

## Redington-Fairview General Hospital Achieves Dramatic Improvements in Patient Flow Using the Opus Solutions Performance Improvement Model

**Redington-Fairview General Hospital reduced LOS for ED Admission patients by a full hour and increased on-time Nursing Home discharges by 91%.**

### Struggles with Patient Flow

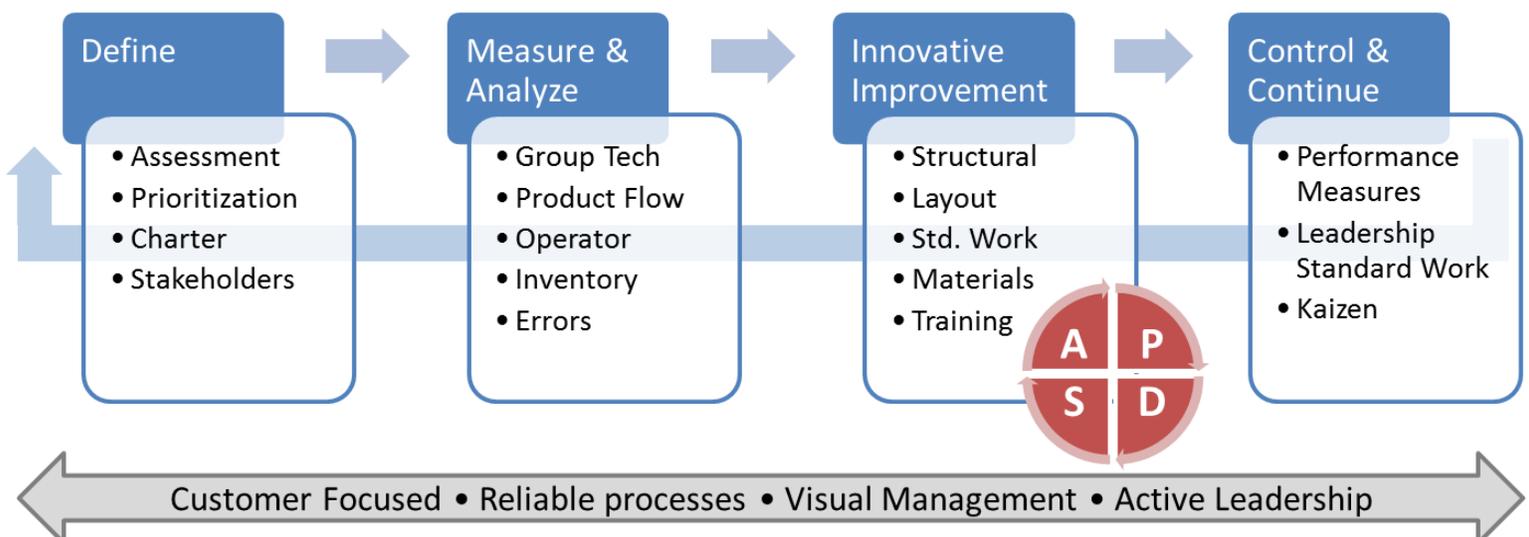
“The admission process was a big problem,” states ED RN and project team member, Nikole Clement. There were long delays in getting patients admitted from the ED to the inpatient unit. Gina Gomez, MD and Lead Hospitalist continues, “We were struggling on the inpatient unit getting patients admitted and discharged in a timely manner.” In short, delays and bottlenecks in the patient flow process at RFGH created frustration for both patients and providers.

With training, support, and a repeatable model from Opus Solutions, RFGH achieved major breakthroughs in both patient flow and patient care.

