

Standardized Training and Accountability Measure's
Impact on Key Performance Indicators

by

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ABSTRACT

Standardized processes for training and accountability, for an Environmental Services department within a healthcare system, were implemented to see the impact they would have on key performance indicators (KPIs). The KPIs involved infection rate for hospital acquired Clostridium Difficile (CDI), cleaning verification compliance, patient satisfaction, concerning the cleaning of their environment, and employee turnover. The results show that standardizing training and an accountability measure can have a significant impact on turnover, contribute to the reduction in CDI cases, ensure cleaning is performed at a high level and that the patient perception requires additional tools to meet their expectations on a consistent basis.

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Introduction:

Lean is a system of constant improvement. There are many methods you can derive from Lean that will benefit your operations. One very impactful method is standardization. The term “Lean” was coined by John Krafcik in 1988 but what Lean is started back in the early 1900’s. In 1913, Henry Ford married consistently interchangeable parts with standard work and moving conveyance to create what he called flow production. (A Brief History, 2017). Consumers wanted variety but Ford’s process did not provide that. Kilchiro Toyoda, Tailchi Ohno and others at Toyota provided variety. They looked at this situation in the 1930’s, and more intensely just after World War II, it occurred to them that a series of simple innovations might make it more possible to provide both continuity in process flow and a wide variety in product offerings. They revisited Ford’s original thinking, and invented the Toyota Production System, or as what we call it today, “Lean Six Sigma”. (A Breif History, 2017). Throughout many generations, this process was used exclusively in the manufacturing industry. Today, lean thinking is used throughout the world and in almost every industry, including healthcare. One area, more specifically, that it is not widely used is an environmental services department within a healthcare system.

Purpose:

The purpose of this research is to show that standardizing processes provides a cleaner and safer environment for the patient, reduces their chances for a healthcare acquired infection, improves overall patient experience and improves the work environment for the team member performing the cleaning.

Problem Statement:

Lack of standardization creates inconsistencies within an organization, specifically a healthcare system's Environmental Services departments.

Hypothesis Statement:

Environmental Services departments within a healthcare system perform at a higher level when systems and processes are standardized.

Literature Review:

Abstract

Implementing 'Lean' concepts in industries outside of automotive production are becoming more and more prevalent. It requires a lot of time and patience in order for the implementation to be successful, and if not done right, failure is imminent. Many different industries have begun introducing "lean" concepts, healthcare, automotive repair, etc... This paper will show how these various industries approached introducing "lean" concepts in their work place and the benefits from it.

Introduction

First, I want to define "Lean". "Lean" is a program and culture that promotes continuous improvement and elimination of waste in all forms, to increase efficiency and reduce wastes (Ikuma, Nahmens, 2012). When you read that definition, you may ask yourself, what forms of waste are they referring to. Waste comes in many various forms such as transportation, inventory, waiting, over processing, over production and defects. The "lean" concept that is used to address these wastes is 5S. 5S stand for sort, set in

order, shine, standardize and sustain. All though all of the 5Ss are equally important, I am going to focus on the impact standardizing and sustaining has on an organization. In this literature review I looked at several examples of different industries implementing a standardized approach and how it impacted their operations. The industries are, auto service shop, healthcare center and manufacturing. The overarching theme in each of these examples is the impact utilizing 5S has on safety and quality. This theme matches well with my research study on how Standardization impacts the safety, quality and team satisfaction of an EVS department.

SUMMARY

Safety is always a top priority in healthcare, but healthcare organizations often struggle in implementing programs that make meaningful, sustainable improvements in safety (Ikuma, Nahmens, 2012). It is also a priority in many other industries such as auto service and manufacturing. These industries want to implement processes that will create efficiencies while improving safety and quality. 5S is used to accomplish this. 5S is a lean term which means:

1. Sort
2. Set in Order
3. Shine
4. Standardize
5. Sustain

5S encourages streamlined inventories, clutter free workspaces, and processes to maintain housekeeping standards (Ikuma, Mahmens 2012). Ikuma and Nahmens reference several

examples where implementing standardized processes directly impacts safety. In one example, in a hospital ward, 5S directly impacted safety by clearing items from hallways, redesigning storerooms with visual management cues to easily identify out-of-date products, and establishing routine checklists to maintain order (Ikuma, Nahmens, 2012). Implementing standardized processes can have a significant impact on costs. For instance, an endoscopy unit was able to convert one storage room to a staff room, save \$7000.00 on linens and inventory, save \$1000.00 on suture supplies, decrease on-hand inventory by two-thirds, eliminate 0.8 full time equivalent, and reduce cycle time by 17 minutes (Ikuma, Mahmens, 2012). This is a great example as well how implementing 5S can impact employee satisfaction by providing the team a staff room that otherwise they would not have had. Standardizing of supply rooms greatly impacts safety. When each supply room is standardized, staff can easily find supplies and less likely to inadvertently use expired or broken items. It also improves the working environment by eliminating the frustration, when working on different units, of having to locate supplies. When supply rooms are standardized, no matter which unit, supplies will always be in the same or very similar locations. This also saves time so that staff can spend more time providing patient care as opposed to looking for things.

Sustaining the changes can often prove to be the most challenging part of the 5S initiative (Ikuma, Mahmens, 2012). Sustaining the changes requires the effort of all employees and one unintended consequence of using 5S may be increased time needed by management to properly sustain 5S events (Rutledge, Simpson, 2010).

In Parker's Sporlan division, a provider of HVAC systems, they established a standardized way of creating an aluminum framing system used for assembling machine bases and frames to hold automation system components as well as for safety guarding, worktables, material handling systems and signage (Mitchell, 2015). They named the system IPS T-slot. An important part of the lean principle is to standardize things, said Cary Cox, Plant III lean leader for Parker Hannifin, Sporlan (Mitchell, 2015). Through this standardization they were able create a safer environment by reducing the amount of clutter, replacing wood with aluminum preventing splinters and the overall look of the plant is neater causes higher level of employee satisfaction of their work environment. In addition, it created an increase in visibility providing team members the ability to locate operators and getting help when necessary. Standardization also benefited material handling and the maintenance team. As a result of the changes, plant flows improved along with parts presentation and delivery (Mitchell, 2015). Before the standardized IPS T-slot system, maintenance personnel would have to append a lot of time building and moving the wooden work stations. Now, with the aluminum work stations, the maintenance personnel are freed up to focus on preventive maintenance and can respond more quickly to other matters (Mitchell, 2015). In addition to the standardized processes, Parker Sporlan used visual management by utilizing team improvement boards. Having the team's metrics out where they can see them each day connects the work they are doing and how it impacts the company and their customers. This is true in any organization. You can't manage what you don't measure is an old management adage that is still accurate today. Unless you measure something, you don't know if it is getting better or worse. You can't manage for improvement if you don't measure to see what is

getting better and what isn't (Reh, 2017). It is important to measure activities or results that directly impact your organization's goals.

Implementing lean is hard and takes a commitment from every person on your team (Mehok, 2012). You must have buy in from all levels, that way they all feel part of the solution and besides, the people that do the work have the best ideas on how to improve it. These ideas will ultimately make everyone's job easier. Set up a series of meetings and gather the entire team. This way they all feel part of the process improvement and not just being told what to do. By cleaning up your area and standardizing processes, you eliminate waste caused from unneeded transportation, excess inventory, excessive motion, waiting around, over processing and over production and defects (Mehok, 2012).

In conclusion, these three very different industries, healthcare, manufacturing and automotive collision, were able to implement lean principles, 5S, and reap the benefits of creating a more efficient, safer work place that improved customer and employee satisfaction. When there comes a time for needed changes in the work place, it is best to get buy in from all team members. This buy in creates a sense of ownership of the problems and being part of the solution. The best ideas come from those that do the work every day. The journey is not easy and takes a lot of time and patients, but in the end, you create a safer, better and more enjoyable work environment.

Research Methodology:

Within the healthcare system, there are 5 hospitals. They have had a formal, "Day 1" system orientation and formal, "Day 2" orientation at each site, but the EVS

departmental orientation and training program varied from site to site. It is critical that no matter the geographical location, the consumer's experiences the same product, service level and overall experience. No matter where a patient would end up, the way they go about taking care of that patient needs to be consistent no matter which location the patient is located. The difference in a healthcare setting is that this consistency in service can greatly impact the consumer's health and recovery.

First, a report was used that generates CDI rates across the system. The rate is measured by the number of cases per 10,000 patient days. A patient day is calculated by the number of inpatients for that day. For example, if you have 100 patients on Monday, then Monday had 100 patient days. Second, a chart was used to measure cleaning verification compliance by rate of compliance. The goal was to be 100% compliant with cleaning high touch surfaces while performing a discharge clean on a patient room. 5-10 high touch surfaces are marked before the cleaning begins and then checked after the cleaning has been completed. The cleaning verification process is an evidence-based approach, utilizing fluorescent marking spray, to improve the cleaning of high touch services. The fluorescent marking spray cannot be seen by the EVS team member but utilizing a black light flashlight, the marks can be and will illuminate if they have not been removed. By simply dividing the number of marks cleaned by the total number of marks, you get your compliance rate. Thirdly, measuring the patient's satisfaction level utilizing the patient satisfaction survey tool, HCAHPS survey which has a question related to the cleanliness of the environment. It utilizes a percentile ranking compared to a top box score. Lastly, the measuring of the EVS department's retention by accessing

Human Resources turn-over reports. The results are compared with results from the previous year before implementing the standard processes.

