University Hospitals Bristol NHS
NHS Foundation Trust

North Bristol NHS
NHS Trust

Pathology Services Briefing Paper (January 15)

1. Purpose of this paper

The purpose of this paper is to provide members of the Joint Health Overview and Scrutiny Committee with some background information regarding pathology services ahead of the meeting on the 19th January 2015.

We understand that some members of the Committee are new. In this context the intention is to use this paper to provide a brief introduction to pathology and the role it plays in the delivery of health care services. The paper also explains how the local Trusts are implementing the final recommendation of The Independent Inquiry into Histopathology Services by developing an integrated cellular pathology service within the City.

At the Committee meeting on the 19th we will provide a presentation which outlines the development plans for pathology services and respond to the questions of Committee Members.

2. Pathology Services

Pathology is a broad science with different disciplines that work in significantly different ways. The disciplines are:

- Chemical Pathology, the chemical analysis of bodily fluids;
- Haematology, the study of blood cells and blood function;
- Immunology, the study of immune function;
- Infection Sciences, the identification and treatment of infectious agents;
- Cellular Pathology, which includes both Histopathology, the examination of tissue; and Cytopathology, the examination of cells from different tissues to determine disease,
- Genetics, the study of genes, heredity, and genetic variation.

These disciplines operate largely using different technologies and different staff groups.

Pathology provides diagnosis, treatment monitoring, drug and susceptibility testing and health screening among its many functions. Most pathology work is non-histopathological and requires blood or other samples for expert analysis. Many thousands of blood tests are processed on a daily basis. Tests are either urgent ("hot") for example involving patients attending A&E or providing safe blood transfusion post-surgery, or more routine ("cold") tests such as monitoring patients with diabetes in the community, or in the investigation of chronic ill health in both GP surgeries & hospital outpatients. Approximately 50% of all pathology work is performed on behalf of primary and community care services.

Without timely high quality pathology services the NHS cannot function properly, delays in A&E services would be greater, and diagnosis and treatment times would

be extended. In this context acute hospitals require emergency pathology services to operate on a 24/7 basis in order to provide effective patient care.

Any perception that pathology relates mostly to post-mortems is incorrect with these services accounting for less than one percent of the workload.

Historically some regional services such as Genetics, Newborn Screening and Cervical Screening have been provided for the whole south west region by North Bristol NHS Trust (NBT).

Public Health England (PHE) works closely with hospital microbiology services across the UK. PHE Bristol is currently based at University Hospitals Bristol (UHBristol) and provides specialist work, including a regional virology service, and a full microbiology for UHBristol and the Royal United Hospital Bath NHS Foundation Trust (RUH). The service is currently split between aging premises on Myrtle Road and laboratories at the BRI.

In recent years both UHBristol and NBT have integrated their respective Chemical Pathology, Haematology and Immunology services into combined Blood Sciences departments at each hospital, capable of 24/7 service provision. These are centred on large scale automated equipment which is procured jointly but currently operated independently by each Trust.

3. Pathology Reconfiguration

Following a review by Lord Carter into pathology services, large scale service reconfiguration across the country was considered by the Department of Health. As part of this work the Bristol, North Somerset and South Gloucestershire health community undertook a full review of local pathology services. The vision at that time was to create a new service under a single organisation to provide pathology services to the three local acute trusts and community services. This was known as the Severn Pathology project. The Local Authority Health Scrutiny committees supported this approach.

Experience in other health communities in England has ultimately concluded that the single provider model does not deliver the level of savings originally estimated in the Carter Review as many had already been realised within the individual organisations.

4. Bristol Histopathology Inquiry

The Bristol Histopathology Inquiry focused on the provision of Cellular Pathology (Histopathology) across the city. The majority of the recommendations have now been implemented including the appointment of a joint cross Bristol clinical lead for the service and closer working arrangements between the departments at NBT & UHBristol.

To fulfil the final Inquiry recommendation of bringing these services fully together, certain pre-requisites needed to be in place. These were suitable accommodation, a single information technology (IT) system and well managed logistics (transport) services.

Following investments in these elements we will be in a position to meet these requirements by mid 2015. The key developments include:

- A new laboratory adjacent to the existing laboratory at Southmead Hospital will be complete in early 2015 to house a single combined Cellular Pathology department for Bristol, and a combined infection sciences department (joining PHE Bristol & NBT microbiology).

- A new IT system for all of Pathology will be deployed in summer 2015 across the whole Bristol, North Somerset and South Gloucester (BNSSG) area.
- NBT is currently out to tender for a logistics solution which will provide robust sample transportation between healthcare sites.

In December 2014 the Trust Boards of UHBristol and NBT approved the business case for this reconfiguration of cellular pathology services to take place in the summer of 2015 with NBT as lead provider of the service in the future.

Expected benefits of cellular pathology reconfiguration

The combined service will be more resilient. Each specialist team of consultants will be able to cover planned leave and be more able to cope with unexpected, disruptive events. The technical and administrative service will benefit from the larger teams working in the purpose built core laboratory at NBT and supporting the service in the Essential Services Laboratory ("hot lab") at UHBristol.

Similarly the service will be more sustainable. The specialist teams of consultants will be larger and are more able to provide professional support between their members combining expertise for more complex cases. Further it is believed that recruitment into such a service largely based in a purpose built new laboratory will be easier.

The service will apply the quality standards described in the Royal College of Pathologists Key Performance Indicators (KPIs) – a process which has already begun. A dashboard of the KPIs is already provided to the commissioners as part of their monitoring of pathology services. Bringing together all staff groups creating larger teams will enable different ways of working, taking the best from existing practice and learning from experience elsewhere in the country. In particular moving away from very small specialist teams of consultants will enable double reporting to be fully implemented.

Importantly, the service described in the Business Case fulfils the recommendations of the Histopathology Inquiry.

The needs of each clinical team (e.g. surgical teams) vary and the single cellular pathology service for Bristol will develop previous analysis of the clinical work in order to tailor how each pathology specialist team meets these needs. The level of service provision will be agreed with all organisations and documented in Service Level Agreements with partner organisations.

5. Development of Pathology Services

The plan for pathology provision across Bristol and South Gloucester from late summer 2015 is therefore that:

- UHBristol will continue to provide a consolidated Blood Sciences department at the Bristol Royal Infirmary (BRI) 24/7. This is important in meeting the clinical needs of the services provided by UHBristol, particularly the acute nature of care required in the adult and paediatric Emergency Departments but also to service the inpatient and outpatient requirements of clinical services and hospitals within UHBristol (including the BRI, Bristol Royal Children's Hospital, the Bristol Heart Institute, Bristol Haematology & Oncology Centre, St Michael's Hospital, Bristol Eye Hospital, Bristol Dental Hospital, South Bristol Community Hospital). .
- Infection Sciences will be provided jointly by NBT and PHE from the Southmead Hospital site

- All other Pathology services will be provided by NBT from the new laboratory complex at Southmead, including the 24/7 support required by NBT.

All of these services including those managed independently by UH Bristol and Weston Area Health Trust will operate on a single IT system providing the local health care community with a seamless service across the area.

In this context Pathology in Bristol has developed significantly in recent years, with many of the services now integrated into a single organisation. The changes that have been implemented will help the pathology teams to deliver high quality services and respond to future service demand.

6. Joint Committee Meeting

We look forward to the opportunity of discussing these plans with the Joint Committee on the 19th January and in answering any questions you may have regarding the development of pathology services in Bristol.