



MHA Green Belt Lean Six Sigma Project Summary

INITIATIVE TITLE: Hand Hygiene

ORGANIZATION NAME: Lake Regional Health System

ELECTRONIC MED RECORD: Meditech 6.15

PARTICIPANT / CONTACT INFORMATION

Team Leader Name	Title	Preferred contact-type email address/phone#
Mariah Swinker	Director of Post Acute Care	mswinker@lakeregional.com

DEFINE – Problem Statement & Goal

- Health care personnel hand hygiene is insufficient in the health care delivery process resulting in transmission of pathogens and potential healthcare-acquired infections. Current state: audit shows that current employee compliance rate is 32.4%. Moreover, the CDIFF rate/1,000 patient interactions in Dec 21-Feb 22 was 2.27%, 5.67%, & 6.99% respectively thus, prompting LSS project initiative.
- Reduce DPMO from 549,382 to 54,938, a 90% reduction in defects, resulting in a Sigma score of 3.0.

DMAIC PHASE	DEFECTS	OPPS	DPMO	SIGMA SCORE
Baseline	178	324	549,382	1.3
Goal			54,938	3.0

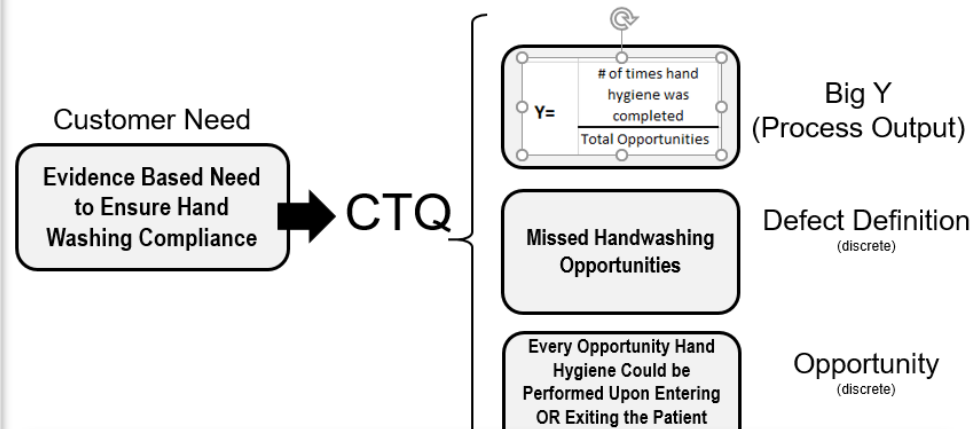
GOAL = 90% REDUCTION IN DEFECTS

DEFINE - Initiative Scope

Completing hand hygiene before entering and while exiting a patient care areas of the Medical Surgical Unit. Will evaluate opportunities of all disciplines entering and exiting patient care areas.

DEFINE –BIG Y

PROJECT CTQ TREE



MEASURE - Data Collection / MSA

Data collection was completed by direct observation of healthcare workers on the medical surgical unit in patient care areas. MSA attribute agreement was conducted and compared to ensure matching results before the 338-sample study was conducted.

ANALYZE - Critical Xs / Root Causes Identified

The following x variables are statistically significant. These will be the focus of our Improve Plan.

Variable Tested	Statistical Test Performed	Stat Sig (Yes<0.05)	p value
Enter/Exit	Two Proportion	Yes	0.00
Discipline- Housekeeping	Chi Square/Two Proportion	Yes	0.004
Discipline- RT	Chi Square/Two Proportion	Yes	0.021
Carrying Anything	Two Proportion	Yes	0.001
Nearest Hand Sanitizer Empty	Two Proportion Test	Yes	0.029
Day of Week-Wednesday	Chi Square/Two Proportion Test	Yes	0.000
Responding to a Non-Emergent Alarm	Two Proportion Test	No	0.003

IMPROVE - What was Implemented

We chose to focus on EVS first, they had a significant amount of non-compliance. We also thought that since this discipline works throughout the entire organization they could be the most impactful.