Variables:

The independent variables in this research are the standardized processes implemented at the system level. There are standardized processes currently in place at the individual site levels but none at the system level specifically for Environmental Services.

The dependent variables are the quality and satisfaction measures' results.

The controlled variables are the facilities that make up the healthcare system and the work that is expected to be performed.

Research Scope:

To see if implementing standardized training and accountability measures impact CDI rates, cleaning performance, patient experience scores and employee retention. The CDI research is limited due to the various activities that impact it outside of cleaning, but you can see a direct link between the standardization and the impact.

Data Collection/Data Characteristics:

The Quality and Patient Safety department produces the CDI rates by collecting the number of CDIs that occurred in a month's time, per facility, and then are able to produce a system rate. For the cleaning verification compliance, a chart was created that measures the compliance rate using a percentage of compliance compared to the goal of 100%. For patient satisfaction, the results were compared month to month starting from

when the standardized training program was first implemented to 12 months later. Team member turnover is measured utilizing our Human Resources department's turnover report comparing the previous year's rate to this past year's rate.

Data Collection:

The data collection for the c-diff rate was collected from each hospital throughout our healthcare system. The Infection Prevention team analyst collect the data and send out monthly reports on the system our CDI rate per 10,000 patient days. To measure the compliance rate for the cleaning verification process, a chart was created to capture the compliance rate of the individual cleaning the room. Assigned personnel would mark 5 to 10 high touch areas with the fluorescent marking liquid before a discharge clean. After the EVS technician completed the discharge clean, the assigned personnel would scan the marks with a black light flashlight and record their findings on the chart.

Patient experience scores are obtained through surveys that are sent out to the patients after they are discharged. It usually takes about a week for the patients to receive them and another few weeks to receive them back. A third party, HCAHPS (Hospital Consumer Assessments of Healthcare Providers and Systems) provides this service for us. They tabulate the results into the questions associated with each department. EVS has its own questions related to cleanliness of the environment.

Employee retention can be obtained by the Human Resources department's turnover report. A report is generated for each facility as well as a system score. These reports are generated monthly. The report shows a percentage of turnover for your

individual department. In this case, EVS department. The report calculates a percentage of turnover month to month and for the fiscal year.

Data Analysis:

CDI rates: twelve months of data were looked at and evaluated the trend line and rate to see what kind of impact the standardization had. The trend line will tell me if it had a positive impact over the twelve months and the rate will tell me if the goal was achieved. There are some limitations to this rate as there are many other factors that can contribute to the rate such as clinician's behavior, hand hygiene and wearing proper personal protection equipment, and antibiotic stewardship, appropriate use of antibiotics.

Cleaning verification: comparing the results from when it was first implemented to the latest scores. This will tell me whether or not utilizing this standard accountability measure improves cleaning over time.

Patient experience scores can be compared to the previous year's scores showing what kind of impact, if any, standardizing the training program would have on the patient experience when it comes to the question of cleanliness.

Employee retention was evaluated by the percentage of turnover for the past twelve months indicating what kind of impact the standardized training program had on retaining employees compared to the previous year.

Results:

The first step that was taken by the EVS leadership team was to create an EVS council. The first objective of the council was to create a charter. The charter provided the structure and mapped out the direction in which to go to achieve success. Once the

charter was established, they began to work on the identified goals. These goals were created to ultimately impact and reduce hospital acquired infections, improve patient satisfaction, increase team member satisfaction and improve retention.

The first goal was to create a standardized training program for not only new hires but for all current team members to go through as well. This way everyone's training is standardized throughout the system and the program provides a sense of professionalism that was not present before. It raises the sense of importance of their job and the worthwhile work they do. The program was created by getting input from all levels throughout the EVS department. There is "EPIC", EVS Management application that helps manage EVS staff cleaning of patient rooms once they are discharged, an online training platform, classroom presentation to review the online modules and then there is a simulation environment. Epic training lasts about 2 hours. The online training program consisted of Computer Based Learning modules that included "Discharge Cleaning" process, "OSHA GHS" training on Safety Data Sheets, "Chemical Safety", "Waste Management" and "Infection Control". This takes about 1.5 hours. The next step involves classroom training where the CBL material is reviewed hitting key points of each module. This takes roughly 30 minutes. The final 2.5 hours consist of the employees working in a simulation environment for AIDET, is a communication framework for healthcare professionals to communicate with patients and each other in a way that decreases patient anxiety, increases patient compliance, and improves clinical outcomes. The employee is videotaped during this simulation. After everyone has completed this step they then move to the cleaning process simulation environment. This is where the employee needs to show competency with the "7 Step", cleaning process. The "7 Step"

cleaning process is our standardized process for cleaning a patient room. Once all employees have completed this step, a debrief and review of the videos is conducted. The video review process proved to be a very valuable tool and provided immediate feedback to the employee to learn from. Feedback from all EVS team members was very positive and appreciative of the level of training that was provided. To ensure ongoing competency, an annual competency program was created where the employee has to show competency with a topic each month of the year.

To go along with the training program, there needed to be a standardized process of ensuring accountability with the physical cleaning of a patient room after discharge. Several different products and technologies were evaluated. Fluorescent marking system was found to be the most effective and most efficient. This program was rolled out at the same time to all EVS team members across the system. It was stressed that the importance of ensuring that all high touch surfaces are wiped clean with the approved disinfectant and that it was needed to be able to show leadership the ability to verify that the Environmental Services team members are cleaning appropriately. The results of the verification process are shown daily on a “Visual Management Board”. The visual management board is another lean tool that was implemented. It is broken out into several categories:

1. True North: Provides a guide of our current condition and where we want to be.
2. Metrics: C-Diff rate and Cleaning Verification compliance
3. A3: Lean tool that is a one page document that contains
 - a. The problem

- b. The analysis of the process
- c. The identified root causes
- d. Potential solutions
- e. Action plan

| WELLSTAR Windy Hill Hospital | | Start Date: | Revision Date: | Revision #: | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|--------------------|-------------|----------------|-------------------|-------|----------|--|--|------------|----------|--------------------------------|--|-------------|----------|--------------------|---|-----|--------|----|------|------------|---|-------|---|--|--|--|--------|--|--|
| Project title: CDI: Daily Surface Cleaning Compliance | | Countermeasures/Action Plan/ Solutions: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Background: The WH Progressive Care Unit /LTAC has observed an increase in the number of CDI cases from FY 2015 to FY 2016. | | <table border="1"> <thead> <tr> <th>Problem/ Issue</th> <th>Action/ Solutions</th> <th>Owner</th> <th>Due Date</th> </tr> </thead> <tbody> <tr> <td>High Touch surfaces are not being cleaned properly 100% of the time.</td> <td>Utilize fluorescent testing as a means of cleaning validation.</td> <td>Keith Holt</td> <td>Complete</td> </tr> <tr> <td rowspan="2">Lack of standardized training.</td> <td rowspan="2"> <ul style="list-style-type: none"> • Develop system level onboarding and education. • Establish ongoing competency. • Distribute EVS system handbook. </td> <td rowspan="2">EVS Council</td> <td>Complete</td> </tr> <tr> <td>Complete 3/1/17</td> </tr> </tbody> </table> | | | Problem/ Issue | Action/ Solutions | Owner | Due Date | High Touch surfaces are not being cleaned properly 100% of the time. | Utilize fluorescent testing as a means of cleaning validation. | Keith Holt | Complete | Lack of standardized training. | <ul style="list-style-type: none"> • Develop system level onboarding and education. • Establish ongoing competency. • Distribute EVS system handbook. | EVS Council | Complete | Complete 3/1/17 | | | | | | | | | | | | | | | |
| Problem/ Issue | Action/ Solutions | Owner | Due Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | Complete 3/1/17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current Condition: CDI Incidence & Comparative Rate/10,000 Pt Days FY 2011 - FY 2017 (Jul - Nov) <table border="1"> <thead> <tr> <th>Fiscal Year</th> <th># Cases</th> <th>Rate</th> </tr> </thead> <tbody> <tr> <td>FY2011</td> <td>30</td> <td>23.3</td> </tr> <tr> <td>FY2012</td> <td>23</td> <td>19.5</td> </tr> <tr> <td>FY2013</td> <td>14</td> <td>11.9</td> </tr> <tr> <td>FY2014</td> <td>7</td> <td>5.8</td> </tr> <tr> <td>FY2015</td> <td>9</td> <td>7.7</td> </tr> <tr> <td>FY2016</td> <td>15</td> <td>16.7</td> </tr> <tr> <td>FY2017 YTD</td> <td>8</td> <td>19.88</td> </tr> </tbody> </table> | | Fiscal Year | # Cases | Rate | FY2011 | 30 | 23.3 | FY2012 | 23 | 19.5 | FY2013 | 14 | 11.9 | FY2014 | 7 | 5.8 | FY2015 | 9 | 7.7 | FY2016 | 15 | 16.7 | FY2017 YTD | 8 | 19.88 | <table border="1"> <thead> <tr> <th>Action / Solutions (Based off of barriers)</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table> | | | Action / Solutions (Based off of barriers) | Result | | |
| Fiscal Year | # Cases | Rate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FY2011 | 30 | 23.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FY2012 | 23 | 19.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FY2013 | 14 | 11.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FY2014 | 7 | 5.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FY2015 | 9 | 7.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FY2016 | 15 | 16.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FY2017 YTD | 8 | 19.88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Action / Solutions (Based off of barriers) | Result | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Goal: Reduce the rate of hospital onset CDI cases from the baseline rate of 16.66 (15 cases). Threshold: 14.43(13 cases) Target: 12.21 (11 cases) Max: 9.99 (9 cases) | | STUDY/TRIALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Problem Analysis: CDI transmission occurs when spores and bacteria are transferred to patients via hands of healthcare personnel who have touched a contaminated surface or item as well as when the patient touches a contaminated surface or item. WellStar EVS departments do not have a standardized means of cleaning validation to ensure EVS technicians are wiping all high touch surfaces with microfiber soaked in approved disinfectant. In addition, there is not a standardized training program. | | Follow up / Sustainability: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <ul style="list-style-type: none"> • Fully implement visual management board/daily metrics. • Standardize cleaning validation. • Standardized training program. • Monthly EVS council meetings reporting on results. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

