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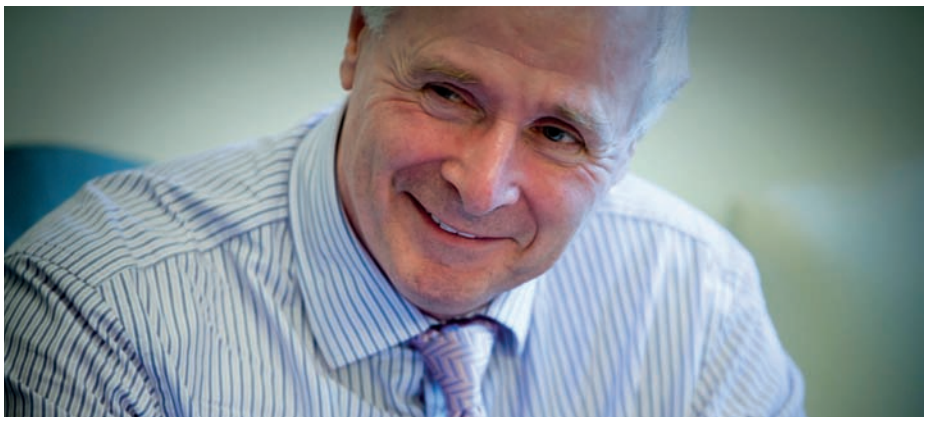
THE BIG DEBATE OVER RESTRUCTURING PATHOLOGY

Roche

WILL BIGGER

The future of pathology seems to lie in larger, efficient hubs. But will consolidation strain links with clinicians? What does it mean for more complex analysis? And how do we even define pathology? Alison Moore reports on a lively expert debate



Pathology touches almost every patient, encompassing everything from a simple blood test to complex diagnostics that determine suitability for groundbreaking drugs.

But pathology departments are under pressure to change as never before. They face increasing demand, the need to contribute to QIPP savings and continual pressure to maintain quality. Structural change has been happening for the past few years but is set to accelerate.

The Carter report in 2008 has already had a significant impact on pathology with recommendations covering network consolidation, workforce reform and IT connectivity – and its focus on potential savings of £250-500m. Last year strategic health authorities were told to look at options for central laboratories for high volume tests supported by "hot" laboratories – dealing with urgent tests – in hospitals.

But what is the right model to meet these demands from large-scale mechanised testing to personalised input of a pathologist to the care of a seriously ill patient?

HSJ brought together nine prominent figures in pathology to debate the future of this crucial part of the care pathway in a roundtable event sponsored by Roche Diagnostics. Roundtable chair and NHS Alliance chief executive Mike Sobanja set the scene by saying that the NHS was looking to save £20bn with an expectation that 40 per cent of that would come from pay freezes and reductions in staff, 40 per cent from provider efficiencies – including in pathology – and 20 per cent from savings through commissioning. So where were we now on pathology services?

Creating hubs

Dr Hemal Desai's reply showed how far thinking has come in the past few years. "In the East of England we are reconfiguring our pathology services. We have 18 trusts dealing with pathology and we are looking to consolidate that to less than four hubs for community-based and direct access services in the short term and then looking to build a framework for any qualified provider set-up in the medium to long term," said Dr Desai, who leads on pathology transformation in the East of England area. The SHA would choose who would run each hub from existing providers and have an agreed specification for pathology services, he said.

Responding to Mr Sobanja's question of whether this was an SHA managed process, he said that it was a commissioner funded process, led and managed by the SHA.

Professor Adrian Newland, director of the pathology clinical academic unit at Barts and the London Trust, outlined the position in the capital, where he said a panel had been set up to look at provision. This had concluded that 27 laboratories in the capital was too many.

Looking at the economics, the conclusion had been that a total of five hubs would be

ROUNDTABLE PARTICIPANTS

Mike Sobanja, chief executive, NHS Alliance, and roundtable chair
Professor Peter Furness, president, Royal College of Pathologists
Dr Michael Thomas, president, Association for Clinical Biochemistry
Jill Rodney, chief executive, Institute of Biomedical Science
Adrian Woolmore, associate director, KPMG
Dr Hemal Desai, GP, leading on pathology transformation in NHS East of England, and clinical adviser to the national clinical director for pathology
Dr Ray Prudo, executive chairman, TDL Group
Dr Martin Myers, clinical director of pathology, Lancashire Teaching Hospitals Foundation Trust
Professor Adrian Newland, director, pathology clinical academic unit, Barts and the London Trust
Richard Jones, chief executive, GSTS Pathology

'About 40 per cent of tests are not necessary; an organisation working on a cost per test basis would have no interest in reducing demand'

BE BETTER?

