

On the CUSP: Stop CAUTI

Comprehensive Unit-based Safety Program (CUSP)

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Learning Objectives

- To understand the steps & tools in CUSP
- To understand how to employ the CUSP methodology to improve safety culture
- To understand how CUSP has been used outside the ICU.



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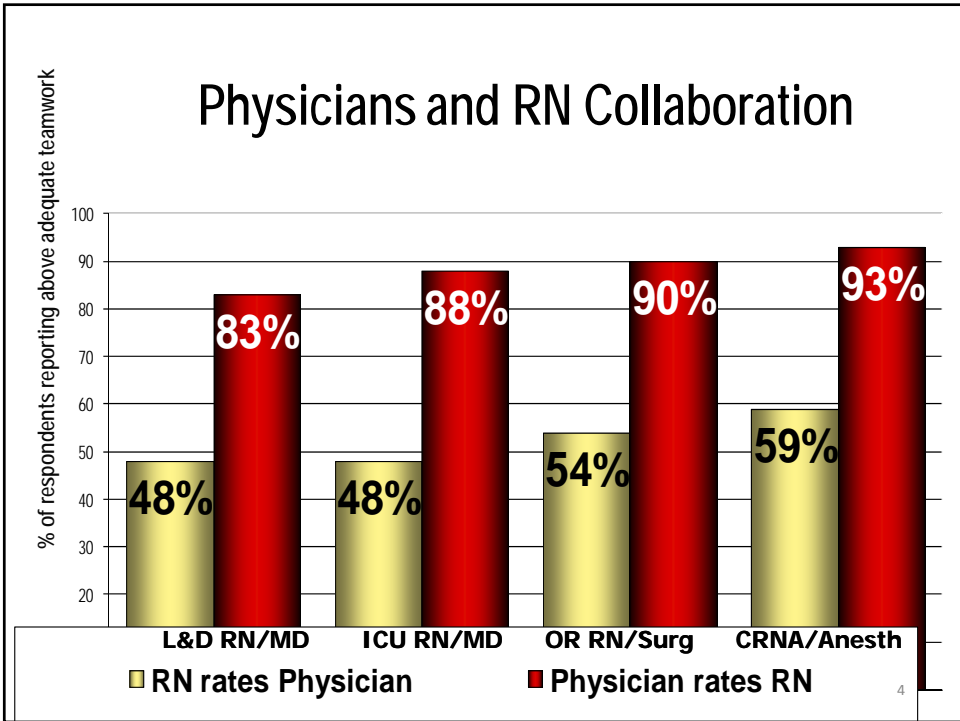
A SUCCESS STORY IN AMERICAN HEALTH CARE:
Eliminating Infections & Saving Lives in Michigan

The Michigan Keystone ICU Project saved over 1,500 lives and \$200 million by reducing health care associated infections.

*Office of Health Reform,
Department of Health and Human Services*

**ON THE CUSP:
STOP HAI**

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Teamwork Disconnect

- MD: Good teamwork means the nurse does what I say
- RN: Good teamwork means I am asked for my input



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Culture linked to clinical and operational outcomes in healthcare:

- | | |
|-------------------------|-------------------|
| •Wrong Site Surgeries | •Post-Op Bleeding |
| •Decubitus Ulcers | •PE/DVT |
| •Delays | •RN Turnover |
| •Bloodstream Infections | •Absenteeism |
| •Post-Op Sepsis | •VAP |
| •Post-Op Infections | |

