The project is in accord with several reviews of pathology in the city culminating in the report by Professor A. Bellingham (1997), commissioned and accepted by the Manchester Health Authority (MHA), about the rationalisation of pathology services.

The project involves transfer of the Cytology Service (from the Christie Hospital) and the Public Health Laboratory Service (from the Withington Campus); together with the increased Pathology investigations arising from the closure of Withington Hospital and associated transfer of patients to Central Manchester.

Arrangements were established in March 2000 in order to organise and manage the progression of the project objectives. These arrangements involve a Chief Executive Officers/Regional Office, Project Steering Group Chaired by the Regional Office (Mr K Wright) and a Project Working Group Chaired by Manchester Health Authority (Dr A Hoskins).

Supported by the NHS Executive (North West) and Manchester Health Authority the Project 2000 initiative has developed as a partnership between the following organisations:
Central Manchester and Manchester Children's University Hospitals NHS Trust (CMMCUH)
Christie Hospitals Trust
Manchester University
Public Health Laboratory Service (PHLS)
South Manchester University Hospitals Trust (SMUHT)

Further information from:
Dr K Hyde 0161 276 4374 khyde@labmed.cmht.nwest.nhs.uk
Mr M Howard 0161 276 4420 mhoward@labmed.cmht.nwest.uk
Dr A Hoskins 0161 237 2743 hoskinsa@manchester.nwest.nhs.uk
Dr I Farrell 0151 529 4921 ifarrell@nw.phls.nhs.uk
Ms N Bering 0192 570 4154 nicola.bering@doh.gsi.gov.uk
Executive Summary  (Figures 1, 2 & 3)

Key features
- First steps in partnership working
- Transfer and integration of Cytology Laboratory Services
- Enhancement of Manchester Cytology Training Centre
- Transfer and integration of Manchester Public Health Laboratory Service
- Establishment of Unified Microbiology Service
- First steps in the establishment of a managed clinical network
- Delivers aspects of the "Bellingham" recommendations
- Facilitates transfer of clinical work upon closure of Withington Hospital
- Establishment of Microbiology Laboratory facilities at Wythenshawe Hospital
- Further development of Autolab facilities at Central Manchester
- Development of Molecular Biology facilities at Central Manchester
- Efficiency savings

The project involves the design and construction of an extension to the Clinical Sciences Building at Central Manchester and Manchester Children's University Hospitals NHS Trust (CMMCUH) based at Manchester Royal Infirmary and the transfer of staff and services to accommodate:

- **CYTOLOGY**

  Involving the transfer of 50 staff, the development will create one of the largest Cytology centres in Europe, which will be fully integrated with Gynaecological Pathology, and the clinical departments of Gynaecology and Oncology at St Mary's Hospital. The modern laboratories and equipment will enhance the prospects of profitable research into new screening techniques. The Manchester Cytology Training Centre is to be housed in purpose built accommodation and will continue to offer high calibre training to staff throughout the North West Region.

- **THE MANCHESTER PUBLIC HEALTH LABORATORY SERVICE (PHLS)**

  Involving the transfer of >100 staff. Following integration with staff and facilities at Central Manchester a “Unified Service” for the provision of Microbiology Services will be developed. This new service will provide comprehensive Microbiology Services to Central Manchester, SMUHT and Christie Trust and specialist services to a wide range of Trusts across the North West region and beyond. In addition to the development at Central Manchester, Microbiology (Bacteriology) laboratory facilities will be established at Wythenshawe hospital.

- **AUTOLAB FACILITIES**

  Further development of the joint Biochemistry \ Haematology automated laboratories (Autolab). This non-stop pathology facility will continue to develop enhanced automation (robotics) capabilities and will facilitate technology transfer with realisable benefits to service provision. Specifically, the development will facilitate the transfer of GP (Community) Pathology Services and in-patient services from Withington.
The Automation and Autolab development is "evidence based", following detailed studies of laboratory services in 10 of the top 20 hospitals of the USA, Japan and Europe. At least five TLA (Targeted Laboratory Automation) systems are fully operational in the USA and there are a number in Japan as well as recent installations in Europe. There are presently no full TLA systems in the United Kingdom.

