



**Strategic Process &
Outcomes Improvement**

Kathy Paro
Keith Hardwick
Melissa Martin

Our Department

Responsible for process improvement and non-IT project management throughout five hospital health care system, including 400+ physician medical group and back-office support functions.

- Annual Strategy Deployment (Hoshin Kanri)
- Strategic project analysis, planning, execution, and sustainment
- Front line leader coaching
- Lean and Project Management training curriculum development and instruction
- Benchmarking and data analytics

Evolution of Lean

2008

Lean Tool Deployment

- Kaizen
- VSM
- Creative Solutions Board
- Kensa 5

2013

True North & Strategy Deployment

- Organizational alignment
- Leader Rounding
- Daily Process Checks

2016

Lean Management System

- Layered Leader Rounding
- Visual Management
- A3 Problem Solving
- Standard Work
- Team Huddle
- Staff Engagement

2017

Inova Operating System

- The “way” we work
- Leadership owns the Continuous Improvement Model





True North defines the organization's purpose, based on what the **customer values**

Visual Management makes performance and defects visible

Standard Work ensures everyone knows the best method; key to reliability in our process and outcomes

Leader Rounding to remove barriers and ensure compliance

Team Huddle to engage the team, share results, and identify barriers

Problem Solving to remove defects through Just Do Its and A3 Problem Solving

Staff Involvement empowers the team to own the work and the results. The frontline team knows the customer and the work the best.

Case Study: RN Time to Fill

Problem

Nurses make up a majority of Inova’s workforce; current market trends and processes are causing a spike in the vacancy rate.

Analysis

While conducting our data analysis, it was recognized that no standard process existed. Thus, all stakeholders were doing different activities with varying results.

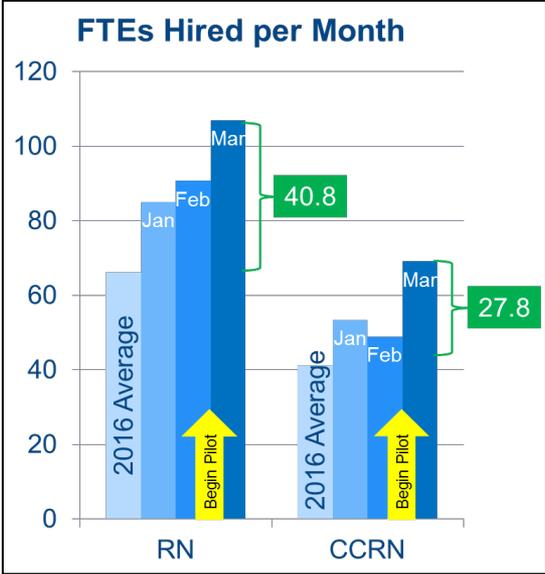
Solution

A Kaizen group was formed to design a new hiring process that involved all stakeholders—recruiters, managers, and front line employees. In addition to all parties understanding the process, three main shifts occurred:

- Recruiters now schedule interviews automatically on managers’ calendars
- Managers must use a standard interview grid to disposition a candidate within 48 hours
- All steps of the process are tracked and visualized

Results

Recruiters are now meeting their time to fill target with an 8% increase; resource balancing has shown a 40.8 increase in RN FTEs hired per month, and a decrease of the system-wide cost per hire by \$1,205.



Case Study: Inova Fair Oaks Quality



Problem

Inova Fair Oaks Hospital is on a journey to ensuring 0 harm to their Patients. In 2015 we had 13 harm events a month.

Analysis

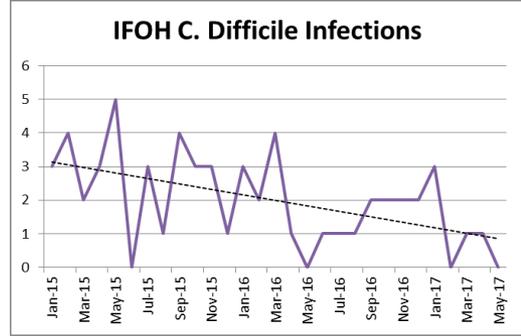
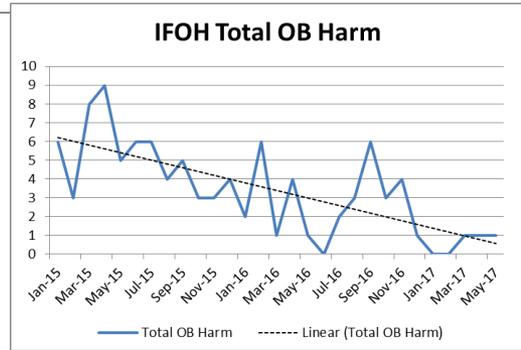
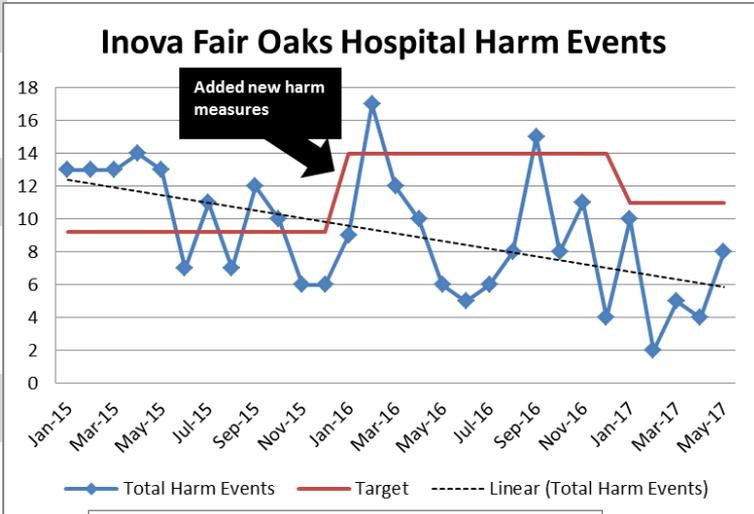
Our biggest gaps under harm were OB harm events and C-Diff infections and. Multi-disciplinary teams were formed to do root cause analysis and determine steps for improvement.