### Defining and Measuring the Problem

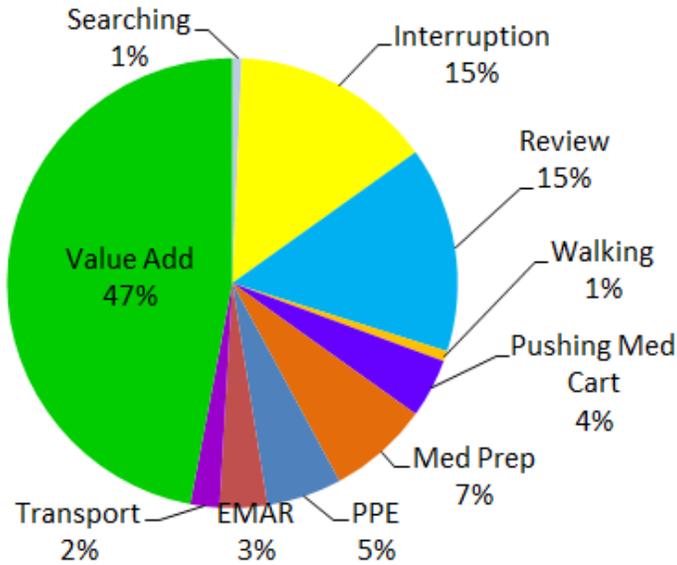
The first step is to define and measure the current state. The team used video, interviews and direct observation to uncover the root cause of delays and rework.

In the ED, the team found that a big part of the admissions delay occurred during processing by the Unit Coordinator. Ultimately, everyone was surprised to discover that most of the work being done by the Unit Coordinator could either be eliminated or be accomplished by others already involved in the patient flow process, freeing the Unit Coordinator for other essential duties.



*The Opus Performance Improvement Model harnesses the power of DMAIC to deliver transformational results. In addition to data driven problem solving, Opus Solutions teaches change management and leadership development to enable a lasting culture of continuous improvement.*

### Medication Pass Analysis



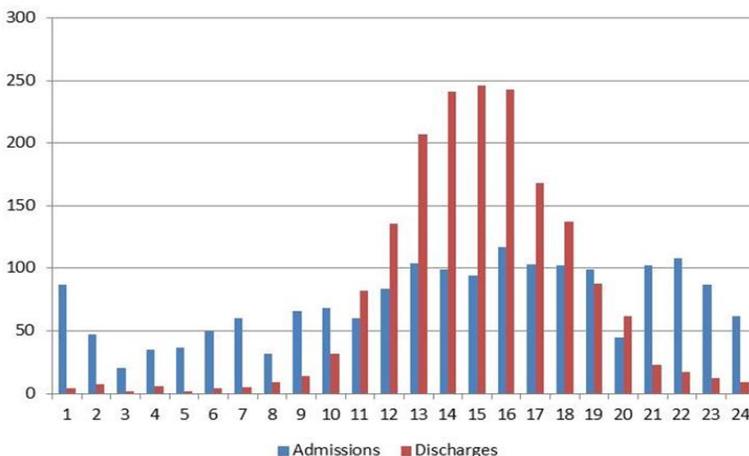
**Detailed Analysis:** Using data to drive improvement identifies unknown root causes and leads to sustainable change.

“Things are often not what you think.” explains project team member Katy Fortier. For example, watching a nurse completing a medication pass, the team observed eight interruptions in just 20 minutes.

Team member Sue Warner describes an essential discovery: “63% of our patients were going home between 12 and 5. Obviously, they aren’t suddenly getting better between 12 and 5.” The bulk of the discharge work was unnecessarily occurring at the same time, causing stress and delays for both the patients and the staff.

### Admissions and Discharges by Hour of Day

Jan - Dec 2013



**Before:** 63% of discharges occurred between 12pm – 5pm causing periods of extremely high workload, stress, and disruptions

### Innovation and Improvement: Creating the Future State

#### 20% Reduction in ED LOS

With support from the hospitalists and ED providers, the team created standard work protocols for patient flow. This included an admissions criteria to ensure crucial diagnostics were completed before calling the hospitalist. Once admissions criteria were met, a standard workflow and communication plan was put in place to make sure the process worked smoothly.

ED Manager, Tiffany Faloon puts it this way. “It feels drastically different than to just be waiting and waiting and waiting. I have only gotten positive feedback. It is a huge improvement to both our patients and to us and a much better use of our time.”

#### 54% reduction in patients with missed or late medication doses

By changing medication pass times, nurses can now focus on passing patient’s medications without being interrupted. This reduced nurse stress and improved patient care.