MOLECULAR CENTRE

Following a process of National competitive bidding against the department of Health’s Pathology Modernisation Fund for the year 2000-2001, the Central Manchester Trust was awarded £965,000 to fund a project to develop services in Molecular Laboratory Medicine. This funding is being used to create a purpose-designed, cross-discipline laboratory to provide a state-of-the-art Molecular Diagnostics Service in Laboratory Medicine to the City of Manchester and surrounding areas. The new laboratory will also provide a high-class facility for molecular biology research and development activities. The bid, representing a partnership between Central Manchester, PHLS, and the Infectious Diseases Unit at North Manchester General Hospital.

CONTEXT

There have been ten local and national reviews of Pathology Services over the last twenty years. The most recent of these being the Touche-Delloite review (financially driven) and the subsequent review by Professor Bellingham (a Professional review).

In parallel with these pathology reviews there have been a number of clinical reconfigurations and facility developments across the city. Specifically the transfer of patients from Withington Hospital (prior to and upon closure) to Central Manchester, together with the reconfiguration of clinical services e.g. Renal Services, Neuroscience's and substantial private finance developments at Central and South Manchester Trusts.

The Bellingham Review of Pathology (1997) made specific recommendations regarding the configuration of Pathology services in Manchester:

- The transfer of Cytology Services and specialist services to Central Manchester Healthcare Trust.
- The establishment of appropriate Microbiology Services at Wythenshawe Hospital
- The development of a Unified Microbiology Service involving close working relationships between CMHT and the PHLS.
- Transfer of specialist services to Central Manchester
- GP's to use a provider unit of their choice

MANAGEMENT ARRANGEMENTS

Microbiology
Management arrangements for the Unified Microbiology Service were agreed in Autumn 2000. The arrangement will be established following agreement of a "Memorandum of Understanding" between Central Manchester and PHLS and prior to the "physical" merger of the two organisations. (Appendix 1)

Cytology
Interim management arrangements for the Cytology Service were introduced in advance of physical merger (June 2000). A combined management structure is in place reporting to a Cytology Management Board consisting of representatives of both Trusts and Manchester Health Authority. (Appendix 2).
Figure 1: MODERNISATION AND ALLIANCE IN MANCHESTER

Current Facilities at Manchester Royal Infirmary (CMMUCHT)

Clinical Sciences Complex 1995

Microbiology/Virology Integrated University Service & Departments
- Research integrated PCR Molecular Biology sequencing facilities
- Grant support EC, Welcome, Industry etc
- Focus on diagnosis of infection epidemiology acquired infection
- Therapy of infection by recombinant proteins

Histopathology /Cytopathology
- University Consultant academic staff
- Electron Microscopy
- Integrated Histopathology/ Cytopathology
- Fully computerised
- CPA accredited

University Teaching
- Undergraduate Medicine, Science and Nursing
- Postgraduate DpBact/MSc in Medical Microbiology, 15-25 students per year
- Postgraduate PhD programme, 4-6 graduates per year

Mortuary
- State of the art facilities
- Bereavement Centre
- Recently refurbished
- Large capacity bodystore
- Deep freeze facility

Clinical Sciences Building
November 1994
Figure 2: MODERNISATION AND ALLIANCE IN MANCHESTER
Phase II & III
Planned Developments 2001-

PHLS
- Relocation of PHLS facilities
- Merger of CMHT & PHLS Department's
- Establishment of Unified Microbiology Service
- Establishment of facilities at Wythenshawe Hosp
- Quality purpose designed accommodation
- Fully integrated diagnostic reference & evaluation facilities

Molecular Development
- Purpose design laboratory
- Integrated molecular diagnostic services
- Centre of excellence a "beacon"
- Development of molecular diagnostic services
- Patient benefits
- Critical mass of highly experienced staff
- Enhanced job satisfaction, increased training opportunities
- Equipment & reagent sharing
- Facilitate R & D