Data provided by Bryan Sexton




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Pre CUSP Work

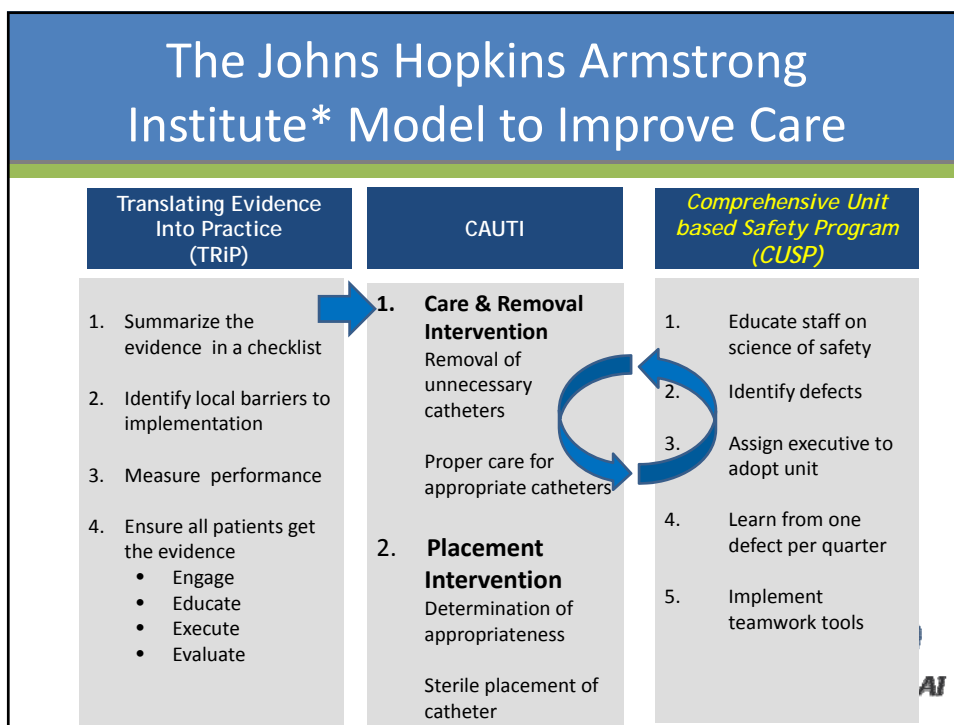
- Create an CUSP CAUTI team
 - Nurse, physician, administrator, infection control, others
 - Assign a team leader

- Measure Culture in your clinical unit
(discuss with hospital association leader)

- Work with hospital quality leader to have a senior executive assigned to your unit based team



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Chain of ownership

	Senior leaders	Team leaders	Staff
Engage	<i>How does this make the world a better place?</i>		
Educate	<i>What do we need to do?</i>		
Execute	<i>What keeps me from doing it? How can we do it with my resources and culture?</i>		
Evaluate	<i>How do we know we improved safety?</i>		

Pronovost: Health Services Research 2006



Science of Safety

- Understand system determines performance
- Use strategies to improve system performance
 - Standardize
 - Create independent checks for key process
 - Learn from mistakes
- Apply strategies to both technical work and team work



Executive Partnership

- Executive should become a member of the CUSP CAUTI team
- Executive should meet monthly with the CUSP CAUTI team
- Executive should review defects, ensure the CUSP CAUTI team has resources to reduce risks, and hold team accountable for improving risks and central line associated blood stream infection



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Identify Defects

- Review error reports, liability claims, sentinel events or M and M conference
- Use the Staff Safety Assessment: Ask staff how will the next patient be harmed



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Learning from Mistakes

- What happened?
- Why did it happen (system lenses)?
- What could you do to reduce risk?
- How do you know risk was reduced?
 - Create policy / process / procedure
 - Ensure staff know policy
 - Evaluate if policy is used correctly



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Pronovost 2005 JCIQI

Prioritize Defects

- List all defects
- Discuss with staff what are the three greatest risks



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To Evaluate Whether Risks were Reduced

- Did you create a policy or procedure
- Do staff know about the policy
- Are staff using it as intended
- Do staff believe risks have been reduced



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Learning From Defects to Enhance Morbidity and Mortality Conferences

