The Clinisys customer summit 2023: the only constant is change

Clinisys' annual conference at the Belfry saw a record number of national experts, pathologists, and IT leaders gather to discuss how change drives innovation in pathology and innovation drives further change. Matthew Fouracre reports from a busy – and optimistic – two days.

The Clinisys customer summit 2023 booked out four weeks before it took place at The Belfry towards the end of June. A record number of delegates made it to the event which, appropriately for a health tech conference, had gone completely paperless.

For the first time, an app guided the 320 plus attendees through the policy presentations, customer case studies, networking opportunities, and mini conferences looking in-depth at Clinisys' systems and how they support blood sciences, blood transfusion, cellular pathology, and microbiology.

Two themes came through strongly. The first was that change and innovation are closely connected. Pathology needs change to address new demands and opportunities. To deliver that change, it needs to adopt innovation. And that in turn, will drive further change.

The second was that change is never easy – and it's particularly difficult in a resource constrained, complex environment like a lab. Still, attendees used a vote on the app to argue that complexity must be tackled. Complacency - ignoring the need for change or finding reasons to put it off - is a much bigger risk.

Pathology networks update

On the first day of the conference, Jane Mills, the head of pathology transformation at NHS England, brought everybody up to date with the big change to the structure of pathology services that has been underway since 2017 – the formation of pathology networks.

In response to reports by Lord Carter of Coles, which argued that consolidation will reduce variability and improve the productivity and quality, NHS England has been supporting the formation of 29 networks. Although, Mills said, that number has reduced to 27.

"We are seeing two of the networks previously identified saying they would better serve organisations and patients if they merged," she said, adding that others might do the same. NHS England has been using a maturity model and assessment tool to understand where the 27 networks are at.

The self-assessed position is that six are 'mature' and now want to go further. Twelve are 'developing', with the remainder identifying as 'emerging'. Those in 'emerging' are a concern, Mills acknowledged, because the NHS long term plan target is for all networks to be 'mature' by 2024-5; although none are saying they won't make it.

Ministers investing and open to new ideas

In the meantime, NHS England is taking another look at its strategy for pathology transformation. Re-framing the focus to ensure patients are the first consideration in addition to the existing productivity expectations and making sure that pathology is embedded in new clinical pathways.

This is likely to require additional investment. Mills pointed out that a significant amount of money has been made available for laboratory information systems and digital histopathology – and networks are getting into the "massive amount of work" required to get these in place.

However, she indicated that ministers are open to hearing about opportunities for investment in new areas, such as automation and AI, and urged network managers to tell her team what they need. She reminded that, investment comes with obligations to deliver benefits for patients.

"So much money is coming in for IT that there is an expectation of a 10% productivity improvement in pathology," she said. "We have to put that in the context of growing demand – but it is very important to evidence to ourselves, as taxpayers, that the money is being put to good use."

Digital pathology: a transformational change

Dr David Clark, a consultant Haematopathologist and Clinical lead for Digital Pathology implementation for Nottingham University Hospitals NHS Trust and the Path Links network, took a step back and told the summit about the massive amount of work that it has put into implementing digital histopathology.

For a start, he said: "It's not just a digital microscope, it's a transformational change... and the first thing you need to know about digital transformational change projects is that most fail." Indeed, Dr Clark cited research from McKinsey that found just a third succeed in any setting – and digital histopathology isn't any setting.

"We're talking about a major IT project in the NHS," he said, to laughter from his audience, "and you're asking pathologists to change their way of working," he went on, to more laughter, "so you need to think about that from the outset."

Systems thinking: from simple actions to complex interventions

Dr Clark suggested that systems thinking offers a way forward. This categorises systems in different ways. A 'simple' system is stable, predictable and repeatable. It's relatively easy to change: the trick is to ask basic questions – in the context of Nottingham's project, questions like "how do we load stuff onto the scanners, reliably?" – and develop best practice and standardise processes. Lean management is the best way to optimise.

