



Yorkshire and Humber  
Commissioning Support

## Yorkshire and Humber Commissioning Support increases GP productivity and enhances patient care with VMware® Horizon™ 6

### INDUSTRY

Public sector, Healthcare

### KEY CHALLENGES

- YHCS wanted to use technology to enhance patient healthcare; ensuring patients have the best treatment regardless of whether they are at the surgery or at home.
- YHCS needed to modernise GPs working methods; namely BYOD and mobile working while driving down the cost of IT.
- YHCS needed to ensure it was providing a quick and responsive service which enabled it to remain competitive against external IT providers or other CSUs across the country.

### RESULTS

- VMware's virtual desktop solution is now being used in more than 80 GP practices, replacing 5,000 PCs in more than 100 locations.
- Clinicians can visit a patient in their home and access the patient's records on an iPad or any device of their choice.
- VDI has improved users' work/life balance. Doctors can spend time with their family and then log on from home to update patient notes outside working hours.
- It has freed up CSU's IT support staff to spend more time on strategy and less time on firefighting; whilst delivering innovative services has made YHCS competitive.
- The virtual PCs save approximately £90,000 a year in energy consumption.

Yorkshire and Humber Commissioning Support (YHCS) is a key driver of innovation across GP surgeries and health centres throughout the region. YHCS wanted to provide greater flexibility for GPs and clinicians to enhance both patient and GP experience. The YHCS IT team chose VMware Horizon 6 to deliver Bring Your Own Device (BYOD) and the ability for GPs to access clinical applications from any location. The solution has transformed patient experience and GPs' work/life balance whilst reducing the cost of desktop PCs.

YHCS provide a range of locally-focused business and commissioning support services, one of which is an internal NHS IT services provider. The Commissioning Support Unit (CSU) covers the Yorkshire and Humber region, supporting more than 730 general practices and 23 Clinical Commissioning Groups (CCGs) working on behalf of more than five million people. In addition, YHCS works with over 80 customers across the country including CCGs, NHS providers, local authorities and NHS England. YHCS is committed to looking at innovations, new technology and developing new strategies for the organisation and its customers. The CSU provides a range of IT services from application provisioning, through to compliance, service management, the development of IT strategies and web development.

### Organisational challenges

YHCSU has a diverse customer base. The CSU supports 33,000 users, many of whom have different needs and requirements, from office workers through to clinicians visiting patients in their homes.

### Delivering bespoke applications

To deliver complete healthcare and business services, YHCS supports a large number of applications and software; from obvious tools such as Microsoft Office, to more specialised, clinical applications such as EMIS and SystmOne electronic patient record systems, Optimize optometry software and NHS Spine Applications. Providing continuous access to these applications is an essential role of YHCS.

### A competitive landscape with budgets under scrutiny

The environment in which the YHCS operates in is also incredibly competitive. CSUs were created in early 2013 as part of the government's plans to enable local control over healthcare planning. Primary Care Trusts (PCTs) were replaced by CCGs, which consist of GPs and healthcare professionals, CCGs are in charge of commissioning support from CSUs. Melanie Daly explains: "While we would traditionally support our local area for providing IT services, there is no reason why the CCGs could not go elsewhere to source new IT services. Therefore, it's essential that we can respond quickly to the needs of GPs in order to remain competitive and ultimately remain financially viable."

Alongside this, YHCS is also under pressure to reduce the cost of IT, so it

***“VMware Horizon 6 has been transformative on many levels. Enabling our GPs to access applications from any internet connected device means they can treat patients from the comfort of their own home, with the same speed and efficiency as if they were in the surgery. Crucially for us, it has shown that we can offer the best IT solutions on the market to the GP practices and health centres that we support, provide significant cost savings, whilst demonstrating that we can help the NHS keep pace with wider technological advances.”***

Melanie Daly, Enterprise Architecture and Innovation, Yorkshire and Humber Commissioning Support

needed to find a solution which would deliver innovation whilst driving down the cost of technology across GP practices.

### Meeting GP and patient needs

“Our biggest challenge was to ensure the IT solutions we provide are similar to the level of usability that a GP would expect in their personal lives i.e. everything to hand and quickly. The working environment should be the same; access patient data wherever they are, at any time,” said Melanie.

Given YHCS’s commitment to driving innovation while improving patient care and experience, Melanie and the team knew they needed to make IT more of an enabler, providing greater flexibility of GPs and clinicians. “We wanted staff to be able to access patient records while they are conducting home visits, and ensure they could still interact with patients if they couldn’t get into the surgery,” said Melanie. “Making sure GPs and clinicians are comfortable with the technology they are using is also important, so implementing BYOD is a key part of our strategy.”

