Referrals 2009/2010 12 Month Expenditure	
Directorate	Cost [£]
Microbiology	369,000
Chemistry	330,000
Cellular Pathology	81,000
Haematology	56,000
Immunology	22,000
Total	858,000

Savings opportunities are likely available from:

- In-house repatriation of referred tests where appropriate and where economies of scale would provide a better unit cost per test.
- For tests that cannot be provided 'in house' (e.g. genetics) but could be provided by a number of alternative suppliers, a cheaper price could be gained by competitive tender.

A 15% - 20% cost reduction (£130k - £170k) could be achievable from a rigorous pursuit of this approach across all Clinical Directorates

Recommendation B2:

Path Links management, through each clinical directorate, will undertake an evaluation of all referred activity to assess:

- Opportunities for 'in house' repatriation of tests where appropriate
- Where appropriate, and giving consideration for a wider 'bundling' of all referred test activity into a single contract, engage in a competitive tendering process against an agreed specification, seeking bids from both NHS and Independent Sector providers.

3. CAPACITY PLAN

For Blood Sciences, the 2004 Capacity Planning process led to the development of the Grimsby site as the Capacity Laboratory, predominantly to receive anticipated growth from Primary Care and as a vehicle to alleviate workload pressures on other laboratory sites. Over the last 5 years, since it's inception, Blood Science (Haematology & Chemical Pathology) workload activity has risen by a total of 62% with Trust activity up by 43.2% and PCT activity by 80.9%.

Whilst significant progress has been made towards diverting PCT activity to the Capacity Laboratory, considerable volumes of PCT activity are currently maintained on all sites.

A further enactment of the Capacity Plan PCT diversionary scheme to achieve maximum consolidation of PCT activity will:

- Unlock opportunities to support achievement of the wider Path Links reconfiguration and workforce proposals, and
- Facilitate Lean implementation, staff development and training

Recommendation B3:

Path Links management through the OMG will undertake a transport review and impact assessment in formulating plans towards maximum consolidation of PCT activity.

4. CONSOLIDATION OF ANALYTICAL TESTING

For good reason, historically, many specialist, non-urgent, or low volume tests have been consolidated onto one or two Path Links laboratories. Savings opportunities are likely to arise from:

- A review of existing consolidated tests to establish cost effectiveness against a range of alternative options (*a process already commenced Q1 2010/11 with option appraisals complete for Specialist Coagulation, Metals, Tumour Markers, and HbA1c (Lincoln) with further proposals for Specialist Immunoassay, Haemoglobinopathy, Anticoagulant dosing, and Toxicology*)
- A full review of the current test repertoire to identify opportunities for further consolidation onto fewer laboratory sites than current; to include consideration of the impact of altered sample flows arising from full implementation of the Capacity Plan PCT diversionary scheme

Recommendation B4:

Path Links management, through each clinical directorate or OMG where appropriate, will:

- Conclude the review of existing consolidated tests and services, undertaking formal option appraisals to confirm future service configuration
- From the impact assessment of the PCT diversionary scheme, implement identified opportunities for further consolidation
- Conduct a review of all non-urgent activity (including Trust activity) to identify opportunities for test consolidation

[Reference Appendix III: Option Appraisal Process & Outcomes](#)

5. PAPERLESS PATHOLOGY

Other than costs directly associated with the production of paper pathology reports, there is a significant indirect cost associated with the transportation, handling and filing in the wider hospital and community setting.

Path Links generates somewhere in the region of 4,000,000 paper reports annually with a direct associated cost of approximately £40,000. For each Trust (NLaG & ULHT) the indirect handling costs equate to approximately £225,000 and £300,000 respectively.

Significant in-roads have been made over recent years to convert GP practices, with approximately half already paperless. The position with acute Trusts is dissimilar with continued reliance on paper based systems. Opportunities now exist for the further deployment and extended functionality of WardV to facilitate the introduction of paperless systems across both Trusts.

Recommendation B5:

Path Links management, in conjunction with clinical directorates and appropriate Trust representatives, work towards implementation of a clinically safe and effective paperless reporting system. Also, to give future consideration for the introduction of a 'paperless' electronic requesting system.

6. PRE-ANALYTICAL AUTOMATION

Pre-analytical automation (Tecan FE500) was installed in conjunction with the wider Abbott chemistry procurement in 2007 with placements in Scunthorpe, Grimsby (x2) and Boston. Changes to sample flows arising from the PCT diversionary scheme in conjunction with planned reconfiguration proposals and Lean implementation, questions the future viability and cost effectiveness of the systems particularly on the Scunthorpe and Boston sites where the impact of the above would be a workload reduction of 400 – 500 samples per day per site and where the removal of the system would be without detriment to other service areas e.g. immunology.

Decommissioning will release savings of approximately £19,000 p.a. per system

Recommendation B6:

Path Links management, in conjunction with the Chemical Pathology Directorate, make arrangements for decommissioning of the Tecan systems as follows

- Decommission Boston system (achieved 2010/11)
- Decommission Scunthorpe system (target 2011/12)
- Conduct an impact assessment for decommissioning one or both Tecans on the Grimsby site in conjunction with a Lean assessment and reconfiguration proposals

1. INCOME RECOVERY

Accurate activity data capture is essential to ensuring that Path Links fully recovers income on expenditure. This is particularly important for referred work that is typically of high value. Data accuracy is solely dependant upon the right test being booked onto the laboratory computer system at the right time. Any errors associated with the booking in process may result in Path Links picking up the full cost of the tests (many of which run into hundreds of pounds) rather than correctly passing on the cost to the requestor. A recent example identified approximately £125,000 of lost income p.a. simply as a result of a lack of standardisation in the booking in process across sites.

A £100k income recovery should be achievable from a rigorous pursuit of this approach across all Clinical Directorates

Recommendation C1:

Path Links management, through the Support Directorate, implement robust mechanisms to:

- Ensure that each test request is uniquely identified and the use of 'generic' or 'miscellaneous' computer test codes are eliminated
- Ensure that each unique test request has an appropriate value to allow full income recovery
- Establish monitoring arrangements to achieve compliance

2. INCOME GROWTH

Increasing income, associated with increasing activity levels, will be influential as a modifier of future reconfiguration proposals. Reconfiguration proposals, as presented, are based on prudent assumptions on activity growth over the next 3-4 years. Clearly, if activity growth assumptions vary considerably in the future (either up or down) then reconfiguration proposals will need to be modified accordingly.

There is also a potential for actively securing additional work form outside of our existing catchment area, which was a common theme emerging from the first round of staff consultation meetings conducted in March 2010. Whilst always under consideration, a number of factors preclude Path Links from pursuing such an approach at the current time; namely:

- The primary focus of attention is based on cost reduction schemes and reconfiguration proposals to boost productivity and efficiency levels for our own 'in county' workload. Given such a major undertaking, there is limited capacity at the moment to pursue other schemes that only offer, at best, limited opportunities for success.
- Path Links must be mindful that all NHS pathology services nationally will be facing the same difficulties, if not worse, and any action to reduce their workloads will only worsen their problems. If future opportunities arise to bid for work in a formal and responsible manner then Path Links will, of course, actively pursue.
- Opportunities for increasing the amount of private work are increasingly unlikely as the private healthcare sector continues to shrink in the current economic climate.

- Path Links could potentially take on more GP surgeries from the periphery of our area but any decision would have to be made by the commissioning PCT, a decision which, in turn, may put at risk other NHS pathology services outside Path Links. Further, with the recent change of Government, the future of PCT's looks uncertain with major reconfiguration proposals planned for commissioning. Any proposed alterations to commissioning for pathology services is highly unlikely to receive attention by PCTs facing massive organisational change.

Whilst securing additional activity would alleviate the position, as a priority, we must plan for our own inherent workload growth and not be diverted from addressing existing inefficiency and waste within our present working arrangements and cost base.

Recommendation C2:

Path Links management favour a continued focus on internal efficiency improvement within a sensible marketing strategy that is supportive of other NHS providers.

3. LEAN

As mentioned, addressing inefficiency and eliminating waste across our entire range of services is a fundamental step towards driving up productivity levels and reducing costs.

As an organisation, Path Links has been committed to implementing a Lean management system for some considerable time albeit with limited and variable success. However, the commitment to Lean as a solution for continual service improvement and process optimisation remains. Extending Lean across the whole of the organisation is a business priority critical to achieving successful outcomes in supporting and underpinning all of the reconfiguration proposals across Clinical Directorates and towards developing a continuous improvement culture across Path Links.

This will necessitate provision of a robust and stable Lean capability supporting an extensive range of Lean initiatives as well as a resource for staff training and development. Following a reconfiguration of the Path Links internal Lean Quality Management structure, such arrangements are now developed and in place to support a full programme of training and Lean events commencing June 2010 which will eventually involve all Path Links staff as a mandatory training requirement. Staff should recognise that Lean will involve changing the culture of the organisation and the ways in which everyone works. Through Lean, striving for excellence through continuous improvement will become part of everyone's daily activities and responsibilities.

Whilst the Lean programme will drive out (expensive) inefficiencies and wasteful processes, staff engagement with Lean is critical to its success. Identifying simple cost savings from changes to the way that we work will reduce the need to make savings from elsewhere.

Lean will be very challenging for many staff as existing working methods, processes and working environments change. Change is always difficult. Staff will be supported throughout but should be mindful of the fact that Lean is 'non- negotiable' by either Path Links or the Trust and critical to the overall future success of the organisation.

A number of initial Lean programme activities are scheduled and described in the Reconfiguration Plan Timeline (Appendix V). A wider programme of events together with further

development proposals will be published in due course in line with arrangements as described in Appendix IV, Proposed Training & Competency Framework.

Recommendation C3:

Path Links management endorse the continued commitment to introducing Lean as a continuous process following reconfiguration into all areas of service provision with mandatory engagement from all staff.

4. MARKET DEVELOPMENT (Retention)

Primary Care is by far the largest purchaser of Path Links pathology services, generating 46% of our total (non-weighted) activity. The Department of Health White Paper “Liberating the NHS: commissioning for patients”, 22 Jul 2010, proposes changes to the commissioning framework, likely to result in the abolition of PCT’s and their replacement with GP consortia from April 2013.

GP consortia will have the freedom to decide what commissioning activities they undertake for themselves and for what activities they choose to buy in. For pathology services, each GP consortium will therefore have complete autonomy for commissioning POCT service provision in GP facilities and choice of external laboratory provider. The size of GP consortia is yet to be confirmed although a patient population base of 100,000 has been suggested. For Path Links, this would mean a commissioner expansion from the current 3 PCT’s to 10-12 GP consortia.

Collectively, this represents a significant business risk from activity and income loss, particularly at a time of expanding Independent Sector involvement. Protecting our market share of Primary Care pathology activity is therefore critical to our long term business plans and future viability.

This will necessitate a complete change of approach from a simplistic ‘purchaser provider’ arrangement to a more market driven ‘customer focused’ approach including a better understanding & responsiveness to user requirements for:

- Accessibility of local clinical laboratory services
- Phlebotomy services
- POCT services
- Transport arrangements
- IT services
- Information and clinical advice

Undoubtedly, a fundamental shift is likely to be required - from a largely internal departmental focus to an external one with greater involvement and participation in community settings.

Recommendation C4:

Path Links management approve the development of Primary Care service proposals to meet the challenge of proposed changes to commissioner strategy.

[D] SERVICE RECONFIGURATION & WORKFORCE PROPOSALS

1. MANAGEMENT & ADMINISTRATION SUPPORT

Cost reduction opportunities arise from both the restructuring of Path Links management arrangements and through anticipated future retirements. Of these, the following have already been enacted and have contributed towards the 2010/14 plan :

- Amalgamation of the Scunthorpe Site Manager and Immunology Directorate Manager roles
- Restructure of Microbiology Directorate Operational role
- Disestablishment of the Grantham microbiology managerial position

Each of the above changes has resulted in a reduction in establishment with associated cost savings.

Future savings will arise from service reorganisation opportunities as and when vacancies arise in the following posts:

- Pilgrim Site Manager
- IT System Manager

A 20% 'back office' management and administration reduction target is currently being integrated into the wider Trust IIP Plan with a timescale for delivery over the next three years. The target is higher than proposed for 'front line' services and puts further pressure on planned reconfiguration proposals necessitating a broadening of management criteria to include Band 7 roles and above. Whilst the cost reduction already achieved will contribute to the target, further cost reduction schemes will need to be identified during 2010-2011 and beyond, including a review of central administrative functions and site based administrative activities.

Recommendation D1:

Path Links management endorse future reorganisation proposals as they arise following a review of managerial, administrative, and secretarial functions.

2. TRAINING

For the next three years, and beyond, internal staff training and development will be a priority focus for Path Links management. The future success of re-designing services will largely be dependent on our ability to create a workforce where staffing levels, skills and competencies are appropriately matched to service requirements. This will require a radical organisational shift in terms of training provision with increasing emphasis on internal 'workplace' training and, particularly, for non-qualified staff.

A number of internal and external change drivers will have a direct impact on future staff training needs:

- The Independent Review of NHS Pathology Services, as well as the Modernising Scientific Careers Programme, aims to achieve a 'best fit' between services required in a future NHS and the workforce delivering it. Process driven competency based workforce modelling will compel services towards significant (*and appropriate*) skill mix changes with greater emphasis on achieving appropriate qualifications in the workplace.

- Addressing skill mix is a core feature of the Path Links IIP, and critical to meeting future financial savings targets. A future focus and requirement for 'on-site' laboratory training, necessary for the delivery of re-defined BMS and support roles, challenges the suitability and purpose of the existing central training function. Further, as defined by the IBMS Professional Guidance 'Managing staffing and workload in UK clinical diagnostic laboratories', 2008, "responsibility for training must be undertaken by a fully supported, designated senior grade biomedical scientist".
- In tandem with a changing emphasis towards localised specialist laboratory based training, is the requirement for specialist training to support the Lean implementation programme. An appropriate coupling of scientific with Lean & Quality Management training is essential to achieve maximum benefit and is best provided within the context of the Path Links Support Directorate development proposal (see Section D4, Appendix IV, and Annexe B)
- Changes to external commissioner funding arrangements over recent years have led to a reduced commitment and requirement for a central training management function. Termination of the Lincoln University BMS degree and withdrawal of support for pre-registration students has, in turn, led to the withdrawal of LBR (*learning beyond registration*) funding from the East Midlands Education Commissioning Unit that previously provided funded MSc placements.
- The downward financial pressure on the NHS, as with other public sectors, is likely to further impact on residual external funding arrangements where they currently exist. Linked to future requirements for skill mix adjustments and diminishing internal demand for BMS staff with higher qualifications, there remains little scope for a centralised training management function.

In summary, future staff training requirements and workforce development proposals, in response to both internal and external drivers, has necessitated a review through the Operational Managers Group (OMG) of the current central training management arrangements, the outcome of which precludes its future suitability and purpose.

Additionally, given the anticipated high level of internal staff training commitment required to support delivery of reconfiguration proposals and the diminishing organisational requirement for external higher qualifications, it would seem prudent to reduce the overhead burden associated with staff pursuing such qualifications. An increasing emphasis on non-qualified staff training over the next 3 years, necessary to deliver reconfiguration and skill mix change proposals, further denudes this requirement. As a consequence, it is proposed that Path Links, with immediate effect, withdraws all support (financial & otherwise) for staff wishing to embark on a MSc degree for a period of 2-3 years subject to ongoing review.

Similarly, external training course attendance should also be reviewed with greater use of training funds prioritised to support internal reconfiguration training requirements within Path Links both for qualified staff looking to enhance their present skill base and for MLA support staff looking to progress to BMA grades. This should be undertaken locally in a manner that can still be utilised within personal development plans and staff appraisals.

Recommendation D2:

Path Links management endorse:

- An increasing focus on staff training and development including support for CPD activities aligned to internal change proposals

- Disestablishment of the central training function as currently configured, proceeding to staff consultation with those affected
- Its replacement with revised arrangements within the Support Directorate, under the direction of the CI Manager as proposed ([Appendix IV](#))
- Agreement to suspend staff pursuance of MSc qualifications for a period of 2-3 years subject to ongoing review
- Review of any external training in order to support enhanced local training
- The preparation of detailed 'External Training Course Guidelines' for staff including a list of endorsed events.

[Reference Appendix IV: Proposed Training & Competency Framework](#)

3. BAND 5 BMS AUTOMATIC PROGRESSION

Addressing staff skill mix in line with 'Modernising Scientific Careers', will result in changes to the workforce profile with an increasing shift from qualified BMS staff grades towards Biomedical Assistant grades at a AfC Band 2/3 level.

Whilst a continued reliance on qualified BMS grades remains essential for the future delivery of high quality services, opportunities arise for the re-definition of roles and responsibilities and re-alignment of skill mix within a competency based framework.

