



# Transforming pathology services

**With slow progress towards pathology reform, the HFMA organised a roundtable discussion between finance directors and pathology service providers to identify what changes are needed and how the reform process can be speeded up. Steve Brown reports**

Consolidation of pathology services is 'necessary ... so that they can respond swiftly to the challenges presented by innovation, system reform across the NHS and reform of

the workforce'. This was the conclusion of two reviews by Lord Carter, chair of an independent panel set up to review pathology. Consolidation was seen as the means of improving service quality,

responsiveness and cost-effectiveness. But nearly six years on from the second Carter report, progress has been patchy.

There has been some consolidation, although not everywhere, and in some places

the joining up has yet to result in significant service change on the front line.

During the summer, the HFMA, supported by Roche Diagnostics UK and Ireland, held a roundtable bringing together finance directors and pathology service providers to discuss the reform process and identify how pathology could play a larger role in the broader transformation of NHS services.

Roche managing director Christopher Parker started proceedings by asking the fundamental question. Given the significant transformation agenda – the need to find an estimated £30bn of efficiency improvements by 2021 – where does pathology fit in the list of priorities to deliver on this challenge?

Colin Carmichael, business development director at pathology provider Viapath – born out of an original partnership between Guys and St Thomas' NHS Foundation Trust and

Serco, and now also involving King's College Hospital NHS Foundation Trust – gave a supplier's view. 'From what we see, on the provider side, pathology is quite low down the priority list of NHS trust chief executives and finance directors and is seen as an area where the difficulties of change are often greater than the financial benefits.'

## Targeting pathology

However, NHS provider organisations challenged this. 'We are in a very financially challenged position,' said Janet Perry, director of operational finance at Barts Health NHS Trust. 'In reality, we need to be looking for efficiencies across the board and that includes pathology. There is no area that can be viewed as a low priority for us.'

With private sector pathology providers already delivering services to the NHS, a



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number of joint ventures and a clear signpost towards greater collaboration from the Carter reports, the environment is more conducive to change. 'There is more willingness to do something different – to work in partnership or contract out – far more than in other clinical areas,' she said. But Ms Perry said the trust also had to consider the longer term implications of changing its current in-house pathology service provision now, while options are still emerging and before different models have had a chance to prove themselves.

'We need to ensure there is a robust economic appraisal of all the options, before deciding on our preferred option,' she said. This may explain why there has not been wider reform of pathology provision.

Marcus Thorman, chief finance officer at Imperial College Healthcare NHS Trust, said collaboration is key to service improvement. The trust has been considering setting up a pathology hub with Chelsea and Westminster NHS Foundation Trust, Hillingdon Hospitals NHS Foundation Trust and West Middlesex

University Hospital NHS Trust. 'Imperial came out of the Carter review and needed to do something across the sector. Pathology has been seen as something to deliver significant savings for organisations into the future. And if we collaborate, we think we can save more.'

Imperial is the biggest partner, representing about 65% of the total pathology activity being considered for delivery by the hub, but even so working together is still seen as important. 'In joining together with other organisations, we think we can do more than by ourselves,' said Mr Thorman.

The Carter reports identified about 160 acute trusts all providing their own pathology services. Figures from Roche suggest a significant number of trusts have subsequently entered into some form of partnership arrangement – creating a range of collaborative models. Some of these involve private sector partners. And they are at different stages of development.

However, Mr Carmichael suggested that in general the perception was that change

was taking far longer than was envisaged by Lord Carter, despite his clear prescription for improvement.

Some delegates put this down to concerns about the fast-moving technology platform underpinning pathology, while others said trusts wanted a better understanding of the optimum hub-spoke model. Others suggested that while providers saw the benefits of collaboration there was often less agreement about where the hub should be provided.

Alan Goldsman, director of finance at the Royal Marsden NHS Foundation Trust, wondered if the focus on pathology transformation was too narrow.

'We've spent time focusing on reducing the unit cost of pathology,' he said. 'Perhaps the reason we have not been successful is that we have not been looking for how we can use pathology to drive our quality, innovation, productivity and prevention targets. How can we put it at the centre of what we do and help us to reduce waste?'

The real benefits for the NHS would come not simply from driving the cost lower but in creating a 'genuine dialogue between pathology practitioners and frontline clinicians about how services could change'. For example, this could involve introducing new tests that could have implications for faster diagnosis and shorter length of stay, improving the service to patients and reducing overall costs – even if specific pathology costs increased. 'There is an opportunity for skilled diagnosticians to transform our business and pathways,' Mr Goldsman added.

