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Chloraprep Dry Time

Nikki Jones

Children's Mercy Hospital, nmjones@cmh.edu

Chelsea Dennison

Children's Mercy Hospital, cdennison@cmh.edu

Becca Millard

Children's Mercy Hospital, rcmillard@cmh.edu

Kristin Sapp

Children's Mercy Hospital, knsapp@cmh.edu

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Chloraprep Dry Time

Nikki Jones, BSN, RN

Chelsea Dennison, ADN, RN

Becca Millard, BSN, RN

Kristin Sapp, ADN, RN

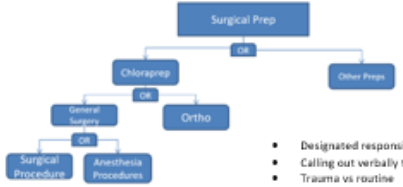

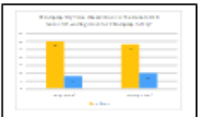


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Acknowledgements

- Unit Leadership – Gentry Ehlert, MSN, RN, CNOR
- KT Scholar – Ellie Frederes, BSN, RN, CPN and Elizabeth Swartz, BSN, RN, CPN
- QIC – Mary Hunter, BSN, RN
- General Surgery Team

A3 Overview

A3 for Problem Solving

Focus: Chloroprep Dry Time	Owner: Nurse Residency	Date:	Date Approved: 10/17/19 G.Ehlers										
A3 Team: Nikki Chilson, Becca Millard, Kristin Sapp, and Chelsea Dennison		Department Director Signature: G.Ehlers	KT Scholar: Elizabeth Swartz and Ellie Frederes QIC: Mary Hunter										
Clarify the Problem <ul style="list-style-type: none"> • Problem: following manufacturer guidelines on dry time • Desired state: waiting the time for drying according to manufacturer guidelines • Current state: belief/perception that we may not be waiting full time to dry according to manufacturers' instructions. • Patient/customers expect we follow guidelines to prevent risks such as SSI and fires. • Key measures: procedures we wait the amount of time we are supposed to versus procedures we are not. • Measuring time—3 minutes for chloroprep. • Clarifying/pieces of problem: <ul style="list-style-type: none"> ○ Paying attention to the clock ○ All clocks matching exact times ○ Three minutes isn't purposeful 	Develop and Implement Countermeasures <div style="display: flex; justify-content: space-around;"> <div> <p>Develop and Implement Countermeasures: RIXI Chart</p> <table border="1"> <thead> <tr> <th></th> <th>Believe</th> <th>Challenge</th> </tr> </thead> <tbody> <tr> <th>Hard</th> <td> <ul style="list-style-type: none"> • Scrub nurse calling out times in all general cases </td> <td> <ul style="list-style-type: none"> • Standard of Work • Chasing start and finish times in OR </td> </tr> <tr> <th>Easy</th> <td> <ul style="list-style-type: none"> • Laminated paper with each prep and recommended dry time • Utilizing dry erase board </td> <td> <ul style="list-style-type: none"> • Clocks all the same throughout the OR • Purchasing timers </td> </tr> </tbody> </table> </div> <div> <p>Develop and Implement Countermeasures: Driver Diagram</p> </div> </div>				Believe	Challenge	Hard	<ul style="list-style-type: none"> • Scrub nurse calling out times in all general cases 	<ul style="list-style-type: none"> • Standard of Work • Chasing start and finish times in OR 	Easy	<ul style="list-style-type: none"> • Laminated paper with each prep and recommended dry time • Utilizing dry erase board 	<ul style="list-style-type: none"> • Clocks all the same throughout the OR • Purchasing timers 	
