

Project Title

STOP-Catheter Associated Urinary Tract Infection (CAUTI) in a Sub-acute Ward at a Community Hospital

Project Lead and Members

- Priscilla Chng, Senior Staff Nurse in Nursing Administration (Infection Control)
- Benjamin Tan Boon Cheng, Assistant Nurse Clinician, Nursing Administration (Infection Control)

Organisation(s) Involved

Yishun Community Hospital

Project Period

Start date: Jan 2017

Completed date: Dec 2017

Lessons Learnt

The team learnt the importance of not only tracking data, but also sharing this data on a timely basis. This allows the staff at the multi-disciplinary level and the hospital's senior management to keep their teams informed about a project's progress and align team and organizational goals in working toward the reduction of CAUTI.

Additional Information

- STOP-CAUTI Video <https://bit.ly/2YdjQVr>
- Received the 2018 AIC Quality & Productivity Festival – Community Care Excellence Awards Winner – Clinical Quality Improvement category

Project Category

Clinical Improvement, Quality Improvement, Safety, Infection Control

Keywords

Clinical Improvement, Process Improvement, Quality Improvement Methodology, Patient Safety, Infection Control, Urology, Sub-Acute Ward, Community Hospital, Multi-Disciplinary Team, Staff Education, Reduce Length of Stay, Reduce Laboratory Test, Reduce Antibiotics Usage, Cost Savings, Costs Avoidance, Yishun Community Hospital, Catheter Associated Urinary Tract Infection, Intermediate and Long-Term Care, Fish Bone Analysis, Plan-Do-Study-Act, Standard Work Processes, Catheter Associated Urinary Tract Prevention, Prevention Bundle Guide, Visual Reminder.

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STOP-Catheter Associated Urinary Tract Infection (CAUTI) in a Sub-acute Ward at a Community Hospital

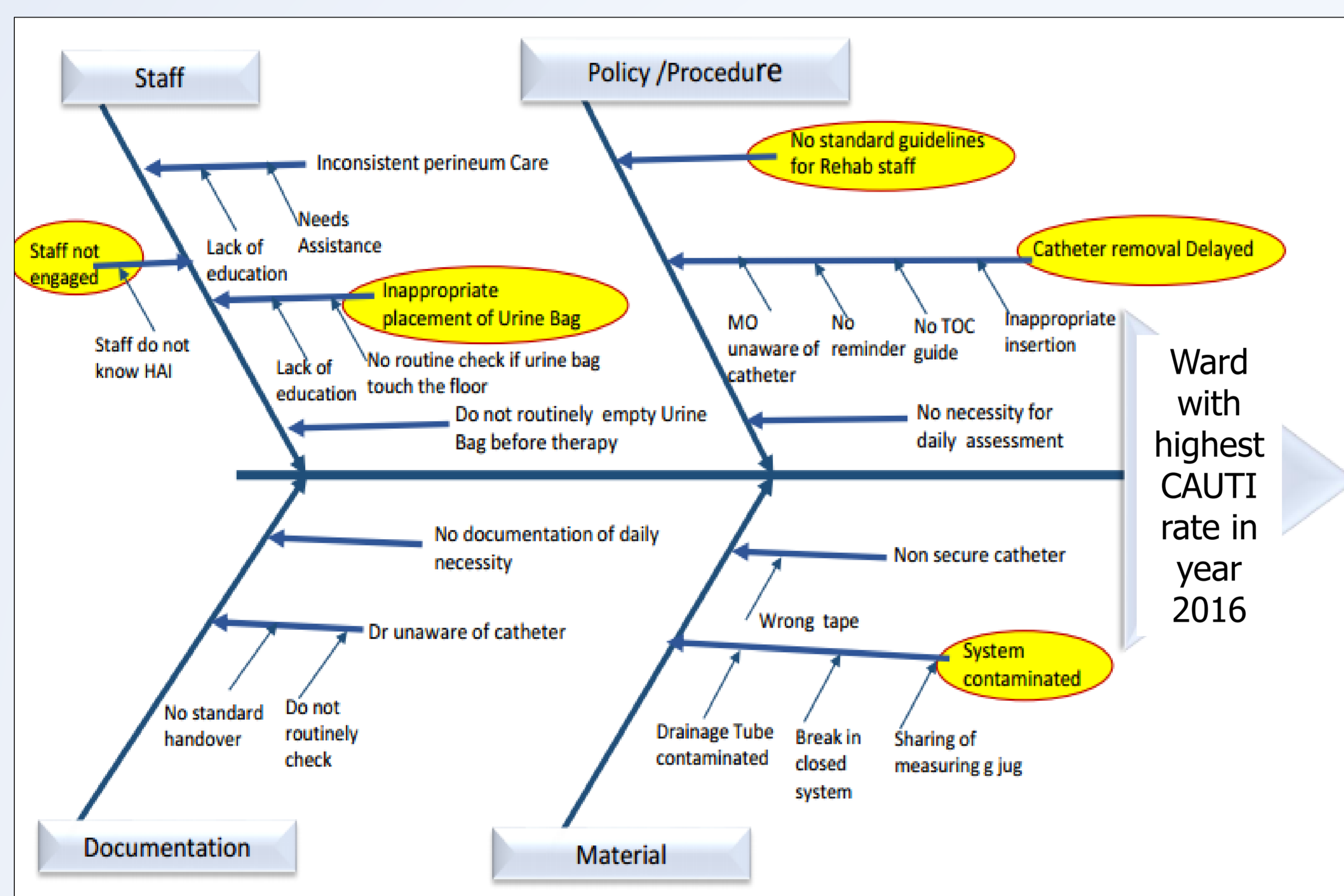
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Background & Aim

