Preventing urinary catheter-associated infections

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In February 2015 the Emergency Care Clinical Network began its seventh round of nine-month evidence-based improvement projects in emergency departments. **The aim of these projects is to use evidence-based care to reduce unwarranted variation in clinical practice and improve consistency of patient care within emergency departments. University Hospital Geelong focused on preventing urinary catheter-associated infections.**

Why this project was important to our emergency department

- Catheter-associated urinary tract infections (CAUTI) can have serious morbidity and mortality implications for patients.
- Evidence indicates that using a suite of simple measures can reduce the incidence of CAUTI.
- There was no clear criteria for indwelling catheter (IDC) insertion at our hospital.
- It was difficult to always maintain asepsis on IDC insertion.
- There was inadequate documentation of IDC insertion.
- Patient discharge planning was inconsistent.

What we did

- Consulted with a wide range staff outside the department.
- Developed and implemented a checklist to standardise practice including indications for IDC insertion, verbal consent, catheter selection, aseptic insertion technique, risk and documentation requirements.
- Improved the consistency of information and education to patients discharged with an IDC.
- Educated staff in practice change.

Our results

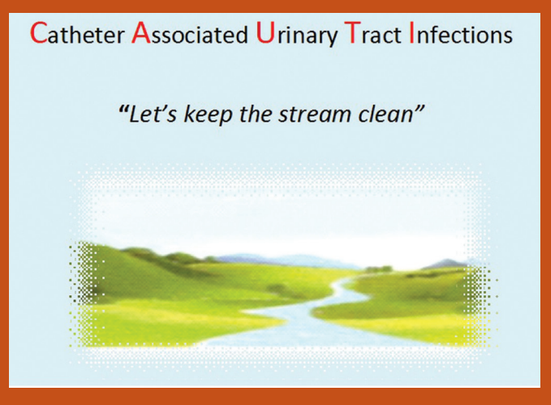
- The proportion of patients with an appropriate indication for urinary catheter insertion **increased from 55% to 100%**.
- The proportion of patients receiving a urinary catheter insertion that had aseptic technique documented **increased from 0% to 25%**.
- If discharged with a catheter in situ, the proportion of patients who received documented education regarding urinary catheter care and a fact sheet **decreased from 100% to 60%** however there were only a small number of cases reviewed in the post-data.

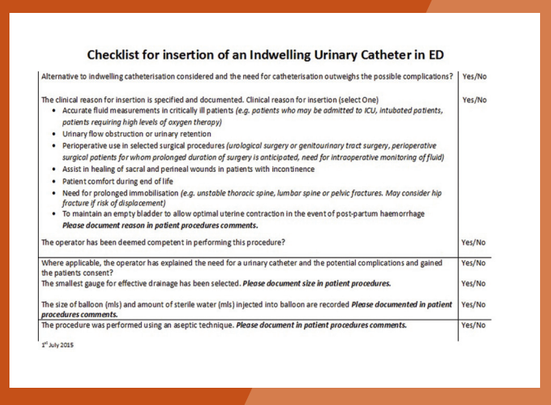
Impact on patients, staff and the health system

- Patient care is now evidence-based.
- Unnecessary urinary catheter insertions have reduced, lowering the risk of CAUTI.
- Patients are better informed about IDC management at home.
- Staff knowledge and understanding regarding indications, risks, documentation and discharge planning requirements for patients with an IDC has increased.
- The standardised care process is supported by an easy-to-use checklist.

What we learnt about improving quality of care

- Staff passion and recognition that outdated practices can cause harm are effective motivators for improving care.
- Identifying key staff who can assist in advancing the project's aims is very useful.
- High-level support makes practice change easier.
- Sharing learnings with inpatient units is difficult.





Checklist for insertion of an Indwelling Urinary Catheter in ED

Alternative to indwelling catheterisation considered and the need for catheterisation outweighs the possible complications?	Yes/No
The clinical reason for insertion is specified and documented. Clinical reason for insertion (select One) • Accurate fluid measurements in critically ill patients *(e.g. patients who may be admitted to ICU, intubated patients, patients requiring high levels of oxygen therapy)* • Urinary flow obstruction or urinary retention • Perioperative use in selected surgical procedures *(urological surgery or genitourinary tract surgery, perioperative surgical patients for whom prolonged duration of surgery is anticipated, need for intraoperative monitoring of fluid)* • Assist in healing of sacral and perineal wounds in patients with incontinence • Patient comfort during end of life • Need for prolonged immobilisation *(e.g. unstable thoracic spine, lumbar spine or pelvic fractures. May consider hip fracture if risk of displacement)* • To maintain an empty bladder to allow optimal uterine contraction in the event of post-partum haemorrhage ***Please document reason in patient procedures comments.***	Yes/No
The operator has been deemed competent in performing this procedure?	Yes/No
Where applicable, the operator has explained the need for a urinary catheter and the potential complications and gained the patients consent?	Yes/No
The smallest gauge for effective drainage has been selected. ***Please document size in patient procedures.***	Yes/No
The size of balloon (mls) and amount of sterile water (mls) injected into balloon are recorded ***Please documented in patient procedures comments.***	Yes/No
The procedure was performed using an aseptic technique. ***Please document in patient procedures comments.***	Yes/No

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