

# The War on HAIs

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# Background

- Hospital Acquired Infections are a key driver of morbidity and mortality of our patients
- Hospital Acquired Infections increase length of stay and readmission rates
- Hospital Acquired Infections cost the health system money [quality of care penalties and value based purchasing]

Event	Cost Opportunity per Case	Potential Cost Savings Opportunity
CAUTI	\$19,679	\$1,377,533
C-diff	\$17,338	\$1,196,308
CLABSI	\$54,409	\$3,863,071
DVT	\$44,841	\$1,076,172
HAPI	\$64,365	\$2,188,401
MRSA	\$41,712	\$1,209,652
SSI Colon	\$2,109	\$48,498

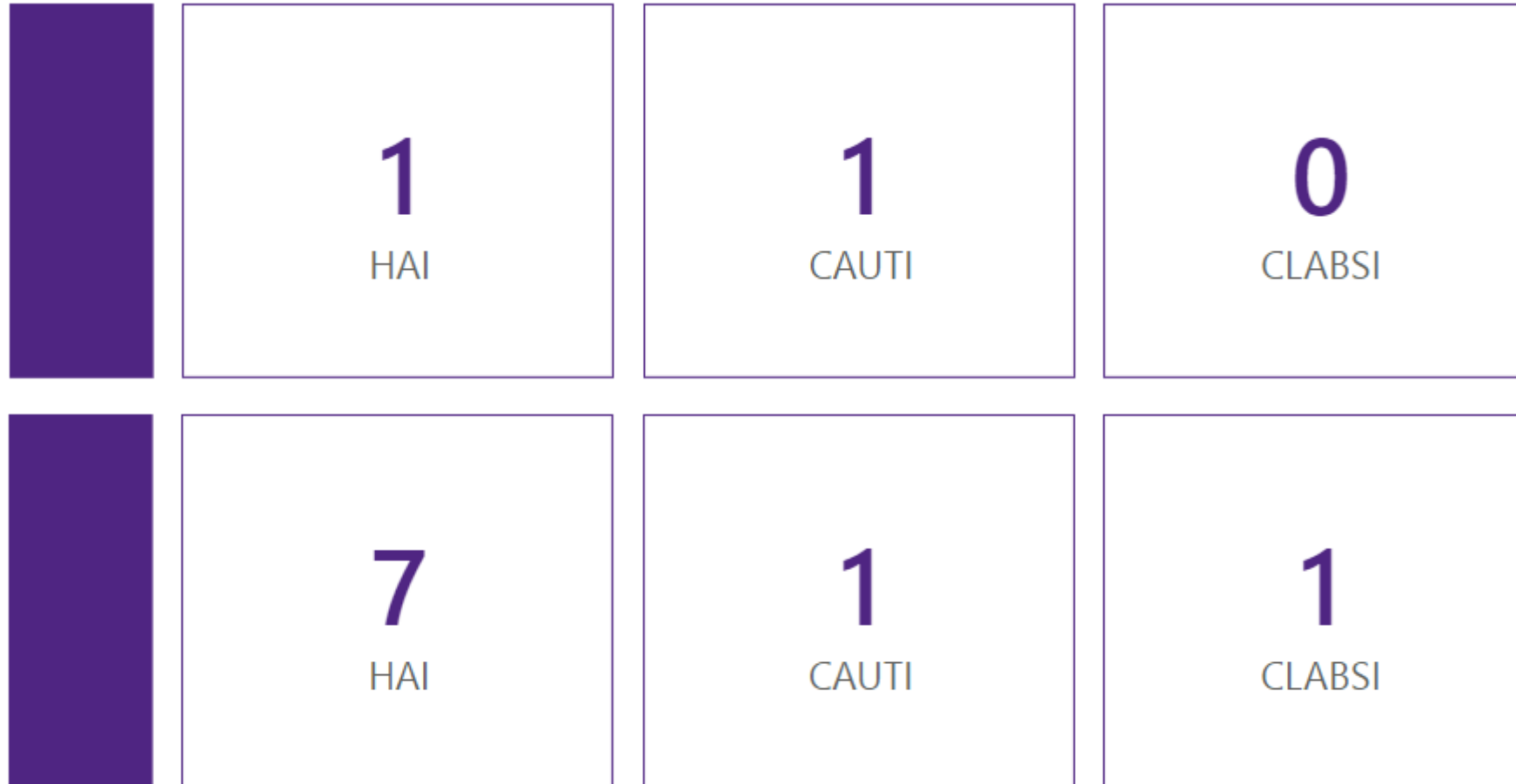
# CAUTI & CLABSI

- CAUTI: in patients with indwelling urethral, indwelling suprapubic, or intermittent catheterization is defined by:
  - the presence of symptoms or signs compatible with UTI with no other identified source of infection
  - along with  $\geq 10^3$  colony-forming units (cfu)/mL of  $\geq 1$  bacterial species in a single catheter urine specimen or in a midstream voided urine specimen from a patient whose urethral, suprapubic, or condom catheter has been removed within the previous 48 h
- CLABSI occurs when these three criteria exist:
- 1. Clinical signs of infection [ie./ fever, rigors, altered mental status, hypotension]
- 2. No alternate source of bloodstream infection
- 3. Positive blood culture from a peripheral vein with any one of the following:
  - -Catheter tip/segment culture that matches organism grown from blood
  - -At least threefold higher number of organisms grown from the catheter versus the peripheral blood culture on simultaneously drawn cultures
  - -Growth from the catheter-drawn blood culture occurs at least two hours before growth of the same organism from a percutaneously-drawn blood culture

