

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

Priscilla Chng Hsing Yun¹, Ho Foong Nun²
¹Infection Control, ²Department of Nursing

Mission Statement

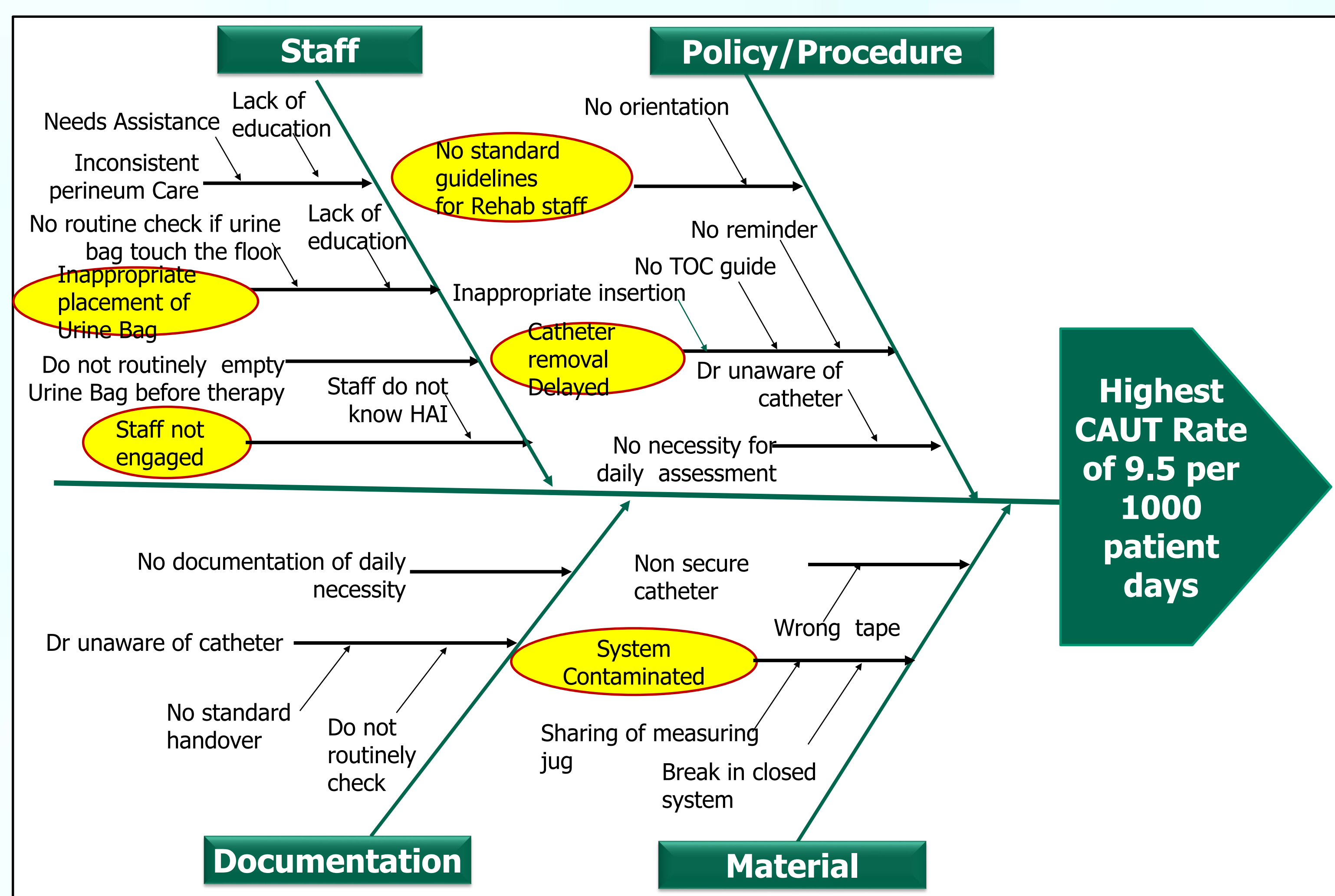
In 2016, the hospital wide average CAUTI incidence rate in Yishun Community Hospital (YCH) was **3.5** per thousand catheter days which was high in comparison with other Intermediate-Long term care (ILTC) facilities. A sub-acute ward with the highest average CAUTI rate of **5.4** per thousand catheter 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.**

Team Members

A team with various stakeholders from multi-disciplines was formed.