The entry level for qualified BMS staff is currently based on substantive positions at AfC Band 6. The entry level for Registered BMS is Band 5 with subsequent automatic progression to Band 6 following successful completion of the post registration IBMS Specialist Portfolio. Adjustments to skill mix are proposed that will create a workforce profile with substantive positions at both Band 5 (Registered BMS) & Band 6 (Specialist BMS) levels.

Under these proposals an overall reduction in Band 6 posts is envisaged supported by the establishment of revised Band 5 (Registered BMS) and Band 2/3 (Biomedical Assistant) roles.

There are currently 40 Band 5 Registered BMS staff awaiting completion of the Specialist Portfolio across the five Clinical Directorates. An immediate withdrawal of automatic progression to Band 6 would provide savings (*cost avoidance*) in excess of £250k in the long term. However, given an original commitment of automatic progression to those affected and recognising that many are currently well advanced towards attaining the Specialist Portfolio, the following recommendations are proposed:

[Recommendation D3:](#)

Path Links management endorse:

- i. The introduction of a revised, Directorate Specific, BMS workforce profile with the development of re-defined grades for Registered BMS (Band 5) and Specialist BMS (Band 6)
- ii. With immediate effect, recruitment to all future BMS vacancies will be to the Registered BMS (Band 5) grade
- iii. Future progression to Specialist BMS (Band 6) posts will be through a formal recruitment process as vacancies arise at Band 6
- iv. For existing Registered BMS (Band 5) staff, a deadline of October 2011 is set for attainment of an appropriate Specialist Portfolio and progression to Specialist BMS (Band 6). Failure of

attainment beyond this date will result in a permanent change of substantive employment to a Registered BMS (Band 5). *Extension of the deadline may be considered on an individual basis in the event of extended mitigating circumstances e.g. long term sickness absence, maternity, etc*

- v. All new staff recruited to Registered BMS posts will be encouraged to complete the Specialist Portfolio as a requirement for future career progression. For specific aspects of the service where there is an organisational requirement for Specialist BMS roles, staff recruited to the post initially as a Registered BMS must complete an appropriate Specialist Portfolio within a 24 month period. Failure of attainment beyond this date may result in termination of employment through a competency assessment and performance management process or retention at Band 5 if there is a vacancy. *Extension of the attainment period may be considered on an individual basis in the event of extended mitigating circumstances.*
- vi. Formal staff consultation has commenced with those staff affected with effect from July 2010

4. SUPPORT DIRECTORATE PROPOSALS

The development of a Path Links non-clinical 'Support Directorate' brings together all essential administrative and business management functions including:

- Lean Continuous Improvement
- Clinical Governance
- Training
- Information Technology
- Finance
- Human Resources
- Health & Safety
- Transport

In going forward, the Support Directorate will facilitate wider service reconfiguration and development through improved coordination of activities and alignment to business objectives. Further, its development provides enhanced arrangements to support 'day to day' management functions and improved prioritisation of activities across overlapping departmental functions.

With Lean central to the Path Links Quality Management System (QMS), the Lean Continuous Improvement Manager has a key role within the Support Directorate in both defining the structure and function of the QMS and coordinating activities to ensure standardisation and alignment across the service.

The introduction of a Support Directorate, coupled with a fundamental requirement to underpin delivery of reconfiguration proposals, will necessitate changes to business arrangements. A revision of Training functions has already been described previously (Section D2) and changes relating to Health & Safety and IM&T are proposed.

- i. Whilst adherence to Health & Safety standards and regulation is a mandatory obligation for the organisation, it is also a key focus of Lean management as part of a continuous improvement process. Given the degree of organisational change associated with reconfiguration proposals, and mindful of a scheduled CPA re-inspection during 2011, it is essential that a robust approach to Health & Safety is maintained throughout. Consequently, it is proposed to augment the current arrangement of site based H&S advisors (operating on a 'part-time' basis as a minor component of their substantive role) with a full-time Health &

Safety Advisor (AfC Band 6). Drawn from within the existing Path Links establishment, the Health & Safety Advisor will take responsibility for H&S compliance, training and coordination of activities across all Path Links sites.

- ii. Data integrity is critical to patient safety and an essential component to the delivery of high quality services. Previous arrangements for duplicate record merging on the iLaboratory database have not been successful or appropriate to meeting ongoing demands. In conjunction with wider reorganisation proposals, responsibility for patient record merging will transfer to Laboratory Management (all sites, all disciplines) under the direction of the Path Links IT System Manager.

[Recommendation D4:](#)

Path Links management endorse:

- i. The development of a new substantive role of Path Links Health & Safety Advisor (Band 6)
- ii. Revised arrangements for patient record merging

[Path Links Support Directorate and management structure is presented in Annexe B](#)

5. BLOOD SCIENCE RECONFIGURATION PROPOSALS

Within the wider context of Trust and Divisional financial recovery plans, 'Blood Science' reconfiguration proposals are primarily focused on:

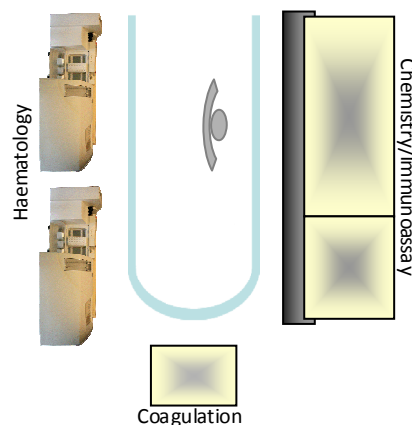
- i. Further enactment of the 2004 Path Links Capacity Plan with increasing flows of PCT activity into the Grimsby Capacity Laboratory (or to Grantham as appropriate)
- ii. Development of 'Blood Science' departments on all sites with full integration of Chemical Pathology, Haematology & Blood Transfusion
- iii. Deployment of Lean layout proposals for analytical 'Work Cells' and co-location of specimen reception and blood transfusion functions as a priority
- iv. Introduction of bi-disciplinary working arrangements, including 'out of hours'
- v. Reconfiguration of laboratory management structure and development of specialist Advanced Practitioner roles in Haematology, Chemical Pathology & Blood Transfusion
- vi. Staff establishment and skill mix adjustments tailored to final service configuration and residual activity on a 'site by site' basis

The degree of organisational change proposed, with associated activities of staff training and workforce development, will require an extended timescale for delivery. It is envisaged that full implementation will be achieved over a 3-5 year period.

5.1 Blood Science Laboratory Configuration

In all cases, Lean principles will be applied to determine optimised laboratory layout & configuration on a site by site basis with analytical functions arranged into 'Lean Work Cells'.

Lean Work Cells are designed to eliminate waste and help optimise material, people and information flows. A U-shape is commonly used, being the primary preferred option when configuring cells because it minimizes walking distance and allows different combinations of work tasks for operators; although other shapes (e.g. L, J, T) may be utilised but only as a result of local spatial limitations.



One of the main purposes of a cell is to achieve and maintain efficient continuous work flows. Other benefits include shorter turnaround times, higher productivity & efficiency, increased flexibility, improved space utilisation, and improved quality. In addition, communication is usually enhanced, because operators work closer to each other and, through improved visual control, operators can see each process—what is coming and how fast—and one person can perform multiple operations.

As applied to the proposed Blood Science laboratories, analytical cells will typically bring together all routine automated equipment accounting for 80%+ of laboratory activity and will include:

- Abbott Architect Chemistry/Immunoassay
- Horiba ABX Haematology
- IL Coagulation
- Greiner ESR

Depending on local circumstance and final workload activity levels, the Tosoh HBA1c analyser may also be incorporated within the cell.

All other activity e.g. microscopy, osmometry etc should be located to the periphery of the laboratory or co-located as close as possible to the analytical cell. Data management and validation work stations may similarly be co-located but away from the analytical cell.

Allied to the development of Blood Science laboratories as proposed is the requirement to simultaneously address layout and location issues in specimen reception and blood transfusion laboratories. Both functions should, again, ideally be co-located or within close proximity to the core Blood Science laboratory.

A full Lean layout assessment and recommendations for laboratory reconfiguration will be undertaken by the Continuous Improvement Manager supported by Trust Lean personnel in the following sequence within the context of the wider Path Links Reconfiguration Timeline

Appendix V:

Lincoln	Complete
Grantham	Complete
Pilgrim	Complete
Grimsby	Provisional schedule November 2010
Scunthorpe	Provisional schedule January 2011

5.2 Bi-Disciplinary Working Arrangements & Skill Mix

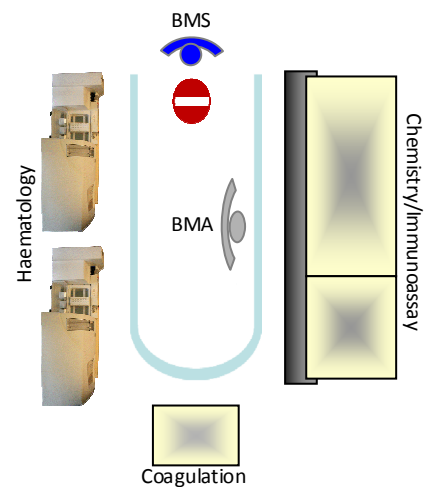
The bringing together of both haematology and chemical pathology automation within a single analytical cell logically leads to a requirement for bi-disciplinary working arrangements for staff with operatives capable of operating all equipment and associated functions within the cell.

The function of the cell is purely analytical associated with sample loading, testing, unloading and archiving, with the more highly complex activities of result interpretation and validation conducted elsewhere.

This in turn leads to a distinction between staff roles whereby the basic operation of the cell will be better suited to MLA/BMA grades with BMS staff taking responsibility for work cell management (of one or more work cells), and complex operations e.g. troubleshooting, equipment repair, decisions on calibration etc.

This distinction will define the future appropriate skill mix requirement of a laboratory whilst final activity levels, analytical repertoire, and out of hours service considerations will determine future workforce levels. Looking at the current skill mix of each laboratory, a major shift from qualified BMS to BMA staff will be required as illustrated [Chart 1].

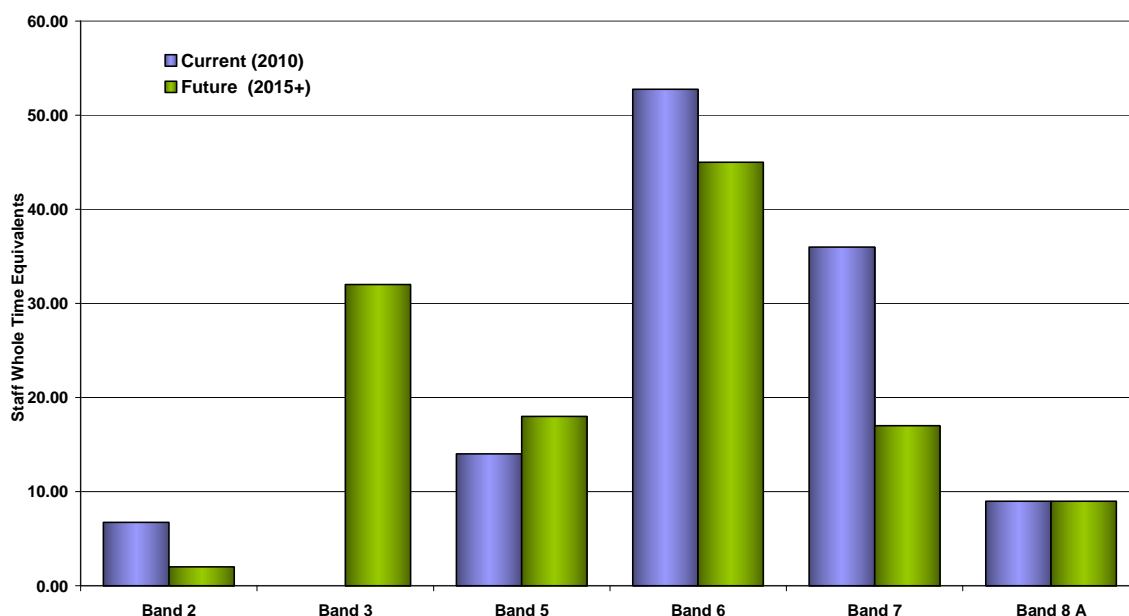
The downward shift in qualified BMS staffing levels will undoubtedly affect each laboratory's ability to maintain out of hours (OOH) services. This will be further compounded by a movement toward restricting OOH working to BMS staff at Band 6 or below, over the next 3-5 years, thereby maximising the availability of senior personnel (Band 7, 8a) during normal routine hours.



Consequently, the participation of BMA staff in OOH working arrangements is essential to make up for the net loss of BMS availability and ensure service provision is robustly maintained on each site. Future OOH services on each laboratory site will therefore be provided from a pool of BMS (Bands 5 & 6) and BMA (Band 3) staff on a contractual basis [Chart 2].

[Chart 1]

**POTENTIAL IMPACT OF RECONFIGURATION PROPOSALS
ON FUTURE WORKFORCE SKILL MIX**



Note: Band 2 staff represented in Chart 1 refers only to those currently laboratory based and does not represent front of house / specimen reception or phlebotomy staff

[Chart 2] Proposed Blood Science OOH Workforce Profile

CORE COMPETENCY	BMS (B5/6)		BMA (B3)
	Operator	Validator	Operator
Haematology	✓	✓	✓
Coagulation	✓	✓	✓
Morphology	✓	✓	✗
Transfusion	✓	✓	✓/✗
Chem Architect	✓	✓	✓
HbA1c	✓	✓	✓

The current typical OOH workforce complement of 1x Haematology BMS & 1x Chemical Pathology BMS (Bands 6,7,8a), will be replaced by 1x Bi-disciplinary BMS (Bands 5,6) & 1x Bi-disciplinary BMA.

Remuneration will be in accordance with Agenda for Change Terms & Conditions, pending outcomes of national and Trust agreements (Section A3).

All Registered and Specialist BMS staff participating in future OOH working arrangements will be required to provide comprehensive cover across all aspects of service provision and take responsibility for result validation and authorisation. BMA staff will perform a broad repertoire of functions, under direction, but with limitations as illustrated above.

5.3 Reconfiguration of Laboratory Management Structure

The current management structure (July 2010) of each laboratory site is presented:

CURRENT PROFILE	Haematology		Blood Transfusion		Chemistry		Total	Total	Total
	Band 8a	Band 7	Band 8a	Band 7	Band 8a	Band 7	Band 8a	Band 7	Staff
Boston	1	3	1	1	1	3	3	7	10
Grantham	0	1	0	1	0	2	0	4	4
Grimsby	1	2	1	2	1	4	3	8	11
Lincoln	0.5	5	0	0.5	0.5	3	1	8.5	9.5
Scunthorpe	0	4	1	1	1	3	2	8	10
Total	2.5	15	3	5.5	3.5	15	9	35.5	44.5

The integration of hitherto separate disciplines into single Blood Science departments inevitably leads to a revision of laboratory management roles and functions where all staff are part of a multi-disciplinary team. The following management structure is proposed:

PROPOSED FUTURE PROFILE	Blood Science Management		Blood Transfusion Management AP		Haem AP	Chem AP	Total	Total	Total
	Band 8a	Band 7	Band 8a	Band 7	Band 7	Band 7	Band 8a	Band 7	Staff
Boston	1	1	1	0	1	1	2	3	5
Grantham ¹	0	0	0	1	1	1	0	3	3
Grimsby ²	2	2	1	0	1	1	3	4	7
Lincoln ³	1	1	1	0	1	2	2	4	6
Scunthorpe ³	1	1	1	0	1	2	2	4	6
Total	5	5	4	1	5	7	9	18	27

Figures in Whole Time Equivalents (WTE)

- i. The basic managerial structure for each Blood Science laboratory will be:

1x Laboratory Manager (Band 8a)

1x Deputy Laboratory Manager (Band 7)

The following exceptions will apply:

¹ Grantham, already operating as an integrated Blood Science laboratory, will continue to maintain managerial arrangements through the Site Manager.

² The Grimsby management structure is effectively doubled to account for the extended routine core hour (16+) period necessitating extended managerial availability.

³ An additional 2x Chemical Pathology AP's are proposed to provide additional roles associated with the development of Trust and community-wide POCT services and GP based service delivery (aligned to underpin successful outcome of recommendation C4). The posts are shown against Lincoln (for ULHT) and Scunthorpe (for NLaG) as an illustration only, with the final location of the posts to be determined.

- ii. Other than the Deputy Laboratory Manager role, all future Band 7 positions will become discipline specific Advanced Practitioner (AP) roles. The basic profile for each site will comprise:

1x Haematology AP (Band 7)

1x Chemical Pathology AP (Band 7)

It is envisaged that Band 7 Advanced Practitioners will provide high level scientific and technical support across a broad spectrum of sub-specialities in their chosen discipline in addition to a developing clinical support function. For example, a Haematology AP will provide expertise in all service aspects including routine haematology and automation, blood morphology & parasitology, coagulation, haemoglobinopathy, etc.

