NETWORKING: LIGHTING UP PATHOLOGY'S FUTURE?

David Wells, Head of Pathology Consolidation for NHS England and NHS Improvement, outlines the progress made on pathology network consolidation and introduces the pathology quality assurance dashboard.

"Consolidating pathology services allows for most consistent, clinically appropriate turnaround times ensuring the right test is available at the right time. It makes better use of our highly skilled workforce to deliver improved, earlier diagnostic services supporting better patient outcomes. Taking a hub and spoke approach to this consolidation can ensure an appropriate critical mass to support specialist diagnostics, so that patients have equal access to key tests and services are sustainable."

Since we published our proposal to form 29 pathology networks in September 2017, we have seen organisations across the country take the steps needed to make networks a reality. Our message has not changed and has been strengthened in the NHS Long term plan (LTP), signalling that pathology networks are here to stay and a key part of the commitments set out by the NHS in England to deliver better care for our patients. It is heartening to see that across England we are now seeing the landscape in pathology change in the way that services are delivered, but also the positive way in which the life science industry, such as diagnostic suppliers, are interacting with local services and networks.

Progress made

We have reported in our "Pathology Networking in England: State of the Nation 2019" publication that over 97% of all trusts in England are making progress towards networking their pathology services and that we are on track to deliver 29 pathology networks across England by the target date of 2021. Pathology networks are central to other developments, such as the genomics programme, primary care networks, and rapid diagnostic centres, but also to ensure staff and technology are retained and used to best effect so that patients receive the right test at the right time using the right equipment and expertise.

We know that digital working is key to successful networking and an important part of the future of healthcare. Interoperability of systems, using common standards and protocols for digital working is going to be vital not only so that we can seamlessly share patient records and results, but also so that where we work becomes more flexible, allowing biomedical scientists to work where they add most value, or

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simply where they choose if that is possible, and even enabling remote reporting for some. We are working with the sector to set standards and articulate the vision for the future, this work is being done with the professional bodies and recognised system experts drawn from the pathology community.

Working with the Office of Life Science and UK Research and Innovation (UKRI) we have been able to secure £50m funds to support the roll out of digital pathology across a number of centres and networks. This and the innovations in other areas of pathology will put us in a world leading position. Earlier and smarter use of diagnostics in the right context will benefit patients as well as bring about the required changes in our international standing in important areas such as cancer outcomes. Performing 100% of diagnostics at the right time, on the right person, will impact on all areas of healthcare.

Capital awards continue to be made to organisations that are networking their pathology services, which shows the commitment to helping the sector achieve this change. With the Office for Life Sciences, we are encouraging the speedy adoption of digital pathology, supporting centres of excellence and networks to benefit as many people as possible as soon as possible. The Department of Health and Social Care's (DHSC) recent announcement that it is to invest £50m in digital pathology and imaging reinforces this.

We have also been considering the impact that staff can have. In England, there are an estimated 3.06 medical pathologist per 100,000 head of population, this compares internationally with 3.94 in the US and 4.81 in Canada.

We also know that recruitment and retention of staff within pathology departments has for a number of years been challenging. There is an overall national vacancy rate of 8% for all staff in histopathology and cytology and this rises to an 11% vacancy for consultant histopathologists and a 10% vacancy for state registered biomedical scientists.

Advanced roles
We know that adoption of advanced roles, in the same way as cutting-edge technology, will enable us to do better for our patients. It will also help close the recognised gap in the workforce, making working in pathology a more interesting and rewarding career choice with a greater diversity of roles available to

29

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scientists. The upcoming NHS England People Plan will seek to deliver new ways of working across all of healthcare to make the NHS the best place to work and to utilise our workforce to the greatest effect. In support of this we are enabling the training of approximately 62 biomedical scientists to undertake the advanced reporting and dissection qualifications offered jointly by the IBMS and RCPath to embed these roles into networks at the earliest opportunity.

