

On the CUSP: Stop CAUTI

Measuring Success: Data, Measures, Collection, Submission

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LEARNING OBJECTIVES:

- **Data Requirements for the Project**
- **How/Where/When to Enter Data**
- **Why Data is Important to the Project**



Importance of “Good” Data

- **“Good” Data:** must be:
 - accurate, complete, and in the required format
- The data we collect and enter are the ultimate proof of our success and progress
- Blinded comparisons will be available:
 - within your state
 - with other states in the national project
- De-identified, aggregated data will be shared broadly to influence care and policy



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WHAT DATA DO WE COLLECT?

- **Preliminary Work:**
 - Readiness Assessment
 - Baseline HSOPS
- **Ongoing Data Submission:**
 - Outcome data
 - Process Data
 - Team Checkup Tool
- **Follow-up HSOPS**



WHAT DATA DO WE COLLECT?

Process and Outcome Data

- **PROCESS DATA:** Are we changing our daily work activities regarding catheters in a way that reduces the risk of infection and makes care safer?
- **OUTCOME DATA:** What impact have we made on our 2 project goals:
 - 1) improving our unit's culture of safety and
 - 2) reducing the CAUTI rate by 25%



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CUSP - CAUTI Goals: Required Data

GOAL #1 **Improving the Culture of Safety:** **CUSP**

STEPS:

1. Educate on the science of safety
2. Senior Executive Adopts Unit
3. Identify Safety Defects
4. Learn from Defects
5. Use teamwork/ communication tools

REQUIRED DATA:

- Quarterly Team Checkup Tool (TCT)
- HSOPS at baseline and post-intervention



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CAUTI DATA REQUIREMENTS: *Improving the Culture of Safety*

- **CAUTI Readiness Assessment**

- One survey per **UNIT**
- Asks about your current practices, related activities/projects, infrastructure, demographics
- Completed once at beginning of project by the team leader



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CAUTI DATA REQUIREMENTS: *Improving the Culture of Safety*

- **Team Checkup Tool:**

- Surveys team activities and barriers
- Due quarterly
- Enter into Care Counts
- First one is due in April 2012; reflects the work of the units from January-March 2012



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CAUTI DATA REQUIREMENTS: *Improving the Culture of Safety*

Culture of Safety Survey

- **HSOPS:**

- Standardized measure of safety culture on the patient care unit
- Done twice: at the beginning of the project, and later after the project intervention;
- MHA will send email bulletins about:

Registration Period: Jan 16 – 27

Survey Period: Jan 30 – Feb 24



CUSP - CAUTI Goals: Required Data

GOAL #2 Reduce CAUTI's by 25%

STEPS:

1. Educate staff about impact of CAUTI's
2. Educate staff about appropriate indications for a catheter
3. Daily Catheter Rounds
4. Proper Insertion Technique
5. Proper Maintenance Technique

REQUIRED DATA

- Outcome Measures
- Process Measures



CAUTI DATA REQUIREMENTS: *Reduce CAUTI's by 25%*

OUTCOME DATA:

For the entire month (not just M-F) each enrolled unit must collect:

- Total # of patient days for that unit
- Total # of indwelling urinary catheter days for that unit
- Total # of CAUTI's for that month

Result: *CAUTI Rates*
Catheter Prevalence

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CAUTI DATA REQUIREMENTS: *Reduce CAUTI's by 25%*

PROCESS DATA:

For each day in the data collection schedule:

- # of patients on the unit that day
- # of catheterized patients on the unit that day
- Main reason why patient has a catheter
- Where the catheter was inserted (on the floor, off the floor, unknown)

Result: *Catheter Appropriateness Info*

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Cohort 3: Data Collection Schedule

