

## BUILDING THE PLATFORM FOR NURSING'S EVOLUTION WITH THE ROYAL COLLEGE OF NURSING



#### CUSTOMER

**ROYAL COLLEGE OF NURSING** 

#### **WEB SITE**

WWW.RCN.ORG.UK

#### **INDUSTRY**

**HEALTHCARE** 

#### **LOCATION**

LONDON, UK

## **KEY CHALLENGES**

- Help 435,000 members including nurses, student nurses, midwives and health practitioners become e-nurses through training and support
- Secure member data without impacting flexible and fast access
- Support RCN employees and members to work remotely

### **SOLUTION**

The College worked with VMware to build an infrastructure that supported its requirements of secure yet flexible access to member data, providing a foundation for its digital future.

## IMPACT

- · College staff on the road or in the call centre can access member data quickly
- Membership data is secure
- Members can access support and services wherever they are

Nursing is changing rapidly. The Royal College of Nursing wants to help every nurse in the UK become an e-nurse, using digital technology and data to deliver effective care. It is a huge undertaking with over 435,000 members, including nurses, healthcare workers, midwives and student nurses, and requires an extremely agile digital infrastructure. With a successful partnership already in place with VMware, the College knew that together they could build a platform equipped for the next chapter of nursing - a platform that lets employees and nurses access information, training and services wherever they are, empowering them to continually improve the already high standards of care for their patients.

The Royal College of Nursing is the world's largest nursing union and professional body. It represents more than 435,000 nurses, student nurses, midwives and healthcare assistants in the UK and internationally. Its work covers nursing standards, education and practice, as well as supporting its members as a trade union and lobbying government on their behalf.

## Challenge

The healthcare profession is under immense pressure to improve patient care and recovery while managing the effects of austerity. Nurses are at the frontline of that eff ort - whether administering vital treatment to the sick on a ward, receiving dozens of outpatients each day in a clinic, or providing vital support to doctors and other healthcare professionals, nurses are the glue that holds the healthcare system together.

As the world's largest nursing union and professional body, the Royal College of Nursing provides its members with the support they need to care for their patients, through training, support, representation and guidance. It has a goal of helping every UK nurse become an e-nurse by 2020.

That goal includes involving nursing and midwifery staff in the design and implementation of information technology, increasing access to education and training, and using data to improve care. Gareth Lewis, senior infrastructure architect at Royal College of Nursing, says "Our industry is under immense pressure to deliver the best care possible, even in the face of budget cuts and staff shortages. At the same time, we are living through a technological revolution, where new tools and approaches are fundamentally changing the way our members and the NHS work. We need to grasp this opportunity now - the nursing and midwifery workforce is crucial to the successful outcome of this healthcare revolution."

With over 309,000 full time equivalent nurses, health visitors and midwives working in NHS hospitals and health services alone, reaching that goal will



"We are living through dramatic, technology-driven change. The ability of nurses and midwifes to embrace technology to enhance their work is crucial to the successful outcome of this healthcare revolution."

GARETH LEWIS SENIOR INFRASTRUCTURE ARCHITECT ROYAL COLLEGE OF NURSING

#### **VMWARE FOOTPRINT**

- VMware NSX
- VMware Horizon
- VMware vRealize Log Insight
- VMware vSphere
- VMware vCenter
- VMware EXSI

mean big changes to their working practices. The College has a significant role in making that transition a successful one - providing everything from training and advice to a platform for collaboration and ensuring nurses' voices are heard. It needs a secure, reliable and scalable digital infrastructure that it can use as a foundation to deliver the guidance the nursing profession needs to become e-nurses

#### Action

"The College is our members - without them we simply wouldn't exist - and the protection of their information and data has to be number one priority," said Lewis. "At the same time, our staff must be able to access data quickly - on the road, in call centres, and in many locations across the country. They need to be able to pull up member data in real time - if they can't, we have a frustrated member and a frustrated employee, and we hear about it fast."

That means delivering flexibility without compromising security. "Data security is a huge concern for everyone. We've recently moved our membership database to a cloud model and the senior leadership team has kept a constant eye on its progress. We also have to manage multiple sites. As well as our staff, we have four libraries across the UK for members to come onto site to use, plus our digital resources and eHealth Courses. We need to be able to manage that - let them get what they need without accessing internal resources or exposing our systems to breaches from other networks."

The first stage was to move from a physical to a virtual environment, now 99% complete. "Moving to virtual environments allows us more flexibility around remote access, whether colleagues are in the contact centre in Cardiff or in the car park of a hospital before a meeting with members."

It then needed a way to completely secure its architecture without hampering flexibility or access. The College had previously used VMware vCloud® Networking and Security for security and decided to upgrade to VMware NSX®. The College now has all of its apps including Skype, File Servers, Exchange and virtual desktop infrastructure (VDI) behind NSX.

Its VDI environment uses distributed firewall rules to lock down access to specific services, delivering strong security without compromising accessibility for those that need it. It also uses an identity-based firewall to allow third party contractors limited access when working remotely.

"We've had a really successful partnership with VMware for a long time now," said Lewis. "Moving from vCNS from NSX was a natural evolution, as we knew the pedigree of the product and the team behind it. With NSX, we've enhanced our security and automation capabilities. It's allowed us to segment critical workloads at a more granular level, getting really specific about who can and can't have access and the degree of access they have. Combining that with VMware Horizon® VDI means, as a small team, we can manage access across a much larger and more dispersed user base, while remaining compliant with data legislation."

The College worked with VMware to deploy NSX and Horizon, as well as strengthening its VMware vSphere® suite.

## Results and Impact

For Lewis, while he has two types of audiences, making it easier for one makes it easier for all. "We want to make the process of accessing applications, data and information as easy as possible for our members and staff. Working with



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"We must be able to give our staff the ability to access [data] quickly and use it to deliver a first-class service and experience, just like our members are doing with their patients."

GARETH LEWIS SENIOR INFRASTRUCTURE ARCHITECT ROYAL COLLEGE OF NURSING VMware has given us the tools to do that. College staff out on the road visiting members have everything they need at their fingertips, enabling them to do their jobs better, smarter and more efficiently. Similarly, our members, working in a highly stressful environment where time is of the essence, can easily get the support they need, whether it's for more training, confidential 1-to-1s on an employment matter, or even just renewing their membership."

## Looking Ahead

For the Royal College of Nursing, helping their members become e-nurses may have a goal of 2020, but it will be a continual process beyond that.

That means keeping abreast of innovation and looking at ways to offer the best experience for both users and members. "We're constantly looking for ways to evolve our services and we need the technical support to do that," said Lewis. "For instance, we're looking at how we digitise our library and working with partners to provide e-books of their physical books. That's a significant undertaking that needs a platform to store, structure and make them easy to access."

What does that mean for VMware and the Royal College of Nursing? Said Lewis, "We're on a journey - we've worked with VMware for a number of years and the impact it has had on our organisation has been hugely positive. We're only going to need to be more flexible, and more secure, and we need a partner who can provide that level of consistent care, just as our members do for their patients."

