



**URINARY TRACT INFECTIONS:
QUALITY IMPROVEMENT PROJECT**

THINK HEALTHY.
THINK HURLEY.

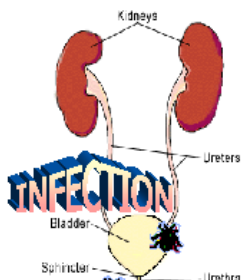
URINARY TRACT INFECTIONS

- Reason for choosing UTI
 - MTQIP reports
 - UTI consistent area of weakness
- MTQIP reports presented at Trauma Program Operational Process Performance Committee
- Presented MTQIP reports to the Board of Managers
 - Developed hospital wide initiative
 - Decrease use of foley catheters
 - Early discontinuation of catheters

- Hospital-wide
- PowerPoint developed by Quality Department
- Michigan Health & Hospital Association Keystone Center for Patient Safety & Quality
 - Keystone: Hospital Acquired Infections (HAI) initiative
 - Goal to reduce and eliminate hospital-associated infections

- Take home messages
 - Not every patient needs a foley
 - Discontinuation of foley should occur as soon as the patient no longer meets criteria
 - Need for continuation of foley should be evaluated on a daily basis

Remove That Foley!



Foley Catheters Cause:

- Infections ↑
- Length of Stay ↑
- Cost ↑\$\$
- Patient Discomfort ☹
- Antibiotic Usage ↑
- ◆ Patients with Foley Catheters tend to stay in bed, which increases risk of skin breakdown, DVTs, & pneumonia due to their immobility.

Foley Catheters are Indicated for:

- ✓ Acute urinary retention or obstruction
- ✓ Perioperative use in selected surgeries
- ✓ Assist healing of perineal and sacral wounds in incontinent patients
- ✓ Required immobilization for trauma or surgery
- ✓ Chronic indwelling urinary catheter on admission
- ✓ Accurate measurement of urinary output in critically ill patients (intensive care)
- ✓ Hospice/Comfort/Palliative care in critically ill patients (intensive care)

Foley Catheters are *not* indicated for:

- Close monitoring of outputs-outside of ICU.
- Patient Request
- Confused patient
- Incontinence without a sacral or perineal pressure sore
- Prolonged postoperative use
- Others (morbid obesity, immobility, patient transferred from ICU)



Foley Catheter Project

Goal:

- Decrease Catheter Associated Urinary Tract Infections (CAUTI), which will in turn improve patient outcomes and decrease length of stay.
- Improve Patient Safety and Outcome.

Background:

- 600,000 patients develop hospital-acquired UTI per year.
- 80% of these are urinary catheter associated.
- Approximately half of the patients with a urinary catheter do not have a valid indication for placement.
- Each day the urinary catheter remains, the risk of the CAUTI increases 5%.

Specific Goals:

- Reduce the unnecessary use of urinary catheters in the inpatient setting.
- Reduce the risk of hospital-acquired urinary tract infections.

Prevention of CAUTI:

Follow criteria indicated for a urinary catheter:

1. Urinary tract obstruction.
2. Neurogenic bladder dysfunction and urinary retention.
3. Urologic or other surgery with contiguous structures.
4. Stage 3 or 4 sacral area decubitus in incontinent patients.
5. Hospice or palliative care (if patient requests)

Promptly Remove Unnecessary Foley Catheters

REMOVE THAT FOLEY!

- MTQIP definitions
 - Culture results
 - $\geq 100,000$ microorganisms per cm^3 of urine with no more than 2 species of microorganisms
 - Vital Signs
 - Fever $>38^\circ \text{C}$
 - Laboratory Results
 - $\text{WBC} > 100,000$ or < 3000 per cubic millimeter
- Discussion of definitions with Trauma Surgeons and Mid-Level Practitioners

INTERDISCIPLINARY ROUNDING

- Badge backers
- Need for foley addressed daily
- All members of interdisciplinary team involved