- 4. Barriers: Track barriers to see if there are trends that need to be addressed.
- 5. Idea Submissions: A process in which team members can submit ideas on how the barriers can be resolved.
- 6. P.I.C.K. Chart: Ideas are placed on the P.I.C.K. chart

Low Payoff, easy to do - Possible

High Payoff, easy to do - Implement

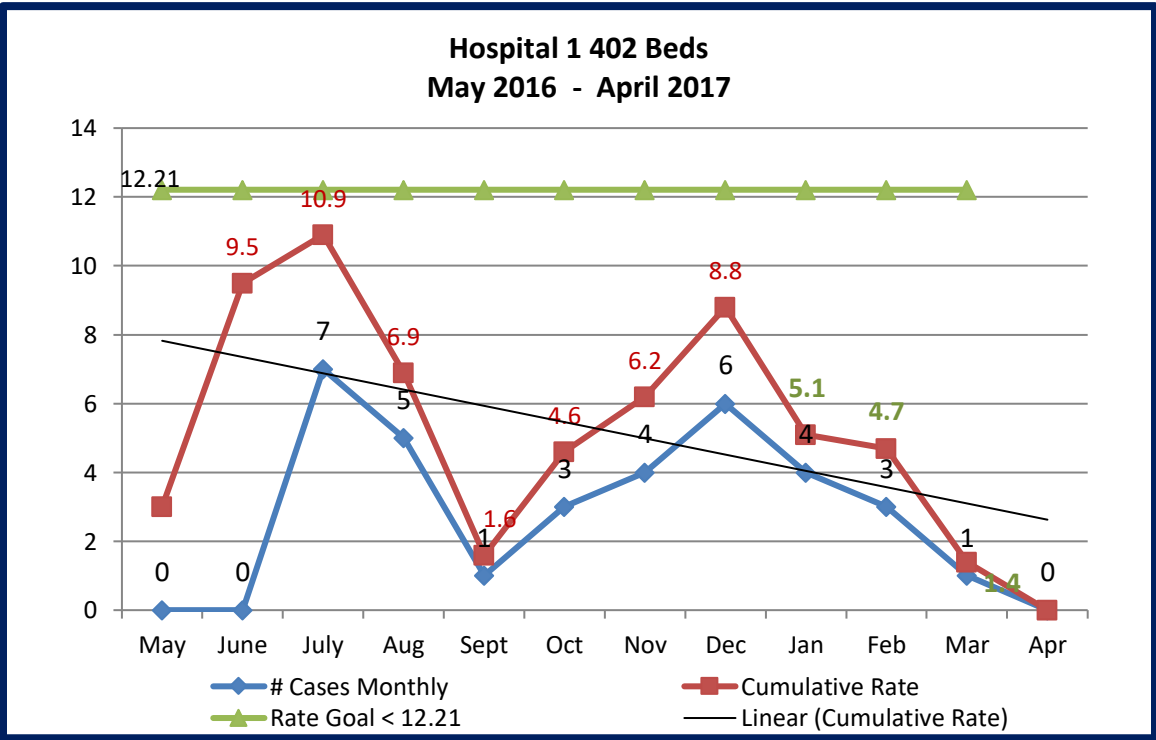
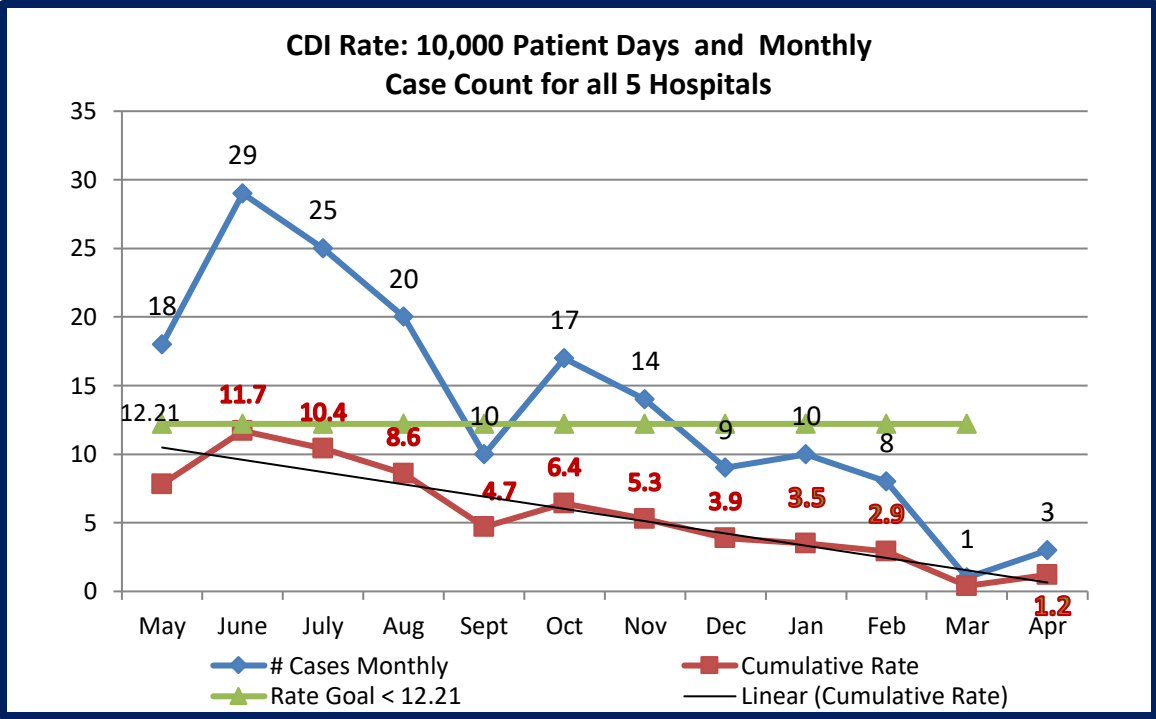
High Payoff, hard to do - Challenge

