



The Royal College of Pathologists

Pathology: the science behind the cure

Essential Services Laboratories

NHS Improvement (NHSI) has identified 29 potential pathology networks in England to deliver more efficient, high value pathology services. Each network will have a hub laboratory and several spokes, also known as Essential Services Laboratories (ESLs). The spoke labs will provide essential services only, with all non-urgent work being centralised in the hub.

The potential standardisation of pathology services, both in terms of quality and cost, is welcome. Many pathology services are overstretched and change is clearly needed. We welcome the opportunity to engage with the process, build more flexibility and resilience into the service, populate more informed detail of the specifications required for both laboratory services and IT, and help align more realistic timescales and budgetary expectations.

We have some general concerns about the network proposal, which we have already raised. While recent work on data collection is a positive step, solutions to other challenges have not yet been forthcoming.

In particular we are concerned about the emphasis on a one-size-fits-all model, with a single hub and multiple spokes, which will not suit all designated networks; some will be very complex and may be better served by a multi-hub and spoke model. Given the current lack of hub capacity, the potential availability of space in the hubs, the resistance of many staff to move location and the absence of any overlap between some pathology services, consideration should be given to hosting different services in different trusts rather than centralising everything in a single hub.

Lessons learnt

There are undoubtedly NHS and international examples of successful consolidated services. However, there have also been several unsuccessful attempts at consolidation. The Pathology Partnership (tPP) in the East of England is an example – this folded with significant debt despite being based on the proposed model. The East of England network is based on the old tPP (plus Peterborough) but there is nothing to explain why the outcome will be any different this time. It is important that experience is shared; both best practice and 'how not to do it'.

In order to help support successful consolidation the College has published a series of articles sharing members' experience of consolidation, particularly focusing on the lessons learnt. It would also be beneficial to learn from the experience of pathology modernisation in the devolved UK countries, each of which had taken a slightly different approach.

Hub capacity

The biggest assumption being made is that hubs have capacity to take on the workload of the spokes. In many networks the designated hub is already overstretched and work is being outsourced. Some are housed in overcrowded buildings which are not fit for purpose. Turnaround times are often worse in the hub than in the spokes. Some hubs have poor public transport provision, are surrounded by gridlocked roads and have insufficient parking spaces. Staff currently working in the spoke hospitals may not wish to work in the hub, or travel may not be practical. Many of the successful consolidation models have involved

significant investment in new premises. This level of investment across all networks is unlikely to be feasible. It is not clear how hub capacity will be increased.

Laboratory Information Management System (LIMS)

It is vital for all labs in a network to use the same LIMS. However, we know that this is not currently the case and procurement and implementation can take 2-5 years for such a project. There is also the small matter of cost, which could be up to £5M per network. Without this the rest simply cannot happen; there is no way to manually order and transcribe up to 50 million tests per year within each network. Pathology services need to understand how integrated LIMS will be procured before committing to the network model.

Digital pathology

Is an opportunity being missed to encourage investment in digital pathology? The procurement of new LIMS provides an opportunity to consider how this technology can be exploited and would offset at least some of the challenges of removing onsite histopathology provision from the spokes.

Logistics

Reliable transportation is clearly vital but not always easy to achieve. A journey from spoke to hub that takes an hour at 3am can easily take twice as long during the day. The scope of ESLs should reflect local infrastructure, which may be one-hour turnaround for a spoke close to the hub and 3-4 hours for one further away.

Economies of scale

“Economies of Scale” have been mentioned as one of the main advantages of the network model but our experience is that the predicted savings are not always realised. The cost, hassle and feasibility of transporting millions of specimens needs to be questioned, especially when that testing is relatively simple to deliver from local automated platforms for a marginal few pence per test i.e. clinical urgency is not the only factor to be considered.

Workforce

With existing significant recruitment issues for certain staff groups in particular parts of the country, and the relative resistance of staff to move location, there is a risk of losing valuable experienced staff. Contract issues will further complicate things. Will all employment contracts be held by the hub trust? What are the TUPE implications? Many staff are likely to take the opportunity to leave or retire. With the emphasis on downsizing the workload to the “minimum” profile and skill mix required, there is a risk that vital “added value” services will be lost, especially in the hospitals with only a designated ESL.

Budgets

With such wholesale shifting of workload and staff across some disparate, and previously competitive Trusts, it remains unclear how the costs will be shared; this is likely to be complicated and will take time to sort out. We are aware of at least one consolidation attempt that failed because a funding structure could not be agreed.

Teaching

Medical students on rotation are routinely taught in spoke trusts, and many receive the bulk of their clinical pathology training there. Pathologists are typically regular contributors to grand rounds, mortality meetings and case discussions. At a time when we are trying to optimise demand for pathology services by improving students’ and junior doctors’ understanding of pathology so that they request tests appropriately and can interpret the results, it seems a backward step to remove the little practical pathology teaching they receive.