- iii. Blood Transfusion sections of each Blood Science Department, with the exception of Grantham, will be lead by a Transfusion Manager at Band 8a. The Transfusion Manager role will additionally incorporate an Advanced Practitioner role in Transfusion Medicine, providing high level scientific & technical support as well as a developing clinical support function. Each Transfusion Manager (Band 8a) will support local managerial arrangements for the Blood Science Department and collectively provide robust arrangements for ongoing compliance with MHRA regulations across the entire service. The proposal for Grantham is for a single Blood Transfusion AP (Band 7) operating within the local management framework previously described.
- iv. For the avoidance of doubt, all Band 7 (including AP's) and 8a staff will operate in a multi-disciplinary environment and will be required to cross train to varying degrees of competency as required.

5.4 Blood Science Department Workforce Profile

Final proposed skill mix and WTE figures for each Blood Science Department on a site by site basis is presented:

BOSTON BLOOD SCIENCE FUTURE STAFF PROFILE					
Staff WTE	Band 3	Band 5	Band 6	Band 7	Band 8a
Laboratory Manager					1
Deputy Laboratory Manager				1	
Advanced Practitioner - Haem				1	
Advanced Practitioner - Chem				1	
Blood Sciences BMA/BMS	8	2	6		
Blood Transfusion			2		1
QMS			1		

GRANTHAM BLOOD SCIENCE FUTURE STAFF PROFILE					
Staff WTE	Band 2	Band 5	Band 6	Band 7	Band 8a
Laboratory Manager					
Deputy Laboratory Manager					
Advanced Practitioner - Haem				1	
Advanced Practitioner - Chem				1	
Blood Sciences BMA/BMS	2	2	5		
Blood Transfusion				1	
QMS			1		

LINCOLN BLOOD SCIENCE FUTURE STAFF PROFILE					
Staff WTE	Band 3	Band 5	Band 6	Band 7	Band 8a
Laboratory Manager					1
Deputy Laboratory Manager				1	
Advanced Practitioner - Haem				1	
Advanced Practitioner - Chem				2	
Blood Sciences BMA/BMS	8	2	6		
Blood Transfusion			2		1
QMS			1		

GRIMSBY BLOOD SCIENCE FUTURE STAFF PROFILE					
Staff WTE	Band 3	Band 5	Band 6	Band 7	Band 8a
Laboratory Manager					2
Deputy Laboratory Manager				2	
Advanced Practitioner - Haem				1	
Advanced Practitioner - Chem				1	
Blood Sciences BMA/BMS	8	6	12		
Blood Transfusion			2		1
QMS			1		

SCUNTHORPE BLOOD SCIENCE FUTURE STAFF PROFILE					
Staff WTE	Band 3	Band 5	Band 6	Band 7	Band 8a
Laboratory Manager					1
Deputy Laboratory Manager				1	
Advanced Practitioner - Haem				2	
Advanced Practitioner - Chem				2	
Blood Sciences BMA/BMS	8	2	6		
Blood Transfusion			2		1
QMS			1		

Note:
 The skill mix distinction for Grantham reflects alternative management arrangements and the lack of requirement for Band 3 staff to participate in OOH cover arrangements. A Band 2 MLA staff proposal is made for Grantham with OOH cover continuing as per current arrangements

In addition to Laboratory management, and BMS/BMA staff, provision is made for a Quality Management System (QMS) role to support site specific Lean, Quality Management and training as outlined in [Appendix IV](#). Whilst described as a Band 6 grade in the above workforce profile, the final grading, detail and configuration of these posts remains to be determined, subject to the outcome of reconfiguration proposals of the Path Links Support Directorate and Quality Management System review. The QMS role being 'site based' will assume responsibilities for all available disciplines across the site i.e. will provide a lead role for Lean events and staff training in Cellular Pathology, Microbiology etc as applicable to the local site. Note also that the 'site

based' QMS role is incorporated within the Blood Science workforce establishment as an illustration only and may alternatively be provided from within the workforce establishment of another Clinical Directorate.

The proposed workforce profile assumes maximal implementation of the Path Links Capacity Plan with minimal Primary Care activity remaining on the Boston, Lincoln, & Scunthorpe sites.

Workforce establishment and skill mix proposals are therefore based on future activity and test repertoire assumptions representing a long term establishment model to be achieved within the next 5 years. Final adjustments to staffing levels may be required, on a site by site basis, dependent upon:

- Outcomes of the PCT diversionary scheme and impact on final workload levels
- Outcomes of the workload consolidation option appraisal process [Appendix III]
- Impact of Lean improvement activities
- Trust reconfiguration proposals of clinical services and estate

In summary, the impact of reconfiguration proposals on the future workforce profiles as compared to present arrangements is as follows:

Current (2010) and Proposed Future (2014/2015) Establishment Figures
(WTE – Haematology & Chemical Pathology):

Site	Staff WTE	Band 2	Band 3	Band 5	Band 6	Band 7	Band 8a	Totals
Boston	Current	2.64	0.00	4.00	7.74	7.00	3.00	24.38
	Future	0.00	8.00	2.00	9.00	3.00	2.00	24.00
Lincoln	Current	0.00	0.00	1.00	16.87	8.50	1.00	27.37
	Future	0.00	8.00	2.00	9.00	4.00	2.00	25.00
Scunthorpe	Current	3.60	0.00	2.00	13.45	8.00	2.00	29.05
	Future	0.00	8.00	2.00	9.00	4.00	2.00	25.00
Grimsby	Current	0.50	0.00	6.00	9.10	8.00	3.00	26.60
	Future	0.00	8.00	6.00	15.00	4.00	3.00	36.00
Grantham	Current	0.00	0.00	1.00	6.60	4.00	0.00	11.60
	Future	2.00	0.00	2.00	6.00	3.00	0.00	13.00
Totals	Current	6.74	0.00	14.00	53.76	35.50	9.00	119.00
	Future	2.00	32.00	14.00	48.00	18.00	9.00	123.00

Net Change to Current (2010) and Proposed Future (2014/2015) Establishment Figures
(WTE – Haematology & Chemical Pathology):

	Band 2	Band 3	Band 5	Band 6	Band 7	Band 8a
Boston	-2.64	8.00	-2.00	1.26	-4.00	-1.00
Lincoln	0.00	8.00	1.00	-7.87	-4.50	1.00
Scunthorpe	-3.60	8.00	0.00	-4.45	-4.00	0.00
Grimsby	-0.50	8.00	0.00	5.90	-4.00	0.00
Grantham	2.00	0.00	1.00	-0.60	-1.00	0.00
Total	-4.74	32.00	0.00	-5.76	-17.50	0.00

The above figures do not include serology which is covered in section 5: 'Microbiology Reconfiguration Proposals'.

5.5 Training & Support Mechanism

Roles and responsibilities of the newly created posts of Blood Science Laboratory Manager, Blood Science Deputy Laboratory Manager, and Advanced Practitioners will be defined through revised job descriptions. Similarly, revised Band 5, Registered Bi-Disciplinary BMS, and Band 6, Specialist Bi-Disciplinary BMS, job descriptions will apply in line with changing roles and responsibilities associated with future multi-disciplinary working arrangements.

Given the magnitude of change across all sites, in combination with a significant requirement for staff training and development, robust arrangements are essential to ensure that service quality standards are maintained both in the long term and through a transitional period.

A revision to routine and OOH working arrangements is proposed and outlined in [Appendix VI: Proposed Blood Science Workforce Profile & Support Framework](#). Under these arrangements:

- i. A single published OOH rota of Registered and Specialist Bi-Disciplinary BMS showing staff on duty across all five sites will be made available, providing contact details and information on their primary core competency i.e. Haematology or Chemical Pathology. Collectively, Registered and Specialist Bi-Disciplinary BMS's on duty at any given time in each of the five sites will provide first line support for each other. This is of particular value where the OOH BMS on duty at any given site encounters an issue outwith their primary core competency. For example, from the illustration in Appendix VI, the core competency of the OOH Bi-Disciplinary BMS for Boston, Scunthorpe and Grantham is in Haematology. Should any of these individuals encounter an issue in Chemical Pathology on which they require assistance or advice, their initial point of contact would be one of their colleagues in either Grimsby or Lincoln whose core competency is Chemical Pathology. Similarly the reverse is true where the OOH Bi-Disciplinary BMS in Grimsby or Lincoln would contact their colleagues in either Grantham, Scunthorpe or Boston for queries arising in Haematology or Blood Transfusion.
- ii. The arrangement will be augmented by the availability of AP's for referral if further guidance or support is required. Accordingly, Advanced Practitioners in Chemical Pathology, Haematology and Blood Transfusion will provide network cover across sites, on rotation, offering advice and support for laboratory staff during both normal hours and OOH. In so doing, they will also be providing first line support to Consultant Biochemists & Consultant Haematologists through protocol guided referrals. A published rota of Chemical Pathology, Haematology and Blood Transfusion AP's will be available to OOH Bi-Disciplinary BMS staff.
- iii. Agenda for Change terms & conditions will apply to Advanced Practitioner OOH rotas on commencement, in line with national agreements. It is envisaged that OOH commitments will operate remotely through telephone and on-line support (including remote result validation/authorisation).

Whilst the requirements for a support framework is critical during a transitional phase, future demands are likely to diminish as core competencies, knowledge and experience of individuals develops over time.

Staff training in their 'second' discipline will follow the format as previously applied in Grantham where bi-disciplinary working arrangements are already in place, as well as other areas (e.g. Microbiology & Immunology) where staff have been re-trained in another discipline.

A comprehensive internal training plan is currently in development that will incorporate schedules and timelines for completion on a site by site basis. All staff affected will be required

to successfully complete the training programme within an agreed timescale. Failure of attainment beyond an agreed date may result in termination of employment through a competency assessment and performance management process. *Extension of the attainment period may be considered on an individual basis in the event of extended mitigating circumstances.*

[An outline Blood Science training plan is provided in Annexe C](#)

5.6 Blood Science 'Front of House'

Blood Science 'Front of House' services typically includes a range of clerical and MLA duties including general reception, phlebotomy, specimen reception, pre and post-analytical sample processing, computer data entry, sample packaging and despatch. A number of change proposals will have a variable impact on 'Front of House' services on a site by site basis, including:

- i. The 'Paperless Pathology' proposal (recommendation B5) having a significant impact on activities associated with report printing and subsequent sorting and posting.
- ii. Impact of the wider deployment of electronic pathology order requesting (completion of NLaG and PCT programme and scheduled implementation across ULHT).
- iii. Withdrawal of pre-analytical automation (recommendation B6).
- iv. Implementation of revised Lean working arrangements following initial local assessments (recommendation C3).
- v. Further enactment of the 2004 Path Links Capacity Plan with increasing flows of PCT activity into the Grimsby Capacity Laboratory (or to Grantham as appropriate); leading to a significant activity decrease in Boston, Lincoln & Scunthorpe and parallel increase in Grimsby and Grantham.

Adjustments to staffing levels will inevitably be required, over time, to achieve a workforce tailored to final service configuration and activity levels on a 'site by site' basis.

Whilst the full impact of change proposals are, as yet, unknown an ongoing review of 'front of house' staffing levels, activities and functions is required with appropriate adjustments made.

Wherever possible, adjustments to staffing levels will be made as vacancies arise within the 'front of house' pool of staff. Adjustments will include the transfer of vacant posts from one site to another if required to support the wider reconfiguration proposal.

Opportunities will also be available for 'front of house' staff to transfer into the developing Blood Science laboratory BMA posts. Current 'laboratory based' MLA (Band 2) staff will equally have the opportunity to transfer into the developing BMA posts but, in either case, no staff will be compelled to do so. Where, for instance, the proposed future establishment shows a reduction in Band 2 staffing levels, this will be achieved over time through a process of natural wastage or redeployment e.g. from laboratory based roles into front of house etc.

5.7 Louth

Analytical laboratory testing facilities were withdrawn from Louth Hospital in 2007. The laboratory now acts as a phlebotomy centre offering venepuncture, for hospital outpatients and some Louth GPs, and a 'front of house' service for the Grimsby laboratory. This includes full

reception facilities, sample numbering, data input, centrifugation, packaging and transfer to Grimsby. Staff are available to answer queries from GP surgeries and the wards. It also houses the Louth hospital blood bank.

The facility is currently supported by 1.0 wte MLA team leader, and 5 part time MLA staff (2.9 wte). The average number of blood science requests processed per working day is between 350 to 400. Due to the relatively small numbers of staff working in Louth, absences are not easily covered by the remaining staff. Annual leave and sickness are therefore covered by bank staff, MLA staff travelling from Grimsby, or sending work through to Grimsby for processing. This in turn produces unpredictable workload pressures at the Grimsby laboratory.

As part of the wider reconfiguration for the delivery of Pathology services, a review of Louth laboratory service delivery will be undertaken. This will include:

- Lean evaluation of current process.
- Option appraisals for reduction in costs.

The option appraisal will consider:

- The potential for WTE staff reductions whilst increasing productivity through the introduction of revised Lean working arrangements.
- Retaining phlebotomy services in Louth laboratory but transfer sample processing to Grimsby laboratory.
- Transferring phlebotomy services to the PCT, sample processing to Grimsby, and return the laboratory building to ULH or the PCT for further site development at Louth County Hospital.
- Maintaining staffing levels at present but, as part of the wider transfer of work to the Grimsby capacity laboratory, divert additional PCT work to Louth laboratory for primary processing before subsequent transfer of samples to Grimsby for testing.

5.8 Goole

The laboratory acts as a phlebotomy centre offering venepuncture, for hospital outpatients and some Goole GPs, and a 'front of house' service for the Scunthorpe laboratory. This includes full reception facilities, sample numbering, data input, centrifugation, packaging and transfer to Scunthorpe. Staff are available to answer queries from GP surgeries and the wards. It also houses the Goole hospital blood bank.

There is currently a glucose monitoring scheme which is run out of the Goole laboratory. The service is currently run by a Band 6 (0.45 WTE) BMS and a Band 2 (0.6 WTE) MLA. The Band 6 also provides an HbA1C analysis service for the Diabetic clinic which is held x3 afternoons per month. Back up services are provided by the Scunthorpe laboratory staff.

As part of the wider reconfiguration for the delivery of Pathology services, a review of Goole laboratory service delivery will be undertaken. This will include:

- Lean evaluation of current processes.
- Appraisal of retaining phlebotomy services in the Goole laboratory but transferring sample processing to Scunthorpe or the Grimsby capacity laboratory.
- Appraisal of the HbA1C service and the glucose monitoring scheme.

Blood Science Reconfiguration Proposals

Recommendation D5:

Path Links management endorse recommendations of the OMG for:

- i. The development of 'Blood Science' departments on all sites with full integration of Chemical Pathology, Haematology & Blood Transfusion as proposed
- ii. Deployment of Lean layout proposals for analytical 'Work Cells' and co-location of specimen reception and blood transfusion functions as a priority
- iii. Introduction of bi-disciplinary working arrangements, including 'out of hours'
- iv. The introduction of a revised BMS workforce profile with the development of a Band 3 BMA role, including OOH operations under direction, and re-defined roles for Registered BMS (Band 5) and Specialist BMS (Band 6)
- v. Reconfiguration of laboratory management structure and development of specialist Advanced Practitioner roles in Haematology, Chemical Pathology & Blood Transfusion
- vi. Staff establishment and skill mix adjustments tailored to final service configuration and residual activity on a 'site by site' basis
- vii. Formal staff consultation is commenced with staff directly affected in the following sequence in accordance with the wider Path Links Reconfiguration Timeline Appendix V
 - Existing Band 7 staff commencing 22nd October 2010*
 - Existing Band 6 staff commencing post April 2011[†]
- viii. An ongoing review of 'Front of House' establishment levels and activities with adjustments made in line with the impact of change proposals
- ix. A comprehensive review and option appraisal as to the future of the Louth facility
- x. A comprehensive review of the Goole facility and reassessment of 'Front of House' and POCT glucose monitoring scheme

** A significant reduction in Senior BMS (Band 7) staff wte is a feature of the reconfiguration proposal. Implementation of the plan will require a balanced approach between natural wastage, retaining some Band 7 staff at a lower (Band 6) grade, resulting in temporary 'over-establishment' at Band 6, and redundancy through a yet to be determined transitional period in 2011. Band 6 'over-establishment' figures will be determined on a site by site basis at levels sufficient to support and maintain OOH working arrangements pending final outcome of the Band 7 staff consultation process. A proposed future reduction in Band 7 establishment of 17.5 wte from current levels, will inevitably result in a number of compulsory redundancies although actual numbers cannot be confirmed being dependant on a number of factors including:*

- *Outcomes of the Trust VRS Scheme*
- *Staff turnover and impact of the Trust Vacancy Control Scheme*
- *External NHS change proposals – driven by national agendas*
- *External Commissioner Framework change proposals*
- *Trust ongoing financial position and success of wider cost reduction schemes*

Final redundancy plans will be determined following staff consultation.

