

University Hospitals Plymouth NHS Trust

The Customer

University Hospitals Plymouth NHS Trust (UHPNT) is a large acute district general hospital, based in south west Devon. It is the largest hospital in the south west peninsula, providing the region with comprehensive secondary and tertiary healthcare services. Beyond its provision of secondary services to some 450,000 people from Plymouth and the surrounding area, UHPNT is a major trauma centre and provides tertiary and specialist services to a population of over 2,000,000 people.

UHPNT works in conjunction with Devon and Cornwall's four other major hospitals and additional healthcare services in the region. Operating within this network of hospitals has enabled the Trust to offer a greater range of specialist services such as kidney transplants, cardiothoracic surgery, neonatal intensive care and high-risk obstetrics.

UHPNT's main sites are:

- Derriford Hospital, including The Royal Eye Infirmary (REI)
- Urgent care for minor injuries and illness at the Minor Injury Unit, Cumberland Centre as well as at minor injury units in Tavistock and Kingsbridge
- Child Development Centre
- The Plymouth Dialysis Unit
- Radiology Academy

UHPNT employs approximately 7,000 members of staff and volunteers, working alongside a tri-service staff of 200+ military doctors, nurses and allied health professionals who are fully integrated within the hospital workplace.



The Challenge

For an organisation that provides 24hr emergency care to over 2,000,000 people in the south west peninsula, reliable network connectivity is a critical factor. Hospital staff rely on the network to access patient records and information as well as clinical applications that run over the network. Resilient connectivity ensures that staff are informed and well equipped to treat patients in potentially life-threatening situations.

Up until April 2017, UHPNT was wholly reliant on the N3 network, the national broadband network for all NHS organisations. This included supporting many applications that were instrumental to providing patient care. The N3, introduced in 2006, became outdated over time and the initial provision of 100MB bandwidth failed to meet its needs. What's more, UHPNT's N3 connection could not guarantee the low latency connection required to ensure the seamless and quick transfer of patient information across the network.

At almost all times, the N3 network was fully saturated, incapable of being upgraded to accommodate advancements in technology. On occasion, staff would be unable to access the network at all. This impacted efficiency and made it difficult for staff to access critical patient information and clinical applications hosted on the network, imperative for efficient patient care.

To address these issues, in March 2017 NHS Digital announced that N3 would be put in a transition state and would be replaced by the Health and Social Care Network (HSCN). HSCN would allow NHS organisations to access a wider range of competitive, market leading network solutions with the aim of enabling NHS organisations to access and share information more reliably, flexibly and efficiently. It would achieve this by opening up the provision of network connectivity to multiple accredited suppliers in a competitive market place. All existing N3 customers were given a mandate to migrate onto HSCN by 2020.



The Solution

UHPNT was keen to be one of the first healthcare organisations to join HSCN, fueled by an increasingly urgent need to increase bandwidth and improve overall efficiency. Following the mandate by NHS Digital for all organisations to migrate onto HSCN, the NHS Sustainability and Transformation Program (STP) and NHS Digital, expressed interest in a collaborative approach, from which the Devon Collaborative was born.

This project was led by UHPNT, and included nine organisations: University Hospitals Plymouth NHS Trust, Royal Devon and Exeter, North Devon NHS Trust, Devon Partnership NHS Trust, NEW Devon Clinical Commissioning Group (CCG) and hospices from Plymouth, Torbay, Barnstable and Exeter.

The Devon Collaborative went to tender in September 2017 for its HSCN migration through a Crown Commercial Service procurement framework. As part of the procurement, UHPNT communicated clearly that it required Fibre-to-the-Premises (FTTP) connectivity to accommodate its increasing reliance on cloud and hybrid cloud-based services for the hosting of its applications and solutions. By future-proofing its network with FTTP, it could ensure future growth and scalability, something that became increasingly difficult for N3 to deliver at a competitive market rate.

Of the eight suppliers that submitted a bid, MLL Telecom was awarded a three-year contract with the option to extend. MLL Telecom was chosen due to its ability to deliver the most cost-effective service, and because it demonstrated a market-leading, adaptable, ongoing solution.



Results

MLL Telecom was awarded the contract in December 2017 and migration from N3 to HSCN began in January 2018. The new connection ran in parallel to N3 for the 6-week migration period to avoid network downtime, during which no major issues were detected. The transition was officially completed on 10th May 2018, with just a few minutes of downtime during the network switchover.

UHPNT has benefitted in several ways from its migration to HSCN, facilitated by MLL Telecom as its connectivity supplier. The first and most significant result is the increase in bandwidth; UHPNT now receive ten times the bandwidth for approximately 20% less cost than was previously supplied via N3.

Secondly, MLL Telecom has brought a flexible, agile and bespoke level of customer service. MLL Telecom provides UHPNT with weekly updates and project updates, as well as highlight and project management reports. UHPNT was also given permission to assign a project manager of their choice to the migration.

Thirdly, MLL Telecom has been effective in respecting the collaborative in terms of scale, but also regarding its ability to provide individual services to each member of the Devon Collaborative based on their varying needs and demands. MLL Telecom also demonstrated flexibility in adapting to changing requirements during delivery.

“The move from N3 to HSCN was a major turning point for the Trust. We had spent years struggling with an over-saturated and failing network and the HSCN promised everything that had previously been inaccessible for us as an organisation. But undertaking a migration of this size is no easy feat, and we needed to find the right provider to minimise disruption and network downtime, so we could continue to guarantee a high-level of patient care. MLL Telecom demonstrated its ability to provide a seamless, cost effective service that met with the needs and expectations of each individual organisation within the Devon Collaborative.”

Rob Harder, IT Manager, UHPNT

As one of the first organisations to have successfully onboarded onto HSCN, UHPNT has been able to provide feedback on the specifications of the procurement process to NHS Digital, helping to improve the process for the future organisations set to join the network ahead of 2020.