

SSII Surgical Site Infection Improvement Programme

Hospital infection rates now known following introduction of ICNet™

Infection rates and potential infection issues at Canterbury District Health Board (DHB) are now immediately available to the infection prevention and control (IPC) staff. This has occurred due to the introduction of an electronic surveillance system ICNet.

Canterbury was the first DHB in New Zealand to begin using the electronic surveillance system in 2012. It is now also used at West Coast and Taranaki DHBs and will be rolled out by Auckland and Waitemata DHBs very soon.

Internationally, electronic surveillance systems are becoming best practice tools for surveying and alerting health care staff to the rates and risk of infections in their hospital.

Michelle Taylor, ICNet coordinator for Canterbury DHB says that until the introduction of ICNet, infection prevention and control surveillance was a manual process.

‘Surveying rates of methicillin-resistant *Staphylococcus aureus* and other micro-organisms such as norovirus was done manually. It involved multiple spreadsheets and took a huge amount of time, time that could be better spent on clinical care and advice and education to medical and nursing staff,’ she says.

Using ICNet has removed the need for spreadsheets to record infection rates and data is now entered directly into the ICNet software. From here the staff can monitor where the patients with the infections are within the hospital.

Michelle says that hundreds of microbiology samples, taken to detect micro-organisms that cause disease, are taken each day – too many for the IPC team to investigate manually. ICNet allows alerts to be set up so staff can be automatically notified if an infection is detected in a sample, rather than relying on verbal notification which could be much slower. The system has the ability to allow the IPC team to set up their own alerts for infections they need to know about immediately. By having real-time data, the IPC staff can immediately liaise with the teams on the ward and advise them on the actions required to prevent the spread of the infectious agent to other patients and staff.

‘The system can also alert us to whether an infection was acquired in hospital or was present on admission.’

‘This is useful for staff as we can understand whether there is an infection spreading among patients, or whether this was present on admission and was likely acquired elsewhere, such as in the community.’

Michelle says there have been many benefits to using an electronic system. It allows surveillance to be completed faster and more regularly, on a wider range of infections; the system alerts staff to the presence of infections allowing them to be contained quickly; time spent on surveillance has increased as there are better and faster methods of reporting. Reports on just about anything related to infectious agents can be developed, as well as rates of resistance to commonly used antibiotics. This includes agents that are useful to know both within the hospital and the community, including legionella and methicillin-resistant *Staphylococcus aureus*.

‘There has been an increased focus on infection prevention and control at the DHB over the past few years,’ says Michelle.

‘So, while we can’t say for sure that the introduction of ICNet is the cause for lower infection rates, we certainly believe it has made a difference in what we know and how fast we know it. This leads to quicker intervention to prevent spread. Our staff love the system and the benefits it brings.’