

Digital Healthcare Environments and Industry Trends

The healthcare sector is transitioning through a period of dramatic change, where technology has become the beating heart of daily operations. From apps to big data, artificial intelligence to virtual reality appointments, 3D modelling and beyond; the sector is continually finding revolutionary new ways to deliver best-in-class health services, all while keeping staff, patients and data safe. From remote operations to power reliability and enhanced cybersecurity through to risk mitigation – there are countless challenges for IT professionals to overcome. We at APC by Schneider Electric[™] understand the challenges of a digitised healthcare ecosystem and offer a series of connected and data-driven infrastructure solutions to increase resiliency minimise downtime.

10.34m¹

Source 4 = North Highland, 2020

IoT connected devices are expected to be used within healthcare across Europe by 2025, up from just 2.79m in 2019.

€84bn^²

potential savings to the sector if Big Data and Artificial Intelligence are utilised effectively throughout the healthcare sector globally.

80%^³

of surveyed healthcare professionals cited customer care with data centricity as their top priorities.

Healthcare Environments in the Era of Digital Transformation

As technology capabilities increase, today's healthcare environments look drastically different to those of a decade ago, which continue to evolve at an exponential rate. Revolutionary technologies including AI, advanced robotics, IoT and remote monitoring are expected to become common in daily operations, and there are now over 10m connected devices⁴ within clinics, research labs, hospitals and surgical centres. With advances in critical power, IT and connected infrastructure, there is now an opportunity for IT experts to relieve pressures on unreliable power and connectivity networks, and future-proof the next generation of healthcare technologies.



The Three Key Challenges of IT Deployments

Delivering maximum uptime and patient satisfaction

Within healthcare, uptime is more than just a business or a financial concern – it can be a matter of life and death. Even just a momentary lapse in power can result in medical records being disrupted, health monitoring systems failing, and operating surgeries being disturbed. IT professionals within the sector must ensure they have visibility into the health status of critical infrastructure systems, using remote monitoring and proactive maintenance to guarantee as little risk of downtime as possible.

Capacity, power and patient safety

Ensuring high-quality environments and levels of patient care is of paramount importance within healthcare. As new technologies continue to develop and health services become more dependent on digital infrastructure, the demand for secure, resilient and robust power drastically intensifies. Organisations need a solid and secure physical infrastructure to support their critical assets.

Strain on existing infrastructure and efficiency

Regardless of the location of critical infrastructure systems, from local general practitioners through to city hospitals, the digital ecosystem will likely have a fixed capacity and limit to its operations. With technology driving further advances in the capabilities of service delivery, this strain is going to vastly increase over the coming years. The UK's NHS, for example, treats up to one million patients every 36 hours⁵ – so organisations must ensure that their digital infrastructures have the capacity to support this level of patient care.

How Does APC by Schneider Electric Address IT Deployment Challenges?



Resilient power products

APC Smart-UPS products by Schneider Electric are used to support the healthcare sector by providing <u>comprehensive</u> solutions and enhanced power protection. With a longer lifecycle, enhanced power quality and complete protection against disturbances, Schneider Electric Smart-UPS ensures peace of mind for healthcare IT professionals and resilient power for patient health and service continuity.



Data-driven remote management

With healthcare services utilised around the clock, digital infrastructure systems need real-time remote management and visibility. By utilising a cloud-based remote monitoring solution such as <u>EcoStruxure™ IT</u> <u>Expert</u>, IT professionals can decrease risks from faulty equipment, increase flexibility and security, and ensure complete visibility for distributed power and IT environments; offering greater resilience and uptime for critical applications.



EcoStruxure™ Micro Data Centers

Physical infrastructure systems such as the EcoStruxure[™] Micro Data Centers offer rapid deployment, high performance connectivity and secure data storage for any type of healthcare organisation. These systems offer increased security, optimisation and resilient power for any IT environment – protecting on-premise applications in an often demanding and complex digital healthcare environment.

EcoStruxure[™] Solutions for Any Environment of Any Size