[†] *Staff consultation on wider proposals for bi-disciplinary working arrangements*

[\[Refer to Section E for further details\]](#)

6. MICROBIOLOGY RECONFIGURATION PROPOSALS

The Microbiology Directorate has followed a programme of significant service reconfiguration since publication, consultation and deployment of its Service Strategy (2004), resulting in:

- Consolidation of bacteriology laboratory services in Scunthorpe & Boston with the services transferring from Grantham and Grimsby
- The closure of the Lincoln laboratory facility
- Rationalisation and consolidation of test repertoire e.g. TB culture
- Consolidation of serology laboratory services in Grantham and Grimsby

As a consequence there is inevitably only limited scope for further savings opportunities arising from service reorganisation and consolidation proposals. Whilst the case for off-site microbiology laboratory services is proven, consideration of reducing the number of bacteriology laboratories further is precluded when taking into account geography, available facilities and logistics.

The case for serology, however, differs as a number of opportunities exist for further rationalisation and consolidation.

6.1 Non Culture Microbiology (Serology/Virology)

Serology analytical services are currently provided from the Grantham and Grimsby laboratories. The Grantham laboratory operates largely as a standalone operation whilst there is closer integration with Blood Sciences on the Grimsby site including participation in OOH.

Changes in clinical activity and clinical service reconfiguration over recent years have resulted in significant activity growth in laboratory activity, namely:

- Introduction of molecular (PCR) testing for Chlamydia and introduction of a screening programme
- Repatriation of the Ante-Natal Screening Programme for infectious disease (HIV, HepB, Rubella, Syphilis)
- Requests for serology/virology investigations, particularly high cost molecular assays, currently referred to an external laboratory; the total cost of external referrals is in the order of £250k+ p.a.

More robust clinical and managerial arrangements for serology were recently introduced with the appointment of Dr Bethan Stoddart as clinical lead, and the separation of the previously single Microbiology DOM post into two distinct roles for Bacteriology and Serology, the latter providing cost savings. The revised clinical and managerial arrangements better supports the delivery of future serology services underpinning potential development and reconfiguration proposals. Serology reconfiguration and cost reduction opportunities are primarily focused on:

- i. Consideration of options available for the further rationalisation of laboratory testing services e.g. by integration with Blood Sciences, re-integration with bacteriology, or consolidation onto a single laboratory site
- ii. Repatriation of externally referred activity, with particular emphasis on high cost, high volume, molecular activity
- iii. A workforce establishment and skill mix review

The Microbiology Directorate, in conjunction with the OMG, has undertaken a comprehensive review and appraisal of available service reconfiguration options. The option appraisal was conducted using the evaluation criteria (Appendix III [A]) with the following outcomes:

- i. Serology laboratory services to be retained on both the Grimsby and Grantham sites
- ii. Grimsby will continue to provide the full repertoire of serology testing activity including PCR for Chlamydia
- iii. Grantham, whilst similarly offering a full testing service, will be developed to extend the repertoire of molecular diagnostic investigations thereby facilitating the repatriation of currently externally referred activity. Notice has already been served with existing providers to achieve this outcome. This will represent a developing service in the future with significant workload growth and an opportunity to both save money on referred tests and to repatriate present referrals.
- iv. A Lean assessment to be completed aimed at maximising productivity levels of the two departments including closer integration of support functions with Blood Sciences.
- v. The full integration of serology staff into Blood Sciences at Grimsby will be maintained, exclusively to support OOH working arrangements. This recognises the routine (non specialised) nature of Serology work to be undertaken on the Grimsby Site and the 16+ hour routine Blood Science Laboratory necessitating greater staffing levels.

Reference Appendix VII: Serology Option Appraisal Process & Outcomes May 2010

The current and final proposed skill mix and WTE figures for each Serology laboratory on a site by site basis is presented:

		Band 2	Band 3	Band 5	Band 6	Band 7	Totals
Current	Grimsby	0.00	0.00	0.60	1.68	3.00	5.28
WTE	Grantham	2.00	0.00	1.00	0.00	2.00	5.00
Future	Grimsby	0.00	2.00	0.00	1.00	1.00	4.00
WTE	Grantham	0.00	2.00	1.00	1.00	1.00	5.00
Net	Grimsby	0.00	2.00	-0.60	-0.68	-2.00	-1.28
Change	Grantham	-2.00	2.00	0.00	1.00	-1.00	0.00

- The future establishment at both Grantham & Grimsby provides for a single dedicated Advanced Practitioner combined with managerial responsibilities for Serology on each site (Band 7) under the direction of the Directorate Operational Manager. The Band 7 will also provide high level scientific and technical support for the department including collaborative working across the two sites.
- An alternative arrangement is proposed for Grantham to support the critical development of molecular services. For an interim period until the service is fully established, the Band 7 role will become a shared responsibility between the 1.0 wte Band 6 and 1.0 wte Band 7 posts on a 50:50 basis. The staffing profile will revert to the proposed establishment of 1x Band 6 and 1x Band 7 as the molecular service is consolidated; likely timescale 18 months.
- The Band 6 BMS role, in addition to providing a specialist scientific technical role, will deputise for the Band 7 Advanced Practitioner. For Grimsby, this member of staff will be required to cross train into Blood Sciences and participate in the OOH rota.
- As compared to Grimsby, the additional Band 5 role in Grantham reflects the requirements of further service development and future extension of laboratory test repertoire. Early

service expansion is critical to achieving a required level of workload repatriation. Skill mix and establishment levels will be reviewed at a point where final activity volumes are known.

- The establishment of BMA (Band 3) roles will underpin workforce flexibility and productivity levels through increasing responsibility and extended roles.
- For Grimsby, two Blood Science Band 5 or Band 6 staff will also cross train in Serology to provide cover for the Band 6 Serology post.

Recommendation D6.1:

Path Links management endorse recommendations of the Microbiology Directorate and OMG for:

- i. The continued maintenance of two serology testing facilities as determined as the preferred outcome of a formal option appraisal process
- ii. Reconfiguration of serology with differentiation between the two laboratories as proposed (routine in Grimsby and Specialist in Grantham)
- iii. The introduction of a revised BMS workforce profile with the development of a Band 3 BMA role, and re-defined roles for Registered BMS (Band 5), Specialist BMS (Band 6), and Advanced Practitioner (Band 7)
- iv. Staff establishment and skill mix adjustments tailored to final service configuration and residual activity on a 'site by site' basis
- v. Formal staff consultation is commenced with staff directly affected in accordance with the wider Path Links Reconfiguration Timeline Appendix V, commencing 22nd October 2010

6.2 Bacteriology

Bacteriological services are currently provided by the Scunthorpe and Boston Laboratories, as a result of the service strategy agreed in 2004 and the closure of the bacteriology laboratory in Lincoln in 2009. Both the Scunthorpe and Boston laboratories provide a full range of bacteriological investigations. Investigations received in limited numbers have been further centralised within bacteriology, with the Scunthorpe site providing the county's TB and mycology service

Clinical activity on the bacteriology sites has increased dramatically over the past 3-4 years. This has been mainly driven by:

- Centralisation of bacteriology from 5 sites to 2 in line with the service strategy.
- Implementation of pre elective surgery MRSA screening

Reconfiguration and cost reduction opportunities in Bacteriology are available and primarily focused on:

- i. Workforce establishment and skill mix review.
- ii. Introduction of Managed Service Contracts for Bacteriology analysers/reagents/kits and consumables.
- iii. Further implementation of Lean techniques throughout the laboratory.
- iv. Repatriation and rationalisation of referred isolates/specimens by a system of clinical authorisation through a Consultant Microbiologist.
- v. Introduction of fully automated microbiology testing system

Whilst the introduction of a fully automated system would provide a solution to radically alter service provision, a full evaluation of available technologies and associated costs precludes its consideration at the current time.

The impact of future changes to transport arrangements, arising from the further enactment of the Blood Science Capacity Plan, will ultimately lead to alterations in Primary Care microbiology specimen flows. As a result, a net gain in Scunthorpe and a net reduction in Boston is anticipated. Whilst the magnitude of the workload shift is yet to be determined, the contingency position of the Directorate would be to re-balance activity levels on each site e.g. by transferring existing centralised services from the Scunthorpe site (TB and mycology) to the Boston Laboratory. A balancing of activity is appropriate to maintain productivity levels at Boston; the alternative of reducing BMS establishment levels is compromised by the requirement to maintain 24/7 service provision.

The current and final proposed skill mix and WTE figures for each bacteriology laboratory on a site by site basis is presented:

Bacteriology: Current and Proposed Future Workforce Establishment (wte)

CURRENT	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8 A	Band 8 B	Totals
Scunthorpe	15.83	0.00	0.00	10.80	2.60	4.02	1.00	1.00	35.25
Boston	3.53	2.75	1.41	2.00	6.00	2.00	0.00	1.00	18.69
Totals	19.36	2.75	1.41	12.80	8.60	6.02	1.00	2.00	53.94

INTERIM	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8 A	Band 8 B	Totals
Scunthorpe	15.83	0.00	0.00	0.00	13.40	4.02	1.00	1.00	35.25
Boston	3.53	2.75	1.41	0.00	8.00	2.00	0.00	1.00	18.69
Totals	19.36	2.75	1.41	0.00	21.40	6.02	1.00	2.00	53.94

FUTURE	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8 A	Band 8 B	Totals
Scunthorpe	13.00	0.00	0.00	9.00	4.00	2.00	0.00	1.00	29.00
Boston	6.00	0.00	1.41	4.00	4.00	2.00	0.00	1.00	18.41
Totals	19.00	0.00	1.41	13.00	8.00	4.00	0.00	2.00	47.41

NET CHANGE	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8 A	Band 8 B	Totals
Scunthorpe	-2.83	0.00	0.00	9.00	-9.40	-2.02	-1.00	0.00	-6.25
Boston	2.47	-2.75	0.00	4.00	-4.00	0.00	0.00	0.00	-0.28
Total	-0.36	-2.75	0.00	13.00	-13.40	-2.02	-1.00	0.00	-6.53

Complete by Oct 2011 deadline
Target 2014 - 2015

'Interim' figures account for the automatic progression of Band 5 staff to Band 6; 'Net Change' figures are calculated as the difference between 'Future' and 'Interim' values. Establishment reductions at Band 6 is proposed to be achieved through natural turnover.

- The Directorate Operational Managers for both Bacteriology and Serology will be based on the Scunthorpe and Boston sites respectively.
- There will be one Deputy Laboratory Manager (Band 7) and one Advanced Practitioner (Band 7) on each site. The Band 7 staff will take on higher technical, scientific and managerial responsibilities, including collaborative work across the 2 sites.
- The Band 6 role, in addition to providing specialist scientific and technical skills, will support any out-of-hours (evening, weekend, shift, public holiday) arrangements.
- Current contracted Band 5 Staff working towards their specialist portfolios will be uplifted to Band 6, providing they complete their portfolio within an agreed timescale. Future Band 5

staff will be employed solely within the band. Opportunities to progress to Band 6 will only take place as vacancies arise.

- No provision is made for Band 3 BMA posts in the proposed Bacteriology workforce profile. All future non-BMS laboratory support roles will be at Band 2.
- The role of the Band 2 staff will be to provide the BMS staff with assistance in any tasks that are required, in addition to their core role of the triage, processing and data input of specimens and requests. Band 2 staff will fully support the service by participation in any out-of-hours (evening, weekend, shift, public holiday) arrangements.

Recommendation D6.2:

Path Links management endorse recommendations of the Microbiology Directorate and OMG for:

- i. Introduction of revised BMS and MLA workforce profile, with re-defined roles for registered BMS (Band 5), specialist BMS (Band 6) and Deputy Lab Manager and Advanced Practitioner (Band 7).
- ii. Staff establishment and skill mix adjustments tailored to final service configuration.
- iii. Formal staff consultation is commenced with staff directly affected in accordance with the wider Path Links Reconfiguration Timeline Appendix V, commencing 22nd October 2010.
- iv. Establish Managed Service Contracts for bacteriology analysers/reagents/kits and consumables.

7. IMMUNOLOGY RECONFIGURATION PROPOSALS

The Immunology Directorate has already been through a phase of reconfiguration and centralisation which resulted in:

- Centralisation of the Immunology laboratory services in Scunthorpe
- The closure of the Boston and Lincoln laboratory facilities
- Recent amalgamation of the Scunthorpe Site Manager and DOM role
- Bi-disciplinary working with Chemical Pathology in Scunthorpe

The Directorate has further consolidated services (recently serum/urine electrophoresis) as opportunities arose, and remodelled the staffing structure to provide a single site service for the whole of the county. The Directorate has already expanded the role of non-qualified (BMS) staff to the basic setup of analysers but recognise opportunities for further expansion to ensure that tasks are performed by the appropriate staff grades.

There are therefore only limited options for further savings through rationalisation of the services. Opportunities predominantly lie with:

- Repatriation of referred assays
- Utilisation of Lean practice
- Closer links with other local Trusts (e.g. Hull)
- Staff skill mix adjustment

Current and proposed workforce establishment & skill mix is presented:

Immunology Current Workforce Establishment (wte)						
	Band 2	Band 5	Band 6	Band 7	Band 8a	Total
Laboratory Manager					1.00	1.00
Senior BMS				2.00		2.00
BMS			2.61			2.61
Trainee BMS		2.00				2.00
MLA	2.01					2.01
Staff Total						9.62
Immunology Proposed Future Workforce Establishment (wte)						
	Band 2	Band 5	Band 6	Band 7	Band 8a	Total
Deputy Lab Manager				1.00		1.00
AP - Immunology				1.00		1.00
Specialist BMS			2.00			2.00
Registered BMS		2.00				2.00
MLA	3.00					3.00
Staff Total						9.00
Net Change	0.99	0.00	-0.61	0.00	-1.00	-0.62

- The significant component of cost reduction opportunities arises from the disestablishment of the Band 8a Laboratory Manager post. Collectively, the proposed workforce & skill mix changes will achieve a c£50k cost reduction.
- A Band 7 Deputy Laboratory Manager is proposed to take on a significant proportion of responsibilities associated with the disestablished Band 8a Laboratory Manager role. The

post will provide support for the Immunology DOM, provide high level scientific and technical support for the department (in addition to a developing clinical support function), and provide continuity of laboratory management arrangements.

- iii. A Band 7 Advanced Practitioner role is also proposed that will provide support for the Immunology DOM, provide high level scientific and technical support for the department (in addition to a developing clinical support function), and provide continuity of laboratory management arrangements. The Band 7 posts will provide cross-cover for each other. A robust support system for the DOM is required to maintain the duality of the DOM and Site Manager role.
- iv. MLA roles will be expanded further to incorporate basic operation of analysers thus releasing BMS staff within Immunology for higher level scientific and technical support and greater specialisation
- v. Implementation of workforce and skill mix changes as proposed will be underpinned by Lean process re-design to optimise work flow and balance against available staffing levels.

Repatriation of assays:

Immunology test activity referred to external laboratories is ordinarily subject to continual review. Opportunities arise for 'in-house' repatriation largely from changes to methodology, activity volume, and clinical demand. A proposal being actively considered is for serum Free Light Chains where an internal provision would provide cost savings of £6,000 annually.

Collaborative Working with another Immunology service provider:

The Path Links Immunology service currently maintains both clinical and laboratory links with the Immunology service in Hull. Opportunities exist for extending the association and working arrangements between the two services including:

- Options for test rationalisation (e.g. flow cytometry)
- Options for further 'in-house' repatriation arising from greater economies of scale.

Recommendation D7:

Path Links management endorse recommendations of the Immunology Directorate and OMG for the:

- i. Introduction of revised BMS and MLA workforce profile, with re-defined roles for MLA's, registered BMS (Band 5), specialist BMS (Band 6), Advanced Practitioner (Band 7) and Deputy Laboratory Manager (Band 7). Disestablishment of the 8a Laboratory Manager role.
- ii. Continuation of discussions with Hull, and/or other providers, to facilitate identification of wider opportunities for service rationalisation, and repatriation of referred activity.
- iii. Staff establishment and skill mix adjustments to be tailored to final service configuration
- iv. Immunology remains as currently configured with cost reduction opportunities arising from role re-design and skill mix adjustments as proposed

8. CELLULAR PATHOLOGY RECONFIGURATION PROPOSALS

The Cellular Pathology Directorate has undertaken significant reorganisation and development over the past number of years. As opportunities have arisen the Directorate has consolidated services and remodelled staffing structures across all Path links sites. The development of Lean systems and processes within the Directorate has increased capacity and efficiency, particularly within the Histology Department. Knowledge gained from the development and implementation of the Lean systems within histopathology are being used throughout the Directorate to increase productivity and efficiency across all other sections.

Future developments within the Directorate will explore areas of commonality across Departments where staffing and equipment resources can be brought together to further increase efficiency and reduce costs. It is envisaged that, in the next 12 - 18 months, both Histology and Cytology specimen reception and staining activities will be combined.

