When the Catheter-Associated Urinary Tract Infection Bundle Is Not Enough

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Patients with cancer who are immunocompromised are at risk for catheter-associated urinary tract infections (CAUTIs). Many recommendations are available for healthcare organizations to use to reduce CAUTIs. Implementing various approaches to prevent CAUTIs requires teams to collaborate and communicate well. The oncology nurse can lead the team to achieve the best patient outcomes and assist in recommending the use of teamwork models.

AT A GLANCE

- CAUTI is a common but preventable hospitalacquired infection.
- Lack of teamwork, communication, and collaboration results in inconsistent CAUTI prevention practices.
- Three teamwork models can assist healthcare organizations in improving teamwork, collaboration, and communication.

KEYWORDS

CAUTI; teamwork; collaboration; urinary tract infection; hospital-acquired infection

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atheter-associated urinary tract infection (CAUTI), which is defined as a UTI where an indwelling urinary catheter (IUC) was inserted and left in place for at least two consecutive days during an inpatient stay, occurs in about 12%-25% of hospitalized patients (Centers for Disease Control and Prevention, 2019). CAUTIs pose a grave problem for patients with cancer because they cause serious morbidity and can increase healthcare costs and length of hospital stay. Each day the catheter remains inserted, the risk of CAUTI increases by 3%-7% (Centers for Disease Control and Prevention, 2019). CAUTI is a common hospital-acquired infection (HAI) and is considered preventable. Patients with cancer often require the use of an IUC because of their underlying health conditions and treatment regimens. Immunosuppression, frequent hospitalizations and increased length of stay, and urinary tract obstruction related to the invasion of cancer into the pelvis can increase the risk of a CAUTI (Bobbitt et al., 2022; Tandogdu & Wagenlehner, 2016) (see Table 1).

A plethora of recommendations are available in the literature to prevent CAUTIs (see Table 2). These interventions can be used individually but are most often bundled together as best practices. The CAUTI bundle is an evidence-based structure designed to prevent CAUTIs in healthcare settings. A care bundle represents "bundling" evidence-based intervention or strategies with the objective of enhancing patient outcomes (Molina García et al., 2022). A CAUTI bundle typically includes guidelines for catheter insertion, maintenance, and removal. Even when bundled, interventions are rarely 100% effective, and reduction of CAUTI occurrence rates averages from 51% to 60% when all components of the bundle are followed with continuous monitoring and audits (Soundaram et al., 2020). Lack of teamwork and communication can result in inconsistent CAUTI prevention practices, and bundles applied in clinical practice may not be sustainable over time (Gregory et al., 2023). As key members of the inpatient interprofessional team, oncology nurses have a primary responsibility to help prevent CAUTIs. The oncology nurse can lead the team and coordinate care to ensure the best outcomes for the patient.

The purpose of this article is to discuss the problem of CAUTIs in patients with cancer. Although assessment of CAUTI, risk factors, and bundled recommendations are described, the focus of this discussion is teamwork as an effective strategy to help achieve and sustain positive outcomes and work toward a zero-CAUTI rate.