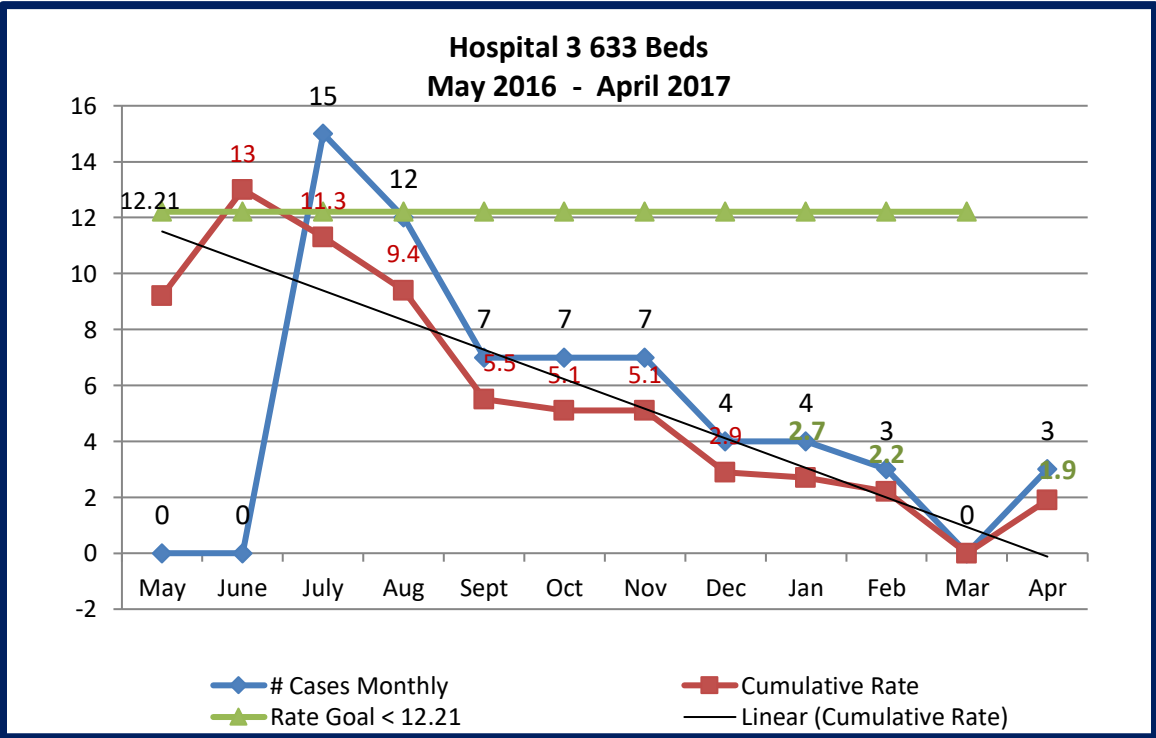
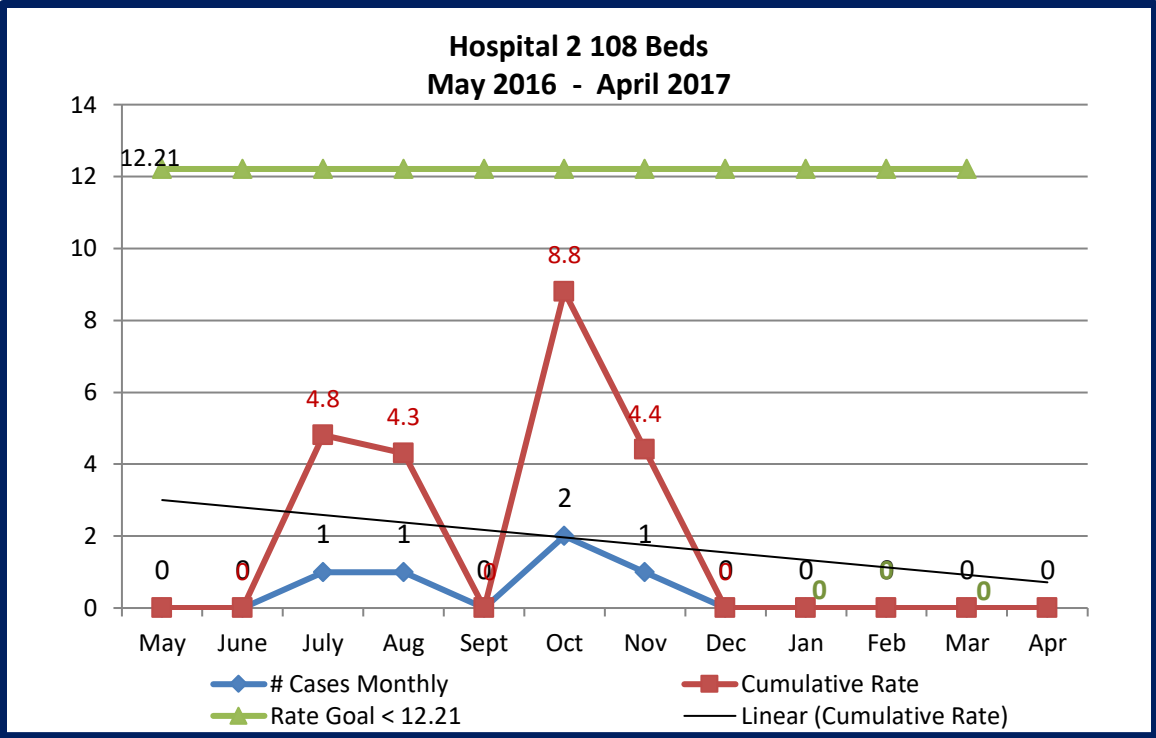
Low Payoff, hard to do – Kill

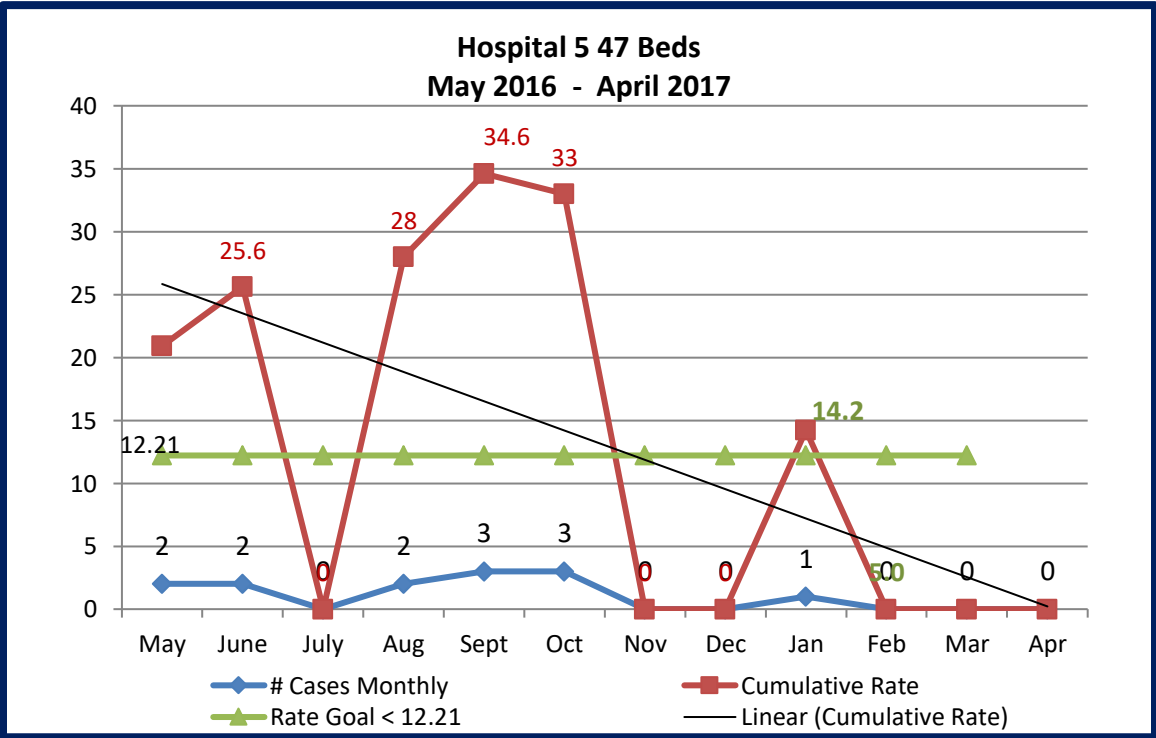
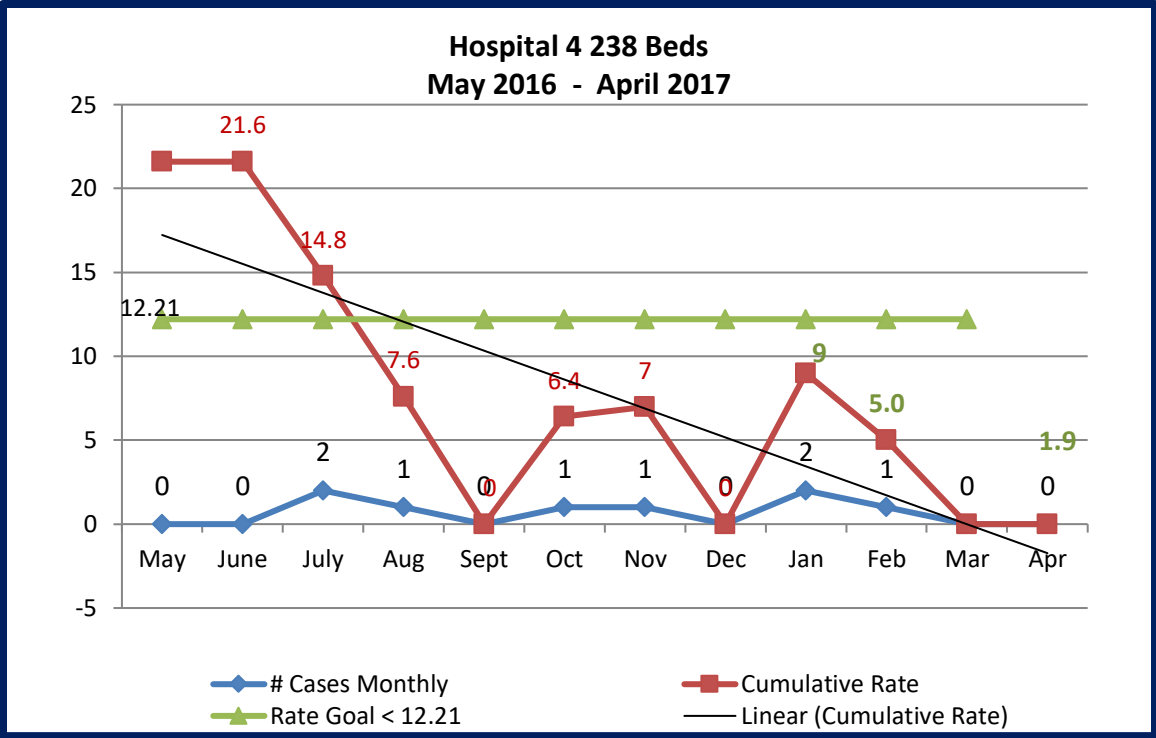
The idea behind this is so the team members can see on a daily basis on how they are impacting the various metrics and see how what they do impacts patient safety and making a difference in people's lives. A way to connect the work that they do and how meaningful, worthwhile, it is. They see that we all share the same goals of creating a clean and safe environment and that we all are putting the patient first. This goal aligns with all departments across the facility and system. It reinforces the team approach and everyone's job is just as important as the next.