In conjunction:

- Where there are significant fluctuations to workload activity over time, e.g. in Cytology, Cyto-screening staff and Cytology BMS staff will be trained to operate in other sections of the Department (Histology, Andrology) thereby providing greater flexibility and service resilience and support.
- Developing centralised roles for staff within specimen reception
- Developing administration and clerical staff with extended roles within each section.

A number of staff have put forward requests, as part of the Voluntary Release Scheme. Future proposals for the reconfiguration of Cellular Pathology should allow staff to be released without detriment to the delivery of the service.

8.1 Histology

The Histology section has undergone a massive transformation over the past five years following the introduction of Lean processes. The section has, for a number of years, had a skill mix that fully utilises non-qualified (MLA) staff with these staff being trained and developed in roles traditionally performed by qualified staff. The section is continuing to adapt and develop staff roles to ensure that tasks are performed by the appropriate staff grades. The main focus of the Histology section, currently, is to address the deficit in Cellular Pathologist reporting capacity. Tasks currently undertaken by Cellular Pathologists, such as specimen dissection, are being increasingly undertaken by qualified BMS staff as an initial measure to increase Cellular Pathologist reporting capacity. This development will be fully rolled out in 2010/11.

Summary of recent and existing developments

- Centralisation of Histology services on the Lincoln site
- Skill mix adjustment over a number of years to an approximate 50/50 split between qualified and non-qualified technical staff
- Training and development of non-qualified staff in roles traditionally undertaken by qualified staff, for example, microtomy.
- Training and development of qualified staff to undertake roles traditionally undertaken by medical staff, for example, dissection.

- Introduction of Lean methodology and working practices which has enabled Histology to greatly increase work throughput without additional staffing resources
- Utilisation and development of 'state-of-the-art' equipment to deliver the service more efficiently and with less staff resource requirements, for example, voice recognition and digital dictation

Summary of future developments

- Training and development of qualified staff to further take on work tasks from Cellular Pathologists to free up reporting capacity. Currently developing BMS 'cut up'
- Over the next 5 years it is expected that 3 of the consultant pathologists will retire. Two of these currently report gynaecological cytology & histology as part of their subspecialisation. Provision of a significant proportion of the gynaecological cytology reporting and pre-screening of gynaecological histology samples through BMS advanced practitioners, will allow new appointments to be focused on reporting of other histology sample groups.
- Further development of Pathosys to release A&C staff capacity
- Development of 'cellular pathology' functions common to both histology & cytology including:
 - Centralised specimen reception
 - Centralised staining facilities

Recommendation D8.1:

Path Links management endorse recommendations of the Cellular Pathology Directorate and OMG for the:

- i. The full implementation of extended roles to support BMS 'cut up' from within the existing workforce establishment.
- ii. Further development of BMS advanced practitioner reporting of gynaecological cytology and pre-screening of histology samples with associated rationalisation of consultant reporting. (Also see recommendation D8.2)
- iii. Further development and full deployment of the Pathosys system
- iv. Consolidation of Histology and Cytology specimen reception and specimen staining functions

8.2 Cytology

The Cytology section has experienced significant fluctuations in workload over the past two years, in addition to anticipated seasonal and annual variations that can occur within the National Cytology Screening Programme workload.

Gynaecological cytology workload has reduced over the past 12 months following a significant rise attributed to the public response to the death and circumstances of Jade Goody. As workload has reduced, this has resulted in excess capacity, mainly within the Cytoscreener grade of staff. Whilst the cytology section still has to maintain flexibility and capacity to deliver a fluctuating workload, appropriate utilisation of the spare capacity is being evaluated: options include:

- i. Targeted workforce reduction through the Trust voluntary release scheme
- ii. Redefining staff roles, allowing for greater staff flexibility throughout the Cellular Pathology Directorate
- iii. Transfer and consolidation of Andrology services to Cytology

Summary of recent and existing developments

- Centralisation of cytology sample processing
- Rationalisation of countywide screening staff
- Flexible staffing measures being trialled (e.g. annualised hours) to match capacity demand due to seasonal and annual fluctuation in workload
- Development of AP roles to free up consultant reporting capacity

Summary of future developments

- Continue to explore and develop flexible staffing arrangements across the Directorate
- Within the next two years it is expected that 2 of the pathologists that report Gynaecological cytology and Histology specimens will retire. Development of the AP roles will allow replacement appointments to be focused more on delivery of routine Histology reporting where there is currently a deficit.
- Developments are currently being explored where Band 7 BMS staff are pre-screening non-gynae slides prior to being reported by a consultant with a view to reducing reporting time. The same group of staff are also being developed as part of a review process to possibly report the negative non-gynae slides which would again release reporting capacity. Initial estimates are that these developments will release, as a minimum, a total of two hours of reporting time for all pathologists per week.
- Explore the provision of Andrology services from within Cellular Pathology primarily utilising cytology screening staff following appropriate training.

Recommendation D8.2:

Path Links management endorse recommendations of the Cellular Pathology Directorate and OMG for the:

- i. Development of flexible staffing arrangements across the Directorate including multi-disciplinary working between histology and cytology.
- ii. Further provision of Cytology advanced practitioner roles to increase consultant reporting capacity. The tasks involved will include increased reporting of abnormal cervical cytology, colposcopy correlation, formulation of difficult case review panel and pre- screening of gynaecological cytology related histology specimens.
- iii. Development of BMS pre-screening of Non-gynae samples with possible expansion to include reporting of negatives to release consultant resources. The task will be performed at BMS Band 7 level and as a minimum should release 2 hours per week of reporting time.
- iv. Evaluate the reorganisation of Andrology services with future consolidation into Cytology (see also recommendation C8.4)

8.3 Mortuary Services

The mortuary service has, over recent years, similarly undergone significant organisational change leading to the downgrading of Scunthorpe and Grantham mortuary facilities, with autopsy services rationalised onto the Lincoln, Grimsby and Boston sites. Adjustments to mortuary staff workforce profile have been implemented in line with requirements of the current service structure.

Further developments for redesigning mortuary services are being considered and discussed together with the users of the service.

Summary of recent and existing developments

- Services consolidated across Path Links sites
- Reduction in staffing associated with consolidation
- Existing model is in line with Coronial requirements for local service provision

Summary of future developments

- Flexible staffing arrangements within other sections of Cellular Pathology
- Consolidation of coronial service provision within long-term agreements

Recommendation D8.3:

Path Links management endorse recommendations of the Cellular Pathology Directorate and OMG for the:

- i. Development of flexible staffing arrangements across the Directorate including cross-site mortuary and cross department working (i.e. histology, cytology)
- ii. Further review of autopsy facilities pending outcomes of Coronial agreements

8.4 Andrology

Andrology services are currently provided from three Path Links sites (Grimsby, Lincoln, Boston) with staff and facilities drawn from Cellular Pathology (specifically Histology) and Chemical Pathology Directorates.

The service is currently under review and, in light of proposed developments within the Chemical Pathology Directorate, the potential for future service provision wholly within the Cellular Pathology Directorate is being considered. As described previously, opportunities arise from the utilisation of excess capacity in cytology to achieve the transfer.

The service review will explore:

- The viability of providing the service within the context of national recommendations for Andrology services
- Availability of resources within Path Links and the current cost recovered for the tests performed

- The delivery of the service from within the Cellular Pathology Directorate utilising spare capacity within Cytology

Recommendation D8.4:

Path Links management endorse recommendations of the Cellular Pathology Directorate and OMG for:

- A comprehensive review of Andrology services, including consideration of future service provision being embedded either a) within Cellular pathology, specifically Cytology, or b) as a separate Directorate

Footnote:

Unlike other Directorate reconfiguration proposals, no workforce establishment and skill mix adjustment proposals are provided at this time for the Directorate of Cellular Pathology. Final workforce profiles will be dependent upon outcomes of the Voluntary Release Scheme and the delivery of reorganisation proposals as described. All development proposals within the Directorate are expected to be delivered within the current workforce establishment, with any future skill mix adjustments made as a result.

The current establishment for Cellular Pathology is provided:

Histology	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8a	Cons
Current	14.54	6.18	3.73	2.60	8.34	4.81	1.00	15.46

Cytology	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8a	AP
Current	5.20	0.33	9.60	3.00	2.36	2.86	1.00	1.95

Mortuary	Band 2	Band 3	Band 4	Band 5	Band 6	Band 7	Band 8a
Current	0.00	2.51	3.00	3.00	1.00	0.00	0.00

Note: Whilst no changes to establishment levels are proposed, other than through the VRS, greater flexibility and improved productivity levels will be achieved from the integration of histology, cytology and mortuary functions.

1. Staff Consultation

Path Links management is committed to a process of ongoing communication with all staff in regard to change proposals affecting both Path Links and the wider Trust. The consultation process to date has included:

- Provision of the Chief Executive 'roadshow' presentation (November 2009), outlining the Trust's 'Innovation & Improvement Plan' in responding to a worsening economic forecast.
- Delivery of a series of Path Links staff presentations, on each Path Links site between 30th – 31st March 2010, providing additional context to the likely impact on Path Links services and, in addition, providing an outline of proposals being considered to meet future financial challenges.
- Path Links management has formally responded, in writing, to all staff questions raised at the meetings and subsequent discussions and submissions.
- Copies of presentations and staff 'questions & answers' have been made available to staff on all sites in the form of an Information Pack that is regularly updated as further information has become available.
- Consultation with Regional Full Time Officers (Staff Side Representatives) on the proposals to agree definition of 'at risk' pools of staff (held 11th October 2010).
- A second round of staff presentations is scheduled for October 2010 to update staff on the detailed proposals contained in this report as endorsed by the Trust IIP Board following approval of the recommended proposals on 21st September 2010.
- In going forward, Path Links management will embark on a formal consultative process with specific staff groups as determined by outcomes of change proposals, in accordance with Trust procedures and requirements.

Across the range of reorganisation proposals contained within the Path Links IIP, there are several schemes that will, unfortunately, result in staff being placed 'at risk' of redundancy.

Whilst every effort will be made to reduce the number of required redundancies to an absolute minimum, e.g. through natural wastage and re-deployment, final figures cannot be determined until the outcome of the Trust Voluntary Release Scheme is known and a firm timeline established.

Path Links management, in consultation with Staff Side Representatives on the proposals made, have determined, by agreement, the definition of staff groups 'at risk' of redundancy. This will lead to specific groups or grades of staff across Directorates being aggregated as 'at risk' pools.

Staff are deemed "At Risk" of redundancy in the following circumstances:

- Where the job which the employee currently holds is redundant (i.e., there is no longer a requirement for the work to be done or there is a reduction in the amount of such work.
- Where there is a significant and fundamental change to the duties/grade of the job resulting from, for example, reorganisation of work/duties.

Taking account of the range of proposals under consideration, a major impact is focused on skill mix changes predominantly affecting existing Band 7 posts. It is inevitable therefore that all Path Links Band 7 staff may be considered 'at risk'. However, considering the uniqueness between

some laboratory disciplines and the overlap and interactions between others, Band 7 staff may be considered as two distinct staff pools:

Pool A

Blood Sciences (Haematology, Chemical Pathology, Transfusion – all sites)

Immunology

Serology/Bacteriology

Pool B

Histology

Cytology

The agreed outcome of discussions with Regional Full Time Officers is that only Pool A will be deemed 'at risk'. Path Links management will therefore undertake a process of formal consultation with all staff affected by the reconfiguration proposal, in accordance with current Trust Policy 'Procedure for Dealing with Staff at Risk of Redundancy'.

An outline schedule of formal staff consultations is contained within the Path Links Reconfiguration Plan Timeline (Appendix V).

2. Stakeholder Engagement & Consultation

Following the formation of the Conservative/Liberal Coalition Government, a number of revisions have been made to the Operating Framework for the NHS in 2010/11 including specific guidance on service reconfiguration proposals.

The Operating Framework introduces 4 new tests for proposals surrounding reconfiguration:

1. Firstly the proposal must have the support from GP commissioners
2. The proposal must demonstrate that the public have been engaged in the development of those proposals
3. The proposals for change have a demonstrable evidence base that the benefits they propose to deliver will materialise
4. That the proposals are consistent with maintaining patient choice

Aligning the consultation process with the 4 new Operating Framework tests, Path Links shall:

- Seek initial support for the proposals from all commissioning Primary Care Trusts, until such time that GP commissioning consortia are established. This arrangement to be extended to include key service users and stakeholders including United Lincolnshire Hospitals NHS Trust.
- Seek public engagement through patient representative groups and local government Health Overview Scrutiny Committees either as a specific issue or as an element of a larger health community wide or Trust wide proposal on changing present health provision.

In doing so, Path Links will aim to provide direct evidence and assurances that:

- The service efficiency and financial benefits of the reconfiguration proposals are achievable within a prescribed timescale

- None of the reconfiguration proposals have an adverse effect on patient care or patient choice.

Recommendation E1:

Path Links management endorse recommendations of the OMG to solicit key stakeholder engagement and support for the reconfiguration proposals as part of a wider consultative process running in parallel to staff consultation.

[F] FINANCIAL ANALYSIS & SUMMARY

Plan Section	Path Links Reconfiguration Proposals	Annual Efficiencies £000s
A2	Vacancy Control	10
A3	Agenda for Change Out Of Hours (OOH) Terms & Conditions	300
B1	Managed Service Contracts	200
B2	Referred Activity	130
B5	Paperless Pathology	38
B6	Pre-analytical Automation	38
C1	Income Recovery	150
C2/C3/C4	Income Growth/ Lean/Market Development *	1,800
D1	Management & Administration Support	150
D2	Training	40
D4	Blood Science Reconfiguration Proposals	350
D5	Microbiology Reconfiguration Proposals	230
D6	Immunology reconfiguration proposals	50
D7	Cellular Pathology reconfiguration proposals	50
D7.3	Mortuary Services	20
	TOTAL	3,556

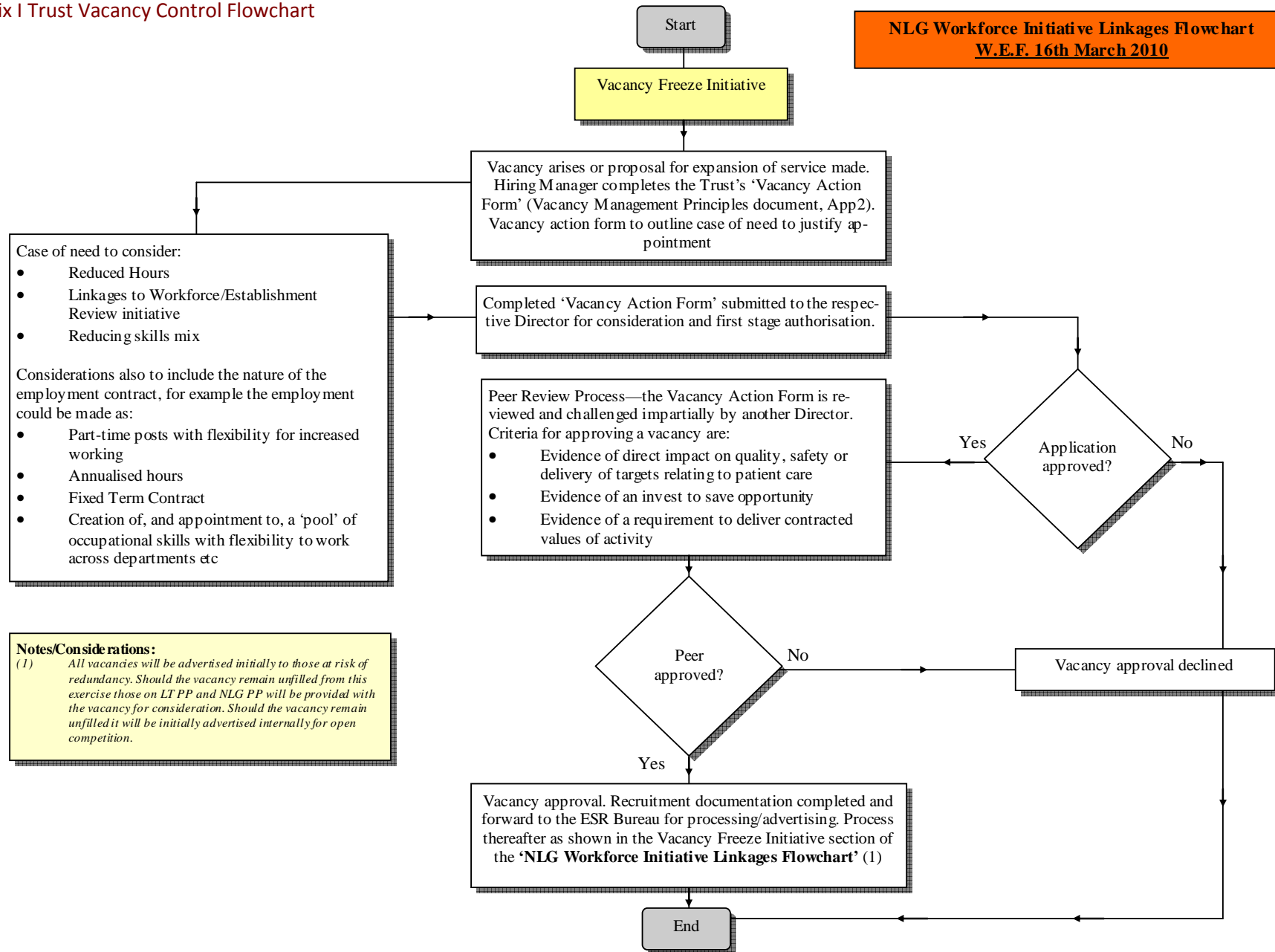
Full delivery of the actions contained in this innovation and improvement plan will achieve annual savings (or additional net income) compared to 2009/10 levels as shown above. The cost of making the transition to the future state in relation to the future state savings will be closely monitored and contained in order to maximise net benefits.

