

Multidisciplinary Team Approach Boosts Best Care...Always! Infection Prevention Campaign

As part of its Quality in Life programme, Life Eugene Marais Hospital began implementing the Institute for Healthcare Improvement's (IHI) '100K lives' campaign a few years back. At the time, the focus was on three areas, namely surgical site infections (SSIs), ventilator-associated pneumonias (VAPs) and central line-associated bloodstream infections (CLABSI).

In March last year, in line with the Life Healthcare group's programme, the hospital began a more comprehensive measurement process for each of these focus areas and also added the urinary tract infection (UTI) bundle as a further quality improvement initiative.

Initial measures and results showed limited impact. A decision was made to renew the initiative as part of the industry-wide Best Care...Always! (BCA) campaign launched in August 2009. The specific focus was to ensure a greater impact on clinical outcomes by enlisting the buy-in and active participation of the hospital's broader healthcare team.

Implementing and measuring bundles

The initiation of measurement within the Life Healthcare Group included more rigour in ensuring implementation of all elements of the bundles in the four focus areas. Compliance with each element of the four bundles was reviewed from data collected, root causes of infection were explored, and knowledge of, understanding and application by the relevant health professionals in the hospital assessed.

In-service nursing and student training was provided while daily educational and observational ward rounds by the infection prevention specialist (IPS) were introduced to elevate compliance with all the principles of each bundle. Problems and trends were diligently addressed and followed up with all role-players. The impact of the interventions was closely monitored through rigorous measurement of both outcomes and process compliance with the bundle elements.



Life Eugene Marais' infection prevention specialist, Antoinette Moolman (back left) and ICU unit manager, Hennie van der Walt (back right) with some of the team members of the Best Care...Always campaign

Antibiotic stewardship

Life Eugene Marais had held weekly antibiotic review meetings in the medical ICU for some time. The hospital's IPS, Antoinette Moolman, attributes the next step to a quote from Prof Mervyn Mer during a presentation she attended 'Infection control = antibiotic stewardship'.

Moolman began to share the data from the four campaigns at the antibiotic review meeting held each Friday morning with the doctors, a microbiologist from each laboratory, the hospital and pharmacy managers. The interdepartmental and multidisciplinary collaboration added further input, awareness, continuity and synergy to the work based on the collective commitment to the best outcomes for the patient. The ongoing collaboration also strengthened the effectiveness of the antibiotic review meeting in ensuring that each patient receives the correct antibiotic according to the organism identified.

Positive impacts on CLABSIs

Doctors attending the weekly antibiotic rounds were quick to realise the significance of the correct preparation for and application of the aseptic technique during the central line insertion procedure. They volunteered to be the first to make use of a checklist to evaluate the insertion technique. A number of surgeons and

anaesthetists added their support by ensuring that best practices for central line insertions were followed in the operating theatre.

These steps, together with the rigorous implementation of the other elements of the bundle by nursing staff, resulted in a positive impact on central line-associated infections in the unit.

ICU unit manager, Hennie van der Walt, said the team was especially excited to have had zero CLABSIs for April and May 2010.

Expanding the initiatives

Additional improvement initiatives that could further reduce the infection rate were explored. For example, working with physiotherapists highlighted an infection risk in suction procedures and it was decided to switch to a disposable cup and new suctioning catheter for each patient to address the risks. In April this year, the unit was very pleased to have had the first month

without any incidence of the multidrug resistant organism, *Acinetobacter baumannii*.

In terms of SSIs, a review was held of all general and orthopaedic surgical cases that had been re-admitted with septic wounds in the past. Working with the various surgeons has led to the introduction of detailed information and instructions for patients on skin preparation prior to admission and risk-based preoperative screening, with decolonisation being emphasised as part of the infection prevention work.

To reduce UTIs, the staff were required to undergo a mindset change regarding the correct procedure for catheter care, as well as fixation of the catheter. Persistent training by the nursing standards manager, team of nursing education specialists and IPS, coupled with detailed attention to the use of the right catheter for long-stay patients, resulted in zero UTIs for the period February to May 2010.

Team approach has impact on outcomes

The healthcare team at Life Eugene Marais is extremely proud to share its campaign progress with hospitals that are on their own journey of improvement through the Best Care...Always infection prevention and antibiotic stewardship campaigns.

For more information go to www.bestcare.org.za. To send your BCA improvement story or ideas, email the chairperson, Dr Dena van den Bergh, info@bestcare.org.za or contact her on 082-451-2284.



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