Joining the debate (from left): Michael Thomas, Jill Rodney, Richard Jones, Hemal Desai and roundtable chair Mike Sobanja. Below: Adrian Woolmore (left) and Martin Myers

best, with pathology networks linking into these. PCT clusters had been asked to come forward with their ideas.

Mr Sobanja questioned what the role of commissioners would be in this – did it involve dictating to providers what the infrastructure should look like? Professor Newland said commissioners wanted to get as cost effective a service as possible.

But Professor Peter Furness, president of the Royal College of Pathologists, said there was a more fundamental question: what was meant by pathology? In the Carter report it had been used to describe an end-to-end service but it had also been used in a different, more narrow sense.

"It raises questions about whether we are talking about a single system delivering the end-to-end service," he said. He pointed out demand management was part of this as about 40 per cent of tests were not necessary; an organisation working on a cost per test basis would have no interest in reducing demand. "We have to have a sophisticated view of what we are discussing," he said.

Richard Jones, chief executive of joint venture GSTS Pathology, said there were significant benefits in consolidating from the laboratory processing point of view, allowing the service to cope with five times the volume for just twice the cost.

"The challenge is how you do that without destroying the relationship with the whole clinical service," he said. "I would claim that GSTS is part of that solution." His company – a joint venture – is in partnership with two trusts in London and involved in the end-to-end journey.

"There is also the issue of research and development which is key to the mission of our partners but at the same time we want to realise some of the savings."

Cherry picking

The key challenge was how to deliver these efficiency savings without losing the clinical service proposition. He did not believe a pure outsourcing solution – a man and a van collecting samples – would work and favoured a partnership which would realise benefits but preserve clinical quality.

Dr Martin Myers, clinical director of pathology at Lancashire Teaching Hospitals Foundation Trust, pointed to the issue of fragmentation of services and cherry picking in direct access services. For example,

changes to one element of the service, such as direct access pathology, might save money but could impact on other parts – such as pathology in secondary care. "If we see pathology as a holistic service with primary and secondary care delivery there has to be a different solution without cherry picking," he said.

Professor Newland said in London they were clear that clinical aspects of care were paramount. They were creating a three tier approach with hubs, spokes and specialist services but had very good provision of research elements and the clinical service which they did not want to disrupt.

"We have taken very much on board the clinical importance of what we are doing," he said.

Mr Sobanja pointed out the importance of educating trainee medics to use pathology services and the impact this could have on other parts of the workforce. "We are getting more and more reports of doctors coming out of medical school not trained how to use laboratory tests or the pathology service," he said. "If that changes, then the picture changes."

Mr Sobanja said the Carter report had been produced at the end of a phase which was about controlled planning but the NHS was now entering a phase of provider business; it would be for providers to get together and plan. A result of this could be that "one size did not fit all" in terms of services: this meant that London could come up with a different solution from the one for the rest of the country. Another option would be to let the market determine the shape of the service. "What is the predominant driver at the moment?" he asked.

Professor Furness said that the market

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How will we measure quality (from left)? Ray Prudo; Peter Furness, who raised concerns over quality indicators; Martin Myers; Jill Rodney and Adrian Newland. Below (from top): Hemal Desai and Michael Thomas

was going to be important in England but already there were different models evolving. But he feared that these might evolve without people having a sufficiently sophisticated view of what comprises quality in a pathology service. Having defined pathology as the end-to-end service, how then was quality defined and measured?

"How are you going to know which model is working best?" he asked. Patient outcomes are often looked at as measures of quality but pathology comes at the start of the process, which can make it hard to relate to patient outcomes. Professor Furness said the Royal College of Pathologists had been looking at some key performance indicators that could be used, such as the availability of expert advice.

"If you have not got the measurement tools in place then you can't know what the quality is," he said.

Dr Desai said he welcomed what the RCP was doing. But he pointed out that what quality was depended on what perspective you had. He questioned whether laboratory based quality markers were necessarily the right ones.

"I completely agree with it being a clinical service," he said. "Having the whole service provided to a whole set of customers in the same way does not meet the needs of all those customers."

Pathology services in a hospital did not have to be the same as a pathology service to a community, he said; the demands and requirements were different.

Richard Jones said the key to getting this right was to give the NHS the financial benefits from production economics without undermining the pre and post analysis advice from the pathologist. But it was important to get pathologists to work in networks as well as laboratories. In many district general hospitals, some specialist

'I don't think we should be blinkered – that we can only have a big laboratory. In 10 years' time we will have a distributed system'

pathologists were almost single-handed practitioners and networks could help them. This could help avoid the position where clinical staff were raising concerns about quality as production was consolidated.

