

**Organization:** Meritus Health

**Solution Title:** Lean Daily Management through Leadership Rounds

**Program/ Project Description, Including goals:**

Industry and manufacturing organizations have been practicing lean and process improvement for decades to improve safety, quality, productivity, cost, and to stay competitive in the market. However, healthcare has been struggling with process improvement since the early 2000s. In 2016, a study by the Johns Hopkins patient Safety Experts stated “more than 250,000 deaths per year are due to medical errors in the U.S” (Johns Hopkins, 2016). Per Centers for Disease Control and Prevention’s (CDC’S) data, this is greater than the third leading cause of death, Accidents (unintentional injuries) at 169,936 deaths per year and the fourth leading cause of death, Chronic lower respiratory diseases at 160,201 deaths per year (CDC, 2017). Only recently have healthcare leaders been identifying lean and process improvement as a vehicle to lower costs of care and to improve operations, workplace culture, patient quality, safety, and satisfaction.

In the spring of 2015, Meritus senior leadership embarked on a new lean journey called Toyota Kata. Toyota Kata is an approach developed by Mike Rother to help track goals by taking small steps (Plan, Do, Study, Adjust) towards achieving them. Until then, most improvement projects were done in the form of Kaizen events (3-5 day rapid improvement events) or A3s. Although they both contributed to significant improvements in the organization since 2010, they were not able to transform the culture and improvements were not sustained. The main gaps were the lack of follow-up, the lack of accountability on behalf of the individuals and/or leaders involved in the projects, and the lack of leadership support following the events to ensure projects reach completion and sustainment.

Toyota Kata could have been yet another new concept that would come and go. However, this time the approach was different. The initiative started inch-wide and mile-deep. All leaders were trained, from the CEO to the supervisor level. This ensured that all leaders changed the culture from “lean as a luxury” to “lean as a necessity”. This model also ensured that leaders are modeling the way daily, teaching everyone around them that continuous improvement should be part of everyday life.

As part of this initiative, the four Operations Improvement team members committed their time to the organization to coach and mentor all leaders working on improvement, daily. This commitment of daily improvement and coaching using the five Toyota Kata “humble” questions, increased the speed of learning of the organization and the number of units/departments working on initiatives. Staff and leaders saw Operations Improvement coaches on the floors, talking about improvement regularly which was something that has never been done before.

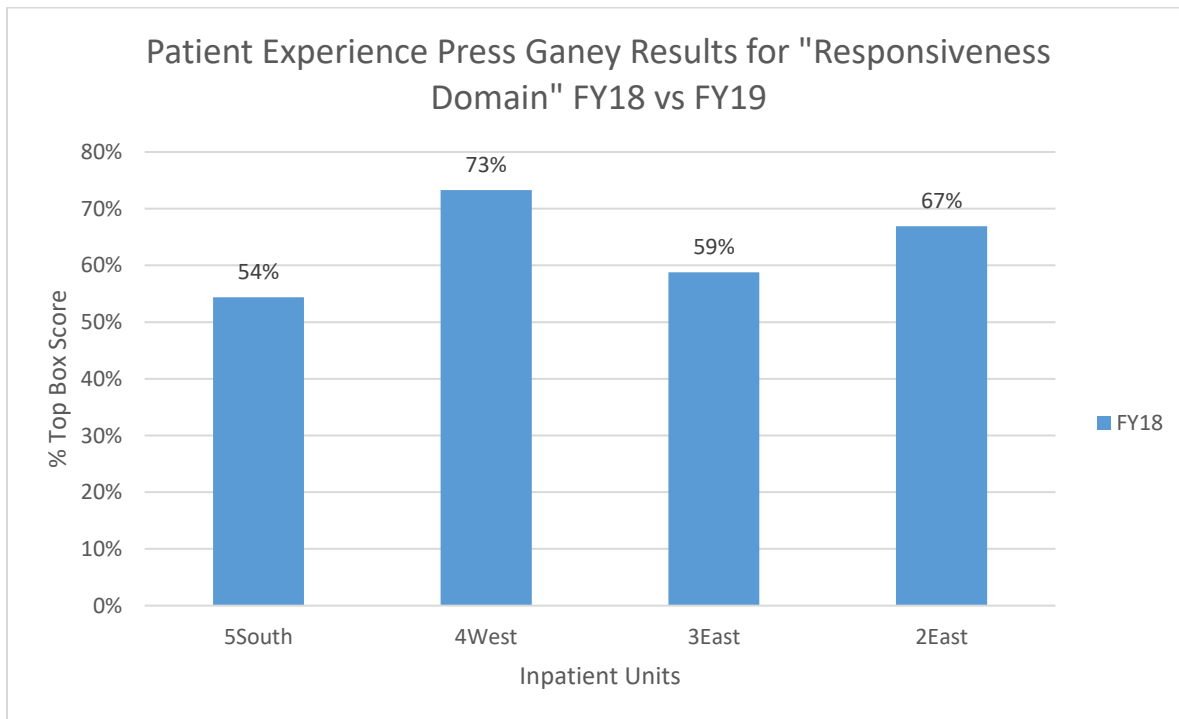
However, as Operations Improvement and senior leadership assessed the process frequently, they noticed the following obstacles:

- 1- Many of the initiatives were not aligning with organizational goals.
- 2- Quality, safety, and patient experience measures were not improving in a steady fashion, and sustainment was a challenge.
- 3- Leadership was not visible on units/departments.
- 4- Leadership was not aware of the organization's operations.
- 5- Leadership was not utilizing the Kata Coaching methodology to coach their staff and encourage scientific thinking.
- 6- Many employees were unfamiliar with senior leadership.
- 7- When senior leadership was visiting their unit, employees perceived that something was wrong.
- 8- A majority of the attention from senior leadership was given to the clinical units.
- 9- During their visits to units/departments, the conversations were not purposeful and questions were not open-ended and humble.