He gave an example relating to his own organisation. 'There are figures showing the cost of cancer services in the UK in 2010 was

## Roundtable participants

*Pictured below, left to right*

**Christopher Parker, managing director, Roche Diagnostics UK and Ireland**  
**Chris Charlton, pathology services manager, Gateshead Health NHS Foundation Trust**  
**Janet Perry, director of operational finance, Barts Health NHS Trust**  
**Peter Ridley, director of finance, Royal Surrey County Hospital NHS Foundation Trust**  
**Lee Outhwaite, director of finance and information, Derby Hospitals NHS Foundation Trust**  
**Paul Briddock, policy and technical director, HFMA**  
**Alan Goldsman, director of finance, The Royal Marsden NHS Foundation Trust**  
**Marcus Thorman, chief finance officer, Imperial College Healthcare NHS Trust**  
**Colin Carmichael, business development director, Viapath**





£9.4bn, with drugs accounting for £1.4bn of this. Estimates suggest that by 2021, total costs will rise to £15.3bn, with drugs being £2.8bn. That's a 100% increase in the drugs bill – we can't afford a doubling of the cancer drugs bill.

He added that about a third of cancer drugs in development were based on molecular diagnostics – effectively tailored to the genetic characteristics of individual patients or cohorts of patients.

'We need to get much better at identifying the drugs that will have an impact [for specific patients],' he said. 'Pathologists have to be more at the centre of things – they need to move out of their backrooms and get into the clinical diagnostics environment. They should be involved side by side with clinicians – that is what will transform our services.'

There was broad agreement about the need to accelerate the introduction of tests. More accurate or faster diagnosis had clear patient benefits, but there could also be big benefits for commissioners and hospitals in terms of better patient pathways, fewer diagnostic tests (to pinpoint specific issues) and reduced outpatient appointments and length of stay. The trick was doing this in a way that was affordable in the short term and then sustainable.

### Drivers for change

Although there has been only modest progress towards the widespread hub-and-spoke model envisaged by Carter, there are now other drivers for change. Chris Charlton, pathology services manager for Gateshead Health NHS Foundation Trust, said pathology laboratories were much more efficient now than they were 10 years ago. 'Carter identified up to £500m of savings [from consolidation],' Mr Charlton

**Gateshead's new state-of-the-art pathology facility**



said. 'We've made little movement towards his vision in the subsequent six to eight years. But in the meantime [at a local level], we've had some 21% of cost improvement programmes, with each lab making incremental changes and pretty much delivering on this.'

In effect, this means pathology services have achieved the level of savings envisaged by Carter by a different route. 'Now I think we're at the point where we can't make individual cuts any more and that will drive collaboration,' he said. Further savings will require transformation of services rather than making the existing business model more productive.

The fact that pathology service budgets operated in silos was also unhelpful, he said. Patient pathways run across silos and investment in one part of the pathology services (paid for by hospitals to support outpatient or inpatient services, for example)

**"The disruptive innovators get us started, but how can we get on with it and not just talk about it?"**

**Lee Outhwaite**

could lead to benefits for commissioners (perhaps through reduced length of stay).

A transparent tariff for pathology tests might help, he said. This could provide further motivation for transformation and enable some business cases to be built.

Another significant driver is greater interest from primary care, which typically accounts for about half of the £2bn-£2.5bn estimated total pathology service costs. Clinical commissioning groups are taking a much





closer interest in what they get from their direct access pathology services and what they pay. HFMA director of policy and technical Paul Briddock said this interest from GPs and primary care in general has been the catalyst for many providers to start taking pathology reform seriously.

In some areas this has involved tenders being issued for the provision of primary care direct access services previously undertaken by local trusts or even just discussions about possible tenders. 'It has provided the driver to get the whole system to start looking at collaboration,' he said.

Lee Outhwaite, director of finance and information at Derby Hospitals NHS Foundation Trust, agreed. Primary care had provided the 'disruptive innovation' needed to kick start many areas into thinking of broader reform, he said, creating networks and looking

across the provision of both primary care direct access services and meeting hospital requirements. But even where trusts accepted something had to be done, he added, it was not always clear what exactly that should be. 'How many stakeholders can you put in a room together?' he asked. 'What is the right hub/spoke model?' And he added that the focus must not simply be about cutting costs.

'The critical bit is getting the pathology teams on side with how it will improve value, not just reduce cost. We need a much more general narrative about how we can drive quality up,' he said. 'The disruptive innovators get us started, but how can we get on with it and not just talk about it? We need to get on with the delivering.'

