

Solutions to reduce the number of hospital-associated infections

[Health & Medicine](#), [Hospital](#)



Being the nurse manager of a 36-bed orthopedic unit, it has come to my attention that there has been a significant increase in postoperative nosocomial urinary tract infections. This orthopedic unit holds a high percentage of postoperative total hip replacement patients that have sustained these injuries due to falls. Data shows that the use of catheters for greater than 48 hours post op, the complication of UTI post op, and the average length of stay have decreased in the last years. Recent data collected within 5 months show an upward trend on patient's length of stay, percentage of nosocomial post op UTI, post op catheters indwelling for greater than 48 hours, and UTI cost per patient. Urinary catheters are used for many reasons including, urinary incontinence, urinary retentions, prostate disease, and prolonged immobility. These catheters are inserted using sterile technique, but germs may enter the urinary tract when proper technique is not used, becomes contaminated, or stays in place for a significant amount of time. These germs can travel from within or along the outside which in turn, causes a CAUTI (Catheter-associated urinary tract infection). " Urinary tract infections resulting from catheter use are one of the most common health care-associated infections. " Since CAUTIs are considered preventable, the Centers for Medicare and Medicaid made a change in 2008 to avoid the financial burden of hospital-associated infections. " The Centers for Medicare & Medicaid Services no longer provide reimbursement if a CAUTI occurs during hospitalization, making prevention of CAUTI a top priority for health care providers nationwide. " The goal for this change was to give these healthcare centers a financial incentive and conclusively, decrease the percentage of hospital acquired infections. Having

an increase in the post op patients that have acquired a nosocomial urinary tract infection can affect hospital roles, management, and protocols.

Management must make changes to protocols in effect to help decrease postoperative nosocomial urinary tract infection incidents. Staff needs to be educated on how these protocols can change patient health results and how these changes need to be made a priority. There must be an “ employee rounding” method in place to be able to check-in on employees and discuss their patients. This method can offer engagement with not only the staff but can also include the infection control committee and above all, the patient.

Management must inspire healthcare members by using effective communication and to lead by example using Transformational Leadership. This form of leadership requires self-motivation to empower others with difficult transitions like this plan will require. Transformational leaders interact with others and can make staff members feel like they are part of a vision. Team building is a vital part when transitioning into company changes and makes this hard time much easier when you have the support of a strong leader. The collected data has shown an increase chance in acquiring a nosocomial urinary tract infection if the patient has a longer hospital stay and is the catheter stays in place for more than 48. A house wide protocol needs to be created in which criteria is listed entailing staff when catheters may be placed/removed and giving the nurse authority to remove catheters. Using this protocol, we can decrease the number of catheters placed therefore, decreasing nosocomial UTIs. “ CAUTI vs. non- CAUTI patients incurred statistically significant increases in length of stay. ” Having a nurse driven catheter removal protocol can reduce indwelling catheter times. This

protocol must be clearly communicated to staff and needs to be followed through with management. Mandatory classes will be required, as well as online education workshops to make new protocols easily available to staff. “ Educational interventions should include knowledge on best practices for IUC care, as well as evidence-based indications for IUC continuation. ” At first, staff may be resistant to new protocols, but management must continue to enforce these guidelines to create a safe health environment for our patients. Hand hygiene and the use of gloves must be reinforced when working with catheters. A hand hygiene tracker can help aid staff in complying with sanitary practice. Also, ensuring that the catheter line does not develop any kinks and the drainage bag stays below the bladder. To decrease the amount of postoperative nosocomial urinary tract infections, we need to acknowledge why the catheters are being inserted in the first place. The data shows that the highest percentage in documented reasons are: Unknown, not documented (37%), prostate disease (23%), urinary retention (17%), history of paralysis/stroke (12%). The highest percentage reason documented for having a catheter has not been documented or has been listed as unknown. To be able to have reliable data, the nurses must be required to document on all lines/drains every X number of hours. The documentation system can be updated so staff cannot skip the catheter screening portion. The system can also provide the staff with the number of days the patient has had the catheter in place and send out reminders on infection risk.

There are other options available rather than placing a catheter at the first go-around. The second highest percentage listed was urinary retention. Healthcare providers need to acknowledge the high risk of infections a catheter can ensue, so ordering the placement of one should be one of the last resorts. Urinary retention may occur due to an obstructive or non-obstructive problem. In an orthopedic unit, it is common for patients to have urinary retention due to anesthesia. Nursing interventions can make a difference in providing patients with early mobility to decrease the chances of urinary retention. “ Nursing interventions can be very effective in the prevention and management of postoperative urinary retention. ”

A clinical study conducted the rate of voiding recovery after urinary retention due to bedrest in 2016. The study informs the reader that decrease mobility in our older population increases the risk of transfers to nursing homes and their mortality. They concluded that patients confined to bed presented an increased risk of acute urinary retention. This can be reversed by providing early mobilization and using the practice of intermittent catheterization. The implementation of a nurse driven catheter removal protocol may face difficulties, but with the right leadership this protocol can be achieved. Being a key leader in this situation, we must ensure our employees have the tools necessary to be able to carry out this goal. Our nursing staff needs to be competent to achieve the power of autonomy this protocol requires. Managers can provide “ employee rounding” to ensure our staff is adapting and if not, acknowledge the challenges so we can attain our goal.