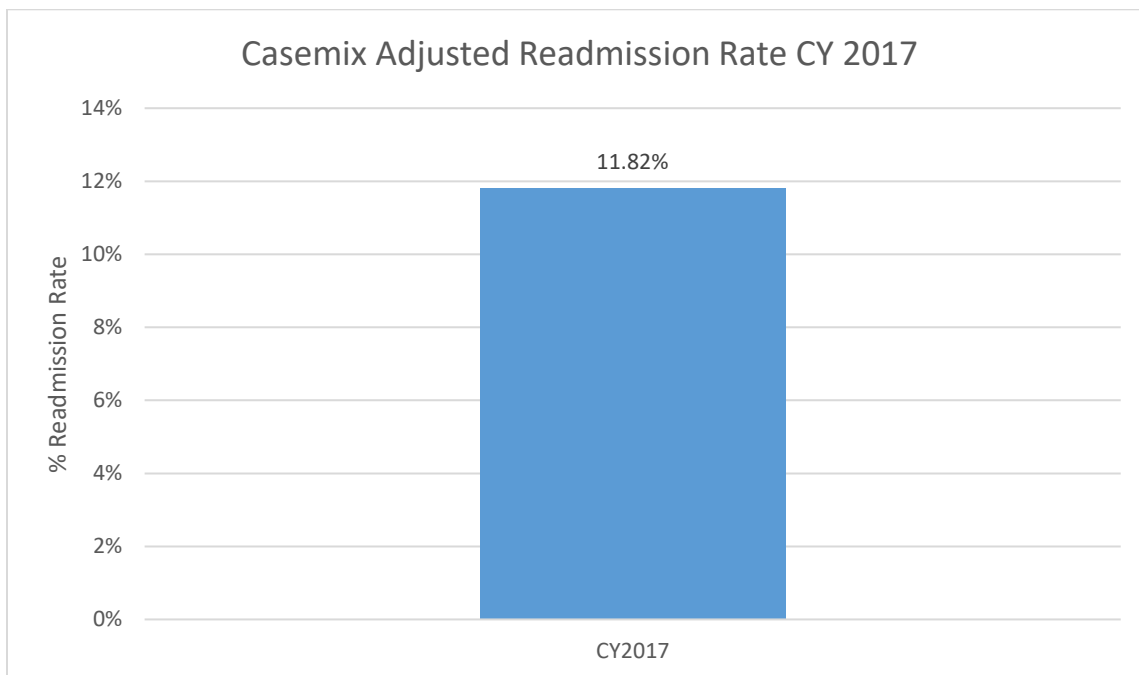
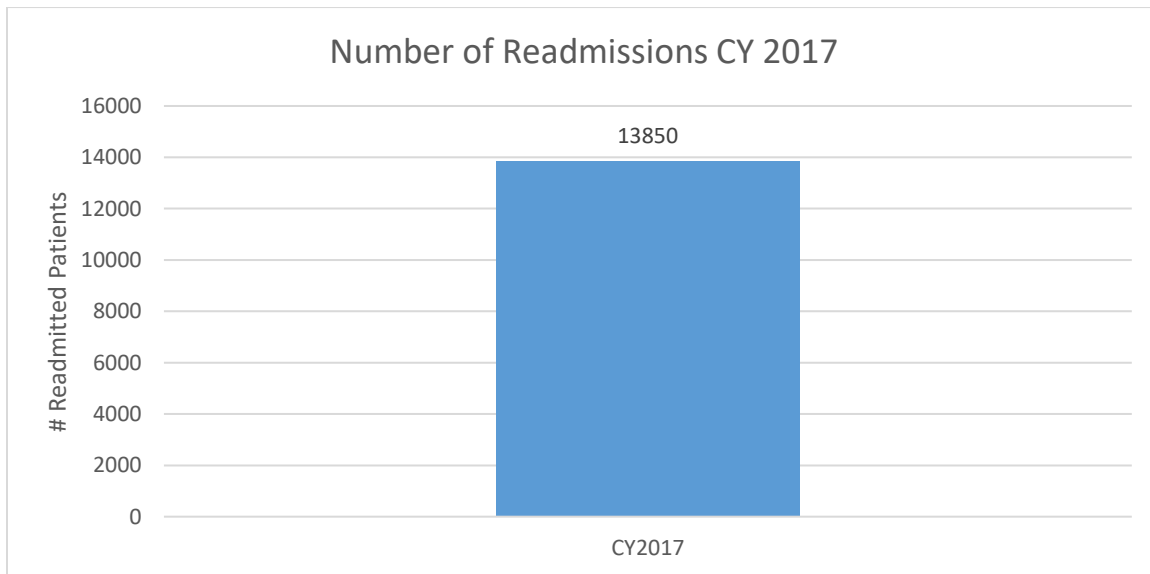
**Baseline Data:**

The figure below shows the baseline data for Meritus's Quality, Safety and Patient Experience Measures prior to leadership daily rounds. Due to the state of Maryland's various reporting periods, some data are shown in calendar year and some in fiscal year. It is also important to note that FY 17 data are not shown for the patient experience scores due to changes in the vendor in FY18.

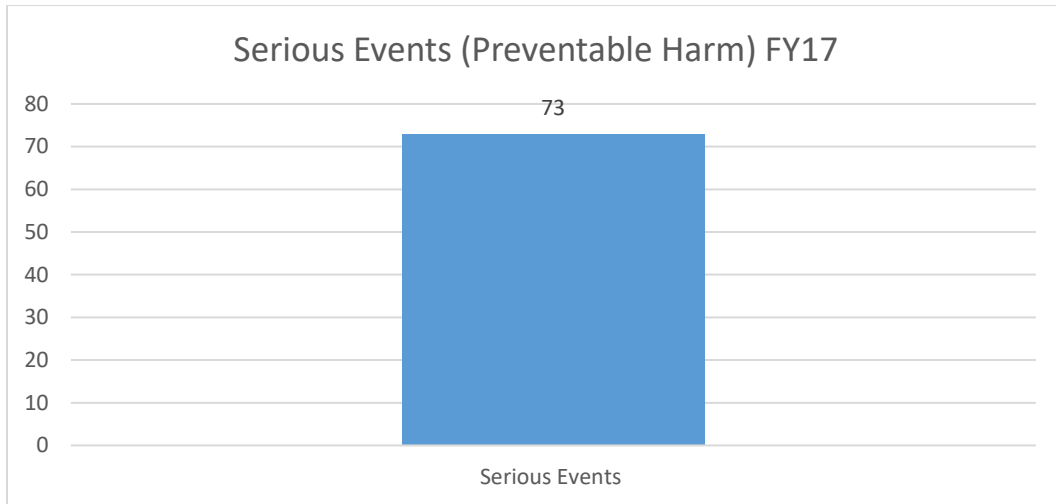
Patient experience -Responsiveness Domain