	Defect	Interventions
Fellow 1	Unstable oxygen tanks on beds	Oxygen tank holders repaired or new holders installed institution-wide
Fellow 2	Nasoduodenal tube (NDT) placed in lung	Protocol developed for NDT placement
Fellow 3	Medication look-alike	Education, physical separation of medications, letter to manufacturer
Fellow 4	Bronchoscopy cart missing equipment	Checklist developed for stocking cart
Fellow 5	Communication with surgical services about night coverage	White-board installed to enhance communication
Fellow 6	Inconsistent use of Daily Goals rounding tool	Gained consensus on required elements of Daily Goals rounding tool use
Fellow 7	Variation in palliative care/withdrawal of therapy orders	Orderset developed for palliative care/withdrawal of therapy
Fellow 8	Inaccurate information by residents during rounds	Developing electronic progress note
Fellow 9	No appropriate diet for pancreatectomy patients	Developing appropriate standardized diet option
Fellow 10	Wrong-sided thoracentesis performed	Education, revised consent procedures, collaboration with institutional root-cause analysis committee
Fellow 11	Inadvertent loss of enteral feeding tube	Pilot testing a 'bridle' device to secure tube
Fellow 12	Inconsistent delivery of physical therapy (PT)	Gaining consensus on indications, contraindications and definitions, developing an interdisciplinary nursing and PT protocol
Fellow 13	Inconsistent bronchoscopy specimen laboratory ordering	Education, developing an orderset for specimen laboratory testing

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16 Am J Med Qual 2009;24(3):192-5.



Teamwork Tools

- Call list
- Daily Goals
- AM briefing
- Shadowing
- Culture check up
- TEAMSTepps



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Call List

- Ensure your unit has a process to identify what physician to page or call for each patient
- Make sure call list is easily accessible and updated



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Daily Goals

- What needs to be done for the patient to be discharged?
- What is the patients greatest safety risk?
- What can we do to reduce the risk?
- Can any tubes, lines, or drains be removed?

Daily Goals

Room Number _____ Date ____/____/____

	-Initial as goals are reviewed-			
	0700-1500	1500-2300	2300-0700	
What needs to be done for patient to be discharged from the ICU?				
What is patient's greatest safety risk and how can we decrease risk?				
Pain Mgt / Sedation (held to follow commands)?				
Cardiac / volume status; Net goal for tonight; Beta blockade; review EKGs				
Pulmonary/Ventilator (PACO ₂ , PUD, DVT, weaning, glucose control); OOB				
IO, Cultures, Drug levels				
GI / Nutrition / Bowel regimen				
Can any medications be discontinued? Converted to PO? Adjusted for renal fx?				
Tests / Procedures today				
What scheduled labs are needed?				
What AM labs are needed? CXR? Is patient on critical pathway?				
Consultations				
Is the primary service up-to-date?				
Has the family been updated? Have social issues been addressed?				
Can catheters/tubes be removed?				
Is this patient receiving DVT/PUJ prophylaxis?				
Anticipated LOS > 3 days: fluconazole PO, LT care plans, LOS > 4 days: spo				
Are there events or deviations that need to be reported? ICU/GRS?				

PROTOCOLS AVAILABLE IF BOLDED

For Weinberg only: ICU status IMC status Fellow/Atty initials: _____

Rev 01/2003

Pronovost, Berenholtz, Dorman. J Crit Care 2003 19

AM Briefing

- Have a morning meeting with charge nurse and unit attending
- Discuss work for the day
 - What happened during the evening
 - Who is being admitted and discharged today
 - What are potential risks during the day, how can we reduce these risks



Shadowing

- Follow another type of clinician doing their job for between 2 to 4 hours
- Have that person discuss with staff what they will do differently now that they walked in another person's shoes



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CUSP Lessons Learned

- Culture is local
 - Implement in a few units, adapt and spread
 - Include frontline staff on improvement team
- Not linear process
 - Iterative cycles
 - Takes time to improve culture
- Couple with clinical focus
 - No success improving culture alone
 - CUSP alone viewed as 'soft'
 - Lubricant for clinical change



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Implementing Daily Goals on a Medical-Surgical Service

- Central challenge on medical-surgical service is multiple teams rounding; lack of a unit-based medical care team.
- Communication failures, Lack of clear understanding of goals for each patient, Multiple pages to the physician care team
- How to a) create a multi-disciplinary care team and b) provide a clear understanding of RN concerns & plan of care

