

CAUTI TASK FORCE KICKOFF!

March 17, 2021



Today's Agenda

- **The Team: Introductions, Task Force Roles and Responsibilities**
- **Understand the “Why?”**
- **Get some Lean Training:**
 - Lean definitions
 - A3 Exercise/component examples
- ***BREAK (5 minutes)***
- **Review the DRAFT A3 for CAUTI:**
 - By A3 Quadrant
 - Understand the role of data
- **Next Steps:**
 - Review the 16-week schedule of activities
 - Go to the Gemba
 - Learn how to perform Observations
- **Questions?**

The Team

Name	Title/Area	Task Force Role
Crystal Farmer, RN	CNO	Executive Co-Sponsor
Philip Perry, MD	CMO	Executive Co-Sponsor
Mark Anderson, MD	Co-Champion	Core Team Member
Stefanie Bartley, RN	Infection Prevention	Core Team Member
Brannelly Batman, RN	Co-Champion	Core Team Member
Amanda (Mandy) Bennington, RN	Nursing Leadership, ED	Core Team Member
Sallie Lewis	Process/Project Mgmt. Director	Facilitator/PI Lead
Bethany Mohler	Nursing Leadership, Inpatient	Core Team Member
Cyndi Solana, RN	Clinical Informaticist	Core Team Member
Andy West, MD	Clinical Informaticist	Core Team Member
Mark Andres, MD	Surgeon	Front-line Partner
Lacey “Sunny” Cline, RN	Medical	Front-line Partner
Kristen Doughty, RN	Supply Chain	Support Area Partner
Jessi Ferguson, RN	ICU	Front-line Partner
Bethany Hoy, RN	OR/PACU	Front-line Partner
Stephanie Mims	Therapy Services	Ancillary Partner
Olivia Moore, RN	Surgery	Front-line Partner
Adam Rochman, MD	Emergency Dept.	Front-line Partner
Chris Sanders, MD	Hospitalist	Front-line Partner
Emily Wyant, RN	OR/PACU	Front-line Partner

CAUTI Task Force – Roles and Responsibilities

- CORE Team Members:
 - Support **front-line time** to LEARN about LEAN (promote *empowerment*)
 - Represent the organizational knowledge around CAUTI reduction and Task Force efforts to Sr. Leaders
 - Influencers of organizational change, adoption of Standard Work
- Front-line/Ancillary/Support Area Members:
 - Serve as role models and champions for CAUTI reduction in your area
 - Get familiar with the pertinent Lean methods and tools:
 - Standard Work
 - Spread
 - Visual Management
 - Data – trends
 - Root Cause Analysis

Why a Lean Approach?

- **Lean thinking is applied in order to:**
 - Improve quality of care
 - Reduce waste
 - Increase reliability
 - Get to Root Cause so as not to have the problem recur
 - Engage **those who do the work** in the problem solving process
- **What Lean is not:**
 - An opportunity to just “eliminate waste”
 - Another “band aid” for problem solving

Key Lean Definitions

Term	Definition
The Scientific Method	The scientific method is defined as a method of research in which a problem is identified, relevant data is gathered, a hypothesis is formulated from this data, and the hypothesis is empirically tested.
Problem (Statement)	The problem statement is a clear and concise statement that describes the symptoms of the problem to be addressed. Defining the problem statement provides three benefits for the team: creates a sense of ownership for the team. focuses the team on an accepted problem. describes the symptoms in measurable terms.
Current State	Usually verified via in-person Observation, the current state often is captured by a diagram that reflects how a specific activity is currently being performed, and by whom.
Future State	Also called the “Ideal Condition,” in Lean this describes the perfect world if there were no barriers or inhibitors in the process (the perfect process).
Kaizen	A Japanese term meaning “change for the better”. Applied to business organizations, it implies continuing improvement involving everyone Continuous improvement.
Process Map	A visual representation of the sequential flow of a process. Used as a tool in problem solving, this technique makes opportunities for improvement apparent Problem Solving.

Key Lean Definitions (cont.)