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Break Down the Problem <div style="display: flex; align-items: center;">  <div> <p>Waiting 3 minutes for Chloroprep to Dry</p>  <p>no yes</p> </div> </div> <ul style="list-style-type: none"> • Designated responsibility of calling out time • Calling out verbally time started • Trauma vs routine • Responsible person to prep • Source of timing the dry • Prep time start at beginning or end of prep • Barriers: awareness, clock times not matching 	Check Results and Process <ul style="list-style-type: none"> • The countermeasures were implemented and did yield the expected results <ul style="list-style-type: none"> ○ The countermeasures did not lead to improvement the way we expected. <ul style="list-style-type: none"> ▪ Whiteboard data showed improvement without the use of the whiteboards ▪ The timer data showed no improvement with little use of the timers. ○ The data is indicated to be normal variation and not improvement because the whiteboards were never used, and the whiteboard option did not go away when implementing timers use, and the data still decreased. ○ The implementations did not yield successful results. ○ The root of the problem has not been resolved. <div style="display: flex; justify-content: space-around;">   </div>												
Set a Target <p>Our goal is to increase the percentage of dry time compliance for solutions used in general surgery in the operating room from 36% to 100% by the end of February 2020 at Children's Mercy Adele Hall.</p>	Standardize and Follow Up <ul style="list-style-type: none"> • Our implementations of whiteboard usage and timers would not be included as a standard of care as neither yielded positive results. The issue of surgical prep dry time compliance would require further data collection, and documentation in order to pin point root cause and alleviate the issue in the OR. • Was AIM Statement met? <ul style="list-style-type: none"> • No. While our dry time compliance did see a temporary increase during the time we implemented "whiteboard usage", this had no direct correlation to the actual usage of the whiteboards but rather the anticipated presence of Joint Commission members during that time frame. • Pediatric nursing implications <ul style="list-style-type: none"> • Without the allowance of surgical prep dry time we risk causing harm to our patients. • Lessons learned from working on project <ul style="list-style-type: none"> • Issue with compliance integrity 												
Identify Root Cause <table border="1"> <tr> <td>Why is dry time not being followed?</td> <td> <ul style="list-style-type: none"> • People aren't paying attention to the clocks. </td> </tr> <tr> <td>Why aren't people paying attention to the clocks?</td> <td> <ul style="list-style-type: none"> • Because it is not a designated role. </td> </tr> <tr> <td>Why is it not a designated role?</td> <td> <ul style="list-style-type: none"> • Because it is not a standardized practice. </td> </tr> <tr> <td>Why is not a standardized practice?</td> <td> <ul style="list-style-type: none"> • Because there was not awareness that it was a problem. </td> </tr> <tr> <td>Why was there not awareness that it was a problem?</td> <td> <ul style="list-style-type: none"> • Lack of education </td> </tr> </table> 	Why is dry time not being followed?	<ul style="list-style-type: none"> • People aren't paying attention to the clocks. 	Why aren't people paying attention to the clocks?	<ul style="list-style-type: none"> • Because it is not a designated role. 	Why is it not a designated role?	<ul style="list-style-type: none"> • Because it is not a standardized practice. 	Why is not a standardized practice?	<ul style="list-style-type: none"> • Because there was not awareness that it was a problem. 	Why was there not awareness that it was a problem?	<ul style="list-style-type: none"> • Lack of education 			
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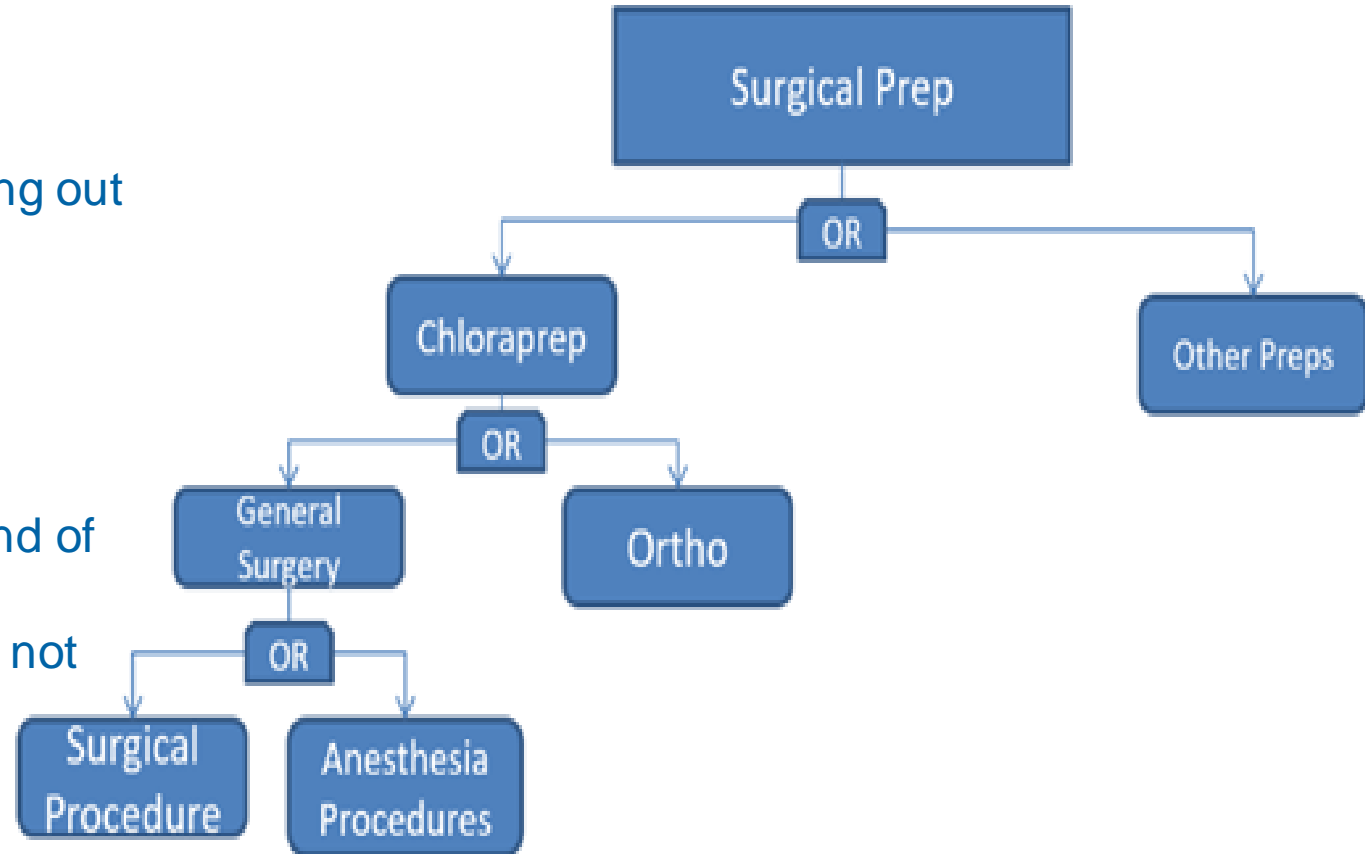
Clarify the Problem

