



Grampian NHS Upgrades ICU with Cybernet

Customer Bio

Grampian NHS, also known as Aberdeen Royal Infirmary, is the largest hospital in the Grampian area, serving its over half-a-million strong population as well as patients coming in from Scotland's offshore islands. Establishing its new NHS Board in 2004, the 900 bed facility has continued to treat over 1200 intensive care patients a year across a wide spectrum of offered medical specialties.



Grampian

Grampian NHS
Aberdeen Royal Infirmary

Industry: Healthcare
Product: CyberMed NB22
HQ: Aberdeen, GBR

Challenge

Last year, Aberdeen Royal Infirmary had decided to go paperless and run their EPR system on computers as opposed to traditional charting. This was actually something the team at Aberdeen had considered doing almost 8 years ago at the request of one of their consultants, but they ultimately tabled the idea for later for fear of expensive upfront costs. After finally putting together the money, they decided to entertain the idea once more and search for computers.

The plan was to outfit the foot of each patient bed in the intensive care unit with a computer physicians could use to record notes and share information with those in care. Thus, they needed a solution that was compact, one that preferably didn't lend to excessive cord clutter as that could prove a safety hazard for staff and patients who regularly enter and leave the room. It also went without saying that they needed the device to support their EPR of choice: Phillips' Intellispace Critical Care and Anesthesia.

Challenge (cont.)

After finally painstakingly raising the money for this large initiative, the team was still hesitant about the cost of such a massive shift in how they conduct care. What they needed was a computer that was cost effective while still delivering a medical grade make that could be disinfected regularly.

Finally, and most importantly, since these computers would be deployed throughout the ICU, it was imperative that any hardware they select offer fanless cooling so as to avoid the haphazard spread and circulation of bacteria within patient rooms.

Solution

For their initial trial run, Aberdeen tested three fanless products: Onyx's Zeus-228, Advantech's POC-W213, and Cybernet's CyberMed NB22 battery powered medical cart computer. Immediately, they found that the NB22 met all of their requirements of fanless, medical grade construction, while also providing an added benefit the other two units didn't: hot-swap battery power. The device being capable of powering on without any cables or peripherals meant no cord clutter and a workstation for physicians that didn't take up unnecessary space.

Even more conveniently, the team was happy to see that the NB22, in addition to offering those benefits, was the least expensive of the three options they tested. This opened up the opportunity to instead put that difference in cost towards backup batteries and charging stations. They even observed a few features they hadn't even considered when shopping for a device in the first place. The device's touchscreen was one such feature which, in conjunction with the NB22's impressive screen size, allowed physicians to seamlessly navigate their EPR system. The computer's IP65 certification also meant the team could use liquid disinfectants to clean the device without worry of ingress.

With all of these pros considered, the team decided to move forward with the CyberMed NB22 as their paperless initiative computer solution.

Results

Aberdeen was surprised to see just how quickly Cybernet was able to roll out their order. In fact, their hardware had arrived and was seamlessly implemented 4 months before other software and logistics were set in place. This was perfect for the ICU staff since everyone was given plenty of time to familiarize themselves with their new computers and their functionalities.

Using the hot-swappable batteries, nurses and physicians alike saw that they could easily power themselves through entire shifts without having to leash their workstations to a wall for a recharge. Better yet, each computer only required a single battery swap per day, meaning it could remain powered on for the entirety of the day including the very brief moment it needed a battery to be replaced. Being able to place their computers at the foot of their patients' beds also opened up more space and didn't make traveling between patients a hassle.

Cut to the present day with their paperless initiative fully underway, Aberdeen has still yet to see a single malfunction or breakdown across all of the computers used in their facility. The one time they required Cybernet support after accidentally dropping a battery, the team was happy to report that communicating with the support team and resolving the issue with a replacement battery took very little effort and time, allowing them to get right back to caring for their patients.



“ *Your product was by far the cheapest and most useful for us with the battery-powered option. It being touchscreen was also quite useful within our ICU. We weren't even looking for that kind of functionality but, in hindsight, we are very pleased it had it. The product has proven to be absolutely fine for us!* ”

- L.V.B., Clinical IS Manager
Grampian NHS