Dr Desai said: "For me as a GP, a commissioner, what happens in the laboratory does not matter as long as I get that service. I don't really mind where the pathologist is as long as I can access them."

One service or two?

Mr Sobanja posed the question of whether the clinical pathology service needed to be commissioned separately from the processing part of the service.

Mr Jones said in London 50 per cent of the work done was direct access and 50 per cent was part of the acute care package. "For most pathology laboratories they do have that 50/50 split," he said. "If an acute trust lost 50 per cent of its activity it would grievously undermine the financial viability of the rest of the work."

GPs might not be bothered about what happened to that work but hospitals would be very concerned. "If you lose your marginal activities you are left with fixed costs. There lies the risk for a laboratory that loses its direct access work."

Institute of Biomedical Science chief executive Jill Rodney said: "I think we should care what happens in the laboratory. The one thing that we know about the NHS is the degree of variability across various providers. If you commission for mediocrity then that it what you will get."

She warned they needed to be cautious about a market where providers could stimulate demand and cost savings which people hoped to squeeze out might not materialise.

But Dr Desai said he had assumed that laboratories were providing a level of service that met a minimum standard and, beyond that, operationally what happened in the laboratories was "not my concern".

Professor Newland said the clinical component and the process could not be separated.

"If you pick and choose you end up losing the staff that provide the service. What you must not do is load the costs."

Association for Clinical Biochemistry president Dr Michael Thomas said picking and choosing really concerned him. He pointed out the vast range of services offered by pathology – from very cheap tests to much more expensive and complex ones. But one underpinned the other and as soon as the cheap end was removed it started to undermine the ability of a laboratory to provide the specialist tests.

"Research and development is a key factor which needs to be costed into the overall service of pathology," he said.

Professor Newland said that the Carter report recognised that 30 per cent of the costs were interpretation, research and development, and teaching and training costs. And there was a need to cost this properly.

Mr Sobanja asked the panel to describe what pathology services might look like in England in 10 years' time.

Professor Furness said there would be

considerable consolidation of pathology as normally defined – analysing samples, and producing numbers. But the delivery of the other bits of the service needed to be devolved as they involved closer clinician contact.

"It is potentially tempting to suggest that we should commission the analysis and clinical bits separately," he said.

"As soon as you get into more complicated tests you need someone who can span the bedside to the laboratory to ensure that things don't fall between the cracks. The biggest single cause of patient damage is at the interface."

So how far will consolidation go? Professor Newland said: "I think we will see, in England, 20 to 30 hubs and I think it will be closer to 20." In some areas there were not obvious hubs.

"We have to have clinical pathology networks as well. You can't abandon a clinical pathologist in a DGH with a small laboratory without proper support.

"We have to have movement of staff within networks so we can keep them fresh and up-to-date with what is going on and part of the process."

Need for clinical networks

Mr Jones said it was relatively easy to get companies such as Roche to model what a redesigned service might look like – but not a lot of people seemed to have done the thinking around professional relationships. He had discussed this with non teaching hospitals around London and found that clinicians liked the idea of clinical networks. He was concerned that the production side of the transformation could run ahead of the clinical side and this could be a quality issue.

KPMG associate director Adrian Woolmore said that, where clinical leadership did not push change and

recognise the quality issues, there tended to be stalemate, with cost driving change. "Taking 30 per cent out of pathology services would impact on people. The question for me is how we get the clinical leadership to take that decision," he said.

'Phenomenal' efficiency increase

Professor Newland said that in his organisation over the past three or four years the workload had increased by 20 per cent but the total budget had dropped by 4 or 5 per cent; and they had 70 whole time equivalent fewer staff through not replacing people when they left. This amounted to a phenomenal increase in efficiency within a short period. Mr Sobanja commented that he could not think of another part of the health service where technology had led to so much restructuring – and yet it was clear this had not been enough.

Dr Myers added: "Part of the problem is that we see the costs as within pathology but the costs are within the patient journey."

There was a need to look at how the costs of pathology affected the whole clinical journey. "I would say that pathology should be delivered where we want it – if we want it next to the patient then I think that can be delivered.

"I don't think we should be blinkered – that we can only have a big laboratory. In 10 years' time we will have a distributed system."

Dr Ray Prudo, executive chairman of The Doctors Laboratory, which offers pathology services, drew a comparison with other countries. "We are 20 years behind what has happened elsewhere. I spent 15 years in North America ... what has happened elsewhere is that you get what you pay for."