- Problem: following manufacturer guidelines on dry time
- Desired state: waiting the time for drying according to manufacturer guidelines
- Current state: belief/perception that we may not be waiting full time to dry according to manufacturers' instructions.
- Patient/customers expect we follow guidelines to prevent risks such as SSI and fires.
- Key measures: procedures we wait the amount of time we are supposed to versus procedures we are not.
- Measuring time—3 minutes of dry time for Chloraprep.
- Clarifying/Pieces of problem:
 - Paying attention to the clock
 - All clocks matching exact times
 - Three minutes isn't purposeful



Breakdown the Problem

- Designated responsibility of calling out time
- Calling out verbally time started
- Trauma vs routine
- Responsible person to prep
- Source of timing the dry
- Prep time start at beginning or end of prep
- Barriers: awareness, clock times not matching



Initial Data

Waiting 3 minutes for
Chloraprep to Dry



■ no ■ yes

Set a Target

- Our goal is to increase the percentage of dry time compliance for chloraprep used in general surgery in the operating room from 36% to 75% by the end of February 2020 at Children's Mercy Adele Hall.

Identify Root Cause

Why is dry time not being followed?

- People aren't paying attention to the clocks.

Why aren't people paying attention to the clocks.

- Because it is not a designated role.

Why is it not a designated role?