MEASURE	DATA COLLECTION SCHEDULE	DATES
CAUTI Rates (Outcome) <ul style="list-style-type: none"> Number of Symptomatic CAUTI's attributable to your unit for that month Number of urinary catheter days per month (number of patients with urinary catheter device is collected daily at the same time each day and the total is summed for the month) Number of patient days per month 	Collect monthly for 5 months beginning in Jan 2012 and quarterly thereafter (Jan-March will be considered baseline)	2012: Jan 1-31 (Baseline) February 1-29 (Baseline) March 1-31 (Baseline) April 1-30 (Implementation) May 1-31 (Implementation) 2012: August 1-31(Sustainability) November 1-30(Sustainability) 2013: February 1-28 (Sustainability) May 1-31 (Sustainability)
Prevalence & Appropriateness (Process) <ul style="list-style-type: none"> Assess each patient on the unit for the presence of a urinary catheter Record the reason for the catheter 	Baseline: Mon-Fri for 3 weeks Implementation: Mon-Fri for 2 weeks, 1 day per week for 6 weeks then one week per quarter thereafter	Baseline: March 5-9, 12-16, 19-23 2012 Implementation: April 2-6, 9-13, 17, 24 May 1, 8, 15, 22 Sustainability 2012: August 13-17, November 12-16 2013: February 11-15, May 13-17
Team Check-Up Tool <ul style="list-style-type: none"> Evaluate how the unit-team is implementing CUSP and CAUTI activities 	Complete and submit quarterly starting in April: •April 2012 TCT – data reported from Jan, Feb, Mar •July 2012 TCT – data reported from Apr, May, Jun •October 2012 TCT – data reported from July, Aug, Sept •Jan 2013 TCT – data reported from Oct, Nov, Dec 2012 •April 2013 TCT – data reported from Jan, Feb, Mar	2011: April (reflects Q1 2012) July (reflects Q2 2012) 2012/2013: October 2012 (reflects Q3 2012) Jan 2013 (reflects Q4 2012) April 2013 (reflects Q1 2013)

OUTCOME DATA: When Is It Due?

Data Collection Starts in January!

Cohort 3	Prevalence & Appropriateness (PROCESS)								CAUTI Rates (OUTCOME)								
	S	M	T	W	T	F	S		S	M	T	W	T	F	S		
BASELINE PERIOD	No Data Collected							JAN 2012	Baseline Data Collected							BASELINE PERIOD	
	1	2	3	4	5	6	7		1	2	3	4	5	6	7		
	8	9	10	11	12	13	14		8	9	10	11	12	13	14		
	15	16	17	18	19	20	21		15	16	17	18	19	20	21		
	22	23	24	25	26	27	28		22	23	24	25	26	27	28		
	29	30	31						29	30	31						
	No Data Collected							FEB 2012	Baseline Data Collected							BASELINE PERIOD	
				1	2	3	4					1	2	3	4		
	5	6	7	8	9	10	11		5	6	7	8	9	10	11		
	12	13	14	15	16	17	18		12	13	14	15	16	17	18		
	19	20	21	22	23	24	25		19	20	21	22	23	24	25		
	26	27	28	29					26	27	28	29					
Baseline Data Collected							MARCH 2012	Baseline Data Collected							BASELINE PERIOD		
				1	2	3						1	2	3			
4	5	6	7	8	9	10		4	5	6	7	8	9	10			
11	12	13	14	15	16	17		11	12	13	14	15	16	17			
18	19	20	21	22	23	24		18	19	20	21	22	23	24			
25	26	27	28	29	30	31		25	26	27	28	29	30	31			
IMPLEMENTATION PERIOD 1	Implementation Data Collected							APRIL 2012	Implementation Data Collected							IMPLEMENTATION PERIOD 1	
	1	2	3	4	5	6	7		1	2	3	4	5	6	7		
	8	9	10	11	12	13	14		8	9	10	11	12	13	14		
	15	16	17	18	19	20	21		15	16	17	18	19	20	21		
	22	23	24	25	26	27	28		22	23	24	25	26	27	28		
	29	30							29	30							
IMPLEMENTATION PERIOD 2	Implementation Data Collected							MAY 2012	Implementation Data Collected							IMPLEMENTATION PERIOD 2	
				1	2	3	4					1	2	3	4		5
	6	7	8	9	10	11	12		6	7	8	9	10	11	12		
	13	14	15	16	17	18	19		13	14	15	16	17	18	19		
	20	21	22	23	24	25	26		20	21	22	23	24	25	26		
	27	28	29	30	31				27	28	29	30	31				

OUTCOME DATA: When Is It Due?