A 'complicated' system is stable, but less predictable. It throws up 'known unknowns' or "things you know you will have to do, but you don't know how to do them." Change in a complicated system requires good project management and an expert team to work out "how to integrate the scanners with the network" or where new workflows are required. Essentially, it's about working out the best solution and implementing it.

There is a third type of system; 'complex.' Where there are 'unknown unknowns' because change in one part of the system will lead to unpredictable change in others. Change in a complex system requires conducting a series of small "experiments" that allow you learn what works.

For example, Dr Clark said it was impossible to predict how clinicians would react to the introduction of digital histopathology, so it didn't just roll out a training programme and hope they'd get on with it. Instead, "we spent a lot of time with each consultant, to make them comfortable with the process."

With consultants getting comfortable with the process, the next stage will be to make more tests "glass free", to remove paper from the ordering and reporting process, and to add in Al support. All of which will require fully interoperable IT. "The Clinisys vision is one screen for reporting, with an integrated link to Halo [the image analysis platform]. And that is where we need to get to," Dr Clark concluded.

Clinisys: a new era and a new purpose

Michael Simpson, president and chief executive of Clinisys, had already outlined some of the changes the company is making to deliver on its vision. Sitting in front of Clinisys' new, yellow branding, he reflected that a lot has changed since he joined in 2017.

"Back then, we had a little office in Chertsey, and 115 people across the country," he said. "Today, we have 300 people – 305 at the latest count – so we have invested in the capacity we need to make you successful." At the same time, Clinisys has become a global company, operating in 34 countries.

And has acquired companies that have taken it into new areas of work, such as environmental, water quality, food & beverage safety, public health screening and toxicology. Simpson told his customers this has led Clinisys to reframe its purpose: which is now "to make communities healthier and safer" – recognising that "people can't be healthy if they live in areas with contaminated water or air."

However, Simpson stressed that Clinisys will always be a healthcare company "in its soul" and focused on four values: responding to customers; keeping promises on delivery and functionality; keeping contracts and support simple; and working as a team.

2030 vision

Against this background, Simpson said Clinisys' priorities for 2023 are fourfold. First, to make sure its key solutions - the WinPath Enterprise LIMS and the ICE (Integrated Clinical Environment) order comms system - are "stable and reliable" and can be scaled up to meet customer demands over the next five years.

Second, "to make sure the things we have promised on our roadmaps happen." Third, to improve the upgrade process. And fourth, to create a single software development lifecycle to make it easier to deliver upgrades and solve problems.

Then, in the run-up to 2030, he said Clinisys wants to progress towards a single platform, in the cloud, so customers can flex their capacity in line with demand, only pay for what they use, and say goodbye to clunky remote working solutions, like Citrix servers and virtual private networks.

"If we just developed WinPath Enterprise or ICE, we would not be doing our jobs," he concluded. "We need to make sure that, as you develop new ways of working, and new services, we are providing the infrastructure and solutions you need."

The future of diagnostics

Debra Padgett, president of the Institute of Biomedical Science, was also looking towards a future driven by innovation. In that future, she pointed out, "tests won't just be done in hospitals." In fact, they're already being done in GP practices, community diagnostic centres, virtual wards, and homes.

As this shift happens, more tests will be undertaken for prevention and public health. "At the moment, diagnostic services are on the reactive paradigm," she said. "We wait for people to become ill and then we diagnose and treat them.

"If we can stop people getting ill, or at least understand their illness earlier, we should get better outcomes for the patient." Plus, she suggested, ease some of the pressure coming in from clinical services overwhelmed by post-Covid waiting lists and rising demand.

Padgett argued that pathology needs to own these changes, by adopting innovation in a controlled way. So, she argued, there is a need to develop networks and implement LIMS and order comms – but in doing that "we have to flex and work with customers, so we can build expansion into our practices and plans."