Solution

- OB Harm: Physicians created best practices and education to reduce lacerations. Nursing implemented standard work on reducing lacerations and how to respond to code hemorrhages. The physicians and clinical staff also embraced Team STEPPs to help with their communication and work environment.
- C-Diff: The teams redesigned workflows by implementing a diarrhea decision tree standard work, antibiotic stewardship program, and physician coaching on C-Diff order sets. The team also implemented a campaign for hand hygiene that improved compliance from 60% in 2015 to 89% in 2017, hospital-wide.

Results

IFOH reduced their harm events by 50% by implementing standard work for critical processes that drive our outcomes. The standard work is observed and audited daily and improvements are made in real time to prevent the defects from occurring. The sustainment model is driven through our Inova Operating System.



Case Study: Inova Fair Oaks Staffing Pilot

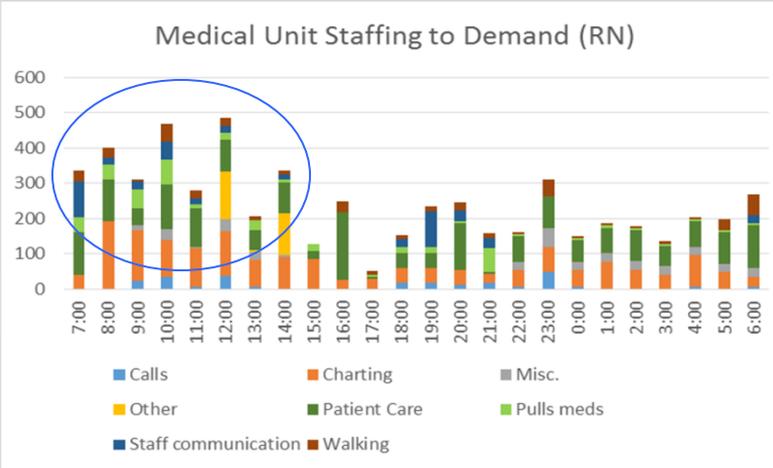


Problem

The Medical/Oncology Unit staff were telling us that they felt they did not have enough staff in order to perform their job adequately. Patient Satisfaction Scores also told us that response time and communication were lacking. At the same time, the unit had Excess FTE's against their productivity targets.

Analysis

Work Content Analysis was performed, which determined that during the day there were times that the demand of patient care tasks outweighed the amount of staff we had, causing the staff to be overwhelmed.



Solution

With the help of finance and process improvement, the unit determined their staffing pattern did not meet the demand of the unit. They decided to break a traditional 7a-7p 12-hr shift into 2 shifts: an 8 hour shift and 4 hour shift. Those two shifts were scheduled during the high demand time from 8a to 2p.

Results

The unit improved their FTE excess by 0.5 FTE. Patient Satisfaction was improved during pilot months (Nov 2016, Jan 2017) and 80% of the RNs responded positively that they were able to meet the needs of their patients. This pilot program has been expanded to 2 other units and is currently being trialed at 2 other hospitals within Inova.

Patient Satisfaction Scores

Press Ganey Survey	September 2016 n = 25		October 2016 n = 32		November 2016 n = 15		December 2016 n = 23		January 2017 n = 27	
	Top Box	%tile	Top Box	%tile	Top Box	%tile	Top Box	%tile	Top Box	%tile
Rate hospital 0-10	64.0	13	71.9	42	73.3	77	73.9	52	77.8	70
Recommend the hospital	72.0	40	81.3	77	80.0	73	78.3	67	88.9	95
Comm w/ Nurses	80.0	46	84.4	82	86.7	91	81.2	56	81.5	58
Response of Hosp Staff	57.9	11	76.7	88	80.0	93	64.6	39	75.3	84
Comm w/ Doctors	73.3	5	83.3	63	60.0	1	72.5	4	81.3	47
Hospital Environment	69.3	62	73.4	79	72.6	77	73.9	81	58.3	12
Pain Management	64.7	13	86.5	99	55.6	1	75.0	78	63.6	10
Comm About Medicines	50.0	1	72.0	90	76.8	97	60.7	24	71.0	86
Discharge Information	81.1	6	87.5	42	80.0	5	82.6	10	92.0	88
Care Transitions	62.3	88	59.4	79	56.6	66	60.8	84	67.2	96

We are hiring!

- **Senior Lean Coaches**

- Spread knowledge and support Front Line through Executive efforts related to Lean thinking and problem solving
- Develop Lean training curriculum and products
- Implement Inova's Lean Management System throughout the organization, using standard tools such as Kaizens
- Contact Keith Hardwick at keith.hardwick@inova.org

- **Project Managers**

- Solve enterprise-wide problems using an IPT of Front Line and Executive staff
- Not traditional project management—problem must be solved to root cause before a countermeasure can be implemented
- Mixture of facilitating and executing
- Contact Kathy Paro at kathy.paro@inova.org