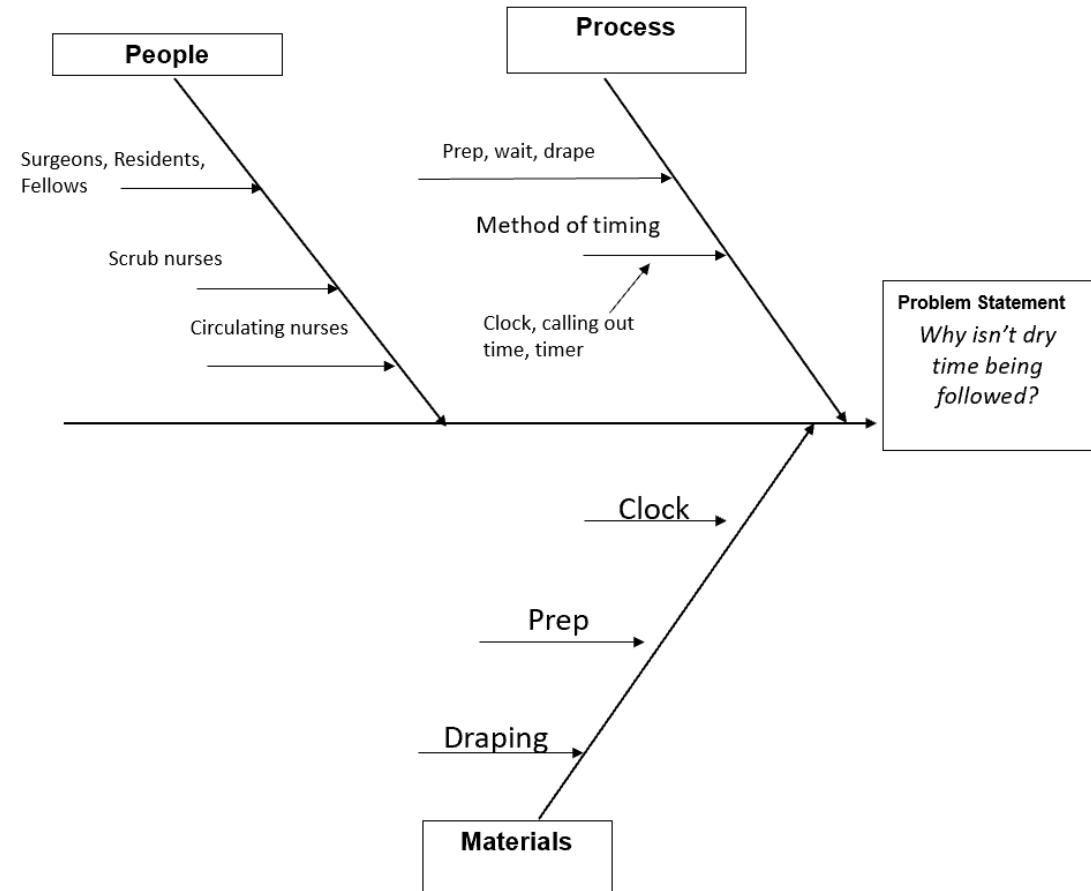
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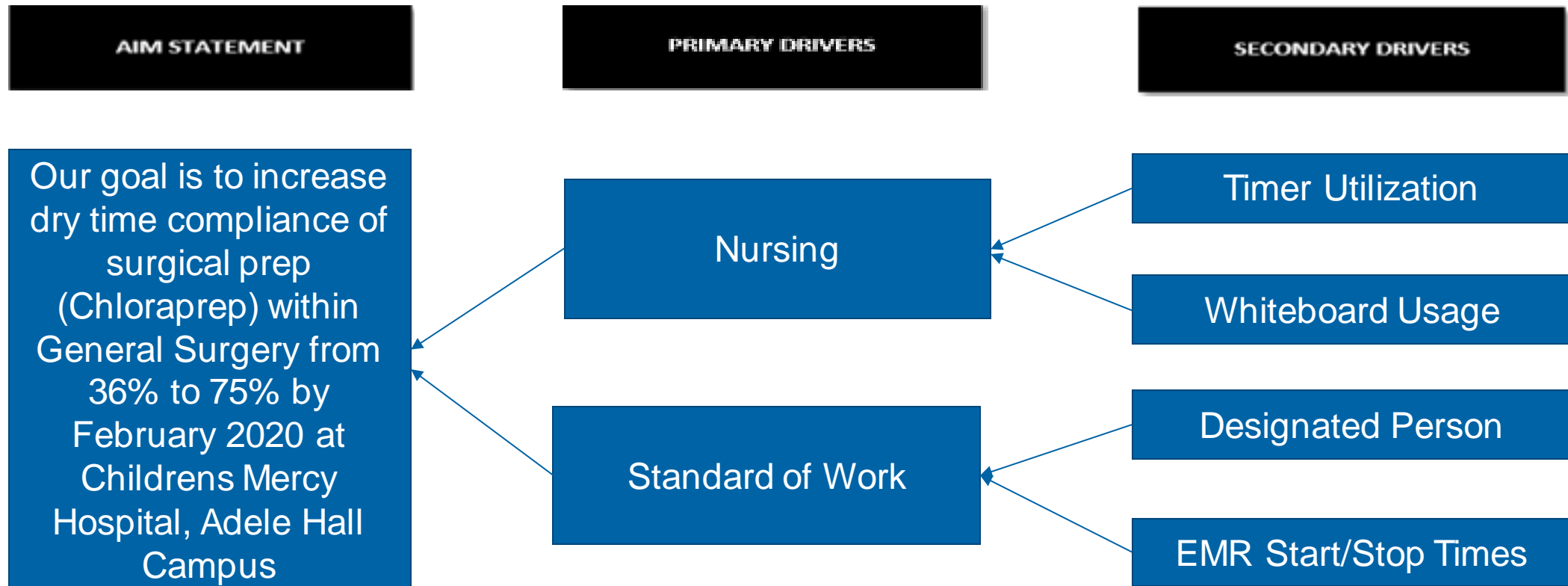
- Because there was not awareness that it was a problem.