Labs do need to find more staff, but they also need to rationalise operations, implement new ideas like digital pathology and AI, and think creatively about new roles and new routes into the profession. "What is happening at Clinisys is great, but they are growing – so if we don't use our skilled people, they will," Padgett joked.

She stressed that the IBMS will not be an obstacle to any of this. "The only restriction is our HCPC registration and being able to demonstrate competence," she said, "and our scientists can work right at the top of their licence. Diagnostic testing is the expert domain of our members, whatever the setting" Indeed, the IBMS has been creating expert roles and qualifications to enable people to develop their careers, while remaining in clinical practice, and developing policies on issues such as point of care testing and AI to shape practice in future.

Need experts: we have experts!

Alongside its big picture sessions, the Clinisys customer summit 2023 was a great opportunity to hear from experts deeply embedded in some of the technical challenges facing pathology. Alyson Bryant, a healthcare accreditation specialist at the United Kingdom Accreditation Service, gave an update on the new standard for the regulation of laboratories, ISO 15189:2022, which is being introduced over this year and next.

Doris-Ann Williams, chief executive of BIVDA, the national industry association for the manufacturers and distributors of in-vitro diagnostic devices, told attendees about the many stakeholders that it works with to make sure that reagents, specimen receptacles, instruments and other kit are well regulated and available to laboratories across the country.

And Victoria Axon, a principal security specialist at NHS England, talked about some of the cyber security challenges facing the NHS. Clinisys customers and experts also discussed the "good, the bad and the ugly" of moving to the latest versions of its systems, the hosting offered by Telefonica Tech, and the roll-out of Service Now: which will give customers around the world far more streamlined access to the Clinisys support team.

The big challenge: not complexity, but complacency

Simon Brewer, managing director of South West London Pathology, would probably approve of this kind of simplification. In his entertaining, app-driven session at the end of day one, he pointed out that pathology has all kinds of complexity.

A major coffee chain may have 20 coffee options, eight frappes, and 12 types of syrup. But that's nothing to the range of tests offered by different laboratories, each of which may have their own names for their drink equivalents – and serve them in different cup sizes.

Or, an online retailer may offer a proliferation of goods, but it will have one IT system for ordering them, from a single, automated warehouse, with an app to track the delivery vans. While laboratories can have a multitude of IT systems, none of which talk to each other (Brewer said SWP has to deal with 14 order comms and GP systems, or iterations of them).

Why? "It's the fourth dimension, time," Brewer said, switching from a consumer to a bicycling metaphor to explain the local development of labs and their struggle to afford investment. "We can only afford a bike with one pedal. So, we save up for the second pedal. And by the time we can afford it, there's a new iteration of the pedal, and it doesn't fit the frame."

Tech is a tool: only people can use it for change

The good news, Brewer said, is that there is a way forward. Networks offer the potential for consolidation and standardisation - and have the size to influence and attract investment from their customers. But to drive change, they need to work out where to start.

"David [Clark] said it," Brewer argued. "We are complex, but we are also complicated, and simple." And the place to start is with the simple stuff. "Look at our processes. Don't send things from one reception to another. Automate stuff. Stack it and rack it. Put it on the analysers. Let it go."

Suppliers are keen to help with that, so labs should let them, and concentrate on "the high-end stuff, that really requires our expertise." What is stopping them? Brewer argued it is not complexity, but complacency.

Any number of High Street chains – from Kodak to Tower Records, Blockbuster and Toys R Us – were overtaken by new technology or delivery models. Pathology needs to make sure the same doesn't happen, as new technology – like AI – or new demands – from public health to home testing – present both opportunities and challenges.

In the app vote, summit delegates agreed. And Brewer argued they should be optimistic. Networks are being set up, national bodies and trusts want them to succeed, companies like Clinisys are bringing innovation on stream. Still, he concluded, while technology can help, at the end of the day: "It is people, you and I, who deliver change."