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3 Part Intervention

- Patient Cohorting: All patients assigned to 1 surgical service were cohorted for admission on the same nursing unit
- Interdisciplinary Rounds: Expanded rounds (MD-centric) to include active RN participation
- Goals Tool: Lists each patient on this service. Includes: date, name, room number, RN concerns, reminders/goals for the rounding team

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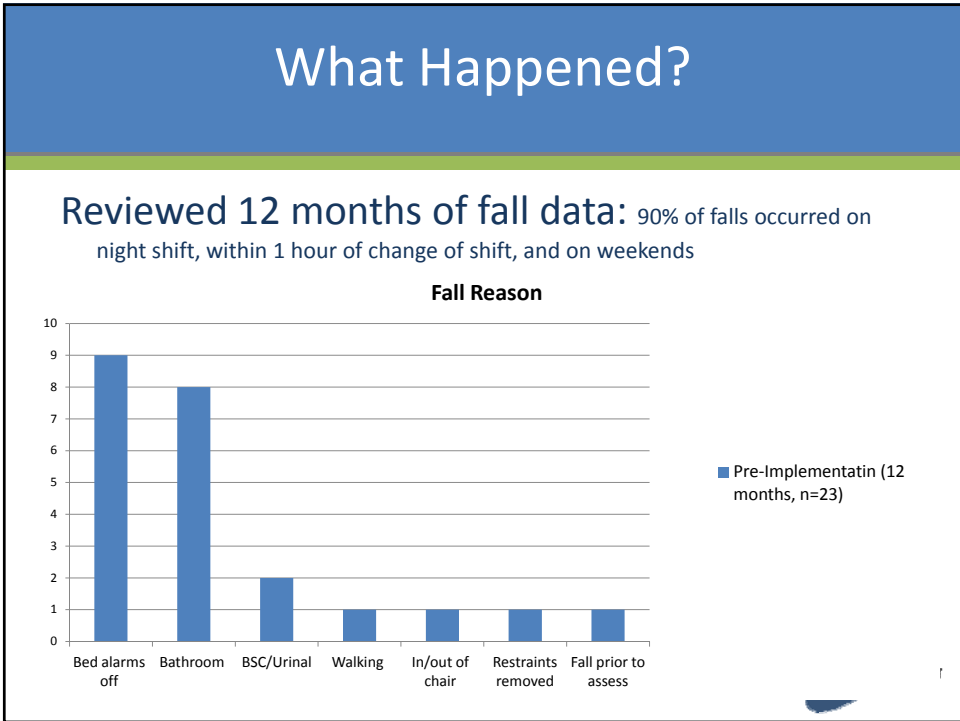
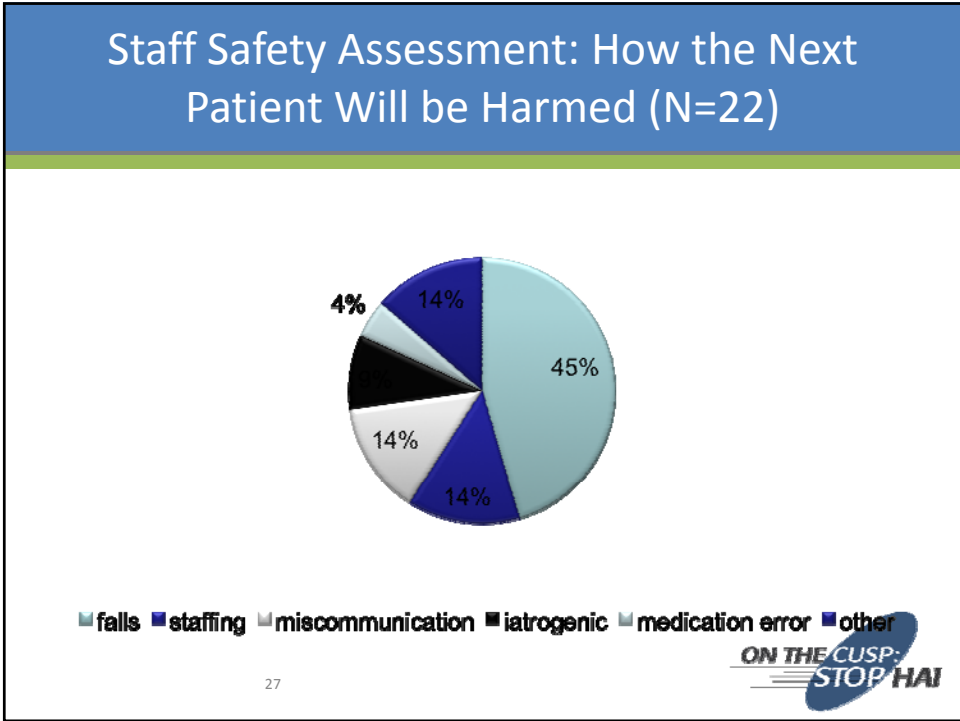