	Name	Designation	Department
Team Leaders	Ms Priscilla Chng Hsing Yun	Senior Staff Nurse	Infection Control
	Ms Ho Foong Nun	Nurse Manager	Nursing
Team Members	Ms Nan Phoo Thandar Aung	Senior Staff Nurse	Nursing
	Ms Ong Jandelle Ann Sorosoro	Assistant Nurse	Nursing
	Ms Sarmiento Cristlyne Grace De Torres	Assistant Nurse	Nursing
	Mr Benjamin Tan Boon Cheng	Assistant Nurse Clinician	Infection Control
	Ms Quan Yuan Ling	Senior Occupational Therapist	Rehab Services
	Dr Dianne Salumbides Doctor	Clinical Associate	Medical Services
Sponsors	Dr Ngeow Colin	Consultant	Medical Services
	Mdm Chua Gek Choo	Director	Nursing
Facilitator	Ms Florence Chng Liong Cheu	Deputy Director	Quality & Risk Management

Cause and Effect Diagram



The following gaps for improvement were:

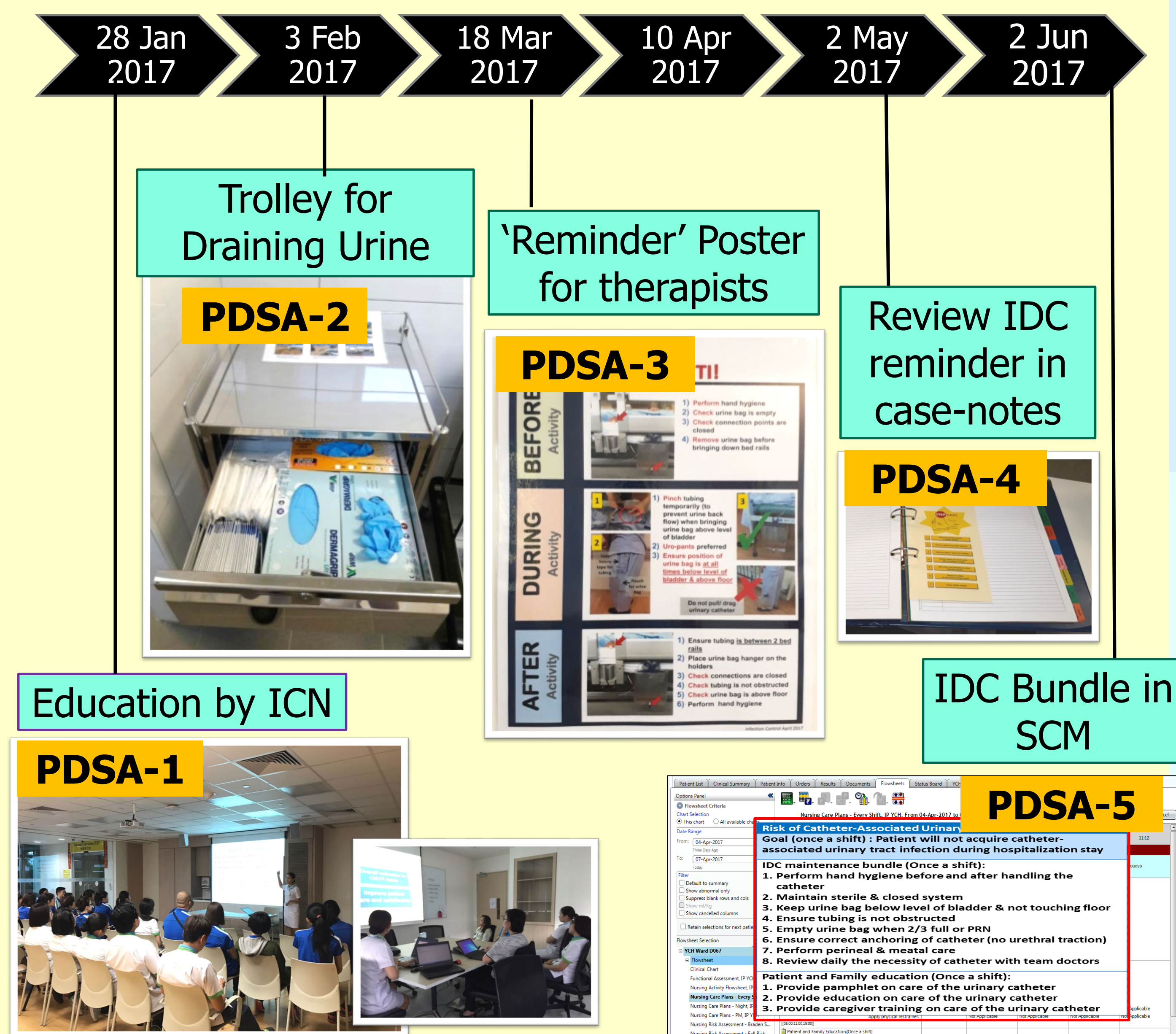
- Knowledge deficit with the CAUTI prevention bundle among therapists, nurses and healthcare assistants (HCAs).
- No standard guidelines for rehabilitation services staff in handling the urine bag correctly before, during and after patient activity.
- Inconsistent compliance by ward staff with the correct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

Implementation

Using the continuous plan-do-study-act (PDSA) methodology, interventions were tested and measured for its effectiveness.