Term	Definition
PI Data	Performance improvement data. Essential to support the problem statement, understand current state, and measure improvement 'post-intervention'
Root Cause Analysis (RCA)	Root cause analysis (RCA) is a method of problem solving used for identifying the root causes of faults or problems. RCA serves as an input to a remediation process whereby corrective actions are taken to prevent the problem from reoccurring.
PDCA	Plan-Do-Check-Act. An iterative four-step problem solving process typically used in quality control. It is also known as the Deming Cycle, Shewhart Cycle, Deming Wheel, or Plan-Do-Study-Act.
Kanban	A visual system governing production or movement of an item, often used when managing supply inventory. The concept implies that all production and movement of parts takes place only as required by the downstream operation. Quantity on hand is determined by the demand rate for the item and the time required to replenish. Goes to the Lean goal of creating flow and eliminating waste.
Gemba	Japanese word of which the literal translation is "the real place." where the actual services are provided or where the work is done. Go and see the work.

Key Lean Definitions (cont.)

Term	Definition
Observation	Also referred to as 'shadowing,' observation is the process of watching someone or something. Often, observation is an informal action, but it can also be formal and involve data collection.
Countermeasure	Immediate actions to bring performance that is tracking below expectations back into the proper trend. Requires root cause analysis
Standard Work	An agreed upon set of work procedures that effectively combines people, materials, and machines to maintain quality, efficiency, safety, and predictability; establishes a routine for repetitive tasks, provides a basis for improvement by defining the normal and highlighting the abnormal, and it prohibits backsliding. The written description of the "best known way" to do work.
Visual Management	Visual management uses instinctive visual cues to make succinct, accurate information within a workplace available at all times to those who need to know it.
Daily Management System(s)	Daily management systems, when implemented properly, allow employees at every level of an organization to understand how their daily activity contributes to the goals of the organization.
Waste	Waste can be defined as any production activity that utilizes resources but does not add any value for the customer. Since these wastes add to the cost of products, they either reduce the profit the manufacturer makes or inflate the price that the patient/customer needs to pay.

A3 Problem Solving

Theme Of A3	Area & Process	Project Lead	Start & End Date
Description Of Current State Problem Statement	Acton Plan Countermeasure For Root Cause (S)		
Background & Supporting Data Fact & Figures			
Root Cause Analysis Process Maps	Check & Follow Up Verify Result Of Each		
PLAN	DO	CHECK	ACT

The A3 Template

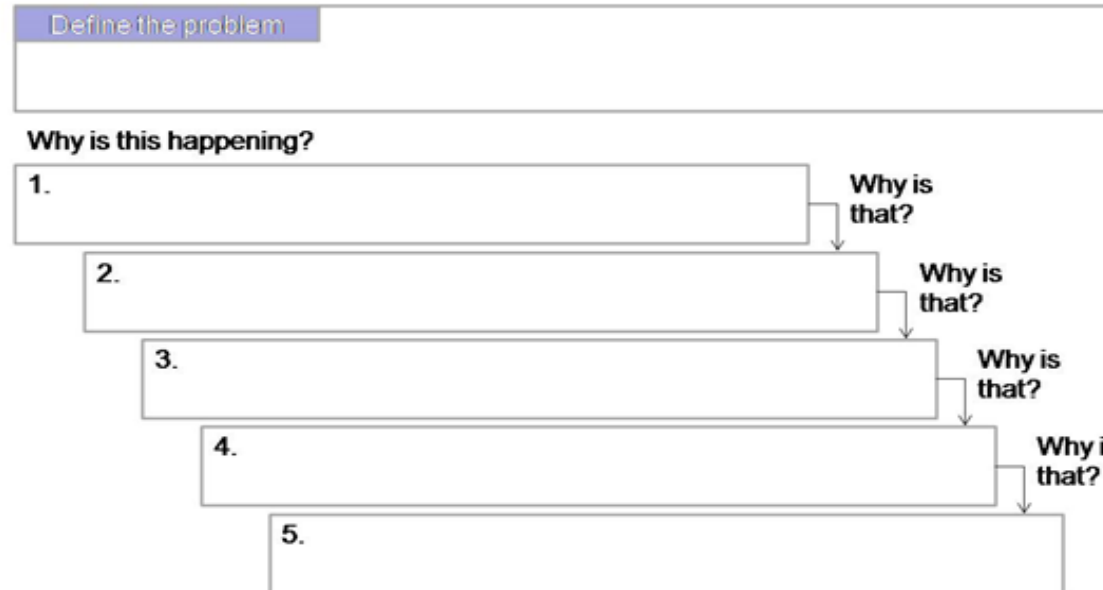
<p>1. Need/problem statement/background/measures</p>	<p>3. Target condition</p> <p>4. Reasoning/Hypothesis</p>
<p>2. Current condition/problems/root causes/5 Whys</p>	<p>5. Action plan</p> <p>6. Key learning</p>