Why was there not awareness that it was a problem?

- Lack of education



Develop and Implement Countermeasures

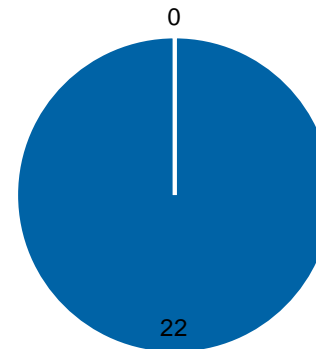


Check Results and Process

- After implementing whiteboard use, data shows there was an increase in compliance to manufacturer guidelines on waiting 3 minutes for Chloraprep to dry from 30% to 54.5%.

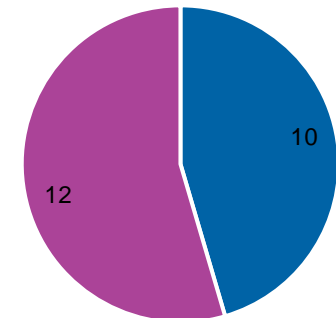
Chloraprep Dry Time Observations: is the General OR team staff waiting 3 min for Chloraprep to Dry?

Using Whiteboard?



■ no ■ yes

Waiting 3 min?



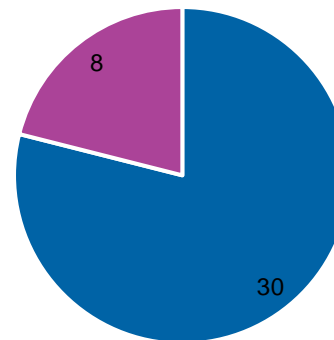
■ no ■ yes

Check Results and Process

- After implementing the use of timers, data shows there was a decrease in compliance to manufacturer guidelines on waiting 3 minutes for Chloraprep to dry from 30% to 26.3%.

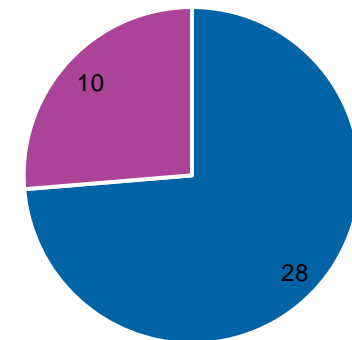
Chloraprep Dry Time Observations: is the General OR team staff waiting 3 min for Chloraprep to Dry?

Using Timers?