For example, pathologist input varied enormously and pathology providers could be focused on hospitals, the community or

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somewhere in the middle. The need to reduce costs was the driver in many cases, he said: in Ontario, the number of laboratories had been reduced from dozens to just three or four.

The UK was likely to end up adopting one of these models and the question then was who could run them best. "My answer to that is very simple – whoever can deliver. What we have heard is that pathology is a very complex set of services, it is not one service. In pathology we have all these complexities within one organisation."

He said the UK did not have much experience with re-engineering. But Professor Furness pointed out that the Carter report had said that the UK system was one of the most cost-effective in the world. And Dr Myers asked: "If they have been doing it for 20 years then why are they still the same cost base as us?"

Standardised tests

But Dr Prudo said the US system was plural: "In America you see every single model you can think of. Within that there are some which are very successful and some which are not."

Professor Newland said that the UK had proved itself on quality but suggested the pre and post analysis side was where performance was "pretty poor". "We are pretty bad at getting the specimens to the laboratory and getting them out – we are ace at looking at the samples," he said. Mr Sobanja, however, pointed out there had been some "horror stories" around cytology.

Professor Newland said: "There is an irreducible minimum of errors – around 3 to 4 per cent. It is the mechanisms we have in place to ensure they don't get out – the checks and so on."

Dr Desai pointed out that simple things which might be assumed to happen – such as standardised tests and ways of communicating – did not happen across pathology services. "There are technical standards which you would expect to exist within pathology," he said, adding there should be a body that set standards.

'It is cheaper at the moment to do the test than to argue about whether it is necessary or not. We have to change that'

Professor Newland said there had been progress on such issues and a meeting was planned for the end of October which would look at them. The current system of laboratory accreditation had served them well but now needed to change. They would look at ways of using all the information about quality from the different perspectives of people who wanted different things – for example, the patient and GP.

Dr Myers agreed there was a need for standardisation and the minimising of variation. "We have got that wrong in pathology," he said.

Mr Sobanja suggested there was a difference between how you regulated and what quality was. He suggested that regulation by multiple bodies could result in failure, whereas with a single regulatory body it was obvious where the buck stopped.

Professor Newland pointed to the amount of work the National Institute for Clinical Excellence was doing around diagnostics. "In pathology we have sometimes been our own worst enemy," he said, explaining that he knew of tests done by three different trusts which resulted in three different results.

He suggested that there was value in defining what tests should be done and what should not.

Dr Desai raised the issue of how intensely laboratory equipment was used and whether a system that had equipment not being used for much of the time could be an efficient model.

The Carter report suggested that haematological analysers were only used 25 per cent of the time, Professor Newland said.

Dr Myers pointed out that UK benchmarking had shown that in clinical biochemistry the cost had gone down in both absolute and real terms over the past 10 years. "If your entire costs have gone down does it matter how much redundant equipment there is?" Dr Desai said: "It matters to me because it shows that it has not reduced enough."

But was it always right to send all "cold" work to a central laboratory? Dr Thomas doubted it because there would always be a need to provide some core services within a hospital and that "sweating the assets" on site might be a cheaper option.

What will be done on site?

But Professor Newland said that depended on what equipment there was on site. About 20 per cent of work needed to be done on site, he said. "You fill up your machine time with some of that work," he said. "It's a question of how much machinery you have and how hard you work it."

So what will be the characteristics of a successful pathology service as we move forward? Mr Sobanja suggested that a quality service would be one that knew its customers and their needs, and tried to meet them: "One that could demonstrate that its quality is as high as it could be. One that

Keeping up with the science (from left): Adrian Woolmore; Mike Sobanja; and Richard Jones, who said pathology services would need to innovate in response to scientific advances. Below: Peter Furness (top) and Adrian Newland

could demonstrate that it was operating at an appropriate cost within a tax funded model."

From a taxpayers' perspective he said: "There is something about demonstrating costs and, even more, a pathology service that is able to demonstrate its value in terms of the difference it makes to outcomes for patients."

Personalised medicine

Richard Jones said it was necessary to include something on innovation to the list of characteristics and highlighted the impact of molecular diagnostics, which opened up opportunities for pathology services that organisations needed to grasp. "We need to take advantage of scientific and medical advances," he said.

Professor Newland added that personalised medicine would be important. An example of this was where testing could determine which patients would benefit from new drugs so that money was not wasted treating those who would not respond. "The problem we have in laboratories is funding the introduction of tests that enable us to do that – to identify the patients who can benefit from particular drugs," he said.