Steps of
the A3
Process:
4 “Boxes”

<p>1. Need/ problem statement/ background/ measures</p> <ul style="list-style-type: none">Identify the Problem or Need	<p>3. Target condition</p> <p>4. Reasoning/ Hypothesis</p> <ul style="list-style-type: none">Develop a Future (target or ideal) stateDevise Countermeasures to address Root cause(s)
<p>2. Current condition/problems/ root causes/ 5 Whys</p> <ul style="list-style-type: none">Conduct Research to understand the Current SituationConduct Root Cause AnalysisUse the “5 Whys” whenever able	<p>5. Action plan</p> <ul style="list-style-type: none">Create an Action Plan, Evaluate results <p>6. Key learning</p>

The “5 Whys”

5 Why Analysis



Control Chart EXAMPLE

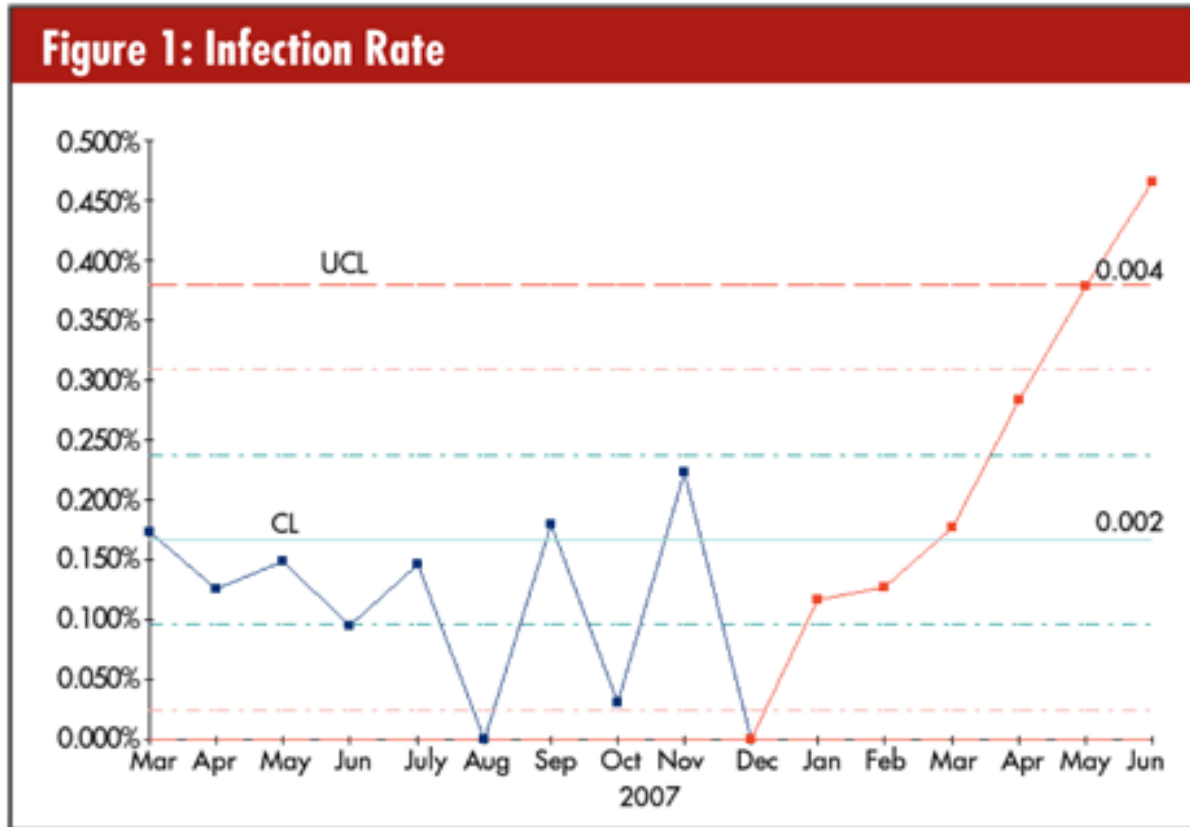
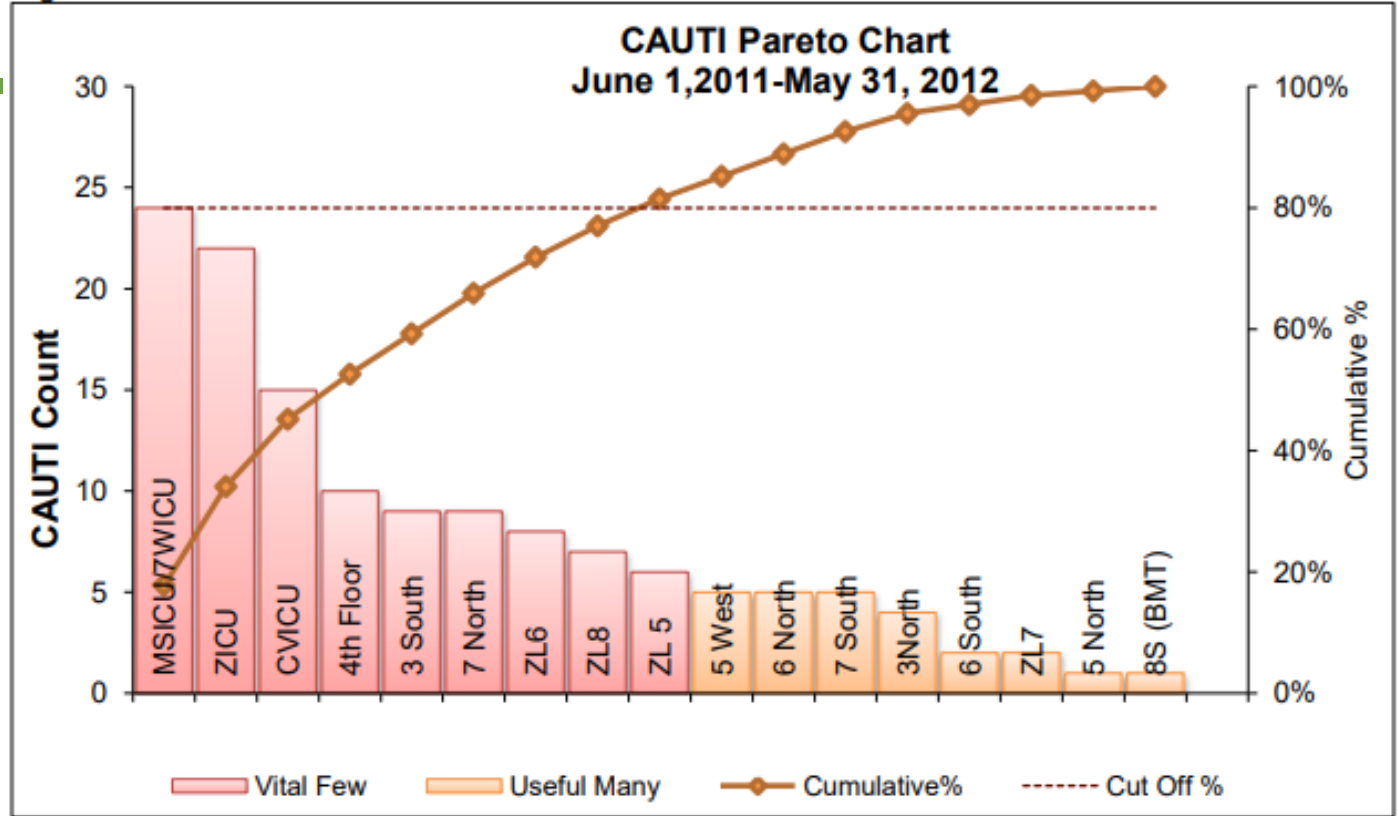