■ no ■ yes

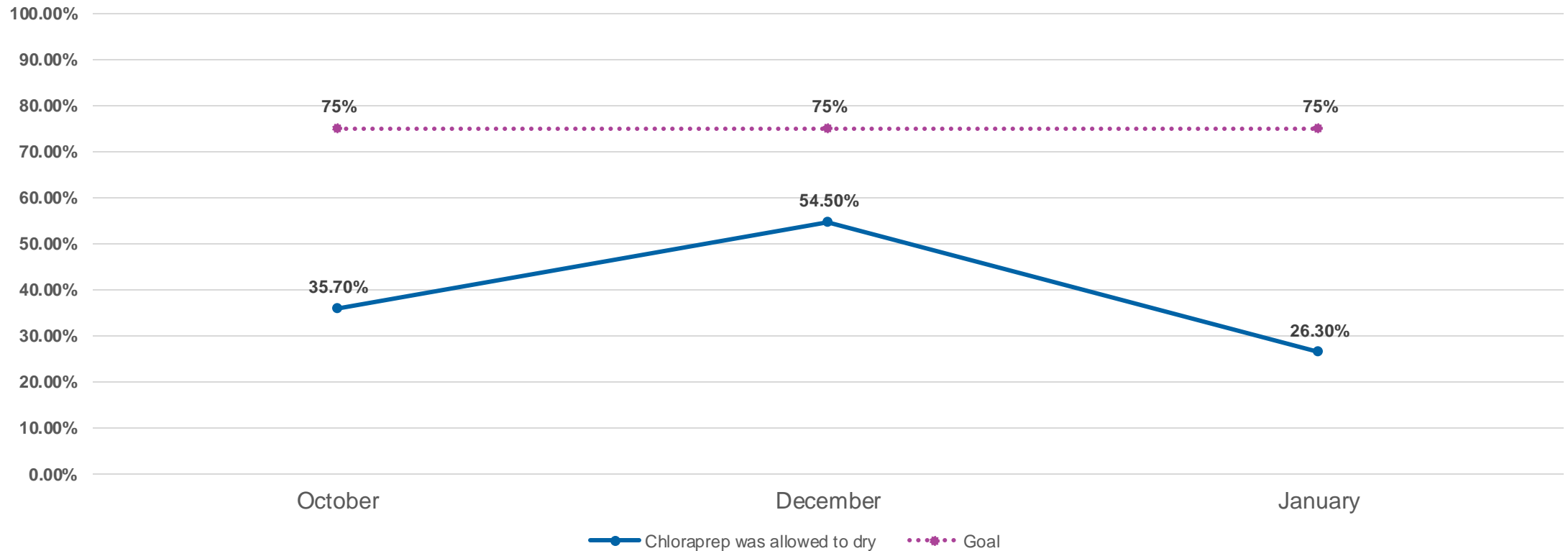
Waiting 3 Min?



■ no ■ yes

Check Results and Processes Cont.

Observation Percentage: Number of observations where Chloraprep was allowed to Dry for 3 Minutes



Standardize and Follow Up

- Our implementations of whiteboard usage and timers would not be included as a standard of care as neither yielded positive results. The issue of surgical prep dry time compliance would require further data collection, and documentation in order to pin point root cause and alleviate the issue in the OR.

Conclusion

- Was AIM Statement met?
 - No. While our dry time compliance did see a temporary increase during the time we implemented “whiteboard usage”, this had no direct correlation to the actual *usage* of the whiteboards but rather the anticipated presence of Joint Commission members during that time frame.
- Pediatric nursing implications
 - Without the allowance of surgical prep dry time we risk causing harm to our patients.
- Lessons learned from working on project
 - Issue with compliance integrity

References

- Jones, E. L., Overbey, D. M., Chapman, B. C., Jones, T. S., Hilton, S. A., Moore, J. T., & Robinson, T. N. (2017). Operating Room Fires and Surgical Skin Preparation. *J Am Coll Surg*, 225(1), 160-165. doi:10.1016/j.jamcollsurg.2017.01.058
- LSL Healthcare, INC. (n.d.). O.R. Products. Retrieved October 2019, from <https://www.lslhealthcare.com/o-r-products/>.

Questions?



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