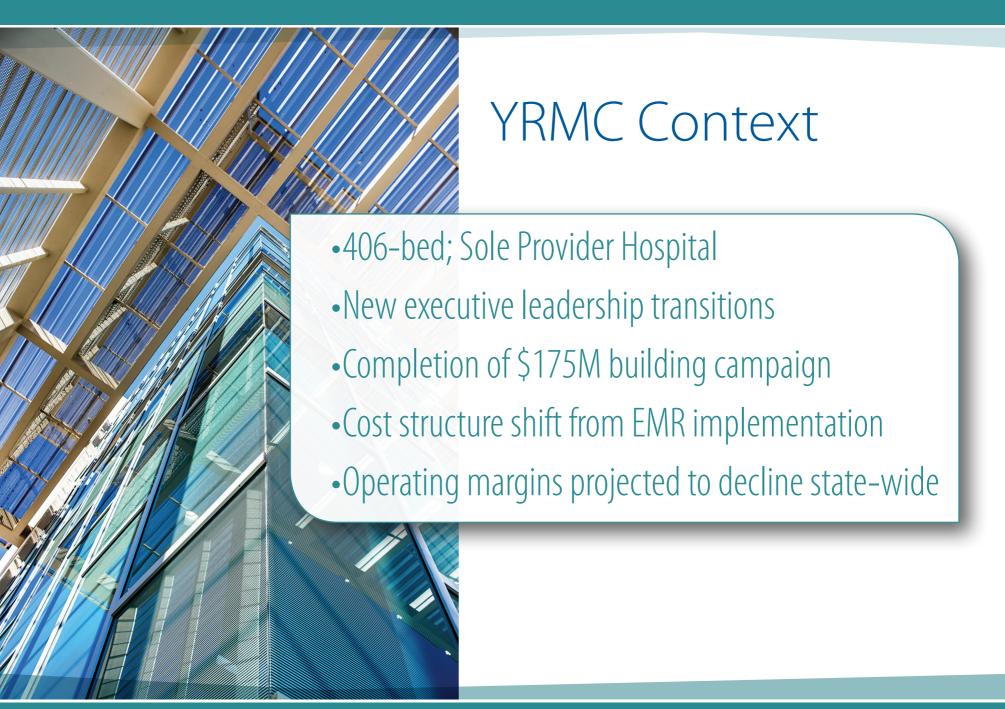
# Our Hospital's Efforts to Implement Lean Strategies