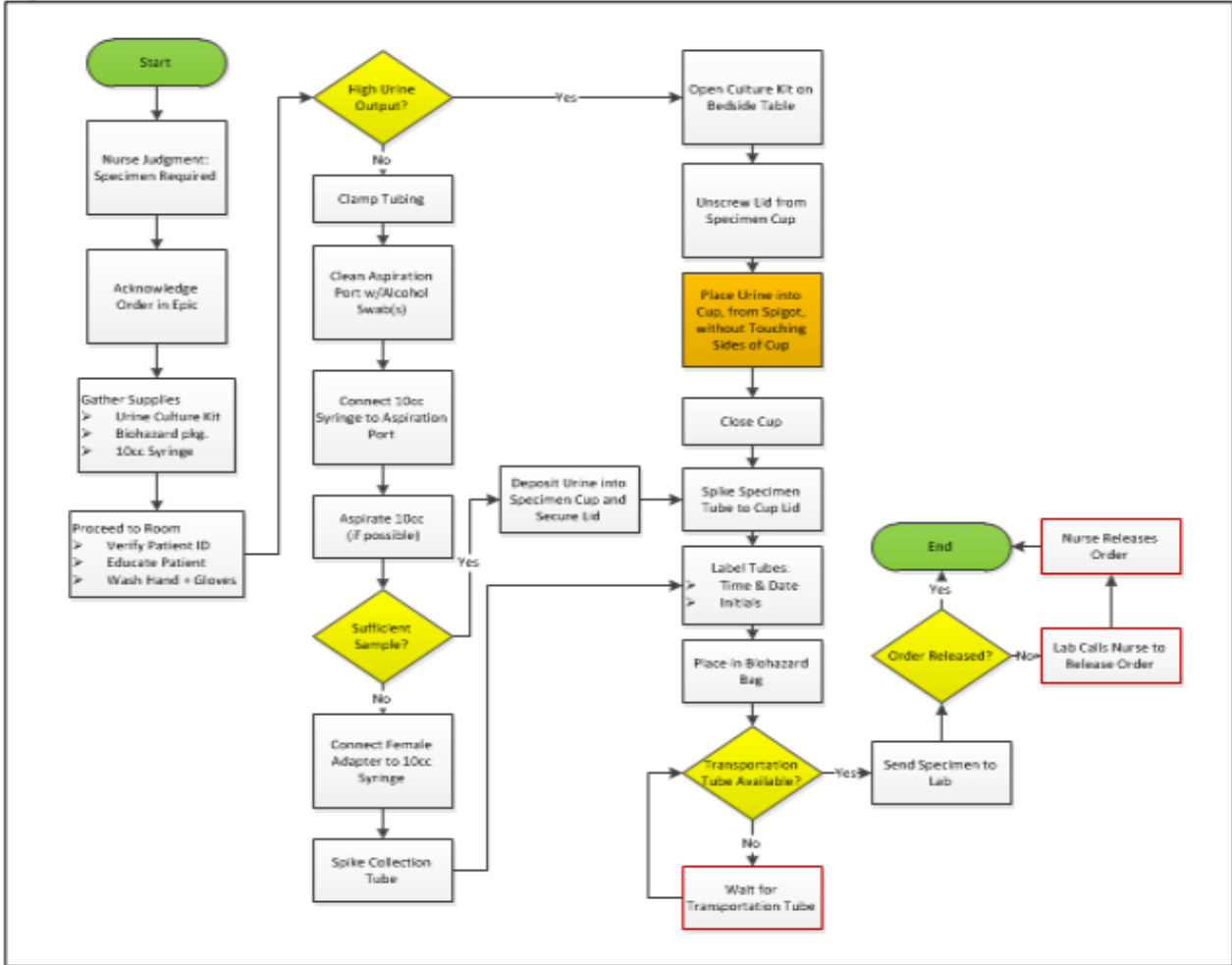
Figure 1: Pareto Chart of Baseline CAUTI Count