- Mariah went to an EVS staff meeting to perform education and received lots of feedback.
- Introduced scripting for EVS upon entering and exiting the patient room.
- Kayla Wood, infection preventionist, is going to attend quarterly staff meeting for this group due to the turnover rate.
- Updated the EVS checklist to include checking hand sanitizer dispensers and wash hands.
- Created a sign to be placed on all the EVS carts for a visual reminder.
- Spoke with Med/Surg staff so they feel empowered to hold their co-workers and other disciplines accountable in real-time situations

IMPROVE – What was Implemented

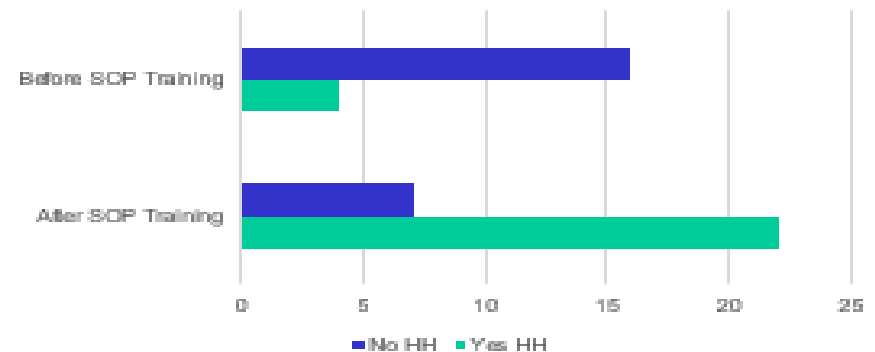
What you say matters!!!

- **What to Say on Entry?**
 - Gloves Already On: “Good morning, I am ____ your housekeeper. I washed my hands prior to putting gloves on. Do you mind if I service your room?”
 - Need to Glove: “Good morning, I am ____ your housekeeper. I am going to service your room after I wash my hands”.
- **What to Say on Exit?**
 - “Thank you for allowing me to service your room. Before I wash my hands, is there anything else that I can do?”



IMPROVE – Results to Date

Hand Hygiene (HH) Completion



Our baseline sigma score was 1.3, our goal was a 90% reduction in defects giving us a sigma score of 3.0. After the SOP training we have a sigma score of 2.3. We are not at goal yet, but we have statistically significant improvement.

CONTROL – Next Steps

How do you plan to keep momentum going to prevent critical x from reverting?

- Infection Preventionist to present quarterly at department staff meetings
- Reward and recognize every step forward we make
- Monthly audits to be turned into Infection Preventionist
- Encourage managers to mention hand hygiene at their daily unit safety huddles

Have you calculated the project benefits to date?

- As of September 9, 2022, hand hygiene compliance rate has increased by 43.5%.

What is your rollout plan and project “Close” timelines?

- Most of the rollout plan has been implemented except the visual signs for EVS carts, which should be completed and implemented no later than September 30,2022.

Who are you “handing-off” to?

- We will be handing off the our Infection Preventionist, Kayla Wood, once completed.

OVERALL LESSONS LEARNED

Summarize findings that you learned:

- We are not virtual learners 😊
- Our leadership team encourages and fully supports changes that will provide better and safer patient care.
- Dedicate the proper time and commitment to the project, to ensure you get the correct data you need to make a difference.

Did anything surprise you?

- The data lead us straight to where we could make the biggest impact

What would you do differently?

- Have stricter timelines
- More data collectors

NEXT PROJECT(S)

The next project is going to be identifying reasons the other disciplines throughout the organization are non-compliant on hand hygiene and help them with these obstacles.

Once hand hygiene is completed, we would like to use these tools to help us with staff compliance with wearing a mask in patient care areas.

REWARD AND RECOGNITION

- Phoebe, for all the one on one help
- Buddy Wood, EVS Director
- Entire EVS team for their flexibility and willingness
- Our entire senior leadership team for their support of the project
- Kayla Wood, Infection Preventionist