Team-Based Daily Goals Sheet		
<p>RN concerns: <i>Family reluctant to do dressing change. If home care can't do daily dressing change, may need subacute placement.</i></p>		
Lab (VAT vs LAB)		Anticipated discharge date:
Blood Sugars		Scripts for discharge
Procedures		
Other:		

Figure 1. A goal sheet, which contains space for five patients, is shown as completed for two patients— John Doe and Jane Doe. PT, physical therapy; OT, occupational therapy; IV, intravenous; PO, oral; RN, registered nurse; VAT, venous access team; LAB, laboratory blood draw; Diag. Rad., diagnostic radiology.

Results & Lessons Learned


- Reduction in number of MD pages from 2-12/day pre-implementation to 0-4 post-implementation.
- Perceived improvements in communication & collaboration. Increased level of trust & respect.
- Improved communication/sharing at change of shift.



What will you do to reduce risk?

III. How will you reduce the likelihood of this defect happening again? Develop an intervention for each of the important contributing factors identified above. Develop interventions to defend against the 2 to 5 most important contributing factors. Refer to the *Strength of Interventions* chart below for examples of strong and weak interventions. Then, rate each intervention on its ability to mitigate the contributing factor and on the team's belief that the intervention will be implemented and executed. Make an action plan for 2-5 of the highest scoring interventions.

Interventions to reduce the risk of the defect	Ability to mitigate the contributing factor, 1 (low to 5 (high)	Teams belief that the intervention will be implemented and executed, 1 (low) to 5 (high)
Independent double check for bed alarms		
Add column to report sheet for patients with high fall risk	5	5
Every 4 hours staff will check Hill-Rom system to ensure bed alarms are on	4	5