Pareto Chart/
Analysis EXAMPLE

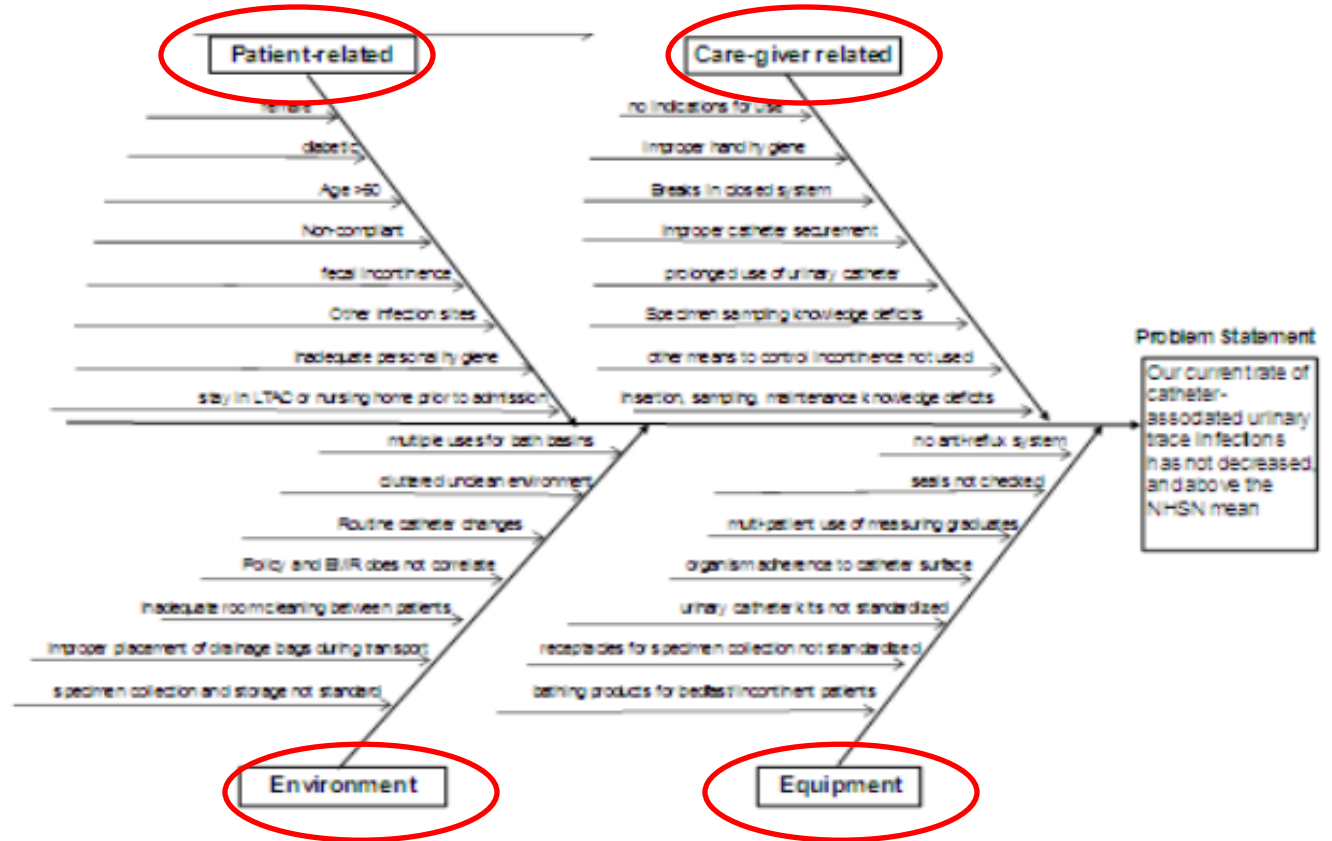
Figure 6, urine specimen collection process

Process Mapping EXAMPLE



Fishbone (Cause and Effect) Diagram EXAMPLE

Figure 7, Fishbone diagram of factors contributing to CAUTI



Manage to a Standard

- Standard Work is not a critical look, but is the *best currently known way* to do the work
- Auditing Standard work for clinical and leadership processes keeps it current
- Managing to a Standard spreads best practice
- Auditing and observing the work is an opportunity for teaching and coaching