Data Results:

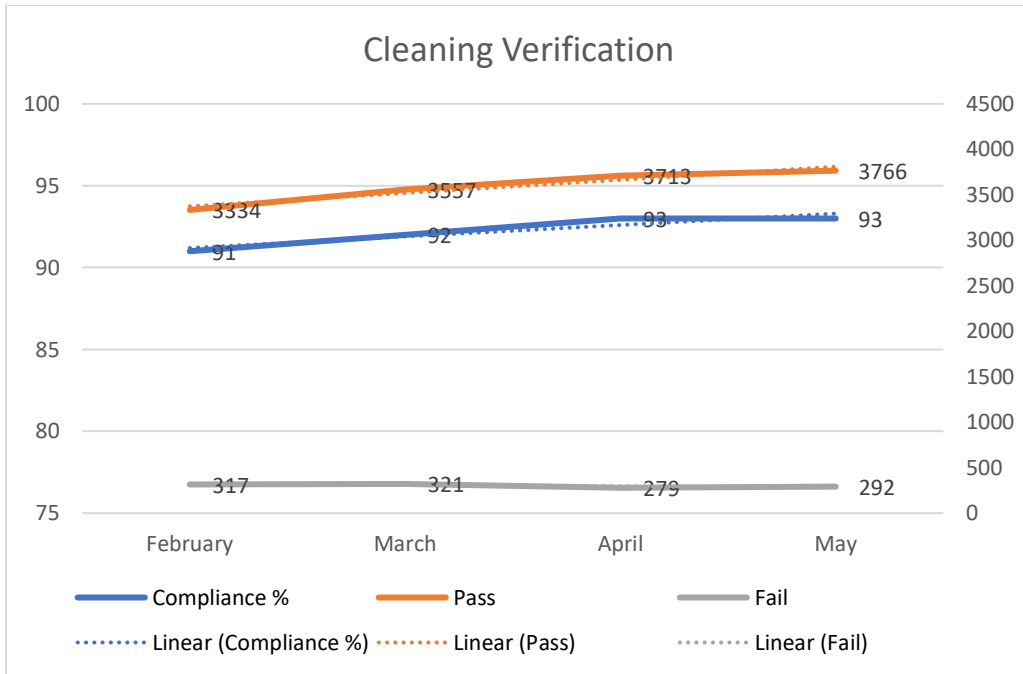
CDI rates: The below chart shows that over the past twelve months the CDI rate dropped significantly after the first few months of the fiscal year. The standardized training program began in July and in just a few short months, you can see that the program may have contributed to the reduction of hospital acquired CDI. As the year went on the rate continued to drop, exceeded goal in the month of March and continued to drop through May. The reason, may have contributed, is used is due to the limitations in this data. There are several additional factors that can contribute to these results, clinicians proper hand hygiene and proper use of personal protection equipment and antibiotic stewardship. Hand hygiene and antibiotic stewardship have always been in place and monitored. The only significant change in the past twelve months was the introduction to our standardized EVS training program. I also included the charts per facility to show which facilities were impacted the most and to compare whether size of the facility played a part as well.





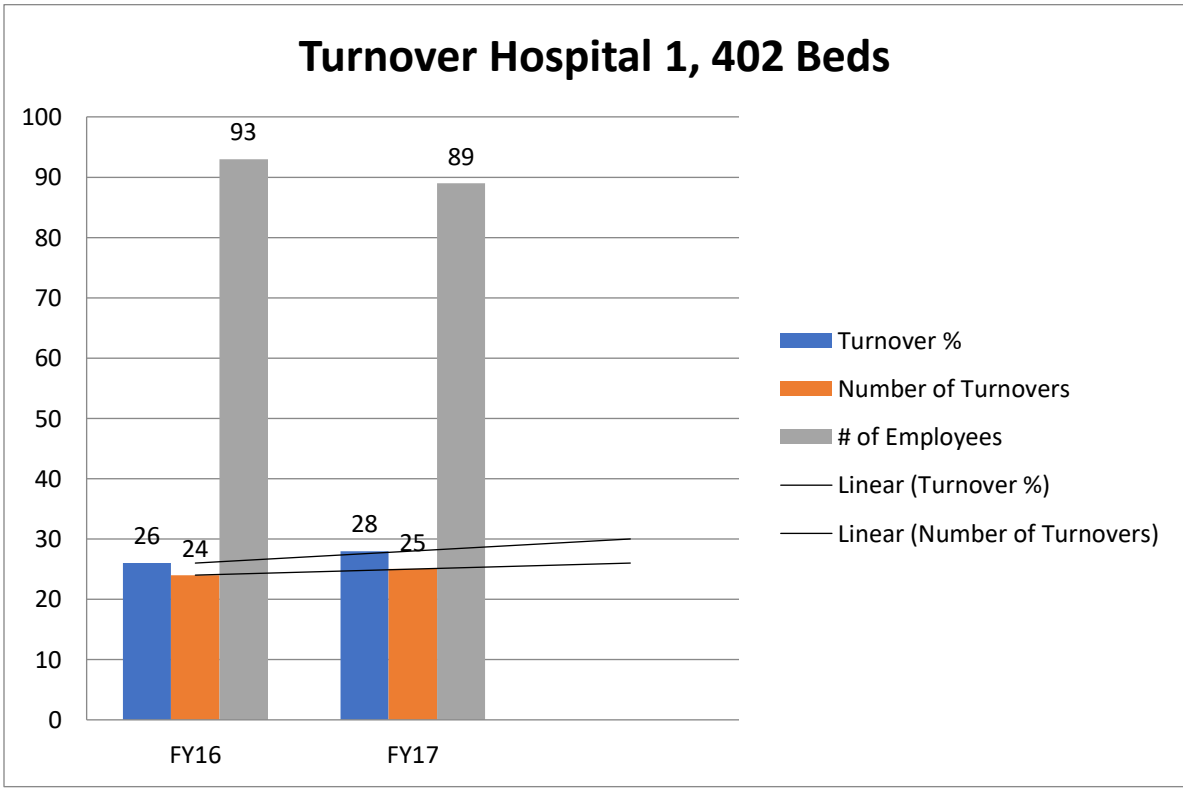
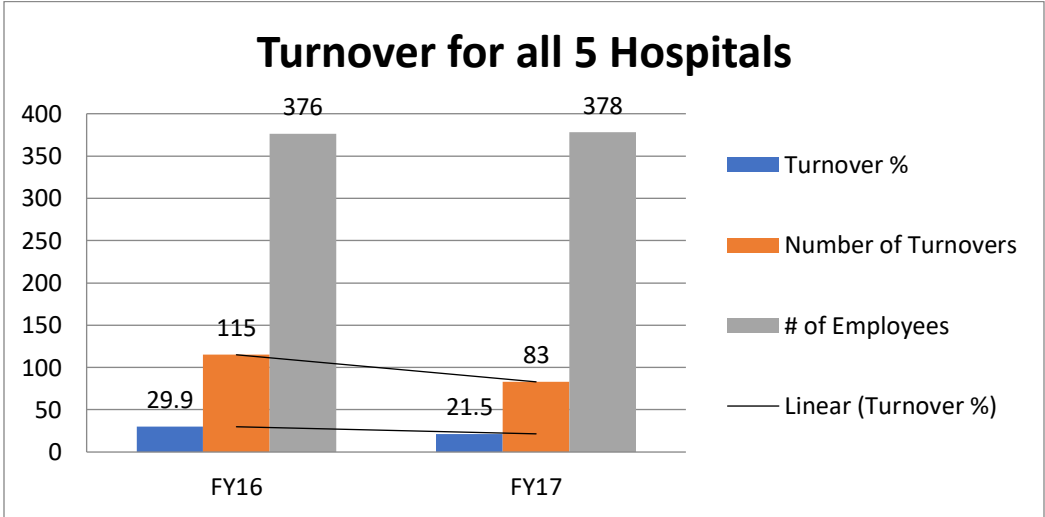


Cleaning verification: The cleaning verification program began in February of 2017. There was a lengthy evaluation period, July 2016 through January 2017, in which various cleaning verification technologies were researched, trialed, and cost analyzed. Through this process the fluorescent marking technology was selected. The chart below shows the compliance rate, number of passes and number of fails. If a mark was wiped clean on the initial cleaning, that mark passes. If not, it failed. Divide the number of passes by the number of marks and you get your compliance rate. The chart shows that there was a very gradual increase in compliance with a corresponding increase in passes. The fails gradually decreased. At first, it may not appear that this is not very significant, but what the chart does not show is how this process impacts the EVS employee's approach to cleaning knowing they may be verified for their cleaning performance. It has served as an excellent accountability tool ensuring a high level of performance is conducted consistently and sustained. It has also served as an excellent tool to celebrate the great work being performed and a great way to quantify the work being performed.