Data Collection Moves to Quarterly

SUSTAINABILITY PERIOD 1	No Data Collected														JUNE 2012	No Data Collected														JULY 2012	No Data Collected														AUG 2012	Sustainability Data Collected														SUSTAINABILITY PERIOD 1																																		
	3	4	5	6	7	8	9	10	11	12	13	14	15	16		17	18	19	20	21	22	23	24	25	26	27	28	29	30		3	4	5	6	7	8	9	10	11	12	13	14	15	16		17	18	19	20	21	22	23	24	25	26	27	28	29	30		31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
SUSTAINABILITY PERIOD 2	No Data Collected														SEPT 2012	No Data Collected														OCT 2012	No Data Collected														NOV 2012	Sustainability Data Collected														SUSTAINABILITY PERIOD 2																																		
	2	3	4	5	6	7	8	9	10	11	12	13	14	15		16	17	18	19	20	21	22	23	24	25	26	27	28	29		30	2	3	4	5	6	7	8	9	10	11	12	13	14		15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
	7	8	9	10	11	12	13	14	15	16	17	18	19	20		21	22	23	24	25	26	27	28	29	30	31	7	8	9		10	11	12	13	14	15	16	17	18	19	20	21	22	23		24	25	26	27	28	29	30	31	1	2	3	4	5	6		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31									
	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						


OUTCOME DATA: How Do I Enter It?

WHERE? Care Counts

HOW?

- Manual Entry OR
- Data transfer from NHSN

(teams need to confer rights to state lead to do this)



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PROCESS DATA: When Is It Due?

Data Collection Begins in March!

Cohort 3	Prevalence & Appropriateness (PROCESS)							CAUTI Rates (OUTCOME)							
	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
BASELINE PERIOD	No Data Collected							Baseline Data Collected							BASELINE PERIOD
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
	8	9	10	11	12	13	14	8	9	10	11	12	13	14	
	15	16	17	18	19	20	21	15	16	17	18	19	20	21	
	22	23	24	25	26	27	28	22	23	24	25	26	27	28	
	29	30	31					29	30	31					
	No Data Collected							Baseline Data Collected							
				1	2	3	4				1	2	3	4	
	5	6	7	8	9	10	11	5	6	7	8	9	10	11	
	12	13	14	15	16	17	18	12	13	14	15	16	17	18	
	19	20	21	22	23	24	25	19	20	21	22	23	24	25	
	26	27	28	29				26	27	28	29				
Baseline Data Collected							Baseline Data Collected								
				1	2	3					1	2	3		
4	5	6	7	8	9	10	4	5	6	7	8	9	10		
11	12	13	14	15	16	17	11	12	13	14	15	16	17		
18	19	20	21	22	23	24	18	19	20	21	22	23	24		
25-31 Educational Period							25-31 Educational Period								
25	26	27	28	29	30	31	25	26	27	28	29	30	31		
IMPLEMENTATION PERIOD 1	Implementation Data Collected							Implementation Data Collected							IMPLEMENTATION PERIOD 1
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
	8	9	10	11	12	13	14	8	9	10	11	12	13	14	
	15	16	17	18	19	20	21	15	16	17	18	19	20	21	
IMPLEMENTATION PERIOD 2	Implementation Data Collected							Implementation Data Collected							IMPLEMENTATION PERIOD 2
	22	23	24	25	26	27	28	22	23	24	25	26	27	28	
	29	30						29	30						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
8	9	10	11	12	13	14	8	9	10	11	12	13	14		
15	16	17	18	19	20	21	15	16	17	18	19	20	21		
22	23	24	25	26	27	28	22	23	24	25	26	27	28		
29	30						29	30							

PROCESS DATA: When Is It Due?