Make it Visible

Remember your fall precaution interventions



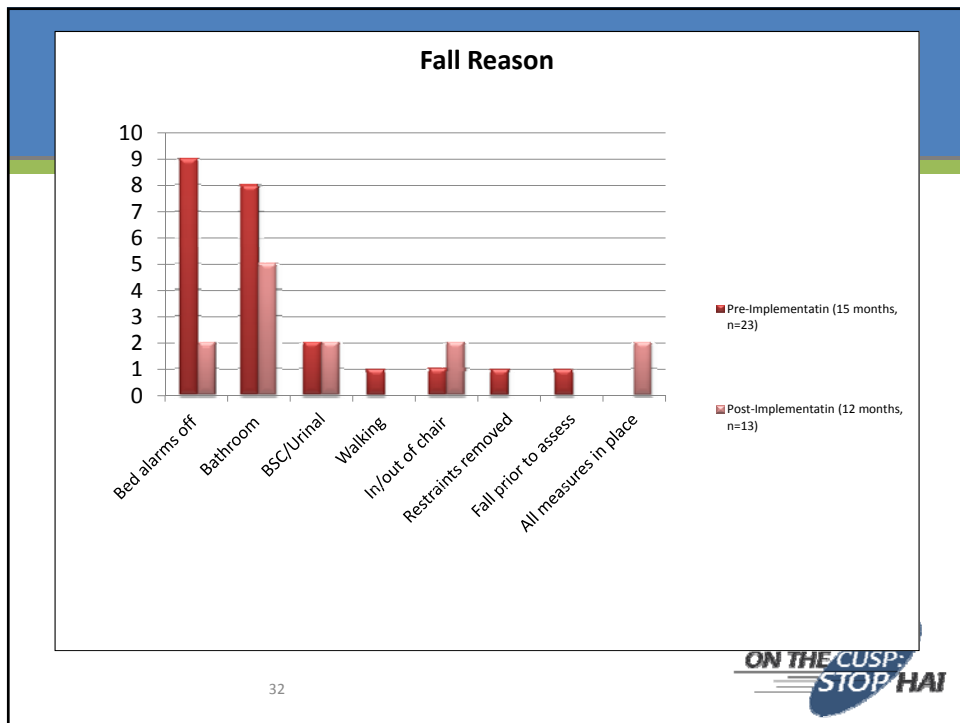
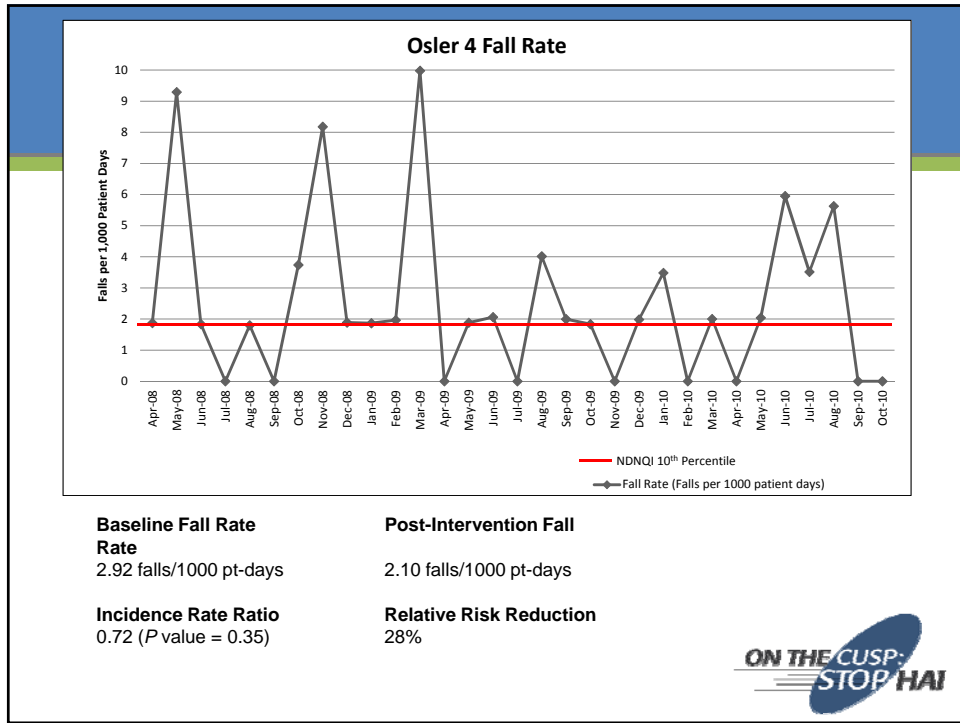
It has been...

0 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 32 33 34 35 36
37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

weeks since Osler 4 has had a fall !!!





CUSP is a Continuous Journey

- Add science of safety education to orientation
- Learn from one defect per month, share or post lessons (answers to the 4 questions) with others
- Implement teamwork tools that best meet your teams needs. Modify as needed for your setting
- Details are in the CUSP CAUTI manual



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References

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- Holzmueller, CG, Timmel J, Kent PS, et al. Implementing a team-based daily goals sheet in a non-ICU setting. *Jt Comm J Qual and Saf*. 2009; 35:384-388.



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