Ulster Hospital Case Study

Situation

Ulster Hospital was built in 1962 to serve a population of just over 260,000. As the community grew, the hospital became increasingly overstretched to care for the needs of its expanding population. The development of additional hospital blocks increased capacity and enhanced healthcare services, but this resulted in the installation of disparate access control and intruder alarm systems, all working independently from each other with no central management. In 2001, a major £98million hospital development plan commenced which was to span seven years. Plans included refurbishment of the existing site as well as the creation of a maternity unit, renal unit, multi-storey car park, specialist security control centre and a critical care centre.

Task

The Trust wished to improve the security infrastructure of the hospital to protect patients, staff and assets. The hospital required a robust access control and intruder alarm solution which could run a single security system throughout the entire site and be managed from one security centre. The chosen system also needed to be able to integrate with other 3rd party security systems and provide scalability to ensure it could adapt with changing demands and future growth. The Trust management team was determined that the new facilities would meet the latest safety and security standards to protect staff, patients, visitors and assets. To identify the security solution that would suit their needs, the Trust undertook a tender process lasting two and a half years to select a preferred supplier.

Action

The Trust selected the Fire and Security integrator and Inner Range Accredited Dealer, Building Protection Systems (BPS) to carry out the security project. BPS recommended the Inner Range Concept 4000 integrated access control and intruder alarm system because it met all of the security requirements as well as providing value added functionality.

Access control for the entire hospital could now be centrally managed at the newly built Security Centre. Phase A of the development commenced with the construction of the new Renal Unit. This was followed with the construction of the new Maternity Hospital and Terraced Car Park and then the new Critical Care Centre. In total, Concept controls 236 card readers and 200 accessed controlled doors with Insight system management software providing inter-lock control of isolation wards as well as full security administration. The Insight server is located in the main hospital I.T. communications room and accessed by the security staff from the security control centre.

Although security is essential, it was recognised that the system could also endanger life if too restrictive. In an emergency situation, staff may lose critical time if they had to request access through multiple doors. The Inner Range system is set up so that in the event of a "Crash Alarm" being activated, the system would intelligently unlock the correct series of doors so access was instant and the emergency situation could take place without delay. Programming ensures that the particular series of doors being released is specific to the location where the "Crash Alarm" has been generated.

Access control was also used to add value within the maternity ward to safeguard new-born babies against the threat of kidnap. Baby tagging devices are linked to the Inner Range access system so exit doors automatically lockdown if a baby alarm is activated.

Results
• Site wide access control and intruder alarm system.
• System capable of coping with access control for over 3,000 staff and consultants.
• Security is now administered from one security control centre.
• Delivered a high level of security required for a hospital environment.
• Access control is flexible and can be overridden in an emergency situation.
• Secure door lockdown in an emergency situation with interfacing to Baby Tagging.