



Infection Control at the Golden Jubilee National Hospital, Clydebank

According to a recent National Audit Office Report, it is estimated that hospital acquired infection costs the NHS £1 billion per year. The NHS plan, published in 1999, stipulates that all NHS organisations should have effective systems in place to tackle these infections in order to minimise risk to patients and staff. One area is Surgical Site Infection (SSI) as the costs to the patient, hospital and community care team are considerable - it is estimated that the NHS spends around £61 million per annum treating SSI.

Hospitals are recommended to report on post surgical procedures up to 30 days after discharge but there has been no real guidance or formal procedures set on how patients should actually be monitored. This notoriously difficult problem of surveillance of post discharge SSI rates however, has been successfully tackled by the Infection Control Team at the Golden Jubilee National Hospital, who have developed an imaginative project using an automated telephone system to monitor patients. The system is run on the Excelicare solution from AxSys Technology and its success has gained them national recognition as well as the Nursing Times Award for Infection Control.

The Scottish National Programme

In Scotland all acute hospitals take part in a national programme called the Scottish Surveillance of Healthcare Associated Infection Programme (SSHAIP), which is co-ordinated by Health Protection Scotland (HPS). The Golden Jubilee has been involved in surveillance since being a pilot site for the programme in 2001.

The original project, initiated five years ago, was driven by Maggie McCowan, Infection Control Manager and Sandra McAuley, Infection Control Nurse. It was set up to address the need to know what happened to wounds when patients went home. As the Golden Jubilee is a national hospital, patients come from all over Scotland, making it very difficult to monitor their progress. Telecare was seen as the way forward for monitoring patients and the system had to be automated so it did not require constant manning.

The solution and how patients are monitored

The infection control monitoring service is led by Jane McNeish, Infection Control Surveillance Nurse, and is available for patients who have had hip, knee or cardiac surgery. The automated post-discharge SSI surveillance system provides an interactive telephone-based, patient home monitoring module linked to an electronic patient record. This record is generated by the surveillance nurse who interviews patients before discharge and gives them instructions on how to use the system.

Patients access the system 15 and 30 days following surgery by calling a free phone number which activates a customised script with questions about the

status of their wound. After the call the system automatically assesses their answers and totals the predetermined numerical weight of their answers. It generates an alert if the patient's response scores between eight and 18. If the score is over 18 the system sends an e-mail alert to three members of the Infection Control Team. All patients with a score greater than nine receive a follow-up phone call to discuss the wound and determine if an infection is present.

The results and benefits

- Complete record of all the patients' responses but only alerts the team to patients that need further investigation
- Saves time from not having to follow-up every patient
- Details of telephone conversations inserted into electronic forms which complete the patient record and enable the production of audit reports
- The team can now check a patient's record to establish if they have called
- Response rates have increased from 60% to between 85 to 95% since the programme started
- Minimises the inconvenience, cost and time incurred for patients from not having to make repeated trips to clinics
- Alerts ensure that patients are seen earlier if complications develop after surgery
- Patient empowerment as they are encouraged to become more actively involved in their own health and treatment
- On average over 300 patients are processed every three months and this will increase once the West of Scotland Regional Heart and Lung Centre opens
- Generation of reports giving percentage infection rates after discharge up to 30 days. These are presented to the NHS Board which enables the hospital to comply with the recommendations of HPS
- Post-discharge infection rates can be added to SSHAIP quarterly surveillance reports for inpatient infection rates with ease and accuracy
- Promotes joined up services by enabling clinical departments and committees to share information and enables consultants to monitor their own infection rates
- Improved standards and consistency of care in line with national objectives.

The future

The model developed is highly relevant for local and national policies. National targets have been set to shorten the length of patient stay in hospital, which has further highlighted the issue of infection control and the need to know what happens to patients after discharge. There is a need to strengthen the validity of the statistics but efforts are being made to circulate CSO funded research nurses into the community for a year to confirm the status of infections rather than just relying on patients self diagnosis and feedback. This system has the potential to be extended and could provide a means of standardising post-discharge SSI surveillance nationally. A number of Boards both north and south of the border have shown an interest in the system for

surveillance purposes or, with adaptation, for reducing visits to post-operative clinics.