Providence Impact of ProvIQ Daily Management Systems on **Catheter Associated Urinary Tract Infection Rates**

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Problem Statement & Aims				Results: Process Metrics					
**	Providence St. Vincent Medical Center is a 539-bed tertiary care		Locatio	n Act	tual #	Expected #	% C	omplete	
	center that observed a 45% increase in Catheter Associated			Neurovascular	2	268	515		52%
	Urinary Tract Infection (CAUTI) Standardized Infection Ratio (SIR)		dized Infection Ratio (SIR)	NCCU	2	238	201	>	>100%
•••	CAUTIS are assoc	iated with increased r	patient discomfort.	ICU		211	731		29%
•	mortality, morbidity, length of stay, and cost.		Surgical	3	335	572		59%	
				CICU	ç	938	732	>	>100%
•••	PRIMARY AIM: To measure the impact of process confirmation card and visual management use on the overall CAUTI rates		Cardiology B		29	120	>	>100%	
			Oncology	•	31	170		77%	
			PSCU		23	51	>	>100%	
				TOTAL ACT	UAL 2	374	3092		77%
Methods				TOTAL ADJU	STED 2	050	3092		66%
ProvIQ is an evidence-based quality improvement methodology			Fig. 1 Process confirmation card completion rates by individual area.						
	 including concepts from Lean, Six Sigma, and change management. A ProvIQ Daily Management System (DMS) was implemented in eight acute care areas October to December 2024. A workshop was offered to nurse leaders, unit champions, and project mentors in September 2024. 			ELEMENTS QUESTION TOPICS				% of YES Questions	
•••				RN DiscussionPatient Education Provided, Evaluate Daily Necessity, Nurse Driven Protocol, Cath. Care every 12 hours and after each BM, Urinary Retention Algorithm Followed, Interdisciplinary Collaboration, Pt94 - 98bath, CHG Tx and linen change frequency, & Urine Collection Algorithm followed94 - 98					
2 r	 Cards consisted of the CAUTI Prevention Maintenance Bundle and peer-to-peer feedback standard work questions. 		Patient ObservationBag below bladder level, not touching floor, and less than 1/2 full, Catheter w/o obstructions, no dependent loops, actively draining, Catheter internal sterility intact, Catheter secured with sufficient slack to allow for movement & Bag emptied prior to transfers or ambulation96 - 97%						
cor	firmation card at the bedside	 Cards were completed every 1 each patient with an indwelling catheter (IUC). 		IUC care and perineal care Preform hand hygiene and don clean gloves, patient cleansing prior to catheter care, products used, No wash basins, no barrier cream cloths (gray wipes), no CHG cloth on mucous membrane/ IUC, Begin catheter care (steps 1-5), Remove gloves and preform hand hygiene, All underlying skinfolds washed and dried. Catheter removed from					88 - 89%
				securement device cleansed, Documentation					
		Process	 Unit-level visual 	Peer feedback Fee	edback provided on "NO"	items			52%
	confirmation ca completion an	completion and	process tracker.	Fig. 2 Overall process card adherence rates by each card element					
	adherence wei monitored		 Abnormality tracker. 	Results :	Outcome	Metr	ics		
				Metrics	Q3-2024	Q4 - 2	.024	91 - 202	5
DAT	A ANALYSIS:			NDNQI CAUTI Rate	July-Sept-1.55	Oct. D	ec1.92	Not yet av	vailable
PROCESS CONFIRMATION CARD COMPLETION = (The actual number of cards completed) / (The expected number of process confirmation cards). The expected number of cards was adjusted			SUR (Standardized Utilization Ratio)	July- Sept -0.654	OctD	Dec0.606	Jan.– Mar	r. – 0.579	
to reflect IUC insertion or removal mid-shift).			SIR (Standardized	July – 1.304	0ct 7	1.157	Jan 2.0	77	
PROCESS CONFIRMATION CARD ADHERENCE = The % of			Infection Ratio)	Aug. – 0.925	Nov	1.714 F	-eb <1		
questions marked as "yes" or ""Not Applicable"				Sept 0.557	Dec	1.002	Mar 1.73		
Comfort care patients and patients with suprapubic catheters were			Fig. 3 House-wide CAUTI rates before, during and after the intervention.						