# QI Project

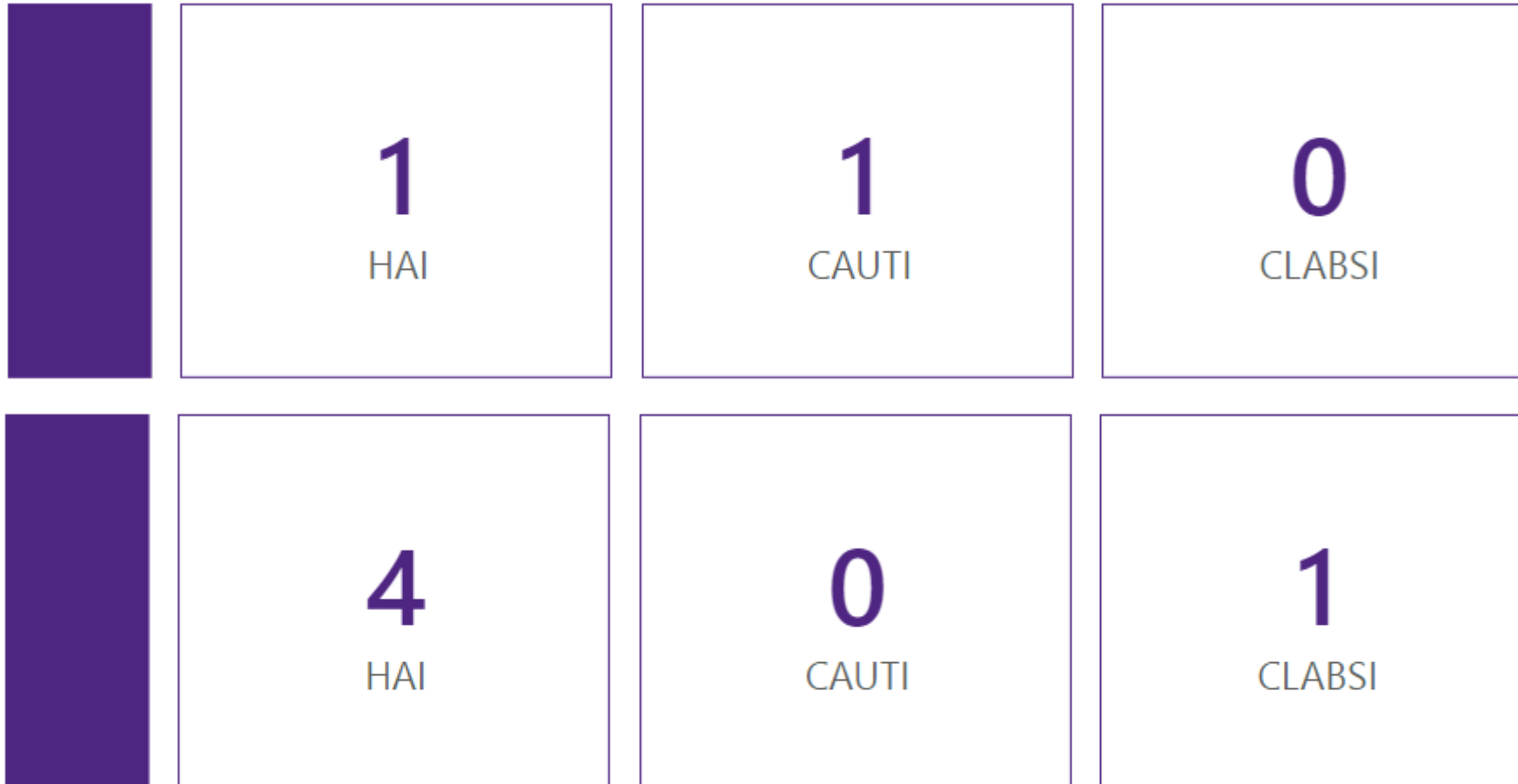
- AIM statement:
  - To decrease CLABSIs and CAUTIs incidence by 15% within a quarter by implementing a standardized process to be used during progression of care rounds that engages the care team to discuss and act on all external devices for each patient.
- PDSA Cycle 1
  - Assessed current POCRs and discussions around patients' catheters
  - Engaged key stakeholders and promoted awareness of our initiative
  - Downstream education on preventing HAIs
- PDSA Cycle 2
  - Charge Nurse template
  - Identifying patient's with catheters
  - Discussing catheters on POCRs
  - Recording medical decision on the template and acting on orders

# Results: Fiscal Year 2022 over Fiscal Year 2023



\*\*SSI is included in the HAI total when no department filters are applied.

# Results: Q4 2022 over Q1 2023



\*\*SSI is included in the HAI total when no department filters are applied.

# Discussion

- Our test of change showed a significant reduction in CAUTIs but led to an increase in CLABSIs
- The overall incidence of CAUTIs and CLABSIs [n] on our unit was very low to begin with which leads to lower powered results despite significant change
- Retrospectively, our team would focus on units with a higher incidence of CAUTIs and CLABSIs in order to effect greater change and collect more powerful data
- In order to make our test of change sustainable, our 3<sup>rd</sup> PDSA cycle would include working with informatics and implementing the process digitally into EPIC where we may track compliance, device days and reduction in device days, as well as choice of action during POCRs

# Gratitude / Appreciation Slide

- TQA Leaders: Dr. Mary Catherine Turner and Jenna Garris
- Coaches: Amy Campbell and Kenji Leonard
- Nurse Managers: Christy Harding and Tracy Hobbs
- Team: Vikram Bhinder, Natasha Drake and Simone Montoya