CAUTI Prevention Standard Work EXAMPLE

Urine Specimen Collection Standard Work – Indwelling Catheter			
Last updated: 5/08/2020	Owner: Brannelly Batman	Performed By: RNs ONLY	
Version: 1.0	Revised by:	Trigger: Urine Specimen ordered for patient with Indwelling Urinary Catheter	
Prior to specimen collection please utilize the Urine Specimen Algorithm to ensure order appropriateness			
IUC in place <48 hours & placed at AH 1. Collect urine from existing IUC 2. Determine ongoing need for IUC; remove if no longer necessary		IUC in place >48 hours and/or not placed at AH 1. Remove IUC RECONSIDER IUC NECESSITY IUC still needed 2. Insert new IUC and collect urine IUC not needed 2. Collect urine using I&O catheter or new clean urinal/hat after proper cleansing	
		IUC in place >48 hours & difficult insertion (Urology Patient) 1. Conduct Team Huddle to discuss need for requested specimen 2. Collect urine if necessary 3. If patient + for CAUTI, discuss IUC removal/ replacement 4. Determine ongoing need for IUC; remove if no longer necessary	
	Work Performed by (when):	Major Step	Details
1	RN	Identify the patient	Identify the patient using two (2) patient identifiers. The two patient identifiers at Augusta Health are name and date of birth.
2	RN	Wash Hands	Cleanse hands as per organizational policy.
3	RN	Put on gloves	Apply Clean Gloves for your protection.
4	RN	Clamp drainage tubing	Clamp the drainage tubing two (2) inches below the catheter tubing junction and secure with a catheter clamp. Clamp should only remain in place for as long as needed to obtain an adequate specimen. The clamp should not be left in place unattended.
5	RN	Cleanse the aspiration port	Vigorously wipe the aspiration port with an alcohol pad.
6	RN	Attach the Luer-Lok Access Device	Attach Luer-Lok Access Device to the needleless access port on the catheter.
7	RN	Insert appropriate BD Vacutainer Collection tube following order of draw sequence	Insert appropriate BD Vacutainer Collection tube to allow withdrawal of urine from the catheter. Order of draw sequence.... <ul style="list-style-type: none"> • Culture – gray top (C&S preservative) • Urinalysis – (UA preservative) • Other – (no preservatives)

BREAK

5 MINUTES

The CAUTI A3: Box 1 – Example

A3 Scie

Title: CAUTI Reduction	Executive Sponsors: Dr. Phil Perry, Crystal Farmer	Leads: Dr. Mark Anderson, Brannelly Batma PI Coach: Sallie Lewis
----------------------------------	--	---

1. Need/ problem statement/ background/ measures

Problem: Despite the # of Foley catheter days decreasing, the number of Catheter-Associated Urinary Tract Infections (CAUTIs) at Augusta Health (AH) are increasing. AH is in the highest risk tier of causing compared to peer organizations based on national and state benchmarks. This **harm** to our patient is preventable.

Background data: CAUTIs are among the most common type of hospital-acquired infections, and complications include increased length of stay, patient discomfort, morbidity and mortality, and cost of patient care.

- Research estimates that 50-70% of all CAUTIs are preventable
- Each catheter day increases the risk of infection by 3-7%
- The Agency for Healthcare Research and Quality (AHRQ) estimates each CAUTI adds approx. \$14,000 in costs to a patient stay

For 2021, a Pillar goal has been established to, "reduce the number of CAUTIs on Inpatient units (excluding Skilled Nursing and Rehab.) by 50%. This target is based on the baseline total of **14** CAUTIs in 2020.

The CAUTI A3: Box 2 – Example

2. Current condition/ problems/ root causes/ 5 Whys

Currently, CAUTI events are reported in the Incident Management system, but **events are not addressed in real time to root cause**. As such, events are not currently categorized into phases of care, i.e., Appropriate Use, Insertion, Maintenance, and Removal. Some analysis has been performed to identify high-level improvement opportunities, such as:

- There is extreme variation in Catheter orders across Providers
- Many Urine specimens are collected using non-standard work steps
- An increase in Foley Catheter days has been observed over the past several months
- Post-op Surgical Patients are the highest frequency of patients infected
- The unit/location of where the Catheter is placed appears to contribute to higher incident rates

Can ask the '5 Whys' for any of these circumstances...