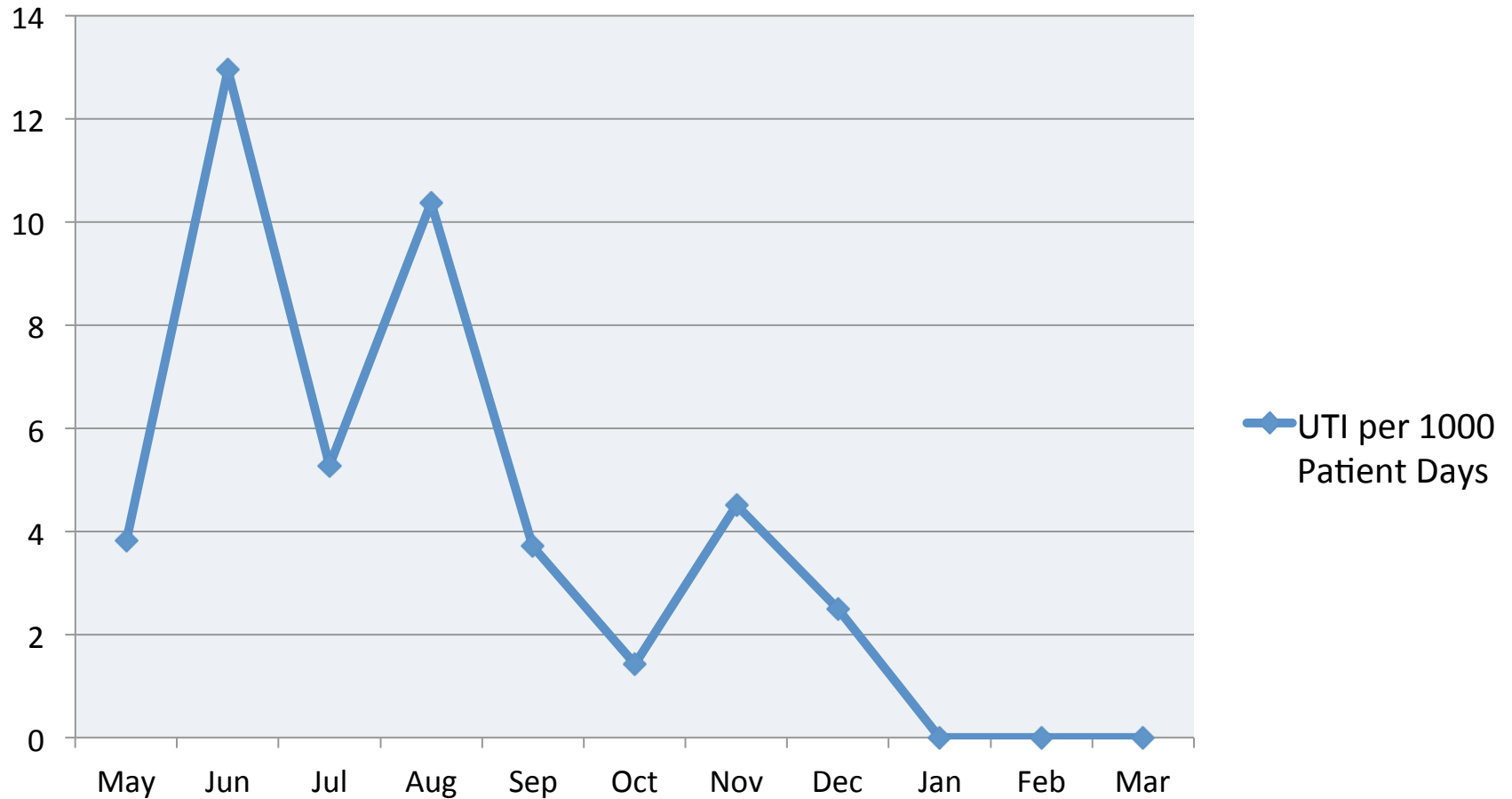
Interdisciplinary Rounds

1. **RASS** / Current **RASS**
2. **Sedative / Analgesic**
Infusion / Intermittent dosing
3. **SAT / SBT** - spontaneous awakening trial / spontaneous breathing trial
4. **DVT prophylaxis**
5. **GI prophylaxis**
6. **Foley** - Appropriate or not



RESULTS

UTI per 1000 Patient Days



May 2011 – March 2012

CONCLUSION

- Several interventions used
 - Staff education regarding Keystone initiative
 - Badge backers for interdisciplinary rounds
 - Modification of data collection methods to match MTQIP definitions
- Decrease in UTI incidence
 - Several interventions simultaneously