In 2016, the hospital wide average CAUTI incidence rate in Yishun Community Hospital (YCH) was **3.5** per thousand catheter days which was high in comparison with other Intermediate-Long term care (ILTC) facilities. A sub-acute ward with the highest average CAUTI rate of **5.4** per thousand catheter days in 2016 was therefore selected as the pilot site. **The aim was to achieve CAUTI rate reduction in the pilot sub-acute ward by 30% within 12 months.**

Cause and Effect Diagram

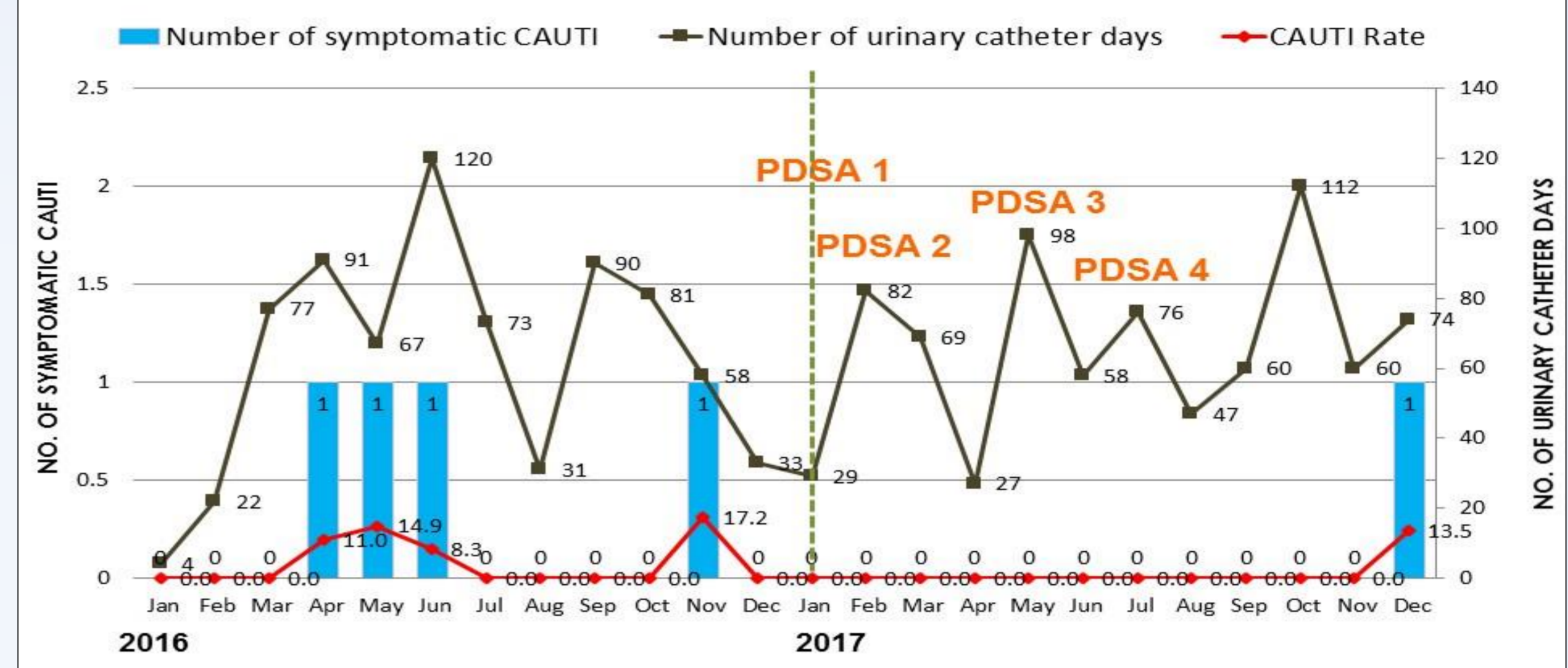


The following gaps for improvement were:

- Knowledge deficit with the CAUTI prevention bundle among therapists, nurses and healthcare assistants (HCAs).
- No standard guidelines for rehab staff in handling the urine bag correctly before, during and after patient activity.
- Inconsistent compliance by ward staff with the correct standard procedure in draining urine bag.
- Physicians did not review daily necessity of urinary catheter.

Results

YCH – Sub acute ward CAUTI Rate 2016-2017



The Sub-Acute Pilot Ward has achieved 75.9% CAUTI reduction from 5.4 to 1.3 per thousand catheter days within 12 months.

	Year 2016	Year 2017
No. of CAUTI	4	1
No. of urine catheter days	747	792
CAUTI / 1000 urine catheter days	5.4	1.3

Cost Savings

Preventing CAUTI will reduce the cost for our patients from extended length of stay, antibiotics usage and laboratory tests. Estimated cost avoidance savings for the Pilot Sub-acute ward only is \$4,605 per year.

Strategies to Sustain

- Train all the infection control link nurses from each ward to check compliance to the CAUTI prevention bundle monthly.
- Continuous measurement of process and outcome. Share these data timely to engage staff at multi-disciplinary level and hospital senior management for their support.

Implementation

A team of stakeholders from multi discipline was formed and using the continuous plan-do-study-act (PDSA) methodology, interventions were tested and measured for its effectiveness.

- The infection control nurse conducted teaching sessions on CAUTI prevention bundle to all nurses, doctors and therapists – **PDSA 1**.
- The pilot ward nurses created a designated trolley for emptying urine bag with a standard work process chart attached to the trolley – **PDSA 2**.
- The CAUTI prevention bundle guide was created and placed in the gyms for the rehab staff – **PDSA 3**.
- For all patients with a urinary catheter, a bookmark will be placed in the patient case notes to remind doctor to review the need to continue catheter and to remove promptly when no longer needed – **PDSA 4**.

Improvement Journey...STOP CAUTI

