



## Case study

### Enabling efficient multi-site working for Severn Pathology Service

#### Customer profile

- 532m annual turnover
- 3 sites
- 8,000 Staff
- Bristol, UK

#### Challenge

To enable safe, efficient working across the largest pathology network in the South West of England with the effective deployment of a single, flexible LIMS.

#### Outcomes

Improved patient care and efficiency gains through single pathology records, standardised, efficient processes, and seamless integration with multiple IT systems.

**Severn Pathology is a collaboration between NBT and Public Health England (PHE) that provides the largest pathology service in the South West of England, including many regional and some national pathology services.**

Severn Pathology set out to establish a system that would increase standardisation, enable efficient, low-risk collaboration and be fully in line with the Sustainability and Transformation Programme, and latterly the NHS drive to pathology networking. This meant implementing a single LIMS to support multi-site requirements and enable multiple incumbent IT systems to share information.

Following a competitive dialogue process, the CliniSys WinPath Enterprise system was selected. We worked collaboratively with the Severn Pathology team to provide a flexible and robust solution which is improving patient care through efficient, consistent processes and effective workflow management.

## The challenge:

NBT in partnership with UHB, WAHT and PHE (South West Public Health Laboratory) recognised the need to invest in new accommodation and equipment and replace disparate IT systems with a modern single database, LIMS solution, that would support multiple site operational requirements.

All the partner organisations had a strategic aim to move to an integrated EPR solution for their trusts but also recognised that patient flows between sites and increased centralisation of specialist services would benefit from integration of pathology results across sites. The pathology departments were concerned that some pathology modules supplied as part of EPR solutions were not best in class and the decision was made to procure a solution that would both meet the needs of pathology but also contribute to the ambition of integrated EPR solutions.

A “competitive dialogue procedure” began in response to the requirement for a single LIMS system for four separate services: blood science, cellular pathology, blood transfusion and microbiology; and three, initially optional, modules for genetics, newborn screening and tissue typing.





Having a solution that can be tailored to a specific site's workflows, whilst maintaining a single multi-site networked solution, was essential.

This meant managing a considerable amount of complexity, drawing together the following:

- 3 Different PAS systems
- 3 Independent ICE systems
- 2 Different GP reporting systems
- 32 CliniSys Integration Manager connections
- 62 CliniSys Analyser Data Manager connections
- 158 Analysers not including POCT
- Separate ADT feed for POCT system
- 2 Different TIE's
- 2 Different cancer management systems

More than 14 million integration messages would need to be processed in the first three weeks alone.

The laboratory information system was considered vital to achieve the project aims of delivering an integrated, high quality pathology service that maximises innovation and technology and drives efficiencies.



## Our approach:

It was clear from the competitive dialogue process that Severn Pathology had a vast number of requirements and needed to navigate through a complex mixture of incumbent systems and processes.

We adopted a collaborative approach from the outset, recognising the importance of working in partnership with the Severn Pathology Team to deliver a solution which would meet most of their needs and identify solutions to any barriers.

WinPath Enterprise delivered most of the requirements needed and CliniSys was considered the partner most willing to work collaboratively. The flexible nature of the WinPath system was a huge benefit and allowed us to provide a tailored response to the specific needs of this project.

- Providing a simple and user-friendly solution to the complex task of managing the patient record across four organisations. The WinPath patient layer is a unique approach to patient data governance as it combines all the benefits of an event based patient record with the benefits of a patient centric layer.
- Routing work electronically between participating organisations within and outside the network. CliniSys' proven Lab2Lab solution and the ability to connect to NPEX was a key differentiator in the decision-making process.
- Providing system resilience to support the required levels of availability, scalability, flexibility and business agility. Our solution delivers a fully managed hosted service via Capita Healthcare Decisions which provides the necessary platform and infrastructure.
- Enabling scalability and future innovation. WinPath Enterprise is inherently flexible and can rapidly evolve alongside the service's developing needs, such as securing new business or forming additional partnerships.



The project followed CliniSys' unique and proven framework of high-level design, low level design, validation testing, user acceptance testing through to go live.

### Benefiting from an outsourced solution

We proposed a partnership with Capita to deliver an outsourced managed service solution. This has enabled the Trusts to transfer some of the risks to the supplier, reducing their exposure to the effects of any shortfalls in hardware provision in terms of resilience and performance. For example, at go-live it became apparent that there were some concerns with label printing, the risks and costs of correcting these fell entirely on CliniSys and their sub-contractor Capita.

Additional hardware and product design were required in the short-term to make the system work as expected. The costs and effort required to deliver these changes in a short timescale were entirely a matter for CliniSys and one which we dealt with and delivered without quibble.

**David Gibbs, Pathology Services Director for NBT said, "We ultimately chose CliniSys as our provider of choice, the only supplier with proven credentials in delivering a multi-site solution with the ability to provide the necessary levels of functionality and flexibility to all aspects of the service".**

### Outcomes:

The WinPath Enterprise migration project was one of the largest single LIMS deployments in NHS history. The go-live process (all departments at all sites) went well with results being issued within two hours and fully operational on day one.

Through the deployment of WinPath Enterprise and ICE order communications, Severn Pathology have:

- Improved patient care through access to complete pathology records across the region with standard reference ranges and coding that have optimised workflows, in line with the Carter Report
- Unified methodologies across all hospitals and laboratories in the network, improving the standardisation of data flows without compromising the need for variation where clinically appropriate
- Reduced IT administrative overhead, IT infrastructure costs, and laboratory staff costs by reducing the number of systems, processes, servers, licensing etc and eliminating process duplication

- Simplified integration with the many clinical systems, allowing standardisation across all pathology partners
- Improved links with all trust EPR solutions and enabling the drive to full integration without compromising the pathology services

Since go-live, we have continued to work in partnership with Severn Pathology to help drive the development roadmap for WinPath Enterprise and implement continuous innovation. Examples include:

- the development and subsequent go-live of a new newborn screening WinPath module in support of the delivery of the National Newborn Blood Spot Screening Programme. About 40,000 babies are born across the South West every year, and Severn Pathology's newborn screening laboratory handles 150-200 samples a day
- the development and subsequent go-live of a new Tissue typing WinPath module for donor-recipient matching for organ donation to determine whether an organ will be accepted or rejected. Severn Pathology's tissue typing lab carries out around 100 transplants per year. Transplants are also performed for a wide catchment area serving the South West and South Wales and including the Royal Devon and Exeter Hospital, Dorset County Hospital, Gloucestershire Royal Hospital and Bristol Royal Hospital for Children

David Gibbs comments: **"The new system has delivered a fully integrated solution that allows independent services to continue to deliver the first-class services they aspire to but opened the door to further networking... It is exciting to see Pathology services across the Bristol region and beyond putting in all the enablers to build a bright future. Working with our partner CliniSys, this will enable us to expand in line with NHSI networking recommendations and provide a pathology service we can be proud of."**

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David Gibbs, Pathology Services Director for NBT