### The solution

YHCS had already virtualized its server estate with VMware vSphere in 2004; this enhanced the speed at which it could create new applications and services for different health centres across the region. However, as the focus moved more directly onto the end-users – GPs and clinicians in particular – YHCS began to look at how it could deploy a far more flexible and mobile end user computing solution.

“The server virtualization project with VMware gave us great confidence in its desktop virtualization technology”, said Melanie.

At the end of 2007, the CSU embarked upon a ‘four proof of concept’ trial with VMware to explore the value of Virtual Desktop Infrastructure (VDI). A key element focused on a comparison between VMware Horizon and Citrix, both within GP surgeries and the CSU’s headquarters, the latter of which incorporated heavy data users, including those in the finance team. It ran a large variety of applications and tested each VDI solution on value for money, performance and business benefits. “It

became apparent very early on that VMware Horizon 6 would be the better fit for us, for integration, functionality, costs and fitting with our existing skills set,” said Melanie.

### VMware professional services

The team then worked closely with VMware professional services to create a solution based on VMware Horizon 6, to address its unique needs around access to bespoke applications and mobile working.

“It was clear VMware Horizon had the edge throughout the four year trial. It was ground-breaking technology. However, we still had another hurdle to jump through; namely making the VDI work across many of our national clinical applications. This is where VMware professional services were absolutely critical to the success of the project. They worked onsite alongside us to ensure the solution worked seamlessly across all of our clinical systems before we officially rolled out the technology to all our users. It was a partnership in the truest sense,” continued Melanie.

### The largest deployment of its type in the NHS

The virtual desktop solution from VMware allows staff, including clinicians from GP practices and community services to securely access their desktop, files and clinical system from any location via any device connected to the internet.

In many respects, the numbers testify to the success of the implementation: 6,500 of CSU’s customers are already using the VDI solution. Since its roll-out, the solution is being used in over 80 GP practices, replacing 5,000 PCs in more than 100 locations. It’s the largest deployment of its type in the NHS.

### Flexibility and mobility for GPs; enhancing patient wellbeing

VMware Horizon 6 has given CSU’s customers unprecedented flexibility. Clinicians can visit a patient in their home and access the patient records on an iPad or any device of their choice. GPs expressed their delight over how the technology has transformed patient experience. “Being able to find the right information at the right time, particularly

### PRODUCTS

- VMware Horizon 6
- VMware vSphere

when a patient is under stress or feeling very unwell, makes such a difference to their experience and ultimately their faith in the service that we are providing. It also means we can treat patients quickly as there are fewer follow up consultations required," said Melanie.

Clinical practices are making VDI a key part of their winter contingency planning. In the event of heavy snow, GPs can carry out telephone consultations from their home, accessing patient files on their own devices, in a secure manner and avoiding patients' appointments being cancelled.

### Addressing work/life balance

On addressing the transformation VMware's solution has made to GP work/life balance, Melanie said: "I don't think it's an understatement to say that VDI has been life-changing for our GPs. Clinicians used to work in the surgery all day, consult with patients until 6pm and then spend all evening typing up their notes. Now they can finish their surgery at 6pm, go home and have dinner with their family, put their children to bed and log back on from home."

### Positioning YHCS as the first choice provider

"Being able to provide immediate access to any of our applications – whether across England or local – through any device, has demonstrated the level of service and added value we can provide. Working with VMware has made us more confident that we are one of the strongest and most innovative CSUs", said Melanie.

Furthermore, VDI has also made a very positive impact on the working lives of the CSU's IT support staff. "Rather than exhausting their energy and know-how firefighting problems by physically going out and fixing computers, they can access a user's computer and resolve issues remotely in a couple of hours. This has increased productivity and enabled cost savings across the team," she continued.

### Increasing efficiency; reducing costs

The vSphere virtualized HP ProLiant DL580 servers can easily host up to 300 desktops each, an extra 50 per cent

above the initial expectations. This means the team has plenty of capacity for on-boarding new users without additional investments in hardware. YHCS expect to save £90,000 each year due to lower electricity consumption of the virtual PCs and by bringing its servers into a single data centre with central control. Each family doctor is saving approximately £3,000 through more energy efficient and cost effective hardware with VDI.

### The future

VDI has opened YHCS's eyes to many more opportunities to develop its offering and support its customers. VDI is an established and important part of the way YHCS works, exploring the option of rolling out on-demand application streaming over the next two to five years.

"By working with VMware we've got a taste for innovation. Every organisation needs to move forward to stay relevant. Technology is crucial to this shift; and particularly for YHCS, which sells itself on providing a full healthcare and business offering. We promise our clinicians the IT support they need to focus on patient outcomes. This means we need to be at the forefront of progress."

