Evaluation of a central catheter maintenance bundle developed to prevent central line-associated bloodstream infections (CLABSIs) found that it led to decreased infection rates, according to a study published in the American Journal of Critical Care (AJCC).

The bundle comprises 14 items and has a 5 point checklist to monitor compliance. In this study a quality improvement team from Select Medical developed and implemented a central catheter maintenance bundle for patients admitted to 30 long-term acute care hospitals (LTACHs), whose patients usually arrive with a catheter in place.

The bundle was based on infection prevention guidelines from the Centers for Disease Control and Prevention (CDC), and included compulsory use of alcohol-based central catheter caps and chlorhexidine gluconate dressings. The intervention also included staff education and use of a checklist to track compliance.

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About 65 percent of patients admitted during the study period had a central catheter. The researchers compared the medical records of 6,660 patients discharged during the 14 months prior to the study and 6,559 patients discharged after implementation of the bundle. The CLABSI standardised infection rate was reduced by 29 percent after implementation of the central catheter maintenance bundle. A mean reduction of 4.5 CLABSIs per hospital occurred for 14 months after implementation of the bundle.

Lead author Antony Grigonis, PhD, Vice President of Quality and Healthcare Analytics at Select Medical, said that the results should encourage other facilities to implement a similar initiative, adding: “This infection reduction could also translate to a savings of approximately $3.7 million annually for the 30 Long-Term Acute Care Hospitals studied.”

Source: American Association of Critical-Care Nurses
Image credit: Pixabay

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