Training

If the anticipated economies of scale are realised, there will be reduced training capacity in the hub, particularly for medical trainees. ESLs should be responsible not just for site-specific training but for providing experience of working in an ESL, just as trainees currently rotate to DGHs from their main teaching hospital. The best way to recruit future staff to an ESL is to train them there.

Research

Pathologists are key members of research teams. How would research programmes in spoke hospitals be supported in the absence of onsite pathologists? Doctors in training in non-pathology specialties often write their first case reports in collaboration with pathologists following exposure to interesting pathology in MDTs and other meetings. It is important that this is continued.

Management

Separating pathology management from all other trust management, including leaving their current directorates in most trusts, could jeopardise understanding of local service requirements. Hub-based managers may not appreciate the challenges and local circumstances of spoke labs.

Standardisation of governance

While it makes sense to use the same quality management system, health and safety standards, error reporting mechanism etc across the network, it should not be assumed that the hub hospital's system and standards are the ones that should be used. Spokes may have developed more robust systems and the best should be chosen.

Operational redundancy

It is hard to imagine how savings can be made if spokes have to retain the capacity to process their own work in the result of hub failure. IT failures and road closures due to road traffic collisions or maintenance work are relatively common in some areas. Maintaining capacity and expertise in the spokes will significantly reduce the aim to centralise services and minimise cost savings.

Point of care testing (POCT)

POCT and specialised services are currently described as being out of scope but these are an integral part of many spoke laboratories and cannot be usefully separated. There is a danger that the governance around POCT is not robust at all sites, with a mechanism to incorporate POCT results into the patient record along with lab-based results. POCT is typically very costly with extremely poor governance; this is an opportunity to bring it into line with lab-based services.

Short-term pressures

During this process spoke labs may expect to see 'planning blight', with difficulty retaining staff and recruiting to roles that will eventually be centralised. This has the potential to jeopardise already overstretched pathology services. The detrimental effects are likely to be rapid but the transformation is likely to take several years – how will services be provided in the meantime?

Clinical biochemistry

More detail is required about the test repertoire to be provided in the spoke labs. There is a lack of detail, justification, evidence or professional consensus input to this – repertoire would largely depend on the local circumstances for such designated ESLs and the services they offer/expect. The laboratory service could not be expected to define this without the opinion of the wider hospital, and much resistance is to be anticipated from

clinicians/services designated as spokes who will have their services downgraded in terms of repertoire, turnaround, available expertise and “added value”.

Microbiology

It is anticipated that microbiology services will be expected to be centralised in the hubs. In the current climate of the high profile sepsis awareness campaign, UK antimicrobial resistance strategy and mandatory infection prevention control targets this does not seem appropriate.

The importance of microbiologists and biomedical scientists (BMSs) communicating between the hub and spokes has been highlighted by colleagues who have undergone consolidation as an important learning point. This direct interaction between microbiologists and scientists represents a significant beneficial addition to the analytical component that may be unrecognised and is not quantified. It is important that the soft intelligence that is gathered by working closely with BMS colleagues and scrutinising reports for validation is not lost, such as detecting the early emergence of novel antimicrobial resistance patterns or early detection of outbreaks. These may be jeopardised if clear and robust lines of communication and IT connectivity are not in place.

Histopathology

Histopathology is also expected to be provided by hub laboratories with little, if any, presence in the spokes. It is not clear how histopathology input to frozen sections, multidisciplinary team meetings, mortality meetings, grand rounds, clinical trials or medical student teaching would be provided or how surgeons and pathologists would examine complex specimens together.

Blood transfusion services

In many hospitals the provision of 24-hour transfusion services is the most difficult service to staff because of the need for trained and competent staff. This nearly always requires cross cover between haematology and transfusion, and sometimes with biochemistry staff as well. Reducing the size of many spoke pathology services will reduce the pool of staff available to man an out-of-hours service. It is likely that maintaining staff rotas will become increasingly difficult. The rapid provision of blood and other components is critical to many clinical services, even in spoke hospitals.

Timescale

While it is clear that NHSI expects to see rapid progress there are several factors outside trusts’ control, such as existing contracts and lack of space at the hub. When IT procurement and negotiating new contracts are added, it is hard to see most ESLs being established for several years. The absence of realistic timescales undermines the programme’s credibility.

On a positive note, the Royal College of Pathologists and member organisations of the Pathology Alliance are committed to working with NHSI to maximise the benefits of the programme. The appointment of Clinical and Scientific Leads for the Getting it Right First Time (GIRFT) programme will help provide essential professional input and engagement.

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