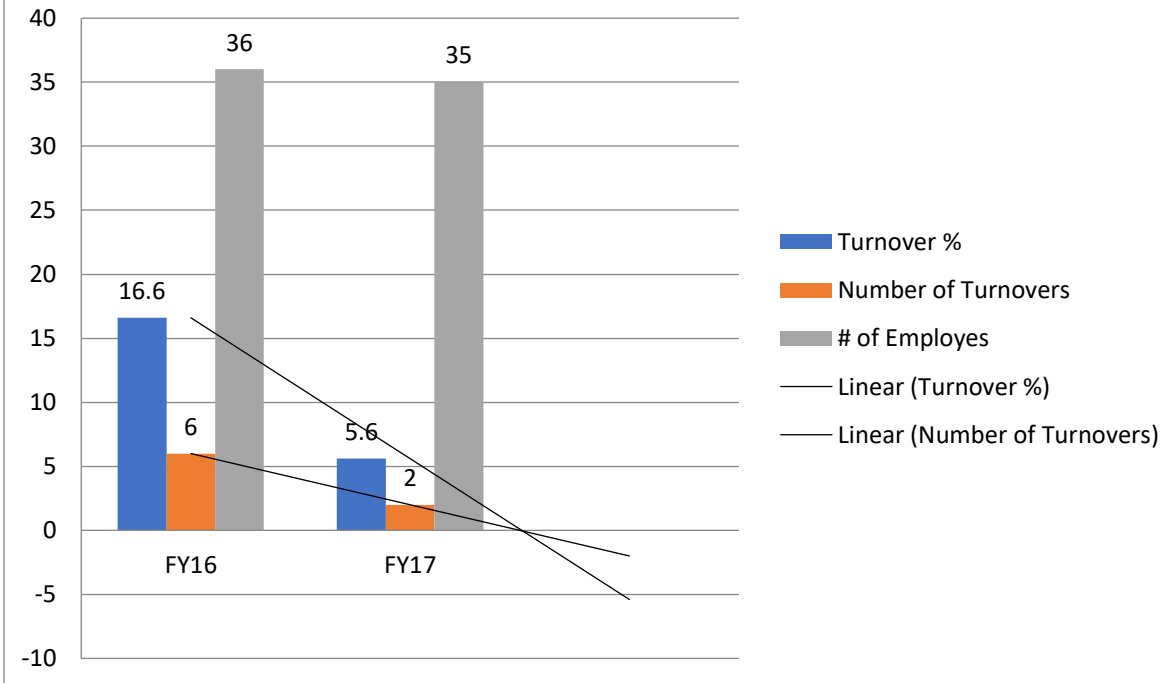


Employee Retention: The thought behind connecting a formal standardized training program with improving retention is that if you show new team members, and current ones, all current team members had to go through the formal standardized training program as well, how important their job is by creating a formal training program, that they help design, and better prepare them for success in their roles, they will enjoy their work more, be more confident and raise the level of pride they have in the work that they do. The chart below shows the comparison between the past fiscal year, FY16 and the current fiscal year, FY17. The fiscal years run from July 1st to June 30th. As the chart shows, the turnover percentage was decreased by 8.4% which equaled reducing the number of turnovers from 115 in FY16 to 83 in FY17. This is very significant, especially if the trend can continue. The site specific turnover results are also shown to evaluate if there were any site-specific variables that can be determined. The ability to keep team

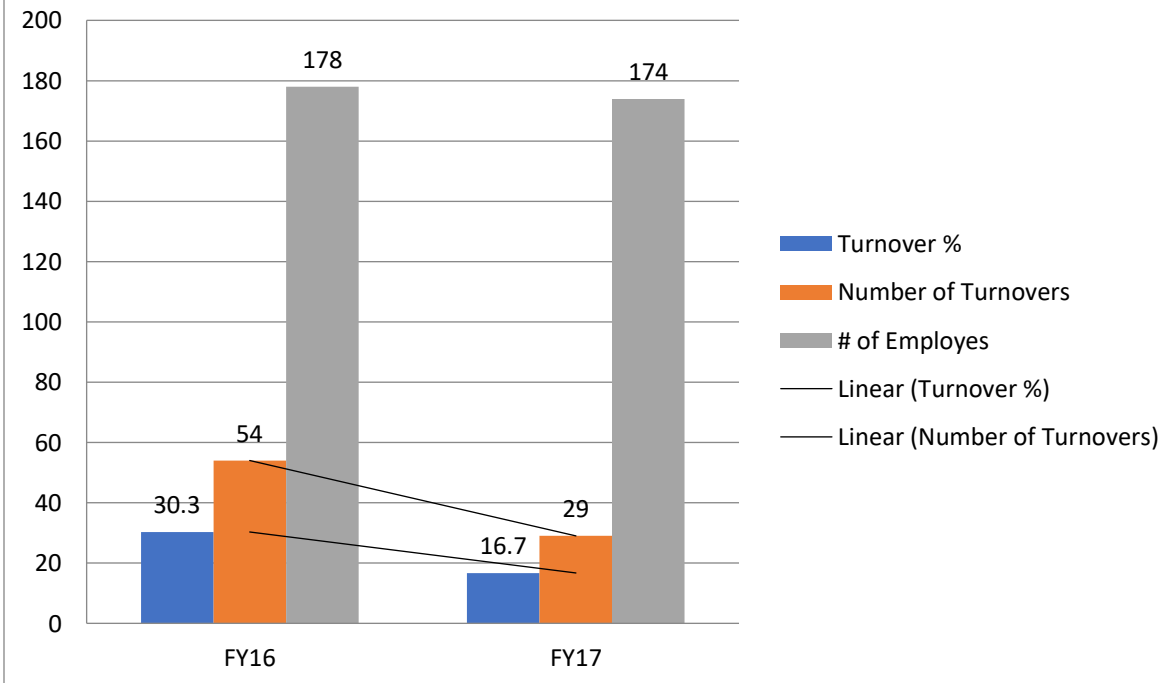
members longer and improve retention equals higher level of moral amongst the team, better performing team, the delivery of better care and reduction in labor costs.