### Conditions for success

There was broad agreement that a key foundation for collaboration was executive sign-up, with agreement about the direction of travel. There needs to be complete agreement about the end goal, and this goal and the benefits need to be shared. If some trusts (the spokes) feel junior to the hub, projects could fail. Everyone needs to be committed to the agreed solution.

Timing is also key. If organisations put off transformation until there are no option, they will approach it in a negative way and the change is likely to be suboptimal. Instead, organisations must anticipate future requirements and set themselves up to deliver those needs. Mr Briddock categorised it as the need to 'move from burning platform to burning ambition'.

Mr Carmichael underlined this point. 'There is now a track record of failed collaborations,' he said. Perhaps one of the highest profile

was the collapse of a community pathology procurement in the Midlands, originally involving about 40 CCGs. CCGs in the north west and south west of the area pulled out after concerns about a reduction in the overall clinical and financial benefits and because pathology was seen as a lesser priority than other areas of commissioning.

This procurement appears to have been put on hold indefinitely, although other areas have had more success in creating pathology networks driven by CCGs. In East of England, three networks have been created to deliver community pathology services, including the Eastern Pathology Alliance (five CCGs, three trusts), the Transforming Pathology Partnership (seven CCGs, six trusts) and a one-to-one CCG/trust relationship at Peterborough and Stamford Hospitals NHS Foundation Trust.

In general, however, roundtable delegates thought progress should be quicker. 'Is there enough leadership and drive to get through to the final form in the collaborations currently under way?' Mr Carmichael asked.

In some collaborations, while participants have been identified and management brought together, the actual testing activity continues in the same way and location as before the merger. This suggests it is easier to get agreement about a generic solution than about the actual model of delivery. With difficult decisions needed about where to locate pathology hubs and how to share services across a network, Mr Carmichael





said the challenge was to achieve large-scale rationalisation with many partners involved.

Mr Briddock believed partners in joint ventures needed to change their perception. ‘Trusts have to start seeing the hub as “our hub” wherever it is located; people need to think differently,’ he said.

Peter Ridley is director of finance at Royal Surrey County Hospital NHS Foundation Trust. The trust has an integrated pathology service, known as Surrey Pathology Services, with Frimley Park and Ashford and St Peters’ foundation trusts. He said that ‘moving

mentality’ is possible, but ‘you can only get so far, so quickly’.

‘You can often get lots of partners at the outset and then two pull out at the last minute and the whole thing crashes.

We started with just two – ourselves and Frimley. This

was more manageable and enabled us to prove the concept as a 50:50 venture and then add other partners,’ he said. ‘Step by step might be the real way of getting there.’

Mr Charlton agreed that it was important to ensure all partners felt equal in any collaboration. The Gateshead pathology partnership (Gateshead Heath, City Hospitals Sunderland and South Tyneside foundation trusts) brought together three different sized hospitals of 300 beds (South Tyneside), 600 beds (Gateshead) and 900 beds (Sunderland).

There was perhaps a presumption the biggest site would provide the pathology hub, but the trusts worked hard to ensure there was no bias in the decision-making process.

‘We made sure the clinical representation was not related to size,’ he said. ‘No one site or discipline had more dominance. This took a huge commitment from each of the sites, but it got us through the hardest part of the process.’

The preferred solution was for Gateshead to carry out all non-urgent ‘cold’ pathology for all three sites – up to 80% of all the pathology required by the three trusts. Each site continues to process its own ‘hot’ pathology.

The state-of-the art facilities at Gateshead, opened earlier this year, are fully automated. While the new machines have modernised service delivery, the roundtable delegates agreed that pathology needed to get better at handling, analysing and understanding its data.

### Data and technology

According to Roche’s Mr Parker, ‘data management – big data – is not being fully leveraged’ by pathology service users and providers. Connectivity between service users and pathology labs and between different laboratories was a ‘key obstacle to more transformational change,’ he added.

Mr Thorman agreed that data was key and access to the data was also important. ‘We need there to be access to what testing has been done in hospital, ensuring everything appears in one portal,’ he said. ‘That way GPs can see exactly what tests were undertaken so they can avoid repeating them.’ The reality was that CCGs often all had different systems that didn’t necessarily talk to each other. He said a ‘cloud or portal solution’ would enable ‘better conversations about transformative change.’

Advancing technology is also fundamentally changing how some pathology services could be delivered. ‘In the United States, you can buy a finger needle, plug it into your iPhone

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**Peter Ridley**

and self-monitor,’ said Mr Goldsman. ‘We’ve almost moved to a new paradigm. Patients can do some of these things themselves. Perhaps we won’t need big warehouse laboratories; we just need to be thinking about the data management.’ His point was, effectively: we’ve waited so long to make the prescribed changes, is the proposed model still appropriate?

