Business needs

At a moment when the NHS is looking to protect its future by using technology, Worcestershire Acute Hospitals NHS Trust 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.

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.

Solutions at a glance

- Computacenter Infrastructure Assessment
- Dell OptiPlex Desktops
- Dell Technologies & Computacenter Co-delivery Services
- VMware Cloud Foundation

Helping the NHS improve services with electronic patient records

Worcestershire Acute Hospitals NHS Trust helps improve patient services, making healthcare data faster to access with Dell Technologies and Computacenter.

“...We’re making it easier for staff to schedule resources and speed up the patient journey through our hospitals with VxRail.”

Tom Brown
Chief Technology Officer, Worcestershire Acute Hospitals NHS Trust
The NHS in the U.K. is under greater pressure with challenges around funding, staffing and supporting an ageing population. To ensure the NHS remains fit for the future, the U.K. 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 a 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.

Improving data centre health

To deploy the EPR, the Trust needed to replace its existing three-tier IT. Tom Brown, Chief Technology Officer at the Trust, says, “The legacy infrastructure was ageing 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 multicloud 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 across its Redditch and Worcester sites, connected by a dedicated wide area network link.

As a result of the move, the Trust 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

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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. 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.

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. 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. 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.”

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