#### Advent of Nurse- Physician Rounding

As a result of the change, more time was made available for nurse and provider rounding. “When I look at what happened in the morning, you created the space to allow for the nurse to round with the physician,” says Medical Director, Mike Lambke, MD. Gerry Buzzell, Assistant Nursing Manager for Med-Surg. explains it this way: “We have been trying for years to do the Nurse-Physician rounding but we couldn’t figure out how to do it. We couldn’t get a handle on why we couldn’t make it work until we analyzed it and realized the med pass was getting in the way.”

#### Patient Status Board

Communication was improved through the development of a patient status board with all relevant information needed for a patient’s discharge. This board is reviewed during daily multi-disciplinary rounds and is updated real-time throughout the day as patient needs change. “We are starting to turn the corner and talk about tomorrow or the next day, not just talking today about who is being discharged today. Every patient gets reviewed every day,” explains project team member Stefne Kuespert.

**Control Systems Sustain the Gains**



**After:** Patient Status Board provides real-time patient status and all helps staff prioritize work



**After:** Provider-Nurse rounding eliminates nurses searching for information and interruptions to provider throughout the day



**After:** Visual Metrics Board allows everyone to monitor performance and act upon variances

*“I learned a lot about working with the team, learning how to work with staff to get buy in on changes, and how as a leader you can influence the staff on making changes.”*

*- Dr. Gomez, Hospitalist Team Member*

**Managing Change**

“The job, the work we do... you can’t just go out and say ‘this is the way it is going to be,’” explains Fortier. “People need to be coached. You can’t just write something down and expect people to do it.”

“It was hard work,” recalls Warner. “With some of the changes, there are too many feelings and emotions. We needed an outside person to help. They challenged our way of thinking.” Opus Solutions provided the daily onsite project management, tools, and repeatable methodology that enabled the team to succeed where earlier efforts had struggled. “I wouldn’t have gotten as far on my own if someone wasn’t here to say ‘just get up and do it’. I would have waited for someone else to help. We were pushed all of the time and we had to step up and do it.”

**The Culture of Continuous Improvement**

The continuous improvement journey has just begun. Steward describes the future this way, “What we expected to accomplish was to get a foundation in place and have a plan moving forward. It was one difficult process, but now we have results and a structure to work with. Today, as the head of Quality, I am almost tearful and proud to see how the team brought this all together. And we owe it to everyone to continue. The work is not done.”

“We’re going to monitor our performance measures while we practice, coach, educate and work on our leadership standard work. We have already identified other opportunities to keep working on,” explains Med-Surg. Nursing Manager Norma Munn.

CNO Sherry Rogers notes that the changing culture allows everyone to be more effective, “I already see a difference in Med-Surg, just since the beginning of the project. There is a willingness to share their issues. The people on the front line are doing the work. It is my job to support them.”

*“This isn’t the end. This was just the beginning and we have a lot more to do. The biggest thing we need to do right now is to sustain what we have already accomplished so the recent changes become second nature.”*

*- Norma Munn, Nursing Mgr.*

**Transformational Results**

<b>Measure</b>	<b>Before</b>	<b>After</b>	<b>Impact</b>
ED Admitted Patients LOS	5.0 hrs	3.98 hrs	<b>20% reduction</b>
Discharge Timeliness (all patients)			
– Before 10am	4%	7%	<b>72% increase</b>
– Before noon	20%	27%	<b>34% increase</b>
– Before 2pm	44%	59%	<b>35% increase</b>
Nursing Home Discharges Before 3pm	39%	74%	<b>91% increase</b>
Corrections Per Nursing Home Discharge Summary	8.8	3.7	<b>58% reduction</b>
Nursing Home Discharge Summaries with Multiple Rework Loops	17.4%	6.7%	<b>62% reduction</b>
Patients with Missed/Late Dose	56%	26%	<b>54% reduction</b>
Doses Late or Missed	10.6%	3.8%	<b>64% reduction</b>

**Customer Focused**

Continuous flow

Takt time paced

Flexible and evolving

**Reliable Processes**

Standard work

Level loading / work balancing

Error proofing

**Visual Management**

5S

Performance Measures

Visual signals (andon, kanban, etc.)

**Active Leadership**

Structured, open problem solving

Coaching, not policing

Leadership standard work