* Future state workforce levels have been set at levels that deliver 10% additional activity compared to 2009/10 levels. After allowing for consumables costs and front of house costs the resultant productivity gain is estimated at £700K. The remainder of the productivity target in sections C2/C3 will be achieved by performing additional activity above the 10% level whilst making the most productive use of resources in place through the application of Lean techniques.

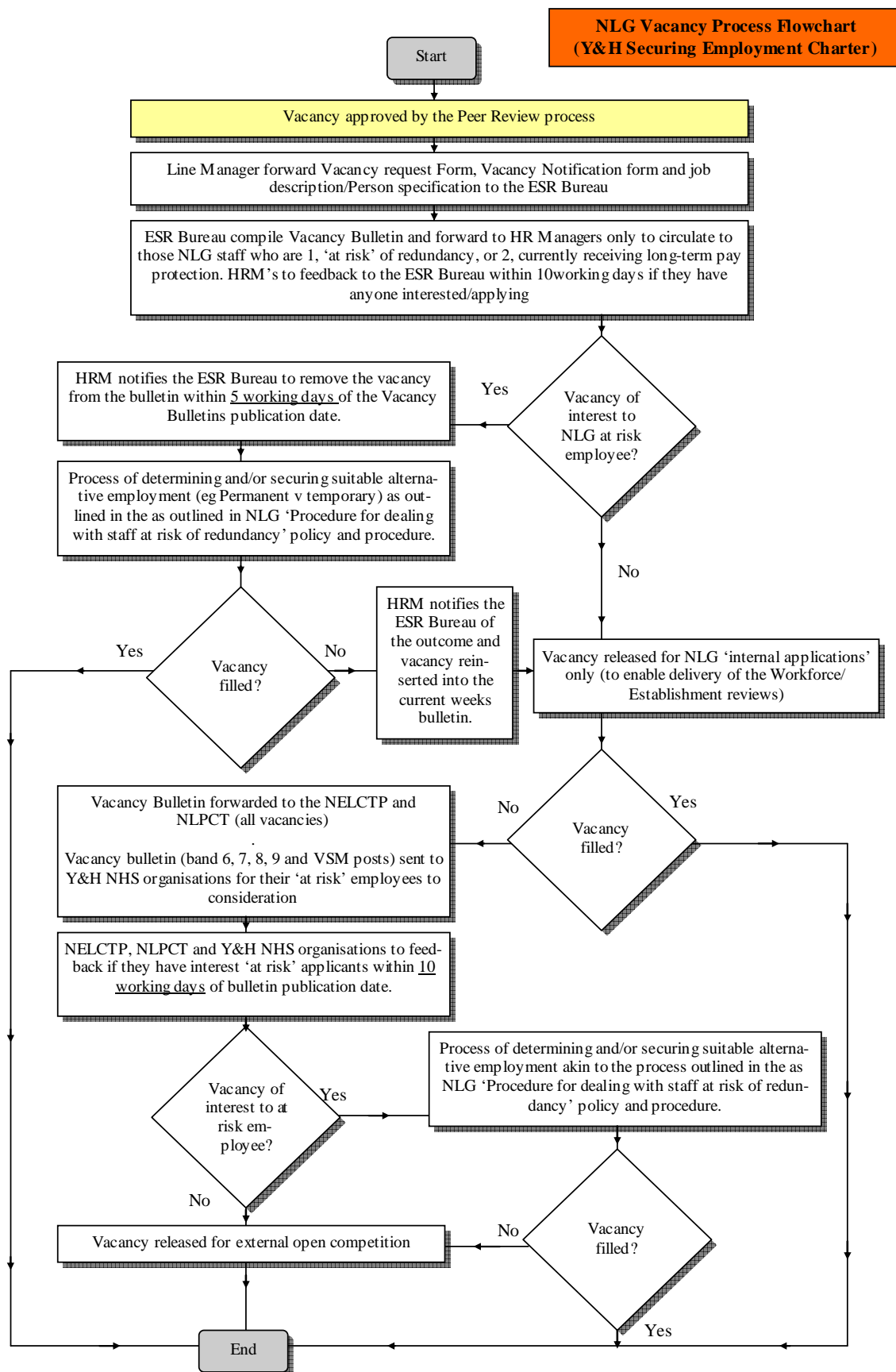
For the avoidance of doubt, delivery of income growth target is wholly dependent upon achieving productivity gains from the full delivery of all reconfiguration proposals.

Appendix I Trust Vacancy Control Flowchart

NLG Workforce Initiative Linkages Flowchart
W.E.F. 16th March 2010



Appendix II Trust Vacancy Process Flowchart



Appendix III – Consolidation of Analytical Testing - Option Appraisal Process & Outcomes

Option appraisals are conducted within the context of the wider Path Links financial recovery plan and reconfiguration proposals (*c£4m cost reduction target*).

The bulk of savings opportunities arises in Haematology & Chemistry and predominantly from:

1. The full integration of haematology & chemistry into 'Blood Science' departments
2. Bi-disciplinary working practices and OOH arrangements
3. Implementation of Lean analytical work cells
4. Layout improvements to co-locate Blood Transfusion with automated Blood Sciences
5. Adjustments to skill mix and development of AP roles
6. Further implementation of the Capacity Plan to include the transfer of all PCT activity (where appropriate) to the Capacity Laboratory; the impact of which will necessitate:
 - An assessment of the impact on the Capacity Laboratory and of residual activity on peripheral sites
 - An assessment of future viability and local availability of tests predominantly arising from Primary Care e.g. HbA1c, urine microalbumin, female hormones etc
 - An assessment of cost effectiveness and practicality of maintaining established 'non acute' specialist consolidated services e.g. Tumour Markers, Specialist Coagulation etc

The principle aim is to achieve an appropriate balance between (*reduced*) staffing levels, productivity, and the ability to provide sustained high quality accreditable services to the local hospital.

With respect to consolidated specialist activity, each area will be methodically reviewed to reach an evidenced based pragmatic decision. Decisions on local maintenance of specific tests or services, or their subsequent transfer, will be determined through an option appraisal process against a range of predefined criteria including cost, quality, sustainability and local clinical need (Appendix III [A]).

Option appraisals are scheduled for completion in advance of the proposed sequence of reconfiguration events i.e. in the following order of Lincoln, Boston, Scunthorpe.

Option Appraisal Priority Sequence:

	Analytical Service	Impact	Status
1	Specialist Coagulation	Lincoln	Complete
2	Metals, Tumour Markers, HbA1c	Lincoln	Complete
3	Esoteric Immunoassay (Immulite) , BNP, HbA1c	Boston	TBA
4	Dawn Anticoagulation Dosing	Scunthorpe	TBA
5	Haemoglobinopathy	Scunthorpe	TBA
6	Toxicology, HbA1c	Scunthorpe	TBA

Agreed outcomes of option appraisals conducted to date are presented below:

Specialist Coagulation	Appendix III [B]
Metals, Tumour Markers, HbA1c	Appendix III [C]

Appendix III [A]

PATH LINKS - SPECIALIST CONSOLIDATED SERVICE OPTION APPRAISAL EVALUATION CRITERIA

Evaluation Criterion	Option 1	Option 2	Option 3	Option 4
	<Title>	<Title>	<Title>	<Title>
	Score	Score	Score	Score
Analytical Quality Standards:				
Routine work stream TAT (guaranteed)				
Urgent work stream TAT (guaranteed)				
Timely access to reports				
Access to specialist clinical advice				
Access to specialist technical advice				
Overall Likelihood of Delivey				
Non-Activity Quality Standards:				
Resolves workforce pressures				
Flexibility & responsiveness				
Supports present & future CPA				
Overall Likelihood of Delivey				
Sustainability:				
Facilitates staff recruitment & retention				
Supports workforce development (AP roles etc)				
Supports extended test repertoire				
Overall Likelihood of Delivey				
Resources:				
Estate usage & space utilisation				
Capital investment				
Revenue consequences				
Overall Likelihood of Delivey				
Supports Reconfiguration Strategy:				
Consolidation of PCT & non-acute activity				
Implementation of core Lean work cells				
Skill mix adjustments				
Bi-Multi disciplinary working practices				
Workforce establishment review				
OOH working arrangements				
Overall Likelihood of Delivey				
Productivity & Efficiency:				
Lean 6-sigma processes				
Staff productivity				
Equipment productivity (asset utilisation)				
Overall Likelihood of Delivey				
Other:				
Clinical strategy support				
Other service links				
Transport issues				
Overall Likelihood of Delivey				
Total score				

Score 1-5 where:

1	5
Poor	Good
Unachievable	Achievable
High Cost	Low Cost
High Risk	Low Risk

Appendix III [B]

PATH LINKS - SPECIAL COAGULATION OPTION APPRAISAL 12th MAY 2010

Options are being considered for the re-development of the Lincoln Blood Science Laboratory to incorporate Lean analytical work cells and co-locate Blood Transfusion by relocating to the existing Coagulation section. This provides an additional issue to be resolved as coagulation testing will need to be reprovided elsewhere.

Four options were considered in detail against a predefined range of criteria:

Option 1: Maintain the status quo (Lincoln based separate coagulation laboratory)

Option 2: Maintain Lincoln based service but fully integrated into proposed Lean work cell

Option 3: Transfer specialist coagulation testing service to Grimsby Capacity Laboratory

Option 4: Transfer activity to an external reference laboratory

Evaluation Criterion	Option 1	Option 2	Option 3	Option 4
	Lincoln Status Quo	Lincoln BS Integration	DPoW	External referral
	<i>Score</i>	<i>Score</i>	<i>Score</i>	<i>Score</i>
Analytical Quality Standards:	12.0	25.0	20.0	5.0
Non-Activity Quality Standards:	5.0	15.0	12.0	10.0
Sustainability:	5.0	15.0	13.0	0.0
Resources:	0.0	15.0	12.0	8.0
Supports Reconfiguration Strategy:	5.0	30.0	30.0	24.0
Productivity & Efficiency:	8.0	15.0	13.0	0.0
Other:	10.0	12.0	12.0	0.0
Total score	45.0	127.0	112.0	47.0
Total Available Score	130	130	130	130

Following a comprehensive evaluation of the available options, unanimous agreement was reached supporting the implementation of **Option 2**

Recommendations:

1. Specialist Coagulation testing to be retained on the Lincoln site and incorporated within the proposed development of a Blood Science Lean Work Cell.
2. If, for any reason, specialist coagulation activity cannot be incorporated within the Lean Work Cell, the testing activity will transfer to Grimsby.
3. A further workstream to be established to formulate robust quality standards and appropriateness of test repertoire

Option Appraisal Panel

Dr Kandeepan Saravanamuttu
 Dr Bethan Myers
 Dr Kevin Speed
 Pete Wisher
 Mick Chomyn
 Graham Sparling

Appendix III [C]

PATH LINKS - LINCOLN CLINICAL CHEMISTRY OPTION APPRAISAL 25th MAY 2010

Options are being considered for the re-development of the Lincoln Blood Science Laboratory to incorporate Lean analytical work cells; metals (Cu Zn) testing is undertaken at a location distant from the main analytical laboratory. Additionally, alterations to specimen flows arising from the planned transfer of PCT activity will have a further impact on the department.

Against this backdrop, three option appraisals were considered specifically relating to the Lincoln department:

1. Metals (Cu & Zn) testing currently centralised at Lincoln
2. Tumour Marker testing; specifically activity currently consolidated at Lincoln
3. HbA1 testing where 75% of current activity will transfer

Evaluation Criterion	METALS			TUMOUR MARKERS		HBA1c	
	Option 1	Option 2	Option 3	Option 1	Option 2	Option 1	Option 2
	Lincoln Maintain	Grimsby Transfer	External Referral	Lincoln Maintain	Grimsby Transfer	Lincoln Maintain	Grimsby Transfer
	Score	Score	Score	Score	Score	Score	Score
Analytical Quality Standards:	25	22	14	25	24	25	16
Non-Activity Quality Standards:	9	15	11	10	15	11	14
Sustainability:	15	15	3	15	15	15	15
Resources:	15	7	11	15	15	12	15
Supports Reconfiguration Strategy:	6	30	30	16	30	16	30
Productivity & Efficiency:	7	11	11	9	15	9	15
Other:	15	11	15	15	15	15	6
Total score	92	111	95	105	129	103	111
Total Available Score	130	130	130	130	130	130	130

Following a comprehensive evaluation of available options, unanimous agreement was reached in support of the following:

1. Metals

Within the context of supporting the Lincoln reconfiguration proposals, the transfer of metals to Grimsby or to an external reference lab scored marginally higher than retaining at Lincoln. However, several overriding considerations resulted in the following outcome:

- 1.1 Metals to remain on the Lincoln site for an indefinite period
- 1.2 In the absence of a suitable alternative, transferring existing equipment would be impractical & incur unnecessary costs
- 1.3 Relatively low activity levels in combination with batch processing has minimal staff impact (4-6 hours per week)

Decision to be reviewed:

- a) At such time when the current equipment fails and is beyond economic repair
- b) In responding to increasing demands, changes to clinical protocol & guidelines
- c) If the maintaining metals on the Lincoln site compromises reconfiguration proposals

2. Tumour Markers

- 2.1 TM assays currently consolidated at Lincoln (AFP, CA 19-9, CA-125, CA-153, & Grantham CEA) to transfer to the Grimsby
- 2.2 The timing of the transfer to be scheduled to coincide with implementation of the Lincoln reconfiguration proposals and transfer of GP activity
- 2.3 Future reassessment of the local provision of PSA and CEA on the Grantham, Scunthorpe, Lincoln and Pilgrim sites as determined by the impact of altered Primary Care flows on residual activity levels

3. HBA1c

No final outcome was reached at appraisal following consideration of the need to continue support to local (POCT) clinical services. From an assessment of final HbA1 activity flows into Grimsby and Grantham, there would be an ultimate requirement for 2x Tosoh analysers at Grimsby and 1x at Grantham.

Continuation of local clinical service support to Diabetic services at Lincoln (and Scunthorpe) would preclude the transfer of the analyser to either Grimsby or Grantham, resulting in an ultimate equipment base requirement of 5 analysers against a current base of only 4

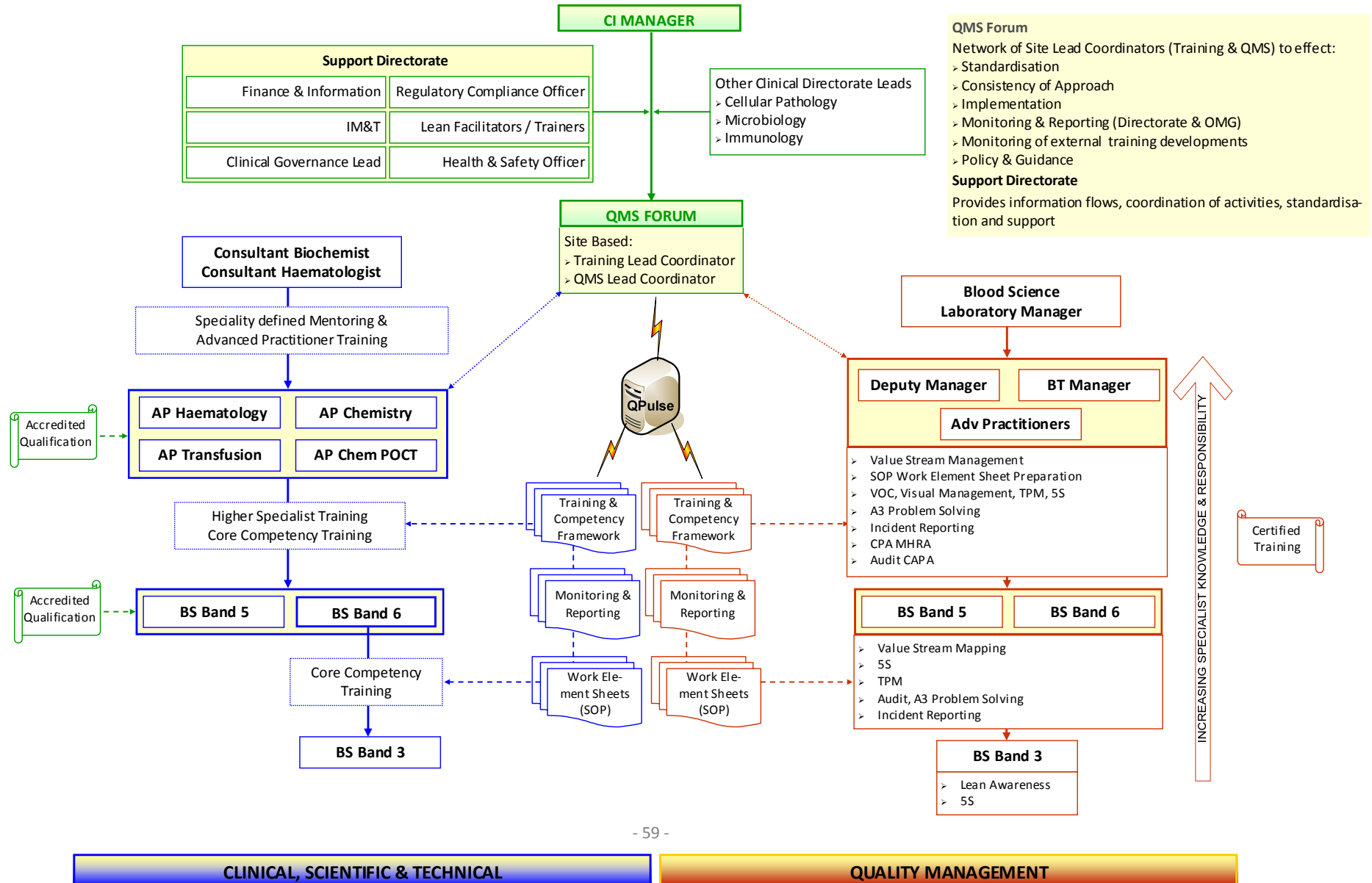
Footnote: Subsequent supplier discussions has led to the provision of a 5th analyser thereby avoiding the requirement for the transfer from Lincoln. The likely requirement for an analyser at Grantham to be confirmed at a later date.