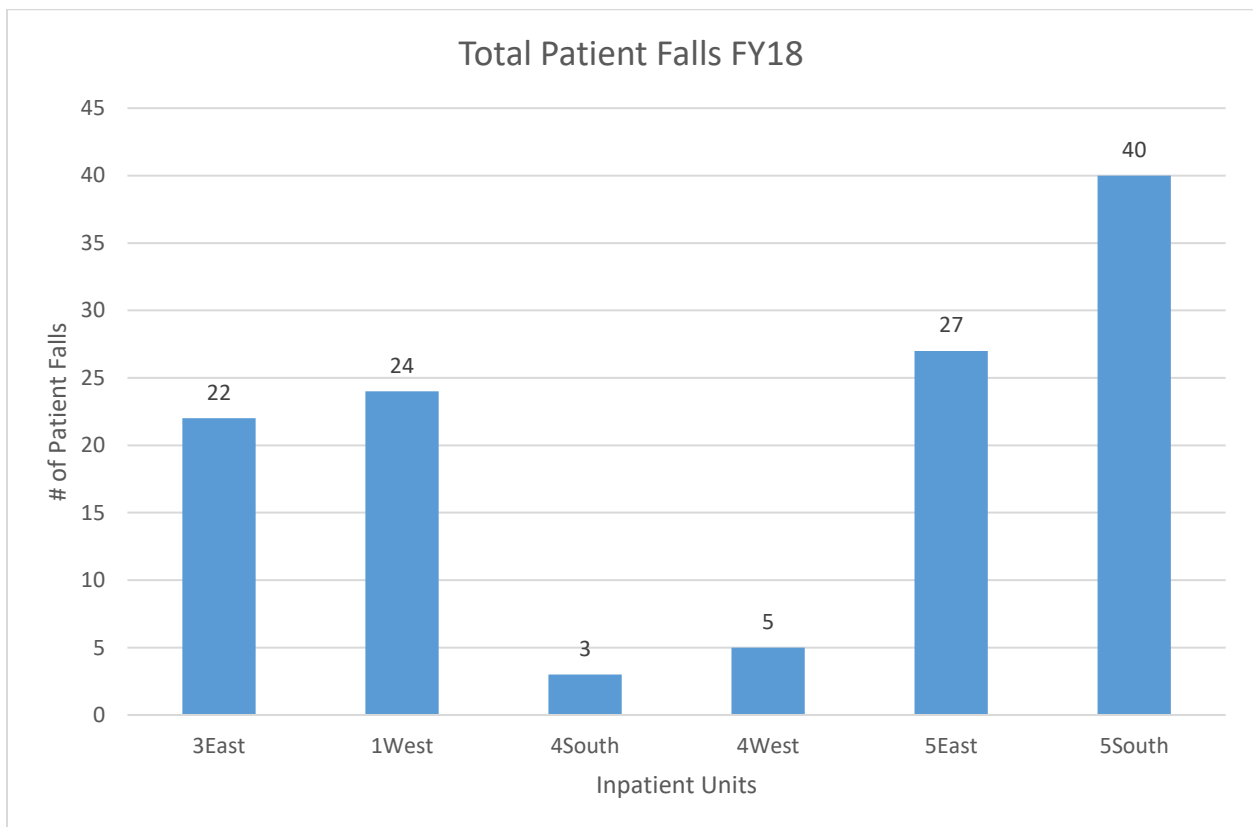
## Readmissions



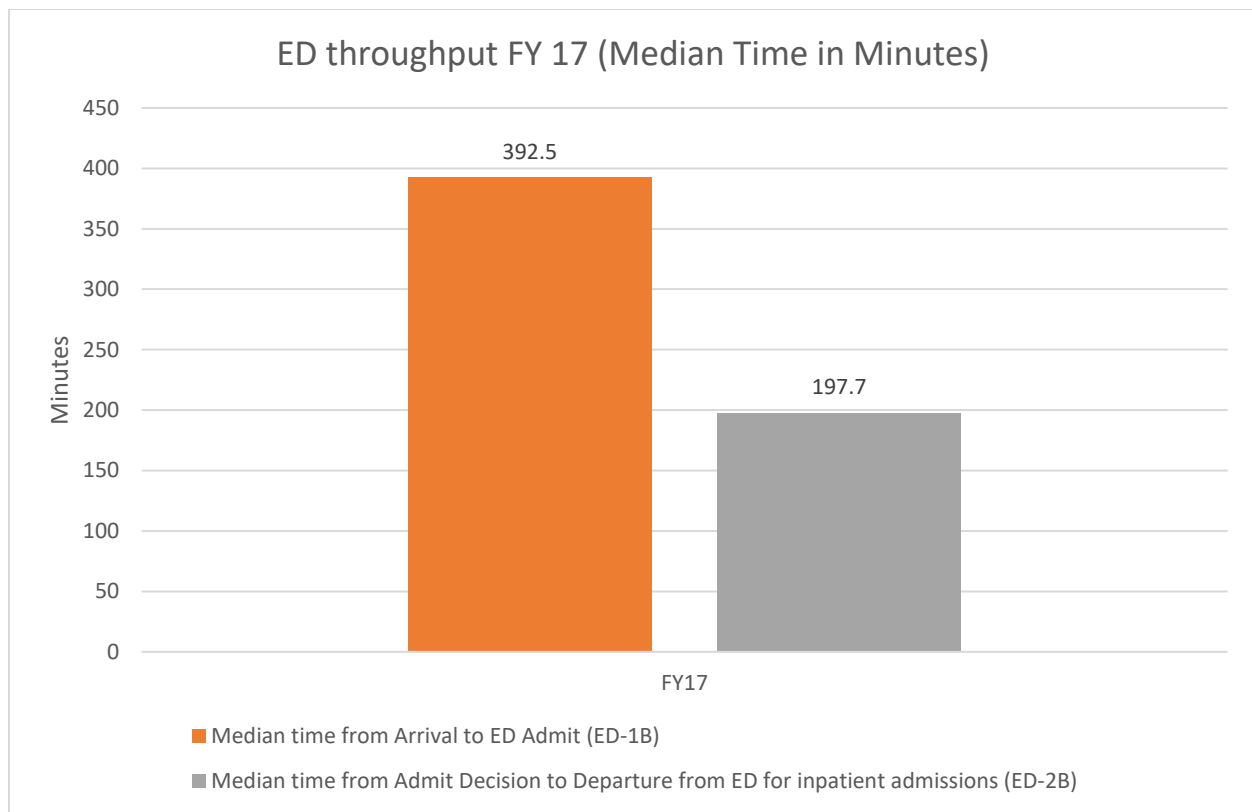
## Preventable Harm



## Total Patient Falls



## ED Throughput



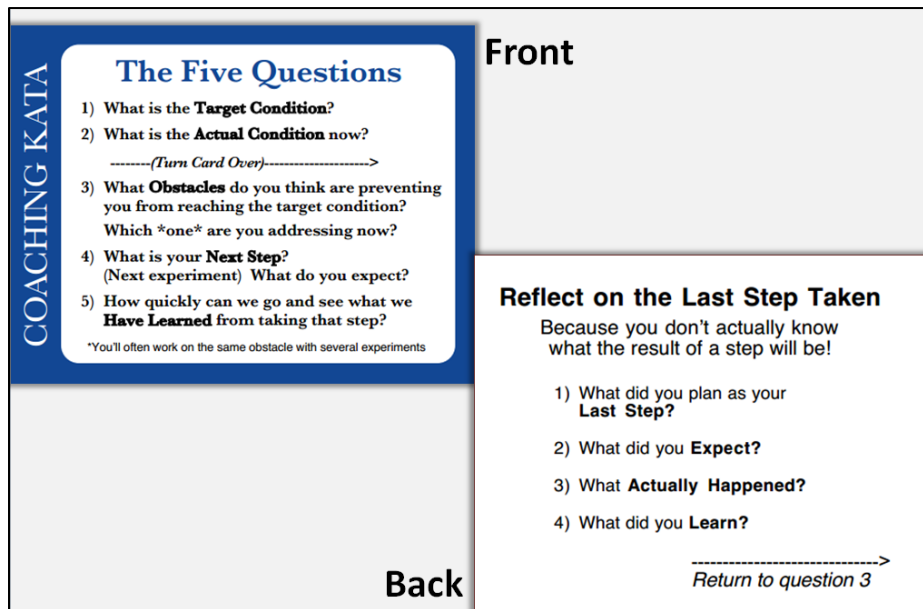
### Process:

A best practice sharing trip was scheduled with Greater Baltimore Medical Center (GBMC) to observe their Leadership Daily Management process in January of 2016. GBMC found a way to break down the barriers at GBMC through lean daily management. “Their executive team and leaders from every area of the hospital visit each department at 9 a.m. every weekday to see how well they are meeting their safety goals, what can be improved and what support departments needed to achieve their goals” (GBMC, 2018).

In the summer of 2016, Meritus Health’s Operations Improvement office and senior leadership committed to starting a month long pilot phase to study whether this process would benefit Meritus. To decide on where to perform the pilot, we looked at all the units/departments and identified four units that had been actively working on improvement initiatives and were following the Toyota Kata process. As a result a pilot route was created, including 4 departments. This provided the opportunity to test our new rounding process and allowed us adequate time to test changes during the trial phase.

The team created a road map for this pilot. The Operations Improvement team created a standard work template to be used for leaders utilizing the Toyota Kata Five coaching questions (Figure 1). The standard work also included questions about safety, quality, and staffing issues.

Figure 1: Toyota Kata- Retrieved from <http://www.personal.umich.edu/~mrother/Homepage.html>



The selected route was walked to anticipate the amount of time necessary leaders take to travel between units. The purpose for this initiative was determined by senior leadership and operations improvement:

- Accelerating achievement of strategic goals with daily improvement across all levels of the organization
- Increasing executive leadership understanding of daily operational service and delivery level challenges
- Raising the visibility and engagement of the leadership team
- Promoting increased levels of teamwork and communication by transforming the entire organization into a team that works well together and is motivated to achieve the same goals
- Improving leadership through the insight they provide to staff
- Demonstrating the leaders' interest in understanding the challenges faced by staff

Once the plan was developed, the team conducted the rounds with one of the vice presidents (VP) who volunteered to pilot the program. During the pilot, the VP trialed standard work and process. One day each week, the selected team would visit the identified four units in the hospital and follow the standard work template.

After the pilot was completed, Operations Improvement compiled data and assessed the results with senior leadership to determine what worked and what did not, and what needed to be modified.

As a result, the following updates were made: questions were updated to ensure ease of use for both leadership and staff, a five-minute debrief session was added at the end for leaders to gather and share learnings from their walks, and routes were created based on location proximity.

**Solution:**

In the fall of 2016, Meritus senior leadership started the full implementation of this initiative. This leadership rounds grew over the years from one route (four units), one senior leader and one day a week in 2016, to up to 50 Meritus leaders (VPs, Executive Directors, Directors) visiting a total of 50 units/departments, including inpatient, outpatient, support services, and offsite physician practices, every day. Leaders follow a standard process and ask structured questions that are directed towards quality improvement. This ensures sustainability of the process.

During the past few years, leadership rounds have been modified to better serve our patients and employees. In fall of 2017, Employee Engagement was added to the daily leadership rounds. On a selected day, leadership will visit units/departments and ask humble and open-ended but structured questions for employees. This helps ensure the process is sustainable. These questions address organizational communication, leadership communication, safety, quality and staffing issues, and any other subject that employees would like to discuss with leadership. During these rounds, teams will split and speak with staff on a one-on-one basis. This ensures employees are comfortable raising questions or issues. Senior leadership will also take note of any issues brought up by employees and follow up within 24 hours to ensure service recovery.

Figures 2-6 show the leadership teams, the routes they cover on a daily basis and the visual management board on which all of this information is displayed. Each team covers one route, rotating monthly. This allows different leaders to gain familiarity with different units/departments and organization operations as a whole. Each senior leader will also rotate on a quarterly basis in order to allow leadership pairing and development.

Figure 2. Leadership Daily Rounds- Teams

<b><i>Team 1</i></b>	<b><i>Team 2</i></b>	<b><i>Team 3</i></b>	<b><i>Team 4</i></b>	<b><i>Team 5</i></b>	<b><i>Team 6</i></b>
Carrie Adams VP, CTO	Melanie Heuston, VP, CNO	Dr. Brooke Buckley VP, CMO	Lee Shaver, VP, Professional Support Services	Jason Cole VP, CIO	Dr. Douglas Spotts VP, CPHO
Tom Chan, VP, CFO	Stephen Nelson VP, Gen Counsel	David Hope VP, Physician Services	Susan Lopp Administrative Onc/Hema Service Line Leader	Laurie Bender Interim Chief Compliance Officer	Jennifer Maust Exec. Director
Allen Twigg Exec. Director	Pawan Kohli Exec. Director	Carol Grove Administrative Women's and Children Service Line Leader	Tim Delbrugge Exec. Director	Dr. Jason Vourlekis Medicine Service Line Medical Director	Khrys Davis Director
Michael Smith Director	Michael Staley Director	Randee Cordell Director	Sarah Harne-Britner Director	Mary Rizk Exec. Director	Michael Reyka Exec. Director
Marsha Hickey Director	Angie Francart Administrative Surgical Services Service Line Leader	Rick Haines Manager	Lisa Milton Director	Cindy Lewis Administrative Emergency Services and Critical Care Service Line Leader	Laura Mercer Manager
Zach Horton Director	Dr. Aaron George Director	Jennifer Foster Director	Jon Noyes Exec. Director	Dr. Paul Quesenberry Director	Sharon Powell Executive Director
Gina Parker Director	Joshua Repac Exe. Director	Adi Nkwonta Director	Linda Walla Director	Julie Miller Director	