Specialist pathology services often cover multiple networks or provide unique national services. In 2018 we asked all specialist trusts to work with designated local networks but also consider the wider opportunity for working nationally. We have identified several attributes of exemplar specialist services:
- clinically specialist pathways
- academic interest and innovation programmes
- scientific expertise, education and advanced roles
- use of "gold standard" equipment and methodologies
- highly specialised clinical advisory service and link between clinical teams.

Specialist testing changes over time. It could be linked to a particular test, pathway or a whole specialist service, the specification of which may include the unique technology, staff expertise or approach.

As technology advances we need to support our people, who are our greatest asset, to keep their skills up to date. Specialist services should have links to other areas nationally to avoid isolation or progress elsewhere making it difficult for their experts to maintain their competencies. This is particularly important as some organisations may bring more tests within a network where previously tests were not performed. We need to guard against creating new capacity and stretching expertise to the detriment of existing capability and expert staff.

PATHOLOGY QUALITY ASSURANCE DASHBOARD

- **Aspirational metrics**
- **Health check**
  - Serious Incidents
  - Staff turnover/ sickness
  - Activity
- **Operational performance**
  - Turnaround times
  - Logistics
- **Commercial/ procurement/ innovation**
  - Capital planning/ contractual meetings
  - Innovation and adoption planning
- **PQAD**
- **Quality and clinical governance**
  - Accreditation
  - Adherence to national standards
- **Stakeholder engagement**
  - Clinicians and users
  - Commissioners
- **People**
  - Training and education
  - Agency and locum use

Developing approaches
As we roll out networked working, the impact seen in the early adopters underlines the importance of this new model. Networks that have completed the transition from single-site operation to a networked model have seen their average cost per test drop by 20%. Some trusts developing their networked approach have already agreed contractual savings of £18m over five years by buying equipment jointly. We are also aware of one network where the proposed savings in joint procurement are many times this figure. Others have found ways to alleviate shortages of key staff, with access to a pool of 40 consultants to avoid delays to diagnostic results for cancer.

All of these benefits have been completed without detriment to patient care, and this must be central to the drive towards networking of services. To that end, NHS England and Improvement have re-launched the Pathology Quality Assurance Dashboard.

The first version of the pathology

quality assurance dashboard (PQAD) was launched in response to Dr Ian Barnes' pathology quality assurance review, which noted that:

"The current pathology quality assurance framework lacks several key factors: transparency, integration, scrutiny, oversight and effective triggers for reward and sanction, without which we cannot say the best interests of patients and healthcare generally are truly being served."

The review recommended that a PQAD be developed, which would draw "transparent and meaningful information from existing data sources to provide a national picture of quality improvement across England, to enable trend analysis and the identification of opportunities for development of the system".

The original metrics, although useful for determining a pathology service's performance, did not test systems and provision when they were not owned by the host trust. They also collected data that was not timely or already assured

through other routes (for example, via the laboratory's accreditation status).

Explaining the PQAD
Individual trusts must understand how pathology services can be more effective and efficient. That means the PQAD needs to be an effective board-reporting tool, with metrics that allow timely interventions focused on delivering high quality patient services and driving improvement.

We reviewed the PQAD, taking feedback from pathology providers and representatives of the Pathology Alliance. Where possible, we have taken a similar approach to the Royal College of Pathologists as it refreshes its key performance indicators. Metrics are broken down into sections that describe where they are testing the system.

To conclude, as networks develop their individual cases for change, NHS Improvement's original efficiency targets have been shown to be conservative estimates. Networks that are well into the transition stages of pathology consolidation are seeing these benefits, while delivering clinically effective, safe services. Now, after several years, Lord Carter's original ambition for pathology services is becoming a reality. In implementing proposals, networks have locally agreed milestones by which they are held to account. The programme's stated approach has always been to allow trusts to make alternative proposals if they are equally efficient and enable the system-wide benefit of networking on a large scale. It is also important for us to continue to revise our proposals as other national programmes and networks develop as networking is just the start of modernising pathology.

A statistic that captures the impact achieved to date on networking is the average price per test in England. Since networking started this price has dropped from £1.95 to £1.81, which equates to £167m that can be re-invested in NHS services.