Option Appraisal Panel

Philip Hyde	Pete Wisher
Caroline Jagger	Mick Chomyn
Martin Fottles	Graham Sparling

Appendix IV Proposed Training & Competency Framework

[Blood Science Illustration]

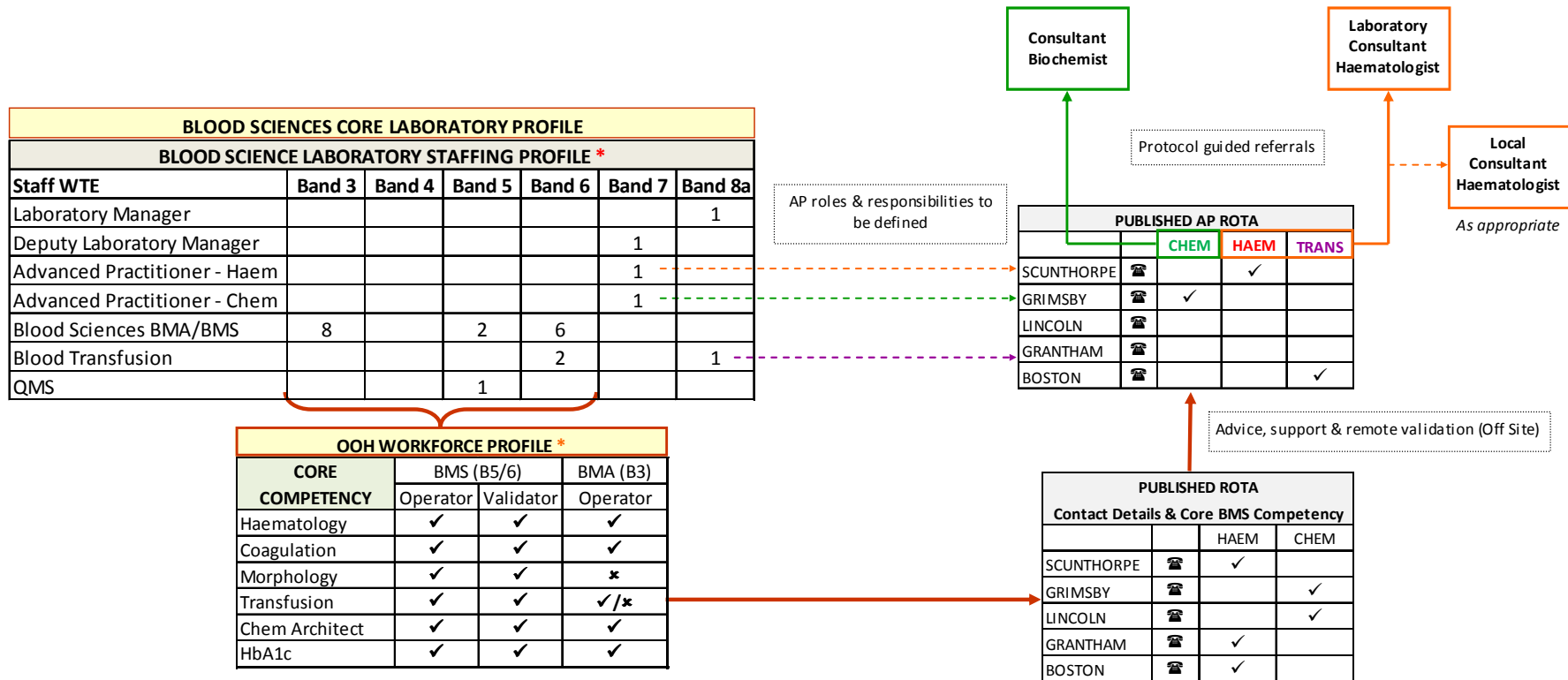


Appendix V: Path Links Reconfiguration Plan Timeline

Achieved	Consultation	DPOW	SGH
Underway	PAUSE	Boston	Lincoln
	Failed		Grantham

Qtr	Jan 2010	Feb 2010	Mar 2010	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011	June 2011	Jul 2011	Aug 2011	Sep 2011	
GENERAL PLAN Workstream 1 LEAD P Wisler, M Chomyn		1	2	3	6	9	16	21	23	24												
GENERAL PLAN Workstream 2 LEAD P Wisler						10	17			25												
BLOOD SCIENCES Workstream 1 LEAD M Chomyn, M Fottles				4	7	11	18	21			26		32									
BLOOD SCIENCES Workstream 2 LEAD P Wisler, M Chomyn, G Sparling					8	12	19	22			27		28	34	35	36	37	38				
BLOOD SCIENCES IMMUNOLOGY Workstream 3 Lead R Cartwright				5				21			27											
MICROBIOLOGY SEROLOGY Workstream 1 Lead M Chomyn, B Davies							20	21			27		29									
MICROBIOLOGY BACTERIOLOGY Workstream 2 Lead P Wisler, M Cioni								21			27		30									
CELLULAR PATHOLOGY Workstream 1 Lead F Sim						13		21			27		31									
CELLULAR PATHOLOGY Workstream 2 Lead P Wisler, F Sim, K Snee						14		21			27		32									
CELLULAR PATHOLOGY Workstream 3 Lead G Sparling, A Milner						15		21			27		33									

Appendix VI Proposed Blood Science Workforce Profile & Laboratory Staff Support Framework



Notes:*

- ◆ Incorporates Clinical Chemistry, Haematology, Coagulation & Blood Transfusion
- ◆ Single laboratory manager & deputy
- ◆ All staff must achieve operational capability in all areas through competency based training
- ◆ Development of Advanced Practitioner roles in Chemistry, Haematology (including Coagulation), and Blood Transfusion
- ◆ AP's will provide network cover across sites and provide first line laboratory OOH cover for Consultant staff
- ◆ Band 7 & 8a personnel restrictions on participating in routine laboratory OOH shift arrangements
- ◆ Staffing numbers shown to be confirmed and applicable to Scunthorpe, Lincoln & Boston only. Figures based on delivery of acute hospital activity & consideration of diversionary scheme to Capacity Laboratory for Primary Care and low acuity activity.
- ◆ Modified staffing levels to be applied to Grimsby and to Grantham based on agreed outcome of diversionary scheme

ADDITIONAL SUPPORT ARRANGEMENTS

- Lean design to site laboratory layout to minimise travelling distance between Blood Science laboratory, Blood Transfusion laboratory & Specimen Reception.
- Implementation of revised Work Element SOP format to facilitate cross discipline operations, enhance staff training & competency, and eliminate error opportunities.
- Consideration should be given to extended use of POCT where available and appropriate.
- Full implementation of electronic requesting (Order Comms) and paperless reporting
- Maximal utilisation of auto validation and remote authorisation
- Development of a pool of staff providing additional flexibility for covering staff absence across sites, audit, training and other QMS activities

Appendix VII: Serology Option Appraisal Process & Outcomes May 2010

PATH LINKS - SEROLOGY OPTION APPRAISAL MAY 2010

A total of 9 options were presented for consideration including 4 two-site options, 4 one-site options and a further option of external referral. Given the complexity of simultaneous evaluation of 9 options an initial appraisal of 2-site, 1-site, and 0-site was undertaken (Option Appraisal Table 1)

SEROLOGY OPTION APPRAISAL TABLE 1:

NFBC Evaluation Criterion	Option 1	Option 2	Option 3		Validation Comments
	Two Site	One Site	No Site		
	<i>Score</i>	<i>Score</i>	<i>Score</i>		
Analytical Quality Standards:	27	22	14		Option 3 non viable. Scores highly for reducing staff & estate usage, full service referral would reduce quality (TaT) and increase costs.
Non-Activity Quality Standards:	30	28	12		
Sustainability:	22	22	0		Option 2 (1 site) whilst likely to provide greater immediate cost reduction opportunities, provided lesser service resilience, increased transport & TaT's, and poorer alignment with sample flows and other services e.g. antenatal screening.
Resources:	32	29	19		
Supports Reconfiguration Strategy:	33	25	10		Option 1 (2 site) Provided the best fit configuration for services cf Options 2 & 3 and better supports the timely reconfiguration for the expansion of molecular diagnostics. Higher achievability.
Productivity & Efficiency:	20	25	17		
Other:	24	20	15		
Total score	188	171	87		
Total Possible Score	245	245	245		

Recommendation: The unanimous decision of the panel favoured a 2-site option for serology

A further option appraisal was conducted of the 4 2-site options presented. Option 1 represented the status quo with serology integrated into Blood Sciences and Grantham as a largely separate arrangement. Option 2 sees the full integration into Blood Sciences at both sites. Options 3 & 4 include the transfer of services from Grantham and/or Grimsby with re-integration into Scunthorpe and/or Pilgrim Microbiology laboratories (Option Appraisal Table 2).

SEROLOGY OPTION APPRAISAL TABLE 2:

NFBC Evaluation Criterion	Option 1	Option 2	Option 3	Option 4	Validation Comments
	DPoW (BS) GDH	DPoW & GDH (BS)	DPoW & PHB	SGH & PHB	
	<i>Score</i>	<i>Score</i>	<i>Score</i>	<i>Score</i>	
Analytical Quality Standards:	27	26	24	22	Maintaining the current configuration of a Grantham/Grimsby 2 site option was unanimously agreed. Proposed development would see a differentiation of the 2 sites between bulk routine serology (Grimsby) and molecular development (Grantham). Further workstreams agreed to be developed to maximise productivity & cost reduction opportunities across the 2 site service.
Non-Activity Quality Standards:	35	34	33	33	
Sustainability:	24	23	18	16	
Resources:	31	28	20	16	
Supports Reconfiguration Strategy:	34	34	28	25	
Productivity & Efficiency:	26	28	26	26	
Other:	23	23	18	15	
Total score	200	196	167	153	
Total Possible Score	245	245	245	245	

Recommendation: The unanimous decision of the panel favoured developing a 2-site option for serology based in Grantham & Grimsby

Option Appraisal Panel:

P.Wisher
G.Sparling
B.Stoddart
P.Cowling
M.Chomyn
M.Cioni
B.Davies

3 June 2010

Wellington House

133 – 155 Waterloo Road
London
SHA Pathology QIPP Leads SE1 8UG

**RE: QIPP – CLINICAL SUPPORT RATIONALISATION
WORKSTREAM – PATHOLOGY**

Dear Colleague,

Following David Nicholson's letter to SHA Chief Executives of 25 May, which set out the final shape and scope of the National QIPP workstreams, this letter provides some more information to help guide SHAs on the reconfiguration of their pathology services.

The NHS Management Board has asked me to work with you to build up your plans and to provide you with an outline of the national planning process and timetable for change. They have asked us to share with you a national planning template, which you might want to use regionally to supplement and guide your SHA QIPP planning.

This builds on work, which has been carried out through SHA Medical Directors and their nominated pathology leads, who should be able to work with you to provide the information and expertise to guide your pathology modernisation, and who should be working to a timetable of the end of June to carry out the necessary planning. I will be providing a report back to the Management Board on 14 July on the information that I receive by this date, and flagging any gaps.

Background

The Independent Review of NHS Pathology Services made a strong case for consolidation of pathology to improve quality, patient safety and efficiency. Characteristics of a good consolidated service would be end-to-end management of the service (including transport and logistics, IT connectivity and efficient and effective use of resources, including people) and the concentration of non-urgent and specialist work in one or more centralised 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 case for consolidation is based on the activity and cost data collected from a representative sample of NHS pathology pilot sites in England. Wide variations between pilot sites were found. The main factors were scale of operation (and the associated economies of scale) and the way in which staff were deployed.

In some instances, the volume of more complex and specialist pathology work undertaken on site is low, resulting in unusually high costs per test/case. A low volume of complex investigations results in expertise being spread more thinly, hindering specialisation and access to specialist expertise. Consolidating

specialist as well as routine services would enhance service quality and improve cost-effectiveness. The Carter Review forms the basis of our work on pathology as part of the QIPP workstream on Clinical Support Rationalisation.

Preferred Approach

The national pathology workstream plan, on which you have commented, sets out a clear expectation that planning for change should be on the basis of a consolidated service model, as set out in the Carter report. **Within each SHA, a 'core' lab would process all routine, high volume pathology tests and bring together specialist testing and technologies. 'Hot' labs would be provided on acute hospital sites where clinically required.** You should also consider the appropriate provision of pathology testing for and in primary and community settings. Your plan should provide details of the preferred approach, with supporting evidence. It should also state when savings will be achieved and the amount. If your approach is different from this, we would expect to see evidence of how the annual savings would be realised.

I advise that plans for change would also seek to bring together molecular pathology and genetics laboratories. This has the potential to benefit patients through better use of the laboratory workforce and more effective uptake and use of new molecular technologies and equipment. It will also provide better value for money and support higher quality through concentrating expertise.

Delivering QIPP in Pathology Services

As you are well aware, there will be a zero per cent uplift in national tariff prices and the uplift for the following three years will be maximum of zero per cent. This uplift in 2010/11 includes an efficiency requirement of 3.5 per cent. A key area to drive efficiency will be to consolidate pathology services as above to deliver annual savings of up to £500 million.

Acute trusts should also introduce service improvement programmes immediately to improve efficiency and productivity and deliver savings. We have commissioned NHS Improvement to deliver a national LEAN programme to aid you in implementing this aspect of your change plans for pathology. Evidence from this programme shows that significant savings can be achieved by implementing a LEAN approach within laboratories to strip out waste. We will be in touch with you separately about the support we can provide to providers within your SHA on implementing LEAN in pathology.

Workforce

There are potentially significant HR implications from service reconfiguration on this scale within your health economies. Close workforce involvement and engagement will be needed to minimise industrial relations issues. We would draw your attention to the importance of these considerations as part of your planning.

DH has published the Pathology Workforce Planning Tool (290828) which you may find helpful to support workforce planning and re-profiling in your localities.

Procurement

A significant element of savings from pathology service reconfiguration will from

rationalisation of buildings, facilities and equipment. While we recognise that it will not be feasible to suspend all procurement, we would expect you to review new equipment procurements and building projects in the light of overall plans for pathology reconfiguration across the wider local health economy. This will provide better value for money in the longer term.

IT

The Carter Review also recognised the need for IT to support new ways of working and to achieve an end-to-end pathology service. We will shortly send you some additional information on mechanisms, which will assist in achieving service consolidation in line with the approach outlined above. These will not only achieve efficiency savings and safety/quality improvements but will be cash releasing through reduction of unproductive activities.

Quality

Finally, I must emphasise that productivity gains are not at the expense of quality in pathology. The NHS cannot afford to let quality drop in pathology service provision if patients are to get the services they need. Consolidation of pathology services provides the model to maintain and improve quality while enabling financial efficiencies to be made.

We are also working with other QIPP workstreams on developments in pathology, which have the potential to transform patient pathways and produce savings in the wider health economy (eg new pathology tests that reduce invasive diagnostic interventions). You may wish to consider such areas in conjunction with commissioners and providers in your localities.