IT Developments
- Regional Microbiology data base (PHLS)
- Integration of systems
- Improved access to information
- The electronic archive
- Expansion of results/reporting capabilities

Targeted Laboratory Automation
- Consolidate several analytical process into one location
- Better integrate the pre-analytical & analytical process
- Streamline the analytical process
- Integrate the different analytical components of the service
- Improve throughput and turnaround times
- Enable more efficient use of staff

Call Centre
- Central reception point for visitors to CSB
- Central point for report printing and distribution
- Central point for goods delivery to CSB
- Telephone results enquiry point for DLM
- Enhanced security for CSB I & II with CCTV & intercom links to individual departments

Primary Care
- Potential transfer of Primary Care Pathology
- Development of Community Hospital at Withington

R & D
- Critical mass of science/expertise
- Potential for shared developments
- Improved University links
- Sharing of equipment
- Improved estates (+access)
- Enhanced education opportunities

Further Consolidation
Clinical Specimen Reception
Pancreatic - Biliary Laboratory
Clinical Research Facilities

Cytology
- Merger of CMHT & Christie Dept's
- Quality purpose designed accommodation
- Largest Dept of its type in UK
- The Manchester Cytology Training Centre
- Fully integrated screening, diagnostic, referral & training service
- Pilot site for liquid base Cytology

Clinical Sciences Building
Phases 1 & 2
July 2002

Aspects of paediatric/children's services
(e.g. microbiology)
Central Manchester and Manchester Children's University Hospitals Trust
Figure 3: Features and Achievements

<table>
<thead>
<tr>
<th>Features</th>
<th>Have</th>
<th>Supported By</th>
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</thead>
<tbody>
<tr>
<td>Strategy</td>
<td>✓</td>
<td>Regional Office</td>
</tr>
<tr>
<td>Supports National and Regional strategies</td>
<td></td>
<td>Manchester Health Authority</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bellingham Report</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manchester GP's</td>
</tr>
<tr>
<td>Supports the NHS modernisation strategy</td>
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<td>Government</td>
</tr>
<tr>
<td>Facilitates further rationalisation</td>
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<td></td>
</tr>
<tr>
<td>Achieves partnership working</td>
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<td></td>
</tr>
<tr>
<td>Develops on site service at Wythenshawe hospital</td>
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<td></td>
</tr>
<tr>
<td>Ensures critical mass (R &amp; D skills)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ensures critical mass (service skills)</td>
<td>✓</td>
<td></td>
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<tr>
<td>Joint managerial systems (E &amp; T)</td>
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<td>Central Manchester / PHLS and Cytology</td>
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<tr>
<td>Maximal integration of PHLS/Central Manchester</td>
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</tr>
<tr>
<td>Founded on goodwill</td>
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<tr>
<td>Integrated I M and T solutions</td>
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<td>Realistic and achievable programme</td>
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<td>Footprint size (decision)</td>
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<td>Appropriately sized facility defined</td>
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<td>Treasury funded</td>
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<td>Achieves revenue savings</td>
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<tr>
<td>Facilitation of PFI at Central Manchester</td>
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<td>Potential to centralise further work</td>
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<td>Consolidates Molecular developments</td>
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<td>Facilitates Primary Care developments</td>
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<td>Facilitates Children's Hospital development</td>
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In Summary

<table>
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<th>Enhancements</th>
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<td>Service delivery (quality) improvements</td>
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<tr>
<td>Meets Government agenda</td>
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<td>Modernises Pathology</td>
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<td>Reduces risk</td>
<td>✓</td>
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<tr>
<td>Improves research and development</td>
<td>✓</td>
</tr>
<tr>
<td>Improves Education &amp; Training</td>
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Interim Management Arrangement
Until the Re-location on the Manchester Royal Infirmary site
(Approximately June 2002)

Accountabilities

The budgets will be delegated by the Chief Executives, through the Clinical Director to the Clinical Manager. Any site specific issues unresolved by the CD/CM will be referred to the respective CEO or the Board.