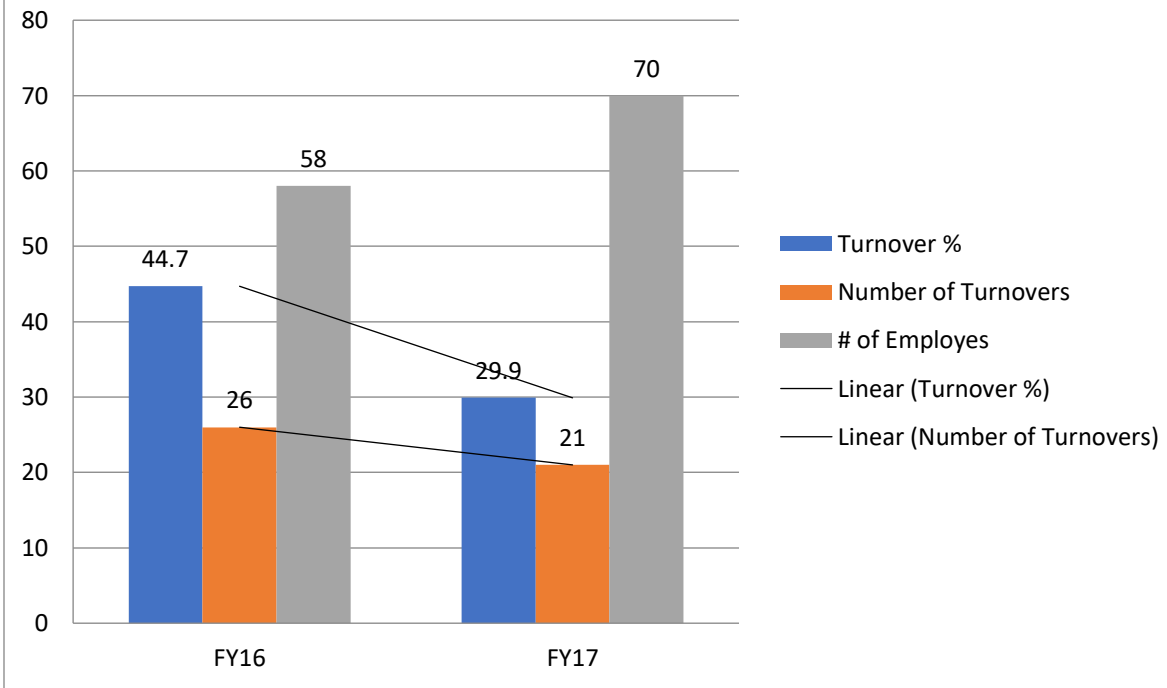
Turnover Hospital 2, 108 Beds



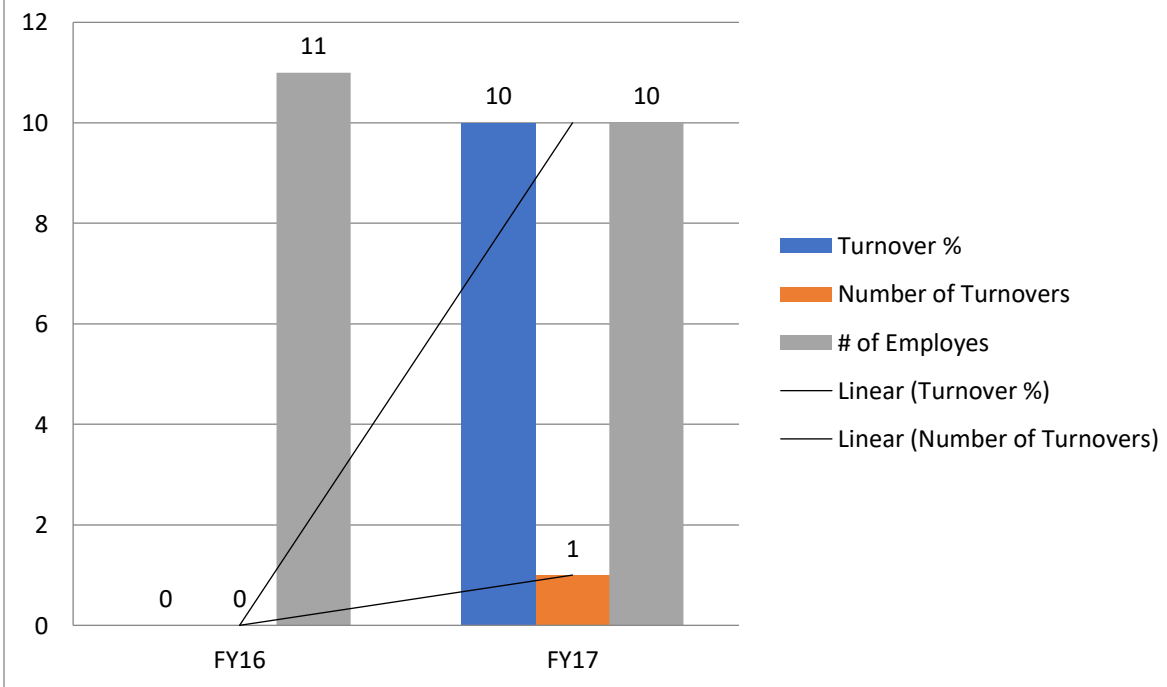
Turnover Hospital 3, 633 Beds



Turnover Hospital 4, 238 Beds

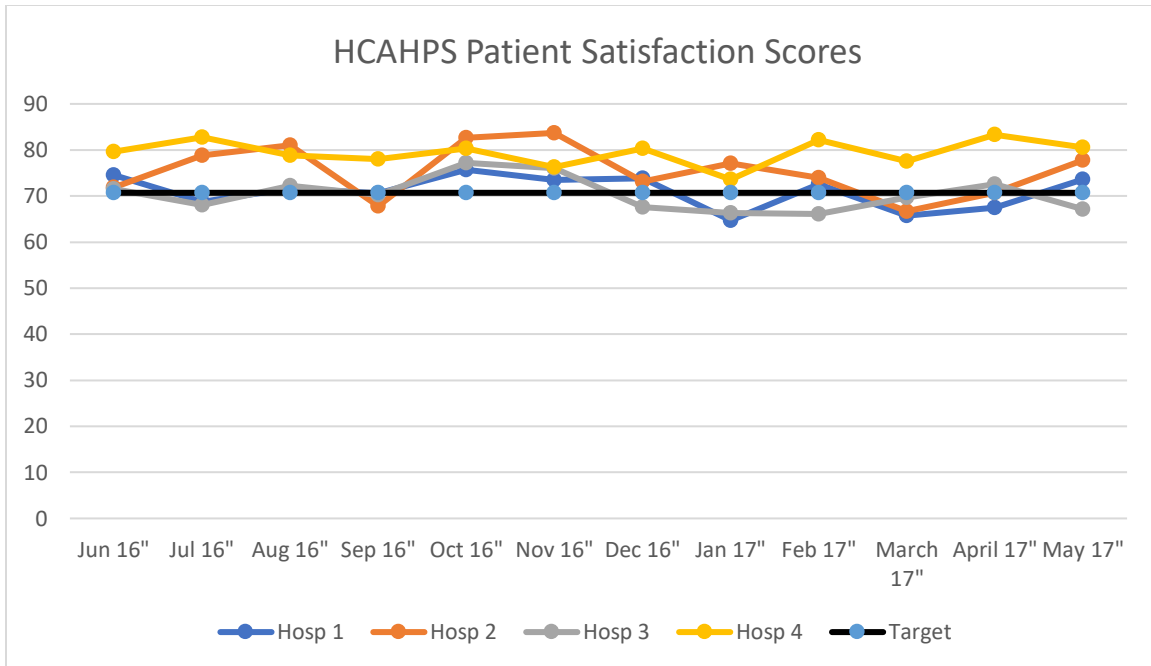


Turnover Hospital 5, 47 Beds



Patient Satisfaction: Twelve months of patient satisfaction scores were captured for the question, “How Often Were your Room and Bathroom Kept Clean”? These scores are based off a percentile ranking compared to a “top box” score in our compare group. The thought was that this area would have had the most positive, consistent, impact by standardizing our training method and how the EVS worker interacts with the patient, but it did not. Although the scores reflect the majority of months above the target, the chart shows a saw tooth pattern which tells there is a lack of consistency month to month as well. In addition, one of the hospitals in the system does not get scored utilizing HCAHPS. We will call that hospital, Hosp 5. Hosp 5 does not get scored utilizing HCAHPS. It gets scored utilizing Press Ganey Patient Satisfaction survey.

Even though the standardized formal training program was conducted, that included scripting when interacting with the patient, the consistent positive impact was not achieved. This shows that the standardized training program, by itself, cannot sustain the delivery of high level patient satisfaction. Additional strategies are needed to hard wire the behaviors the patients are looking for in the delivery of very good service and always behaviors.



Conclusion:

Standardizing processes overall is very beneficial to a team. By standardizing the training program and cleaning verification process, positive results were achieved concerning the CDI rate and employee turnover. For the CDI rate, the rate decreased from 11.7 in June 16" to 1.2 in April 17". There were some limitations to these results as mentioned, but again, the other variables involved in affecting this data have stayed constant, the only significant change has been the standardized training and cleaning verification process. Employee turnover was drastically reduced by 32 FTEs compared to the previous year and the turnover percentage reduced from 29.9% to 21.5%. Both of these statistics are very significant.

The cleaning verification compliance stayed pretty steady throughout the year with a slight improvement of the 12-month period. The first reaction to this outcome was of surprise. The thought was that standardizing our cleaning verification process and

being able to quantify the cleaning process would have improved over time. In actuality, it stayed pretty constant. As these results were evaluated longer, a different conclusion was determined. With a goal of 100%, the first month showed a compliance rate of 91% and after 4-months, the compliance rate ended up at 93%. Right away the score was very favorable. This shows that the employee's awareness of the accountability measure immediately had an impact on their performance level. The employee's awareness that there was a cleaning verification accountability measure ensured that the cleaning was done in a very effective manner.

Patients satisfaction scores, concerning the cleanliness of their environment, were inconsistent, represented by the saw tooth pattern on the chart. These results identify that there needs to be additional measures taken to ensure the always behaviors, always keeping the room and bathroom clean, the patients are expecting are achieved. Some recommendations would be routine observations of the employee interacting with the patient and interviewing the patients to ensure the EVS team member delivered very good service. These results could then be shared with the EVS team member so that they get the feedback and can be coached on how to improve and understand they are being held accountable to the always behavior expectations.

In conclusion, standardizing training and cleaning verification had positive results. When you put the time and effort in developing a standardized formal training program and accountability measures, you can get some very positive results in key areas such as turnover and infection rates. The other two KPIs showed that there is still work to

be done in addition to the standardized program but the program provided an excellent starting point.

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APPENDIX A

CHARTER

1. Council Description

The EVS System Council is an interactive workgroup comprised of leadership representation from the Environmental Services across the system that will serve as a forum for shared decision making on environmental services. The EVS System Council will serve to integrate core values and beliefs and professional practices that all Environmental Service team members will embrace as a means of achieving system-wide quality services.

1. Key Stakeholders

This Council's purpose will be to improve the Environmental Services team members' work environment, satisfaction, and retention. Through standardization of best practices improve the environment for all team members and our patient, families and communities we serve.

2. Mission and Business Drivers

The Council's mission is to share information and standardize our policies, processes, products, and services, where applicable, in order to retain quality team members, comply with regulatory requirements, and maintenance of an optimal environment of cleanliness throughout the system.

3. Council Scope

- Collaboratively and interactively communicate and share ideas
- Assist in development of best practices for environmental services
- Assist in determining solutions to system-wide environmental service barriers/challenges

- Looking for improvement opportunities to enhance environmental services work processes
- Assist in standardization system-wide, where applicable
- Assist in professional development of the environmental services team members

4. Communication Plan

The EVS System Council will establish a standard agenda, which will be acknowledged and confirmed in advance of a scheduled meeting by the chairperson for any additional discussion matters. Minutes will be retained for each Council meeting as a written account of the proceedings. These records will be made available, upon request, to the executive sponsor of the EVS System Council.

5. Goals for Success

1. Develop and implement a system-wide standardized training program for Environmental Service team members with facility or location specific variations, as applicable
2. Collaborate with Organizational Learning to develop and implement a standardized on-boarding program for Environmental Services. (e.g., basic computer skills, EPIC, Lawson, SuccessFactors, Outlook, access and navigate eSource, CSStars and Weblinks).
3. Establish system-wide standardized environmental services policies, as applicable, using recognized professional guidelines (e.g., Association for the

Healthcare Environment of the American Hospital Association and International Sanitary Supply Association) as a guide for best practice.