I look forward to receiving your pathology plans shortly. Please do not hesitate to get in touch with me or one of my team to discuss your plans, if that would be helpful.

Yours sincerely,

DR IAN BARNES
National Clinical Director for Pathology
National QIPP Workstream Lead

ANNEXE A (2)

DATA RETURN FOR CLINICAL SUPPORT RATIONALISATION (PATHOLOGY) – for submission by 30th June 2010

Please see endnotes for guidance as marked. For further queries, please contact the Pathology Programme team at pathology.modernisation@dh.gsi.gov.uk or 0207 972 4011

SHA name	NHS East Midlands	Workstream lead	Workstream sponsor	Organisations/Labs	Current Status	Current Cost	Current Networks	Future Status	Future Cost	Future Networks
		Liz Bowsher, Programme Director, Towards Excellence Change Management, 0115 968 4534 liz.bowsher@eastmidlands.nhs.uk	Kathy McLean, Medical Director							
				Path Links 1 x Core Lab in SHA	Single managed pathology network, covers: Histopathology, cytology, mortuary, haematology, biochemistry, serology, microbiology, immunology, blood transfusion,	£27, 353k (08/09)	Path Links	Continue as Network	tbc	See Rationale
				UHL 1 x core lab 2 x hot labs	Provides histopathology, cellular pathology, haematology, biochemistry, serology, microbiology, immunology, blood transfusion, blood sciences	£24,309k (2008/09)	-	See rationale	tbc	Part of M1 Corridor project
				Derby Hospitals	Microbiology, blood sciences, histopathology/ cytology, mortuary, immunology, haematology, clinical biochemistry	11,609k (09/10)	Collaborates with Chesterfield Royal	See rationale	tbc	See Rationale
				Chesterfield Royal	Blood sciences (chem., haem, transfusion, phlebotomy), microbiology, histology, cytology, mortuary		Histopathology/ cytology service for S Derbs/ E Staffs Collaborates with Derby Hospitals	See rational	tbc	See rationale
				Nottingham University Hospitals (NUH)	Chemistry, haematology, microbiology, histopathology (including cytology), mortuary, other pathology	£30,919k (06/07)	Links with NUH	See rationale	tbc	Part of M1 Corridor project
				Northampton General Hospital		£12,624k (08/09)	-	See rationale	tbc	See rationale
				Kettering General Hospital	Histopathology, cellular pathology, haematology, biochemistry, serology, microbiology, immunology	£8,805 (08/09)	-	See rationale	tbc	See rationale
				Sherwood Forest	Chemistry, haematology, immunology, microbiology,	£8,418 (08/09)	Links with NUH	See rationale	tbc	See rationale

blood bank, cell path

Note: Doncaster & Bassetlaw services overseen by Y & H

Total:

Total number of networks:
1

Total:

Net savings anticipated as part of our QIPP programme logged at £58,943k by 2013/14

Total number of networks:

See rationale

Note figures will be updated as NHS Trusts make returns to the Keele Benchmarking exercise, currently underway. Not available for all providers.

Rationale	Key projects
<p><i>Please explain the reason for selecting this option, and the relative benefits when compared with alternatives. Please include to what extent your model follows the Carter approach, and if it does not, how the outcomes will release the intended benefits.</i></p> <p>Individual Trusts in the East Midlands have invested in recent times in pathology services and there has already been significant consolidation and rationalisation and organisations have a record of providing CIPs.</p> <p>In light of Carter and the future financial environment, the approach to further harnessing gains, which will lead to improvements in quality, efficiency and professionalism, the East Midlands is taking forward a phased approach:</p> <ul style="list-style-type: none"> - Phase 1: Strategic alliance and development of M1 Corridor service. This phase is centred around two major initiatives. These are; <ul style="list-style-type: none"> • The development of a shared joint venture service along the M1 corridor, between University Hospitals Leicester and Nottingham University Hospitals. This is a dynamic and radical project with considerable potential in terms of rationalising services, use of facilities and making a step improvement in the quality of services. • Forming a strategic alliance among the organisations which provide pathology services in the East Midlands. This will recognise each organisations autonomy and also, using the lever of the current economic circumstances, provide the basis for organisations to begin to rationalise services on a strategic basis with a view to moving towards a formal network over time. This will build on current collaborative arrangements, optimise recent investment and create - Phase 2: Development of a networked service . This requires further discussion at strategic level with CEs in the region. <p>The approach has the benefit of recognising that the organisations involved are executive organisations, some FTs, some NHS Trusts and some have PFI arrangements with pathology arrangements included. It also takes account of current service investment and the need to build on the record of service, quality and CIP improvement already established in the region.</p> <p>The SHA has appointed an FT CE as the programme sponsor and a well respected pathologist as clinical lead for the programme.</p>	<p>What are the key component projects to this workstream?</p> <p>There are a number of key projects, some of which will run consecutively:</p> <ol style="list-style-type: none"> 1. The development of the M1 Corridor service: This requires services specification, the development of a business case, procurement of a joint venture partner. These stages are likely to take until August 2011 at which point the implementation phase will begin 2. Service analysis and Option appraisal: This is a project to develop coherent and comprehensive data to provide the basis for robust option analysis. We will use data submitted as part of the Keele Benchmarking exercise, and supplement this with additional data to ensure we have a coherent baseline to enable key strategic decisions to be made 3. Developing a strategic framework: This work reflects the phases set out in the rationale and will look firstly to develop strategic alliances, with a view to moving towards a networked service. This work will be taken forward with key leaders of organisations and services within the region and will lead the the development of a model of services which will deliver the required improvements to services and productivity improvements in the timescales required. This work will be led at regional level to ensure that change is based on evidence and developed options. <p>This work will also be supported by underpinning work around IM&T, estates and workforce.</p>

ANNEXE A (3)

DATA RETURN FOR CLINICAL SUPPORT RATIONALISATION (PATHOLOGY) – for submission by 30th June 2010

Please see endnotes for guidance as marked. For further queries, please contact the Pathology Programme team at pathology.modernisation@dh.gsi.gov.uk or 0207 972 4011

SHA name	NHS Yorkshire and the Humber	Workstream lead	Sherry Hirst (sherry.hirst@yorksandhumber.nhs.uk)
		Workstream sponsor	Chris Welsh, Medical Director (chris.welsh@yorksandhumber.nhs.uk)

Organisations/Labs	Current Status	Current Cost	Current Networks	Future Status	Future Cost	Future Networks
Barnsley Hospital NHS Foundation Trust & Rotherham NHS Foundation Trust	<p>Transitional phase of integrated service across both health communities (approx 500000 population). Year 3 of integration plans achieving the following modernisation targets:</p> <ul style="list-style-type: none"> • New joint LIMS • extensive GP ordercomms usage, • analytical standardisation • new comprehensive commercial joint GP collection service • Efficiency gains of £1.5 million <p>Blood Sciences Lean full lab automation in Blood Sciences scaled for maximum efficiency to deliver routine and community pathology at the Barnsley site (includes Biochemistry, Haematology, Coagulation and serology). Staff re-profiled in line with Pathology Modernisation Toolkit embracing skill-mix</p>	£15 000 000	Barnsley & Rotherham. Significant central referral to Sheffield for cancer and specialist testing			New South Yorkshire network to be created to deliver an integrated service.

opportunities.

Consolidation of more specialised testing for Immunology and special haematology at Rotherham. Both sites provide comprehensive 24/7 service.

Microbiology

All community bacteriology provided at Barnsley site with specialist microbiology, including low volume viro-serology, provided from the Rotherham site..

Cellular Pathology

No integration at present. 2 stand-alone laboratories.

Doncaster and Bassetlaw NHS Foundation Trust	Haematology, Biochemistry, Microbiology and Histopathology	£11 000 000	Standalone – single managed Directorate for 5 hospital sites
Rotherham, Doncaster and South Humber Mental Health NHS Foundation Trust	Awaiting Info	£365 000	Standalone
Sheffield Children's Hospital NHS Foundation Trust	Haematology, Biochemistry, Microbiology, Histopathology, Genetics and Specialised	£2 200 000	Standalone
Sheffield Health and Social Care NHS Foundation Trust		£61 500	Standalone
Sheffield Teaching Hospitals NHS Foundation Trust	Haematology, Biochemistry, Microbiology, Histopathology and Immunology	£24 000 000	Standalone
Northern Lincolnshire and Goole/Pathlinks Network	(See NHS East Midlands submission)		
Harrogate Hospital NHS Foundation Trust	Haematology, Biochemistry, Microbiology and Histopathology	£6 800 000	Federation network – Harrogate, Hull and East Yorkshire, Scarborough and York
Hull and East Yorkshire Hospitals NHS Trust	Haematology, Biochemistry, Microbiology, Histopathology, Genetics and Immunology	£16 800 000	
Scarborough and NE	Haematology,	£5 700 000	

Develop network further by rationalising IT framework and specialist services.

Yorkshire Healthcare NHS Trust	Biochemistry, Microbiology and Histopathology				
York Hospital NHS Foundation Trust	Haematology, Biochemistry, Microbiology and Histopathology	£12 000 000			
Airedale NHS Foundation Trust	Haematology, Biochemistry, Microbiology and Histopathology	£7 700 000	Standalone		
Calderdale and Huddersfield NHS Foundation Trust	Need to approach through formal process for information				
Leeds Teaching Hospitals and Bradford Hospitals Partnership	Haematology, Biochemistry, Microbiology Histopathology and Immunology	£50 000 000	Leeds Teaching Hospitals Trust and Bradford Teaching Hospitals Trust. The testing is based on on-site labs scaled to demand and specialist services consolidated to one of the main centres. The systems are standards across the whole network.		Develop network to ensure all pathology sites/labs are included across West Yorkshire. Rationalise IT platform and specialist services.
The Mid Yorkshire Hospitals NHS Trust	Haematology, Biochemistry, Microbiology Histopathology and Immunology	£22 000 000	Standalone		
South Yorkshire Partnership NHS Foundation Trust		£122 000	Standalone		
Total: £173,748,500			Total number of networks: 3	Total:	Total number of networks: 3 region-wide networks

Rationale

NHS Yorkshire and the Humber's proposed model is to expand the current networks in West and East/North Yorkshire (highlighted in purple above) and to create a new network in South Yorkshire – to provide three networks to cover all pathology services across the whole region.

This will create a mix of organisations capable of managing all pathology services to trusts and PCTs across Yorkshire and the Humber, enabling better flexibility and use of knowledge and skills.

This proposal is based on:

- Rationalising IT systems and platforms to enable greater cross-over and fluidity.
- Becoming leaner/smarter working (as test volumes are likely to increase rather than decrease in the future)
- Rationalising some services/creating centres of excellence or expertise – such as the genetics regional services in Leeds and Sheffield.

Key projects

Key components or milestones for this project are:

1. Establishing a Yorkshire and the Humber board with responsibility for overseeing the project at a regional level and liaising with the Department of Health, PCTs and other stakeholders,
2. For a number of investigations (to be specified in due course) a Yorkshire and Humber wide service will be developed,
3. Creating three locality projects with each of the health economies in South, West, and East and North Yorkshire,
4. Develop three locality pathology boards to oversee pathology services in each sub-region.

ANNEXE C

BLOOD SCIENCE BI-DISCIPLINARY TRAINING PLAN OUTLINE

Training for Biomedical Scientists will be structured in modules for Registered Practitioners, Specialist Practitioners, Bi-disciplinary training, Advanced Practitioners, and Managers. Each module will be further divided into practical (competency based learning) and theoretical learning (power point presentations and supporting documentation). The training and competency framework will define which competency schedules and theory based learning is required for each module.

In general terms it is anticipated that the minimum level of training required for bi-disciplinary training will be that required for a registered practitioner. However specific units from the specialist portfolio may also be required for a better understanding of issues that may arise 'out of hours'. These will be clearly defined in the framework document.

Advanced practitioners will have an additional training programme (theoretical based) to the specialist portfolio which will be written in conjunction with Clinical Scientists and Consultant staff.

Laboratory managers (and deputies) will be similarly required to undertake minimum training in a secondary discipline to fully understand the problems that may arise when they are in charge of the combined Blood Science laboratory. Whilst no firm training schedule has been formulated, it is again anticipated that this will be based around the training required for a Registered Practitioner.

Training for Biomedical Assistants will be a module comprising of competency and theoretical leaning. It is anticipated that this will also be based on the training package for Registered Practitioners to enable them to have suitable knowledge for working in an 'out of hours' environment.

Below is a provisional example of the theoretical module for Chemical Pathology. This (and other Directorate modules) will be refined during the summer by the Directorate Operational Managers working closely with Laboratory managers in the Directorate.

	Spec Portfolio Ref.	Biomedical Assistant	Registered Practitioner	Specialist Practitioner	BI-Disciplinary	Advanced Practitioner	Deputy Manager
Basic Training Modules							
Electrolytes and Renal function			√		√	√	√
Liver function			√		√	√	√
Glucose			√		√	√	√
Lipids			√		√	√	√
Calcium/Bone Profile			√		√	√	√
Specific proteins			√		√	√	√
Troponin/Cardiac			√		√	√	√
IGs/Electrophoresis			√		√	√	√
Toxicology (including urine drugs of abuse)			√		√	√	√
Tumour markers			√		√	√	√
Therapeutic drug monitoring (including lithium)			√		√	√	√
Iron/TIBC			√		√	√	√
Urine analysis			√		√	√	√
Proteins/microalbumin			√		√	√	√
Thyroid			√		√	√	√
Adrenal cortex			√		√	√	√
Adrenal Medulla			√		√	√	√
Putuitary			√		√	√	√
Fertility			√		√	√	√
Specialist Portfolio Modules							
Alkaline Phosphatase	7.1a			√		√	
Bicarbonate	7.1b			√		√	
Bilirubin	7.1c			√		√	
Blood Gases	7.1d			√		√	
Calcium	7.1e			√		√	
Creatine Kinase (CK) and CK-MB	7.1f			√		√	
Creatinine	7.1g			√		√	
Gamma Glutamyltransferase (γGT or GGT)	7.1h			√		√	
Glucose	7.1i			√		√	
Lipids	7.1j			√		√	
Phosphate	7.1k			√		√	
Potassium	7.1l			√		√	
Proteins	7.1m			√		√	
Sodium	7.1n			√		√	
Transaminase Enzymes (ALT and AST)	7.1o			√		√	
Troponins	7.1p			√		√	
Urates	7.1q			√		√	
Urea	7.1r			√		√	
Adrenal Hormones	7.2a			√		√	
Catecholamines	7.2b			√		√	
Gastrin	7.2c			√		√	
Growth Hormone (GH)	7.2d			√		√	
Human Chorionic Gonadotrophin (hCG)	7.2e			√		√	
Insulin	7.2f			√		√	
Parathyroid Hormone (PTH)	7.2g			√		√	
Sex Hormones	7.2h			√		√	
Thyroid Hormones	7.2i			√		√	
Anticonvulsant/antiepileptic drugs (AEDs)	7.3a			√		√	
Antimicrobial Drugs	7.3b			√		√	
Caffeine	7.3c			√		√	
Carbon Monoxide	7.3d			√		√	
Cyclosporin	7.3e			√		√	

Digoxin	7.3f			√		√	
Drugs of Abuse	7.3g			√		√	
Ethanol	7.3h			√		√	
Lithium	7.3i			√		√	
Paracetamol	7.3j			√		√	
Salicylate	7.3k			√		√	
Theophylline	7.3l			√		√	
Faecal Occult Blood	7.4a			√		√	
Glycated Haemoglobin (HbA1c)	7.4b			√		√	
Microalbumin	7.4c			√		√	
Prostatic Specific Antigen (PSA)	7.4d			√		√	
Specific Proteins	7.4e			√		√	
Tumour Markers	7.4f			√		√	
Urine Protein	7.4g			√		√	
Amino Acids	7.5a			√		√	
Down's Screening	7.5b			√		√	
Phenylalanine	7.5c			√		√	
Qualitative and Semi-quantitative Screening Tests	7.5d			√		√	
Porphyryns	7.5e			√		√	
Sweat Test	7.5f			√		√	
B12 (Cobalamin) and Folate	7.6a			√		√	
Trace Elements	7.6b			√		√	
Haematinics	7.6c			√		√	
Vitamins	7.6d			√		√	
Advanced Modules							
Electrolytes and Renal function						√	
Liver function						√	
Glucose						√	
Lipids						√	
Calcium/Bone Profile						√	
Specific proteins						√	
Troponin/Cardiac						√	
IGs/Electrophoresis						√	
Toxicology (including urine drugs of abuse)						√	
Tumour markers						√	
Therapeutic drug monitoring (including lithium)						√	
Iron/TIBC						√	
Urine analysis						√	
Proteins/microalbumin						√	
Thyroid						√	
Adrenal cortex						√	
Adrenal Medulla						√	
Putuitary						√	
Fertility						√	