

CUSTOMER STORY

HELPING THE NHS IMPROVE SERVICES WITH ELECTRONIC PATIENT RECORDS

Computacenter and Dell Technologies partner to deliver an infrastructure transformation to help provide faster access to healthcare data and other digital healthcare solutions in the future

SERVICES

- Data Center Strategy
- Cloud Platform Strategy
- Technology Refresh Services
- Application Migration Assessment
- Workload Migration Services
- Advisory Services for Data Center and Multi-Cloud Connectivity
- Data Center Network Transformation

USER EXPERIENCE

- Enhanced agility and mobility
- Faster decision making
- Improved access to information
- Improved performance
- Improved user satisfaction
- Simplified business processes

BUSINESS IMPACT

- Boosts business agility
 - Hardware consolidation
 - Improves productivity
 - Improves sustainability
 - Reduces administration
 - Supports digitalisation
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OBJECTIVE

Improving care systems by deploying a new infrastructure platform that supports the delivery of an electronic patient record (EPR) system

At a moment when the NHS is looking to protect its future by using technology, Worcestershire Acute Hospitals NHS Trust (WAHT) wanted to deploy an electronic patient record (EPR) system to improve care services. The Trust had to overhaul its legacy IT infrastructure and find a solution that could support the EPR alongside other digital healthcare solutions in the future.

As the Trust's Chief Technology Officer, Tom Brown, explains, "The Trust is made up of three main hospitals. We want to put patients first – that is our key objective. The Electronic Patients Record system is our number one priority and is part of our Clinical Services Strategy. And our top priority for our Digital Strategy is to improve the pathway for our patients through the hospital."

The NHS in the UK is also under great pressure with challenges around funding, staffing, and supporting an ageing population. To ensure the NHS remains fit for the future, the UK Government developed the NHS Long Term Plan, whose objectives include giving staff the technology to deliver better levels of care.

To meet the NHS challenges, Worcestershire Acute Hospitals NHS Trust has developed its Clinical Services Strategy to give doctors and nurses the kind of IT support laid out in the NHS Long Term Plan. Among the strategy's key objectives are delivering comprehensive integrated healthcare in the region for the best possible patient outcomes.

As part of the strategy, the Trust planned the rollout of an EPR solution. This would give clinicians instant access to patient data across wards and remotely when in the community. The EPR would also sit alongside an updated Patient Administration System (PAS) to help speed up patient pathways through the Trust's hospitals.





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Tom Brown
Chief Technology Officer
Worcestershire Acute Hospitals
NHS Trust



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Gareth Holland
Global Service Director
Computacenter

SOLUTION

Delivering a hyperconverged infrastructure solution that underpins the Trust’s EPR system and other digital healthcare systems

Solution at a glance:

- Computacenter Infrastructure Assessment (the Strategy, Advisory and Assessment services listed on page 1)
- Computacenter & Dell Technologies Co-delivery Services
- Dell OptiPlex desktops
- Hyperconverged Infrastructure (HCI)
- VMware Cloud Foundation on VxRail

To deploy the EPR, the Trust needed to replace its existing three-tier IT. “The legacy infrastructure was ageing,” explains Tom Brown, the Trust’s Chief Technology Officer, “and lacked the performance and availability to run the EPR 24x7.”

The amount of hardware had also grown significantly over time, making it costly to power and manage. The Trust wanted to deploy a solution to underpin the EPR and other digital healthcare systems as well as handle future workloads across multi-cloud environments.

Worcestershire Acute Hospitals NHS Trust engaged with Dell Technologies’ Titanium Black partner, Computacenter, to find a solution. Computacenter, which has worked with the Trust since 2014, ran an infrastructure assessment to help IT build a business case for transforming the old hardware and to collect data needed to design a replacement infrastructure for the Trust’s long-term requirements.

