



# Conquering CAUTI: Evaluation and Implementation of an External Female Catheter to decrease Catheter Associated Urinary Tract Infections



Patti Newton, BSN, RN, CCRN, CNRN, SCRNI; Mindy Close, BSN, RN, CWOCN; Becky Ramos, MSN, RN, ACNS-BC, SCRNI, Adult Health Clinical Nurse Specialist; Ashika Bhan, MPH, Infection Prevention Specialist.

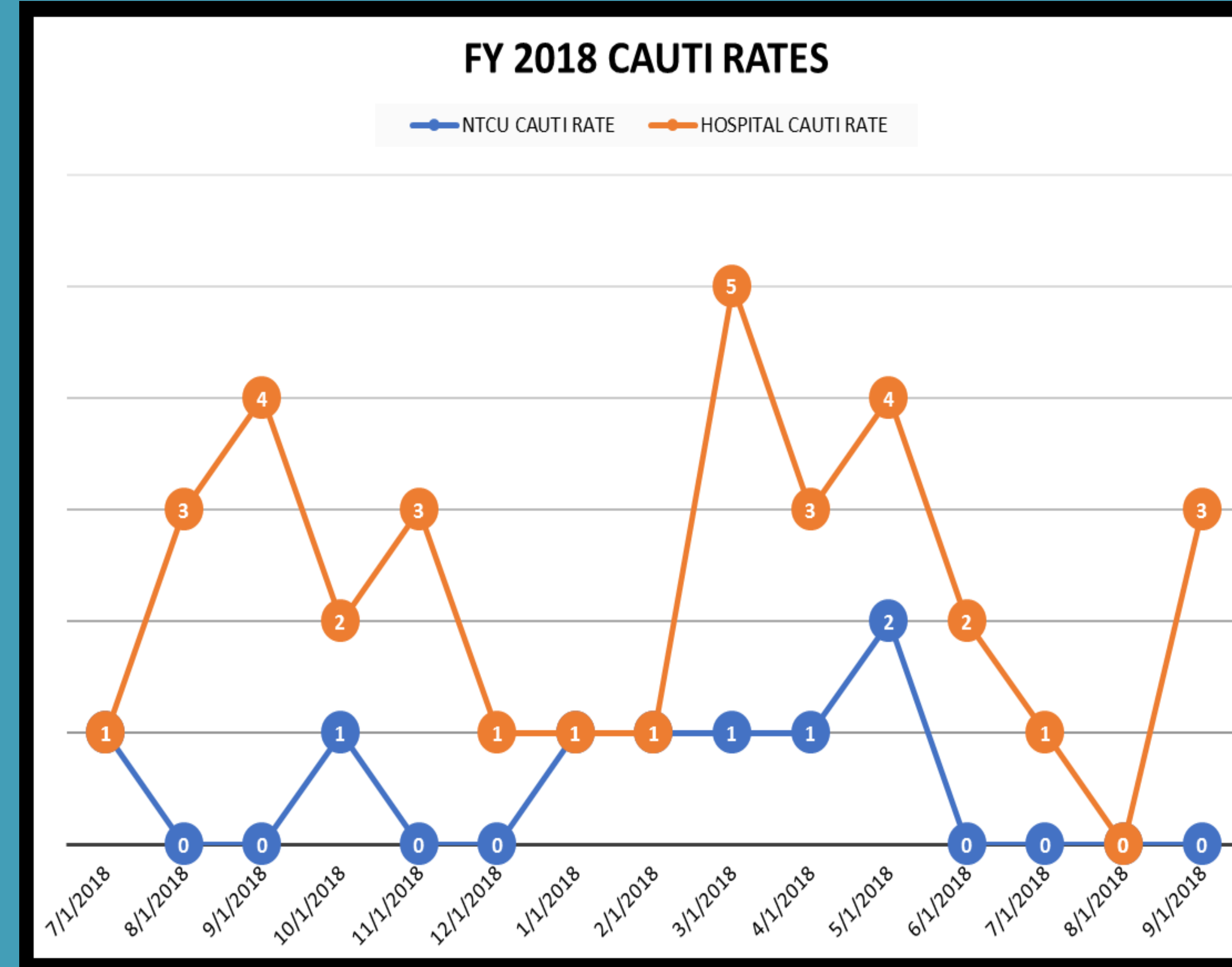
**Background:** CAUTIs increase patient discomfort and hospital expenses, and are the most frequently reported Hospital Acquired Infection. CDC reports 75% of CAUTI's are associated with urinary catheter usage and lead to increased LOS and patient dissatisfaction.

- Neuro Trauma Care Unit (NTCU) leaders reported eight CAUTI's in FY 2018 after having zero in the prior fiscal year.
- Deep-dive case reviews indicated that catheter insertion technique was not the issue, instead the length of catheter dwell time was most likely the culprit.