Figure 3. An Example of Leadership Daily Rounds- Routes/Departments- Week A

Week A											
<b>Route 1</b>											
MSO Hallway VMB (Brief)		5 South (Conf. Rm)		5 East (Conf. Rm)		4 South (Gemba)		4 East (Gemba)		MSO Hallway VMB (Debrief)	
Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart
8:10	8:15	8:17	8:22	8:23	8:28	8:29	8:34	8:35	8:40	8:45	8:55
<b>Route 2</b>											
MSO Hallway VMB (Brief)		4 West		PT/OT (Employee Lounge)		3W Rehab (Conf. Room)		3 East (Gemba)		MSO Hallway VMB (Debrief)	
Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart
8:10	8:15	8:17	8:22	8:23	8:28	8:29	8:34	8:35	8:40	8:45	8:55
<b>Route 3</b>											
MSO Hallway VMB (Brief)		SCN (Tue) 2 West LDRP (Galley) (Wed)		2 East (Gemba)		1 West		ED (Employee Lounge)		MSO Hallway VMB (Debrief)	
Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart
8:10	8:15	8:17	8:22	8:23	8:28	8:30	8:35	8:36	8:41	8:45	8:55
<b>Route 4</b>											
MSO Hallway VMB (Brief)		Cath Lab		Blood Bank (Tue) EVS (Wed)		Imaging (Rad Conf. Rm)		Pulmonary Rehab- Tue Trauma - Wed		MSO Hallway VMB (Debrief)	
Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart
8:10	8:15	8:17	8:22	8:24	8:29	8:30	8:35	8:37	8:42	8:45	8:55
<b>Route 5</b>											
MSO Hallway VMB (Brief)		O.R. (Employee Break Room)		PACU (OR Conf. Room)		SDS (Employee Lounge)		Clinical Informatics - Tue PAT (Main Lobby)- Wed		MSO Hallway VMB (Debrief)	
Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart
8:10	8:15	8:16	8:21	8:21	8:26	8:27	8:32	8:34	8:39	8:45	8:55
<b>Route 6</b>											
MSO Hallway VMB (Brief)		Wound Center		IV Infusion		Patient Transport		Pharmacy		MSO Hallway VMB (Debrief)	
Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart
8:10	8:15	8:16	8:21	8:22	8:27	8:29	8:34	8:35	8:40	8:45	8:55

Figure 4. Leadership Daily Rounds- Questions and Example Route Schedule

Route 2											
MSO Hallway VMB (Brief) 8:10-8:15	4 West		PT/OT (Employee Lounge)		3 West Rehab (Conf. Room)		3 East (Gemba)		MSO Hallway VMB (Debrief)		
	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	Arrive	Depart	
	8:17	8:22	8:23	8:28	8:29	8:34	8:35	8:40	8:45	8:55	
Any new safety or quality issues (staff injury, patient falls, Foley, Lines)?											
Operations/Delivery: Productivity Any other issues today or yesterday?	Staffing: _____		Staffing: _____		Staffing: _____		Staffing: _____				
What are your Katas and how do they align with the organizational Goals? (At least 2 Kata/Dept.)											
Long-term challenge? Target condition? Actual condition now? What was your last step? What did you expect? What did you learn?											
Which obstacle are you addressing now? What is your next step? What do you expect?											
Anything we could do for you?											
Do you have an EPIC obstacle you want senior leadership to be aware of?											