Dr Prudo said there was a need to have pathology support for individuals. "We don't have people trained in this kind of activity. It's very doctor intensive." Pathologists might have to pull together lots of different information "We are going to require more and more medical expertise to identify this."

Professor Furness called for decision-making bodies to say what should and should not be used.

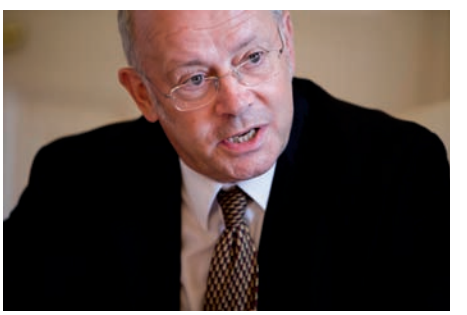
"We can't reasonably expect every single local laboratory to be physically able to do that job. It has to be more centralised. NICE is the obvious candidate for most of the stuff but it is getting more complex."

Advice could extend to what is and isn't worthwhile using in particular circumstances. This could offer a way of relating the cost of tests to budgets – as it would be clear that savings were made by not doing things the patient would not benefit from.

"It is cheaper at the moment to do the test than [to] argue about whether it is necessary or not. We have to change that," he added

Professor Newland mentioned patient access to results, especially as where tests are done diversifies – "the patient has to be in charge of that".

But while there was acknowledgement that a diversity of providers is likely to be involved, Mr Jones pointed out some of the issues that held back the private sector. He said: "There are issues around tariff and transaction management, around procurement rules and competition, and also around TUPE and the impact on the workforce of moving people around. They are massive issues preventing the market playing the part it can in this."



Jill Rodney said that people were vital to making change happen and they had not been talked about; clinical leadership was crucial in all of this.

Dr Prudo said there had been a lot of discussion around cost but not what the benchmarks for costs were. He highlighted the very different costs between hospitals.

Bringing the debate to an end, Mr Sobanja drew a series of key points out of the wide-ranging discussion. These included:

- What do we mean by pathology? Was it an end-to-end service or simply a diagnostic testing service?
- Variation was a critical issue. Reducing unwarranted variation is one of the most productive things we can do in the NHS, he said.
- There is no "one size fits all" system.
- Key performance indicators would be important for the service as would regulation/accreditation.
- There was a distinction between the data processing side of pathology services and the pathologist service – which raised questions about how they should be commissioned and whether different commissioning mechanisms were needed for these different parts of the service.
- 20-30 hubs for pathology services had been proposed as a model with possibly a more "distributed" focus.
- The role of the private sector would be important – "whoever can deliver effectively".
- Issues around workforce needs in this new world should not be forgotten. ●

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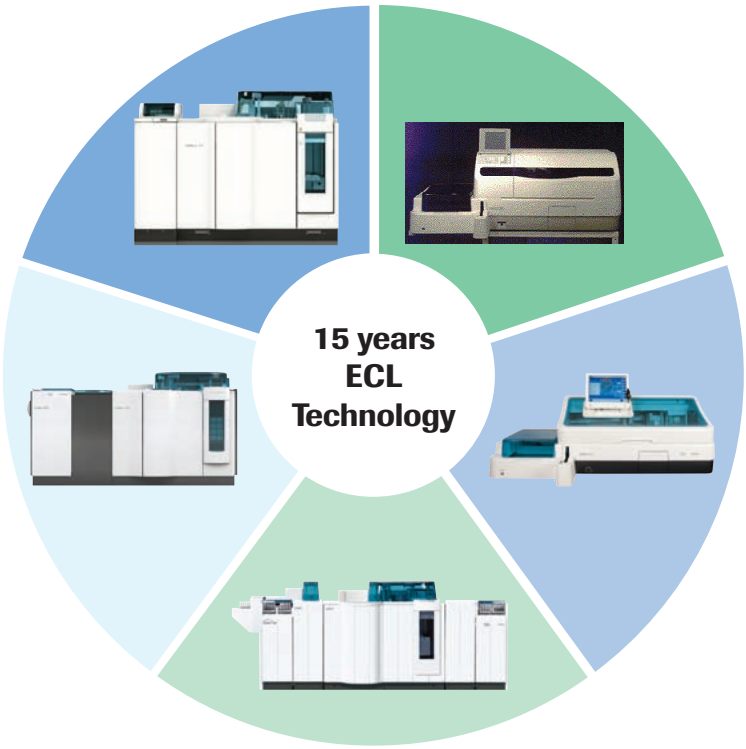

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