

INFECTION

**NURSE PROTOCOL
TO REDUCE CAUTI**

The fight against catheter-associated UTI (CAUTI) continues, with a new study describing the implementation of a nurse-directed programme for catheter removal that halved the use of indwelling urinary catheters over a 3-year period, leading to reduced rates of CAUTI.

Michael Parry and his team at Stamford Hospital in Southwestern Connecticut, USA, started their CAUTI reduction project in January 2009 after realizing that education-based efforts and handwashing initiatives had not reduced CAUTI rates over the previous years. Between 2000 and 2008, CAUTI was the most prevalent hospital-acquired infection at their hospital, accounting for 28.2% of cases.

Many different approaches have been taken to tackle CAUTI rates, including the use of antimicrobial-coated catheters and vibroacoustic stimulation to prevent biofilm formation, but Parry and colleagues chose to target the overuse of Foley catheters. Their first step was to come up with a nurse's checklist for prompt catheter removal, which lists the criteria required to justify catheter use, including acute neurogenic bladder, head injury or surgery. In addition, the researchers incorporated a device-specific charting module to the physicians' electronic progress notes and held biweekly meetings for nurse managers to report on the rates of catheter use and CAUTI, providing the opportunity to review outcomes and discuss strategies.

From implementation of the nurse-directed protocol (January 2009) to December 2011, the investigators evaluated 181,785 patient-days, and 30,747 catheter-days. Over this 36-month period, the use of indwelling catheters was reduced by 50.2% from 0.223 catheters per patient-day to 0.112 catheters per patient-day. Accordingly, the rate of CAUTI was lower than expected, with an actual frequency of 103 infections reported over 36 months, compared with the predicted frequency of 174 infections (extrapolated from previous data).

The researchers estimate that their intervention saved \$100,000 and six lives, and hope that others will adopt a similar approach. They describe a cultural shift within the hospital that led to greater awareness and improved teamwork.

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Original article Parry, M. F. et al. Successful reduction in catheter-associated urinary tract infections: focus on nurse-directed catheter removal. *Am. J. Infect. Control* doi:10.1016/j.ajic.2013.03.296