Figures 5. Leadership Daily Rounding Board with Schedule and Rounding Sheets

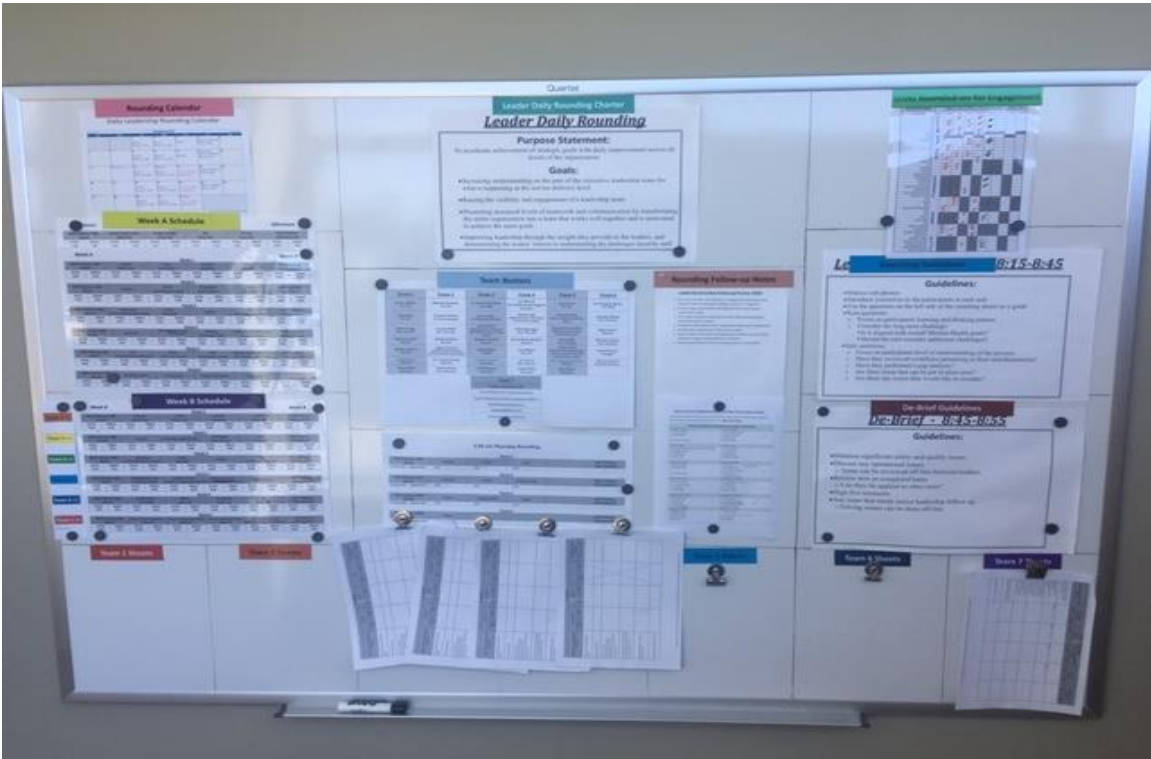


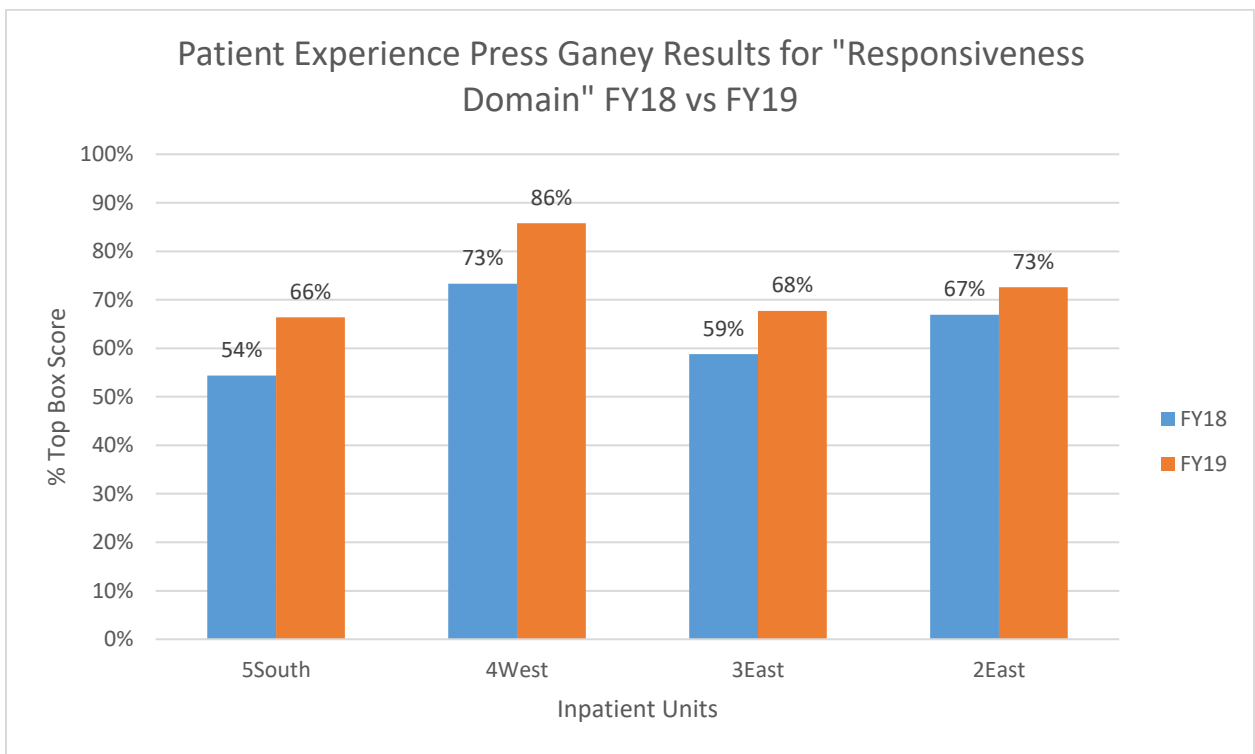
Figure 6: Leadership Rounding Debrief



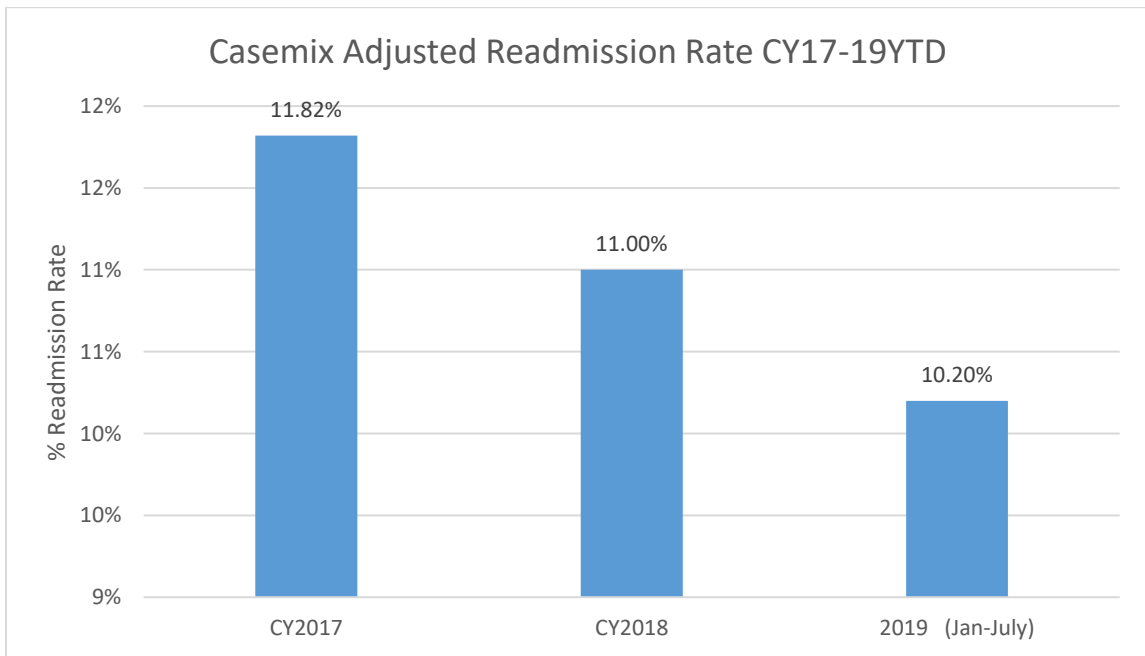
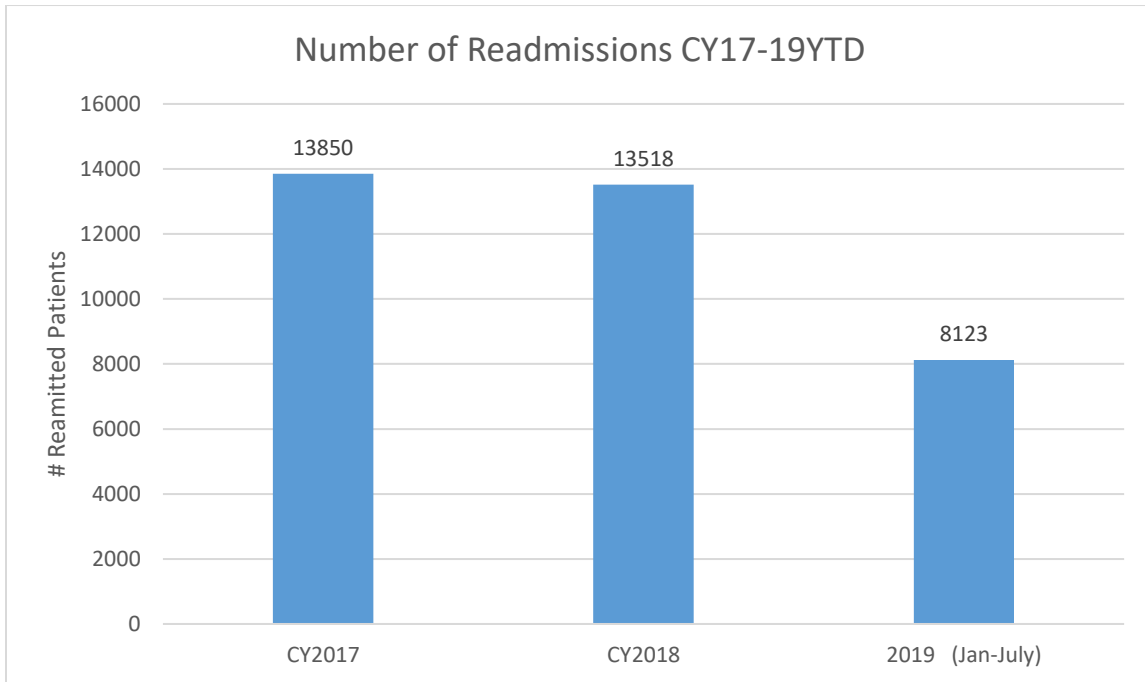
### Measurable Outcome:

There has been both quantitative and qualitative outcomes from this initiative. Senior leadership is more aware of the operations of the organization. The Meritus Chief Executive Officer at that time, said “ED reported they are holding patients. I suspect this happens frequently and senior team had no visibility to the obstacles to our staff”. Leadership has been able to create a collaborative environment, focusing on organizational goals, operations, patient safety and experience. This program also reduced the fear that rounds are set up for punitive action which could lead to employees being reluctant to share safety/quality concerns. Figures below shows the outcome metrics data for Meritus’s Quality, Safety and Patient Experience Measures post leadership daily rounds full implementation at Meritus Health.