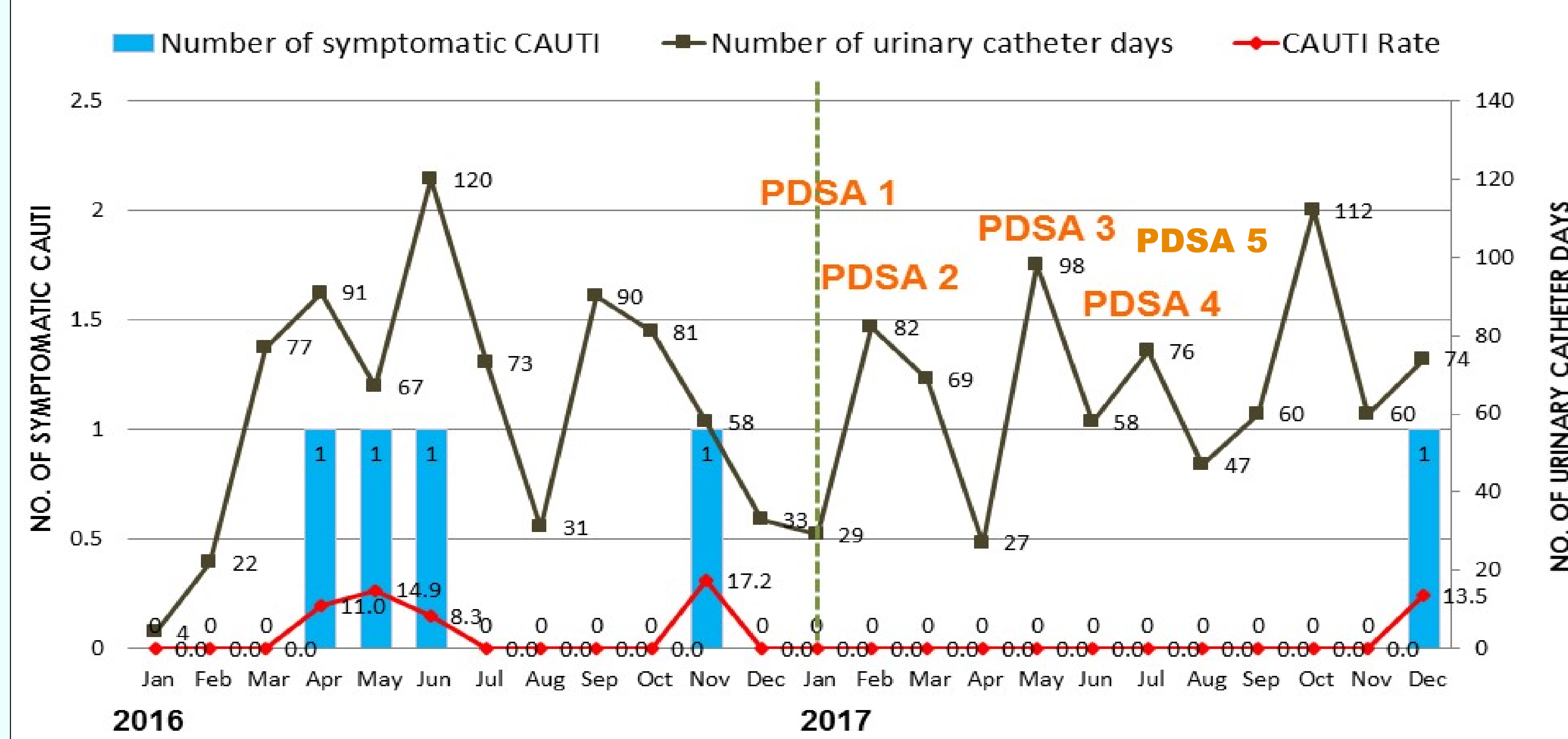
- The infection control nurse conducted teaching sessions on CAUTI prevention bundle to all nurses, doctors and therapists – **PDSA 1**.
- The pilot ward nurses created a designated trolley for emptying urine bag with a standard work process chart attached to the trolley – **PDSA 2**.
- The CAUTI prevention 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**.
- Indwelling Urinary Catheter maintenance Bundle was added in electronic Nursing document (SCM) – **PDSA 5**.

Improvement Journey...STOP CAUTI



Results

YCH – Sub acute ward CAUTI Rate 2016-2017



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

	Pilot 1 Sub-Acute Ward	
	Year 2016	Year 2017
Number of CAUTI	4	1
Number 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 is \$4,605 per year.

Strategies to Sustain