Problem Statement & Aims				Results: Process Metrics					
•	Providence St. Vincent Medical Center is a 539-bed tertiary care center that observed a 45% increase in Catheter Associated Urinary Tract Infection (CAUTI) Standardized Infection Ratio (SIR)		Location		Actual #	Expected #	% Complete		
			Neurovascular		268	515	52%		
			NCCU		238	201	>100%		
•••	CAUTIs are associa	ated with increased p	atient discomfort.	ICU		211	731	29%	
·	mortality, morbidity, length of stay, and cost.		Surgical		335	572	59%		
•			4 . 6	CICU		938	732	>100%	
***	PRIMARY AIM: To measure the impact of process confirmation card and visual management use on the overall CAUTI rates.		Cardiology B		129	120	>100%		
			Oncology		131	170	77%		
				PSCU		123	51	>100%	
M	Mathada			TOTAL AC	CTUAL	2374	3092	77%	
1.16	ciiuus			TOTAL AD	JUSTED	2050	3092	66%	
*	 ProvIQ is an evidence-based quality improvement methodology including concepts from Lean, Six Sigma, and change management. A ProvIQ Daily Management System (DMS) was implemented in eight acute care areas October to December 2024. A workshop was offered to nurse leaders, unit champions, and project mentors in September 2024. 			Fig. 1 Process confirmation card completion rates by individual area.					
•				ELEMENTS		QUESTION TO	% of YES Questions		
**				RN DiscussionPatient Education Provided, Evaluate Daily Necessity, Nurse Driven Protocol, Cath. Care every 12 hours and after each BM, Urinary Retention Algorithm Followed, Interdisciplinary Collaboration, Pt94 - 98% 94 - 98% 94 - 98%bath, CHG Tx and linen change frequency, & Urine Collection Algorithm followed94 - 98%					
2 ro	 2 registered nurses completed a process confirmation card at the bedside Cards consisted of the CAUTI Prevention Maintenance Bundle and peer-to-peer feedback standard work questions. Cards were completed every 12 hours for each patient with an indwelling urinary catheter (IUC). 		Patient ObservationBag below bladder level, not touching floor, and less than 1/2 full, Catheter w/o obstructions, no dependent loops, actively draining, Catheter internal sterility intact, Catheter secured with sufficient slack to allow for movement & Bag emptied prior to transfers or ambulation96 - 97%						
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					securement device cl	eansed, Document	ation		
	Process confirmation card completion and adherence were monitored	Process	 Unit-level visual 	Peer feedback Feedback provided on "NO" items 52%					
		onfirmation card completion and	process tracker.	Fig. 2 Overall process card adherence rates by each card element					
		dherence were monitored	 Abnormality tracker. 	Results	: Outco	ne Met	rics		
				Metrics	Q3-2024	Q4 - 2	2024 Q1	- 2025	
	<u>A ANALYSIS:</u>			NDNQI CAUTI Ra	te July-Sept-1.	55 Oct. [Dec. –1.92 No	ot yet available	
**	 PROCESS CONFIRMATION CARD COMPLETION = (The actual number of cards completed) / (The expected number of process confirmation cards). The expected number of cards was adjusted to reflect IUC insertion or removal mid-shift). PROCESS CONFIRMATION CARD ADHERENCE = The % of questions marked as "yes" or ""Not Applicable" Comfort care patients and patients with suprapubic catheters were 			SUR (Standardize Utilization Ratio)	ed July-Sept-0.	654 Oct	Dec. – 0.606 Ja	an.– Mar. – 0.579	
*				SIR (Standardize Infection Ratio)	d July – 1.304 Aug. – 0.925	Oct. – Nov.–	1.157 Ja 1.714 Fe	an2.077 eb<1	
*				Fig. 3 House-wid	de CAUTI rates t	Dec Defore, during a	and after the interv	vention.	
excluded.									

For references and additional information, please use the QR code to view the electronic poster online.

Summary of Results

PROCESS METRICS:

**	RNs reported a h
	Bundle adherence
•••	98% of RNs repo
	hours for all patie
•	The lowest area

OUTCOME METRICS:

•	There was a redu
	timeframe (Q1 -2
* * *	CAUTI Rates and
	intervention.

Limitations

•••	Our facility experi
	January- Februar
+ ↓ ↓	The peer-to-peer
	of nurse engagen
•	Some areas com
	process confirma

Implications for Practice

**	RNs identified the
	ensure adherenc

- **
- **

Acknowledgments

Georgina Bicknell, MSN, RN, NEA-BC, Nursing Director, Women's and Children's and Nursing Quality Dr. Melissa Robinson, PhD, RN, CNE, Nurse Scientist Clinical Excellence, Research & Practice All nurse leaders and bedside RNs who participated in the pilot.



high level of CAUTI Prevention Maintenance

orted evaluating the necessity of the IUC every 12 ents with an IUC.

of adherence was peer-to-peer feedback.

uction in SUR during the post-intervention 2025). d SIR were not significantly changed pre- to post-

rienced a nurse and provider work stoppage y 2025.

feedback rates at the bedside may reflect a lack ment with the process.

pleted more than the expected number of ation cards.

e need to improve peer-to-peer feedback to ce to CAUTI Prevention best practices.

Nurse leader involvement was critical to the process.

SUR is dependent on patient population, and critical care areas may have less control over catheter insertion.

Further work and implementation to other units is needed to deduce the direct impact to patient related outcomes.