Digital patient data at all times

The Trust replaced the legacy technology with VMware Cloud Foundation on VxRail, the jointly engineered hyperconverged infrastructure (HCI) by Dell Technologies and VMware. With its partner competencies, Computacenter was able to deliver a highly efficient, end-to-end service, co-delivering the solution with Dell Technologies. It implemented 24 VxRail nodes in total, with 12 nodes each across its Redditch and Worcester sites, connected by a dedicated wide area network link.

As Computacenter’s Global Service Director, Gareth Holland, confirms: “We have a long-standing relationship with both Dell Technologies and the Trust. Between us, to refresh the Trust’s estate, we knew that hyperconverged infrastructure would be a key requirement and a key deliverable.”

Gavin Stothart, the NHS Account Director at Dell Technologies adds more about the process for delivering the solution. He says, “For this project, we had to engage in different ways, virtually, and we utilised a joint working party between Computacenter and Dell Technologies using co-deploy and co-deliver. VxRail is a jointly engineered solution between VMware and Dell Technologies, and being an engineered solution, it moves the customer comfortably from the build-to-buy continuum, making it easier to deploy, easy to scale and easy to support.”



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Tom Brown
Chief Technology Officer
Worcestershire Acute Hospitals
NHS Trust

ABOUT WORCESTERSHIRE ACUTE HOSPITAL NHS TRUST

Worcestershire Acute Hospitals NHS Trust provides hospital-based services from three main sites in Redditch, Kidderminster and Worcester and turns over around £460m pa. They serve almost 600,000 people and, in 2020, provided care to around 240,000 different patients. The Trust employs nearly 6,000 people, has 800 volunteers, and delivers 42 sub-specialties, whilst also running two Type One Emergency Departments.

OUTCOME

Faster access to data, better patient services, improved sustainability and a future proofed EPR and other digital healthcare systems

As a result of this infrastructure transformation, the Trust has gained the performance to deliver its EPR and PAS goals as well as future digital solutions. It also consolidated its hardware, improving manageability and reducing power usage for greater sustainability. In addition, by deploying the HCI nodes as a stretched cluster using the Redditch and Worcester sites, the Trust improved disaster recovery with servers at one site failing over to servers on the other in the event of an outage and vice-versa. This, in turn, gave the IT team peace of mind that clinicians would face minimal disruption, with system access restored in around 30 minutes maximum.

Business results:

- 50% faster access to patient admin data for healthcare staff
- Better patient services with access to digital care records from bedsides
- Streamlined patient journeys with 24x7 access to care systems
- Improved sustainability with hyperconverged solution reducing power use

50% faster access to critical systems

With VMware Cloud Foundation on VxRail up and running, the Trust can deliver services more effectively, improve patient outcomes and streamline pathways through its hospitals as part of the clinical strategy. Clinicians using the PAS, whose critical functions include appointment booking and patient admissions, have seen a 50% improvement in speed of data access. Tom Brown says, “We’re making it easier for staff to schedule resources and speed up patient journeys through our hospitals with VxRail.”

Boosting bedside care

Using the EPR, the Trust will transform patient care in all its wards. The healthcare provider is rolling out hundreds of medical carts fitted with Dell OptiPlex desktops so clinicians can access patient records from bedsides and get the most up-to-date information for a better quality of care. Tom Brown concludes, “I look around and can see we’re meeting our objectives to make the Trust a better place for our staff, our patients and our local community with Dell Technologies.”

Helping the NHS achieve their goals

Tom Brown nicely summarises the benefits for the Trust. He says, “By having the EPR system on a High Availability system means that the service is available 24/7. This means that we can work with our patients and be able to manage them effectively through the pathway of their journey through the hospital.”

“From a Computacenter perspective,” adds Gareth Holland, “we take great pride in helping the NHS achieve their goals.” Gavin Stothart agrees, saying, “For me personally, it’s great to be engaged in a project like this with the Trust, helping improve and save patient lives.”

MORE INFORMATION

To find out more about our enterprise services and read more customer case studies, log on to www.computacenter.com