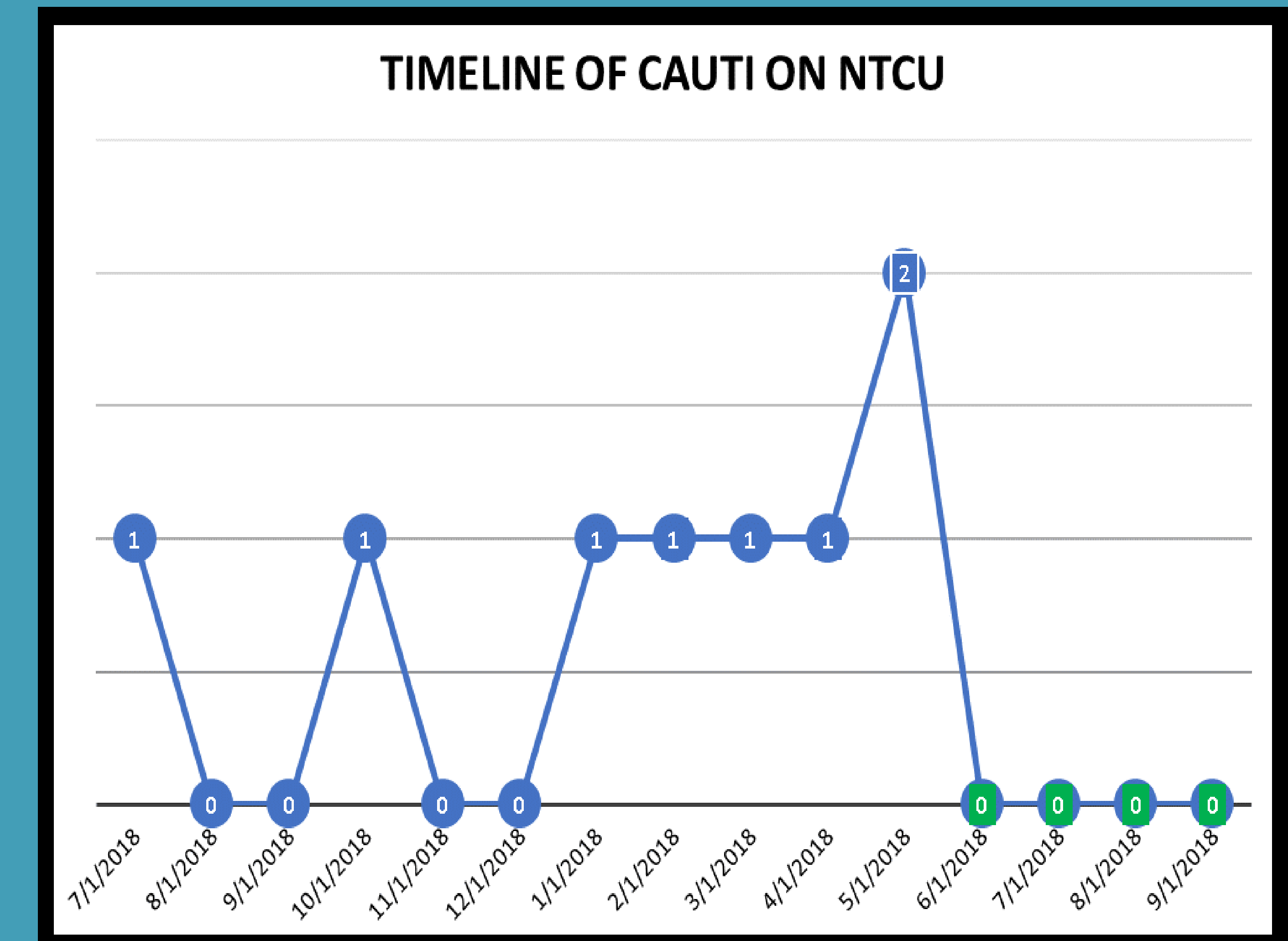
**Purpose:** To determine the effect of two different external female catheter devices upon CAUTI rates on NTCU and the General Surgery Unit.

### Test of Change:

- Two products were found available and both were trialed.
- Eight weeks of test of change was planned.
- During week 1 both devices were available to see which one would be favored above the other.
- In the remaining weeks nurses were offered only 1 product at a time to measure effectiveness and efficiency.



**Methods:** Nurses employed Lean methodology to conduct continuous performance improvement. Two units participated in a 90 day trial: one surgical unit and NTCU which has IMCU/Tele/MS levels of care. After education completion to staff both devices were made available for use. Study leaders monitored products and compiled opinion survey results weekly.



### Outcomes:

- Between June 11, 2018 and Oct 31, 2018 NTCU had zero CAUTI events.
- Clinical nurses preferred the Purewick device. Nurses found external catheters useful in trauma, stroke, neurosurgical and CHF patients.
- Devices were more effective and efficient on NTCU compared to the general surgical unit.

### Clinical Implications for the Future:

- NTCU had a passionate nurse champion ensuring the trial's success.
- Current plans include hospital spread with unit super-users.
- 10/1/18 Hospital wide education.
- 11/1/18 Adopt product throughout hospital.

### References:

1. Centers for Disease Control and Prevention: <https://www.cdc.gov/infectioncontrol/guidelines/cauti/index.html>
  2. Bard Medical corporation: Effectiveness and functionality of a female External Catheter trial (EFFECT): <https://www.bardmedical.com>
- Disclosure: there was no financial support or gain from products utilized in this project

### Contacts:

- patricia.newton@salemhealth.org
- mindy.close@salemhealth.org
- becky.ramos@salemhealth.org
- ashika.bahn@salemhealth.org