Data Collection Moves to Quarterly

Sustainability Period	No Data Collected							No Data Collected							
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
SUSTAINABILITY PERIOD 1	No Data Collected							No Data Collected							SUSTAINABILITY PERIOD 1
	3	4	5	6	7	8	9	3	4	5	6	7	8	9	
	10	11	12	13	14	15	16	10	11	12	13	14	15	16	
	17	18	19	20	21	22	23	17	18	19	20	21	22	23	
	24	25	26	27	28	29	30	24	25	26	27	28	29	30	
	No Data Collected							No Data Collected							
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
	8	9	10	11	12	13	14	8	9	10	11	12	13	14	
	15	16	17	18	19	20	21	15	16	17	18	19	20	21	
	22	23	24	25	26	27	28	22	23	24	25	26	27	28	
	29	30	31					29	30	31					
	Sustainability Data Collected							Sustainability Data Collected							
			1	2	3	4				1	2	3	4		
5	6	7	8	9	10	11	5	6	7	8	9	10	11		
12	13	14	15	16	17	18	12	13	14	15	16	17	18		
19	20	21	22	23	24	25	19	20	21	22	23	24	25		
26	27	28	29	30	31		26	27	28	29	30	31			
SUSTAINABILITY PERIOD 2	No Data Collected							No Data Collected							SUSTAINABILITY PERIOD 2
							1							1	
	2	3	4	5	6	7	8	2	3	4	5	6	7	8	
	9	10	11	12	13	14	15	9	10	11	12	13	14	15	
	16	17	18	19	20	21	22	16	17	18	19	20	21	22	
	23	24	25	26	27	28	29	23	24	25	26	27	28	29	
	30							30							
	No Data Collected							No Data Collected							
		1	2	3	4	5	6		1	2	3	4	5	6	
	7	8	9	10	11	12	13	7	8	9	10	11	12	13	
	14	15	16	17	18	19	20	14	15	16	17	18	19	20	
	21	22	23	24	25	26	27	21	22	23	24	25	26	27	
28	29	30	31				28	29	30	31					
Sustainability Data Collected							Sustainability Data Collected								
				1	2	3					1	2	3		
4	5	6	7	8	9	10	4	5	6	7	8	9	10		
11	12	13	14	15	16	17	11	12	13	14	15	16	17		
18	19	20	21	22	23	24	18	19	20	21	22	23	24		
25	26	27	28	29	30	31	25	26	27	28	29	30	31		

PROCESS DATA: How Do I Enter It?

WHERE? Care Counts

HOW?

---Use the data collection paper tool as you do catheter rounds

---Enter manually into Care Counts

---Enter in “real time” (daily or ASAP); consider laptop/mobile workstation



Process Data Collection Tool															
Patient Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Is Catheter Present? (Yes or No)															
If yes, where was Catheter placed? (On the Unit, Off the Unit, Unknown)															
Why was Catheter Placed? (Check the MAIN reason for the catheter)	APPROPRIATE Indications														
Accurate measurement of urinary output in critically ill patient															
Acute urinary retention or obstruction															
Assist healing of perineal or sacral wound in an incontinent patient															
Chronic indwelling catheter on admission															
Hospice/comfort /palliative care															
Hospital approved indication															
Perioperative use in selected surgeries															
Required immobilization, for trauma or surgery															
If none of the above reasons apply, why is the catheter placed? (choose one from the list below):	INAPPROPRIATE Indications														
Incontinence WITHOUT a sacral or perineal pressure sore															
Other reason (ICU transfer, morbid obesity, immobility, confusion/dementia, patient request)															
Prolonged post-operative use															
Urinary Output Monitoring OUTSIDE the ICU															
Does Catheter Have an Appropriate Indication? (answer Yes or No)															
OPTIONAL: ACTION TAKEN															
If catheter does NOT have an appropriate indication, what action was taken? (check box)															
Nurse removed catheter today															
Staff contacted dr. dr. ordered removal															
Staff contacted dr. dr. did NOT order removal															
No action taken															

TAKE HOME MESSAGES:

- **What Data Do We Collect ?**

Readiness Assessment

HSOPS

Outcome Measures: by Month

Process Measures: by Specific Day Intervals

Quarterly Team Checkup Tool (TCT)

- **When Is it Due?**

Readiness Assessment: at the start of the project

HSOPS: baseline and post-intervention

Outcome Measures: by end of the next month

Process Measures: enter in real time, ASAP

TCT: quarterly



TAKE HOME MESSAGES:

- **WHY IS DATA IMPORTANT TO THE PROJECT?**

Data submission tracking :

----ensures dataset is robust and findings are reliable

Process and Outcome Measures:

--- provide continuous monitoring of whether CAUTI rates and catheter prevalence are decreasing

--- focus attention on which patients inappropriately have catheters, so education and processes can be implemented to reduce those situations



TAKE HOME MESSAGES:

- **WHY IS DATA IMPORTANT TO THE PROJECT?**

Quarterly Team Checkup Tool:

----monitors teams' implementation of recommended activities for:

- 1) CUSP activities
- 2) CAUTI reduction activities

HSOPS:

--- assesses units' culture of safety before and during the project



TAKE HOME MESSAGES:

- **Data Collection Process:** is complex, but manageable
- **MHA is available as a resource** to you for issues regarding:
 - data collection and entry
 - report interpretation
 - action plan development



Questions

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