4. Develop and implement an annual standardized competency process for Environmental Services.
5. Conduct a feasibility study into staff development opportunities for Environmental Service team members such as the Certified Healthcare Environmental Services Technician (CHEST) and Certified Healthcare Environmental Services Professional (CHESP) recognized by the Association for the Healthcare Environment (AHE), a membership group of the American Hospital Association (AHA).

6. Council Deliverables

- New “best practices” for environmental services system-wide
- Standardization in policies, processes, practices, products, where applicable
- Increased fiscal responsibility system-wide to assist in achieving system financial performance goals
- Increased engagement and retention of quality environment services team members
- Improve HCAHP performance levels to identified system thresholds.

7. Council Milestones

Identify the project milestones.

| Milestone Date | Milestone Name | Milestone Description |
|-----------------------|-------------------------------------|--|
| [June 10, 2016] | First System EVS Leadership Meeting | Scheduled meeting to review and discuss results from the system-wide environmental services learning needs assessment that was conducted by Organizational Learning. Actions Taken: 1.) Establish the EVS System Council; 2.) Discuss agenda and meeting schedule for EVS System Council; 3.) Draft a Council Charter and submit for consideration by proposed executive sponsor; 4.) Prioritized top training / education issues to address; 5.) Schedule next meeting. |
| [August 2016] | EVS System Council Meeting | TBD |
| [October 2016] | EVS System Council Meeting | TBD |

8. Council Chairperson

The EVS System Council Chairperson is a representative of the Council and is nominated and elected by the members of the Council. As a result of the nomination and election process on the initial meeting of this group, the following action occurred:

EVS System Council Chairperson:
Chairperson-Elect:

9. Council Roles and Responsibilities

The table below provides a quick way to identify specific people within a role:

| Name | Role | Facility | Responsibilities |
|-------------|-------------------|-----------------|---|
| | Chairperson | | Draft agenda and facilitate the meetings |
| | Chairperson-Elect | | Stand in for Chairperson in their absence |
| | Council Member | | Actively participate and arrange for scribe when meeting rotation scheduled at Kennestone |
| | Council Member | | Actively participate and arrange for scribe when meeting rotation scheduled at Douglas |
| | Council Member | | Actively participate and arrange for scribe when meeting rotation scheduled at Cobb |
| | Council Member | | Actively participate and arrange for scribe when meeting rotation scheduled at WHH/ECHP |
| | Council Member | | Actively participate and arrange for scribe when meeting rotation scheduled at Kennestone |
| | Council Member | | Actively participate and arrange for scribe when meeting rotation scheduled at Cobb |

| | |
|-------------------|--|
| Council Member | Actively participate and arrange for scribe when meeting rotation scheduled at WDC/WCO/WAB |
| Ex-officio Member | Support and mentor of Council function. Assistance with training/education needs. |

10. Authorization

Provide the names of those business sponsors that must sign the Project Charter. Once the project Charter is signed by the project sponsors, the project is authorized to start.

Approved by the Council Executive Sponsor:

_____ Date: _____

APPENDIX B

STANDARDIZED TRAINING AGENDA

AGENDA
EVS System Onboarding
Date:

| TIME | TOPIC |
|-------------------------|--|
| 9:30 a.m. – 11:30 a.m. | EPIC Training – EVS Management Application Location: Epic Training Rooms |
| 11:30 p.m. – 12:00 p.m. | Lunch Break |
| 12:00 p.m. – 1:30 p.m. | Completion of Five (5) Assigned Computer-based Learning (CBLs) in SuccessFactors: <ol style="list-style-type: none">1. Discharge Cleaning2. OSHA GHS3. Chemical Safety4. Waste Management5. Infection Prevention Location: Computer Training Room |
| 1:30 p.m. – 4:30 p.m. | <ul style="list-style-type: none">· Lecture<ol style="list-style-type: none">1. Emphasizing key points on CBL's· Competency Check-off for Donning & Doffing Personal Protective Equipment (PPE)· Simulation<ol style="list-style-type: none">1. AIDET (Acknowledge, Introduce, Duration, Explanation, Thank You). This is videotaped.2. 7 Step Cleaning Process<p>Debrief/Critique AIDET Video</p><p>Q&A</p>Location: Advanced Patient Simulation Center |

APPENDIX C

ANNUAL COMPETENCY SCHEDULE

| January | February | March | April |
|---|---|---|---|
| Area of Education: AIDET & Customer Service | Area of Education: Chemicals & Chemical Safety | Area of Education: Bodily Fluid Spill | Area of Education: Infection Prevention: PPE |
| Objective: Refresher on professional presentation and customer service. | Objective: Assess knowledge on safe handling and use of chemicals | Objective: Evaluate performance in proper spills clean-up procedures | Objective: Evaluate performance in proper donning & doffing of PPE |
| Method of Competency Assessment: <input checked="" type="checkbox"/> CBL & Test <input type="checkbox"/> Mock Event <input checked="" type="checkbox"/> Return Demonstration <input type="checkbox"/> Self or Peer evaluation <input type="checkbox"/> Q & A Questionnaire | Method of Competency Assessment: <input checked="" type="checkbox"/> CBL & Test <input type="checkbox"/> Mock Event <input type="checkbox"/> Return Demonstration <input type="checkbox"/> Self or Peer evaluation <input type="checkbox"/> Q & A Questionnaire | Method of Competency Assessment: <input type="checkbox"/> CBL & Test <input checked="" type="checkbox"/> Mock Event <input type="checkbox"/> Return Demonstration <input type="checkbox"/> Self or Peer evaluation <input type="checkbox"/> Q & A Questionnaire | Method of Competency Assessment: <input checked="" type="checkbox"/> CBL & Test <input type="checkbox"/> Mock Event <input checked="" type="checkbox"/> Return Demonstration <input type="checkbox"/> Self or Peer evaluation <input type="checkbox"/> Q & A Questionnaire |
| May | June | July | August |
| Area of Education: Body Mechanics | Area of Education: Xenex / Ultraviolet Technology for Disinfecting Rooms | Area of Education: Waste Management | Area of Education: The Joint Commission / Environment of Care |
| Objective: Evaluate understanding in the use of proper body mechanics | Objective: Assess understanding of Xenex cleaning process | Objective: Assess knowledge on waste management procedures | Objective: Assess understanding of EVS role and regulatory requirements |
| Method of Competency Assessment: <input checked="" type="checkbox"/> CBL & Test <input type="checkbox"/> Mock Event <input checked="" type="checkbox"/> Return Demonstration <input type="checkbox"/> Self or Peer evaluation <input type="checkbox"/> Q & A Questionnaire | Method of Competency Assessment: <input checked="" type="checkbox"/> CBL & Test <input type="checkbox"/> Mock Event <input checked="" type="checkbox"/> Return Demonstration <input type="checkbox"/> Self or Peer evaluation <input type="checkbox"/> Q & A Questionnaire | Method of Competency Assessment: <input checked="" type="checkbox"/> CBL & Test <input type="checkbox"/> Mock Event <input type="checkbox"/> Return Demonstration <input type="checkbox"/> Self or Peer evaluation <input type="checkbox"/> Q & A Questionnaire | Method of Competency Assessment: <input checked="" type="checkbox"/> CBL & Test <input type="checkbox"/> Mock Event <input type="checkbox"/> Return Demonstration <input type="checkbox"/> Self or Peer evaluation <input checked="" type="checkbox"/> Q & A Questionnaire |

| September | October | November | December |
|---|---|---|---|
| Area of Education: 7-Step Terminal Cleaning Process | Area of Education: Bed Cleaning | Area of Education: HCAHPS – Patient Satisfaction | Area of Education: Proper Carpet Spotting |
| Objective: Evaluate performance in 7-Step Terminal cleaning procedures | Objective: Evaluate performance in proper bed cleaning procedures | Objective: Assess understanding of patient/customer service expectations | Objective: Assess knowledge of proper carpet spotting procedure |
| Method of Competency Assessment: <input type="checkbox"/> CBL & Test <input type="checkbox"/> Mock Event <input checked="" type="checkbox"/> Return Demonstration <input type="checkbox"/> Self or Peer evaluation <input type="checkbox"/> Q & A Questionnaire | Method of Competency Assessment: <input type="checkbox"/> CBL & Test <input type="checkbox"/> Mock Event <input checked="" type="checkbox"/> Return Demonstration <input type="checkbox"/> Self or Peer evaluation <input type="checkbox"/> Q & A Questionnaire | Method of Competency Assessment: <input checked="" type="checkbox"/> CBL & Test <input type="checkbox"/> Mock Event <input type="checkbox"/> Return Demonstration <input type="checkbox"/> Self or Peer evaluation <input type="checkbox"/> Q & A Questionnaire | Method of Competency Assessment: <input type="checkbox"/> CBL & Test <input type="checkbox"/> Mock Event <input type="checkbox"/> Return Demonstration <input type="checkbox"/> Self or Peer evaluation <input checked="" type="checkbox"/> Q & A Questionnaire |