Mr Outhwaite agreed that self-testing would have an impact. ‘Why aren’t patients doing their own warfarin dose management if they are managing their own diabetes?’ he asked.

There was less agreement that this would or should have any impact on the move to greater collaboration. Mr Charlton warned a significant move into self-testing could be a distraction. ‘There are lots of things being promised, but also lots of things to be sorted out before they become a practical reality,’ he said. ‘How do you capture the result so you can refer back to it? What we need to understand is that there is a spectrum. First we get the brand new technology then it is refined so that it can be adopted in specialised centres and only then can it be rolled out to pathology labs in general and beyond that to the point of care.’

Greater use of point-of-care testing was definitely coming, he said, but it should not be used as an excuse to put off pressing transformational changes. ‘There will always



be a transition, but if we do nothing [and retain the status quo], laboratories will start to collapse. Point-of-care and technology will help, in part by pulling the technology in faster, but it will be part of a continuum. In the meantime, we need to avoid planning blight.'

## Incentives

The roundtable also talked about incentives inside and outside the hospital. Mr Goldsman wondered whether there could be greater incentives to adopt new tests. 'In the drugs arena, we are looking at value-based pricing,' he said. 'Could we have some form of value-based pricing for routine testing – with prices based on what diagnostic tests deliver back to the pathway? This might enable us to have a greater dialogue with clinicians.'

There were also thoughts about influencing the use of tests in hospitals. 'We had an internal recharging system at Barts, where we charged every clinical group for the tests they requested,' said Ms Perry. The aim had been to ensure departments controlled their usage of pathology, but it did not provide any incentive for pathology to work with the clinical groups to help reduce demand. We have now suspended the internal recharging system.'

Mr Briddock said a key issue was how the payment system could be used to influence clinical behaviour. Mr Carmichael added that demand management was rising up the agenda of commissioners. Pathology service providers needed to find ways of ensuring all requesting patterns reflected need and, if necessary, be incentivised to help trusts reduce demand.

Mr Briddock agreed. 'In some places there are simply no incentives for acute providers to work with primary care to manage demand. In fact, a cost per case basis for direct access

pathology often means that looking to reduce demand will reduce margin for the acute provider. But we need to take a system-wide approach to getting the right tests done to support optimal patient care.'

This might mean acute providers challenging test requests where they are inappropriate or duplicate existing tests. Or it might mean refining the test request to improve diagnosis or better referral. 'Benefits could be seen right across the pathway, from earlier diagnosis and treatment, avoided referrals and direct reduction of costs related to unnecessary tests. But the incentives at the moment don't push providers to get involved,' he added.

Mr Charlton said there continued to be significant variation in clinical practice relating to ordering tests – with significant scope for elimination of unnecessary testing and standardisation. 'We need some kind of decision support mechanism – providing a control mechanism when clinicians are really under pressure,' he said. And he added that in the absence of accepted best practice of the range of tests that should be done in all situations, the starting place was to look at the variation and get a discussion going.

Ms Perry agreed. 'Anecdotally we know there are issues. For example, there is anecdotal evidence that junior doctors order more tests, but we really need the hard data to test this.'

**“We need to take a system-wide approach to getting the right tests done to support optimal patient care”**

**Paul Briddock**

Mr Goldsman said variation was a major issue. 'We need a greater understanding of the evidence for every test – and recognise the difference between appropriate and unnecessary variation,' he said. There was widespread agreement that this again demanded closer interaction between pathologists and clinicians.

Mr Ridley added that looking to reduce test volume had to be seen in the context of patient experience. 'In the United States, they do four times as much testing, and patients feel cared for and reassured,' he said. 'So we need to understand the value perceived by patients and the need for patient education as we look to reduce inappropriate testing.'

The roundtable closed with a focus on the urgency to deliver change. The NHS is facing widespread pressures from increasing levels of chronic illness, an ageing population and the desire to deliver new, and often expensive, technologies and treatments. In this sense, pathology is a microcosm of the broader service, facing all these specific pressures.

Mr Charlton said that data showed that the over-60 population typically had an average of nine or 10 tests a year, while the under-60s had just 1.5 tests. 'Demand for pathology will continue to escalate,' he said, adding that chronic disease was also associated with higher levels of pathology testing.

The overarching conclusion was that pathology service delivery needed to change – and change faster. Change needed to be transformational – bringing pathology into the heart of the patient pathway – and not just structural. However, this change needed to be built on better data, better intelligence and better dialogue between the pathology practitioners and frontline clinicians. 