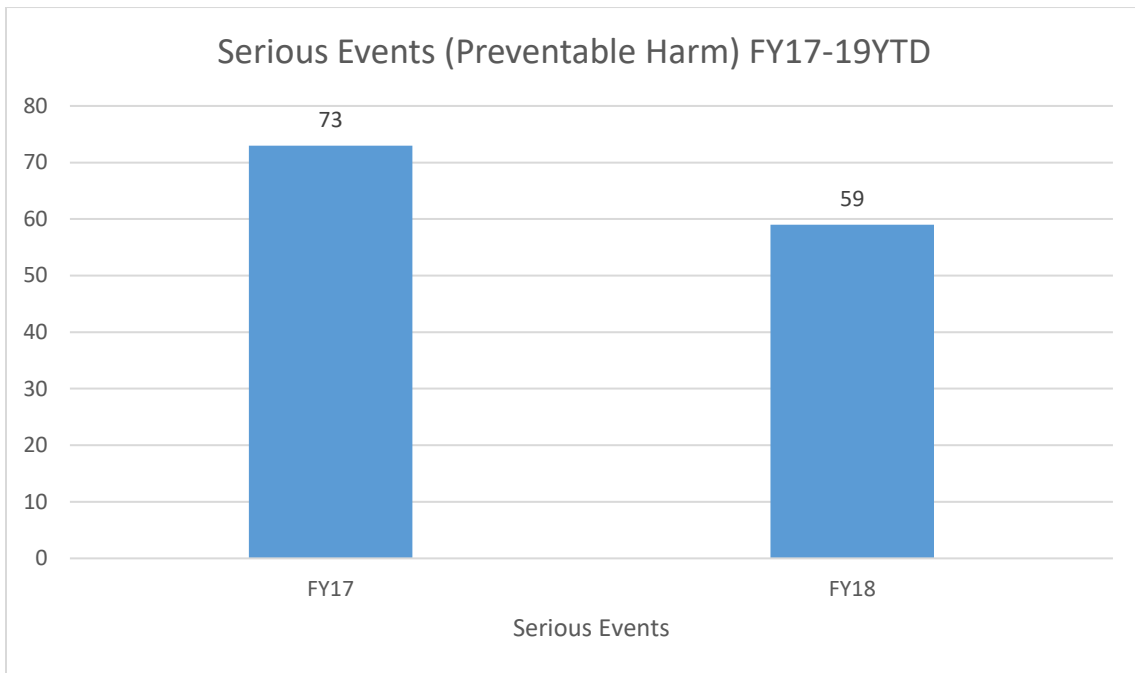
#### Patient Experience – Responsiveness Domain