The CAUTI A3: Box 3 – Example

Target condition

*What does the **Ideal State** look like? EXAMPLES*

- Standard Work exists for all phases of care and there is little to no variation
- Standard supplies are in use, communicated, and readily available
- Front-line and interdisciplinary teams are educated and participatory
- There is very minimal waiting/searching for supplies
- EMR workflows are optimized
- New staff onboarding includes rigorous training that can minimize CAUTI
- Maintenance education and high visibility tracking data that will encourage sustainment

*What are examples of **countermeasures** to reduce CAUTI? EXAMPLES*

- Upon admission from ED to IP, there should be no catheter (unless chronic). A “Foley-free ED.”
- Chronic catheters should be changed upon arrival to IP with a silver nitrate (IC) catheter.
- CHG Baths for all patients with Central Lines and Foleys unless contraindicated.
- Daily CHG catheter care & CHG preparation prior to catheter insertion.
- SW for Foley urine collection w/algorithm.
- Use pad weights to measure urine output in the incontinent patient.
- Catheter orders/’reason for’ and RN documentation match 100% of the time
- *ID and prioritize others from above list...*

The CAUTI
A3:
Box 4 –
Action Plan
Example

5. Action Plan				
No.	What	Who	By When	Status
1	Obtain regular CAUTI reports (source?)			
2	Conduct CORE Team A3 Training			
3	Identify and Communicate Key Task Force Milestones			
4				
5				
6				

Next Steps

- **Schedule CORE Team – A3 Working Sessions:**
 - Continue LEAN Education
 - Work through the CAUTI A3 Process
 - Create an Action Plan:
 - Discuss Performing Observations, going to Gemba - next CAUTI event?
 - Discuss Unit-based Huddles, Visual Management, Daily Management as additional tests of change/Countermeasures?
- **Schedule Next Overall Task Force Meetings:**
 - Review key support activities and dates
- **Continuous Communications/updates to Sr. Leaders, Key Leadership**

Task Force - Proposed Schedule

% Complete	WBS	Task Name	Duration	Start	Finish
17%	1	CAUTI Task Force	95 days	Mon 2/8/21	Fri 6/18/21
63%	1.1	INITIATE	27 days	Mon 2/8/21	Wed 3/17/21
100%	1.1.1	Identify Team Members	2 wks	Mon 2/8/21	Fri 2/19/21
30%	1.1.2	DRAFT A3 /Collect Data	3 wks	Mon 2/22/21	Fri 3/12/21
90%	1.1.3	Create Task Force Schedule w/Key Milestones	1 wk	Mon 3/1/21	Mon 3/15/21
50%	1.1.4	Complete RACI Matrix	2 days	Mon 3/8/21	Tue 3/16/21
0%	1.1.5	Team Kickoff	0 days	Wed 3/17/21	Wed 3/17/21
0%	1.2	PROBLEM SOLVE	40 days	Wed 3/17/21	Tue 5/11/21
0%	1.2.1	CORE Mtg. 1: Current State, Data Analysis, 5 Whys, Ideal State Intro.	1 wk	Wed 3/17/21	Tue 3/23/21
0%	1.2.2	CORE Team Identifies Countermeasure 1	2 wks	Wed 3/24/21	Tue 4/6/21
0%	1.2.3	CORE Team Identifies Countermeasure 2	2 wks	Wed 4/7/21	Tue 4/20/21
0%	1.2.4	Conduct Tests of Change	3 wks	Wed 4/7/21	Tue 4/27/21
0%	1.2.5	Gather Results and Define New Standard Work	2 wks	Wed 4/28/21	Tue 5/11/21
0%	1.3	COMMUNICATE (ONGOING)	8 days	Fri 3/12/21	Tue 3/23/21
0%	1.3.1	Weekly Exec. Sponsor Updates	1 day	Fri 3/12/21	Fri 3/12/21
0%	1.3.2	Identify Addl. PI Communications Channels, i.e., Key Leadership	1 wk	Wed 3/17/21	Tue 3/23/21
0%	1.4	DEPLOY AND SPREAD STANDARD WORK	30 days	Mon 5/10/21	Fri 6/18/21
0%	1.4.1	Identify and Communicate SW to remaining units	2 wks	Mon 5/10/21	Fri 5/21/21
0%	1.4.2	Share SW via Unit Huddles	2 wks	Mon 5/24/21	Fri 6/4/21
0%	1.4.3	Set Up Visual Management Boards/Tracking Cues	2 wks	Mon 6/7/21	Fri 6/18/21
0%	2	CELEBRATE/CHECK/SUSTAIN	0 days	Mon 6/21/21	Mon 6/21/21
0%	2.1	Final Task Force Meeting	0 days	Mon 6/21/21	Mon 6/21/21

QUESTIONS?