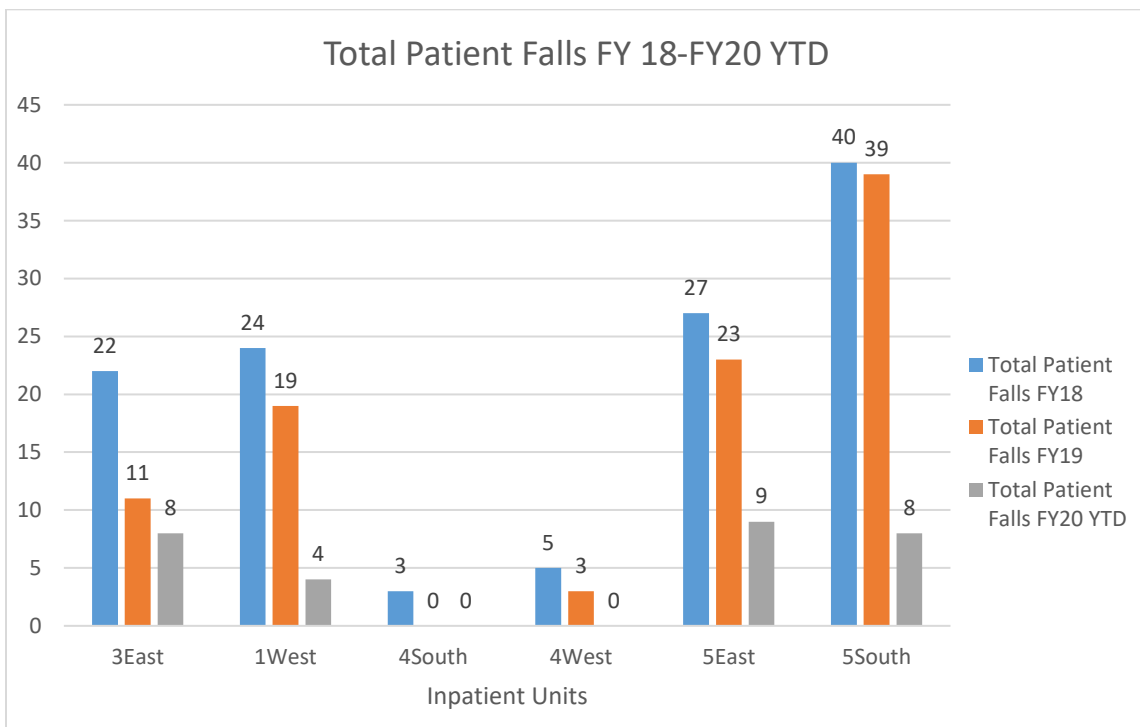
## Readmissions



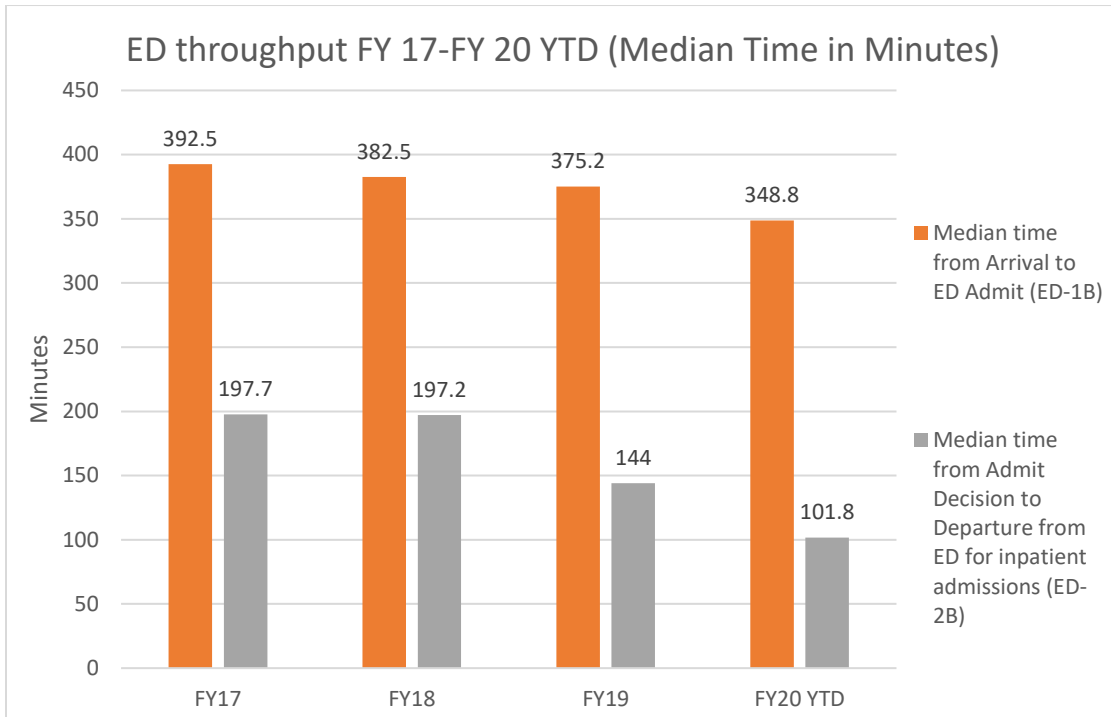
## Preventable Harm



## Total Patient Falls



## ED Throughput



### Sustainability:

Leader rounding at Meritus has continuously evolved and improved with more leaders getting involved, additional departments being included and increased in frequency. In order to sustain the gains and spread of this process throughout the health system, the following measures need to be taken in collaboration with the senior leaders, operations improvement coaches, managers, and staff.

1. 100% senior leadership commitment and buy-in. The senior leaders are consistently committed and visible during rounding. They serve as role models to other leaders in the rounding team and to managers and staff they round on. Their commitment to rounding and their presence positively impact our culture of continuous learning and improvement.
2. 100% senior leadership training in Toyota Kata is vital. During training, they practice asking the coaching questions through a number of iterations and hands on simulation. This ensures their familiarity with the standard work when they start attending leadership rounds.
3. Standard leader rounding questions are utilized during rounding. This helps provide structure and consistency when talking to the managers and staff and to ensure alignment of katas (process improvement initiatives) to the organization's strategic goals.
4. In order to keep leadership daily rounds attainable and sustainable, departments that are being rounded on are strategically selected and continuously evaluated.

5. Utilizing Visual Management boards on the units displaying goals, initiatives, and measures ensures alignment and sustainability of the improvements. This also ensures the organization is deploying resources on appropriate initiatives.

### **Role of collaboration and leadership:**

As mentioned above, the role of collaboration and leadership is inherent in the Leader Daily Rounding initiative. Using this method, the commitment and actions of leaders influence the operations of the entire enterprise. Rather than work in a vacuum, Meritus developed a process that allows leaders and executives to visit units/departments in the organization and see how they operate.

This in-person observation allows leaders to see the difference between what they assumed is happening and what is actually happening. It also gives them a chance to interact with the people doing the job and see exactly where it is done, instead of imagining it from a conference room.

By leadership doing their daily rounds, they encourage collaboration amongst all employees and brings focus to daily work aligning with the organizational vision to relentlessly pursue excellence in quality, service, and performance.

### **Innovation:**

It is important to note that the daily leadership rounding is not a ubiquitous program. In the Tristate area (West Virginia, Maryland, and Virginia) not many health systems perform this innovative and proven methodology to improve their quality, safety and patient experience measures. Molly Gamble (2013) mentions in the Becker's Hospital Review, "High reliability organizations are sensitive to operations. Use rounding to drive outcomes, there is no substitute for observing operations firsthand. Rounding can help leaders develop a more textured understanding of hospital processes".

Our success on the senior leadership rounding process using the 5 Kata coaching questions led to other health systems within and outside our area to visit our hospital and observe this process. Hospitals who visited us are the following: Frederick Memorial Hospital in Frederick, Maryland, UPMC Hanover in Pennsylvania, and Valley Health in Winchester, Virginia.

*"It was fascinating to see kata in action. It is one thing to read it in a book, but watching the dialogue between senior leaders and unit managers was really inspiring."*

- Chris Kita, Sr. Lean Coach, Lehigh High Valley

### **Culture of Safety:**

As the Institute of Healthcare Improvement advocates, organizations can significantly improve safety when leaders are visibly committed to change and when they enable staff to openly share safety information. Senior leaders must drive the culture change by demonstrating their own commitment to safety and providing the resources to achieve results (Institute of Healthcare Improvement, 2019).

At Meritus, through leadership rounding, senior leaders demonstrate their visibility, availability to staff, and commitment to change. They consistently support process improvement efforts by asking standard, purposeful questions, promoting daily learning and encouraging staff creativity during their kata experiments/steps, to improve care delivery and patient safety.

Senior leaders typically open the rounding discussions by asking about quality and safety issues. They also provide a follow-up with staff when obstacles/issues escalated need their intervention. Over time, staff have become more comfortable reporting issues as they become more familiar with senior leaders rounding in their area. They also know that senior leaders follow-up with them regarding the concerns they reported.

In short, staff being rounded on (e.g. nurses, housekeepers, phlebotomists, etc.) have voiced their appreciation when senior leaders talk to them, show interest in what they do, obtain their input on how to make Meritus operations more efficient and how to provide higher quality and safer patient care.

### **Patient and family integration:**

Beginning on October 8<sup>th</sup> 2018, senior leadership added an additional day to only focus on patient rounding, using purposeful questions to patients and families at the bedside. During rounding, patient suggestions and any concerns raised are addressed and followed-up with the patient/family in within 24 hours. Appropriate leaders and staff are informed of patient feedback. Some of the examples are:

- 1- Patients provided comments on the current television system installed in each patient room. They mentioned that the TVs are outdated, do not provide many options and do not link to the electronic health record system. As a result of their feedback, the Information Systems and Facilities Engineering departments have been working on an improvement plan.
- 2- Patients commented on food menu options for breakfast. As a result, the Nutrition Services department is consistently attempting to improve breakfast, lunch and dinner choices.

Moreover, during patient rounds, staff that have gone above and beyond the call of duty for their patients are also recognized. A total of 460 notes of praise have been given to staff as a result of patient rounding.

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