# Aligning Strategy & Operations

	Balanced Scorecard																			
	Objective	Measurement	FY17 Goal	Jan-16	Feb-16	Mar-16	Apr-16	May-16					Oct-16	Nov-16	Dec-16	Jan-17	FY17 YTD	Trend	Responsible Executive	Source
_	Improve Patient Value	Improve Top Box Percentage 'Would you recommend' (HCAHPS)	≥ 68.4%	71.1%	67.1%	62.1%	60.9%	67.8%	68.7%	68.2%	68.3%	65.5%	68.7%	63.4%	68.9%	66.5%	66.4%	<b>1</b>	Marshall Jones	HCAHPS, Press Ganey
ts and		Eliminate Preventable Harm - AHRQ PSI 90	≤ 0.3	0.11	0.26	0.28	0.20	0.33	0.20	0.16	0.08	0.13	0.27	0.13	0.02	0.10	0.12	个	Bharat Magu	Midas
atien		Annual Per Capita Cost (Medicare Patient)	\$20,242	Under Review	Under Review			Currently In Development												
•	Improve Access to Healthcare Services	Average 3rd Available Appointment in days - YRMC Ambulatory_Primary Care	≤15	-	-	-	-	-	-	-	-	4	8	6	7	3	6	个	Ricci Sanchez	FMC avg business days to 3rd available appt
alth	Reduce Cost	Internal Cost per Adjusted Discharge (monthly ytd)	\$8,888	\$8,142	\$8,006	\$7,959	\$7,972	\$7,738	\$7,570	\$7,656	\$7,707	\$8,378	\$8,807	\$9,097	\$9,027	\$7,896	\$8,279	<b>1</b>	Deb Aders/ Ricci Sanchez	Cost/CMI Wage Adj Disch - Hospital-wide
E E	Increase Return on Assets	Operating Income/Loss (in thousands)	\$13,433	\$6,942	\$3,650	\$3,885	\$1,635	\$797	\$1,953	(\$4,238)	(\$4,118)	(\$319)	(\$134)	\$2,167	\$831	\$5,523	\$8,387	个	David Willie	Financial Statements
nanci	inclease Neturn on Assets	Operating Return on Assets (ROA)	1.71%	1.50%	0.77%	0.89%	0.40%	0.21%	0.39%	-0.79%	-0.79%	-0.01%	0.01%	0.51%	0.26%	1.13%	1.97%	个	David Willie	Financial Statements
Ē	Diversify Revenue	% of Non-Traditional Revenue to Net Patient Service Revenue	≥ 1.1%	0.9%	0.8%	1.9%	1.3%	1.1%	0.3%	1.1%	0.6%	1.0%	0.7%	1.4%	1.5%	0.9%	1.1%	$\downarrow$	Justin Farren	Financial Statements
	Increase Value-Added Activities	Increase Top Box Percentage 'Overall Rating' (HCAHPS)	≥ 70.2%	62.3%	62.8%	59.5%	60.4%	66.4%	69.7%	70.5%	68.4%	70.4%	73.5%	65.8%	69.2%	63.8%	67.9%	$\downarrow$	Marshall Jones	Overall Rating of Hospital, HCHAPS, Press Ganey (FY17 Goal = CMS 2019 VBP Target)
s e	Reduce Non-Value-Added Activities	Overall Length of Stay (LOS)	≤ 4.5	4.2	4.4	4.5	4.5	4.5	4.4	4.4	4.4	4.0	3.9	3.9	4.0	4.2	4.0	<b>4</b>	Deborah Aders	Financial Statements
Ses	Treative Horry and Proced Processings	Average ED Time in Minutes - Arrival to Disposition	≤ 320	360	395	377	302	268	273	262	290	256	261	258	291	316	283	$\downarrow$	Deborah Aders	YRMC Care
g.	Increase In-Migration	Encounters from Outside the Primary Service Area (PSA)	≥ 6%	10.6%	11.3%	10.0%	5.2%	3.2%	2.5%	2.2%	1.8%	2.4%	3.5%	5.9%	7.5%	10.0%	6.8%	个	Headington/ Farren	Trendstar
	Increase Alternative Payment Structures	Revenue from Alternative Payment Models	≥ \$1,700,000	\$40,508	\$146,637	\$130,353	\$151,626	\$157,517	\$139,870	\$183,551	\$169,136	\$175,562	\$182,725	\$140,739	\$182,462	\$110,219	\$616,144	$\downarrow$	Headington/ Farren/ Sanches	z Financial Statements
		Engagement of Caregivers-Overall Commitment Indicator (Press Ganey EE)	≥ 50th %tile	-	-		-	-	-	-	-	40th	-	-	-	-	40th	$\rightarrow$	Marshall Jones	Press Ganey
	Increase Caregiver and Physician Engagement	Engagement of Physicians -Overall Commitment Indicator (Press Ganey EE)	≥ 20th %tile	-	-	-	-	-	-	-	-	19th	-	-	-		19th	$\rightarrow$	Bharat Magu	Press Ganey
ness		% of ALT Implementation of Lean Management System	100%	0%	0%	14%	14%	14%	14%	25%	25%	25%	25%	25%	39%	39%	39%	$\rightarrow$	Justin Farren	Value Capture Database
Read	Improve Capital Investment Prioritization	Total New Projects Combined NPV Over 7 Year Period (in thousands)	\$100,000	-	-	-	-	-	-	-	-	-	\$0	\$0	\$0	\$0	\$0	$\downarrow$	David Willie	Capital Plan
	Improve Provider Collaboration	# of Participating Providers in Alternative Payment Models	≥ 51	0	0	0	0	0	0	0	0	0	0	0	0	22	22	<b>1</b>	Bharat Magu	YCIN Participating Provider List
	Improve Leadership Alignment and Accountability	# of Scorecards Deployed	≥73	0	0	0	0	0	0	0	1	1	73	73	73	73	73	$\rightarrow$	Justin Farren	Business Development

\* Not available for time perior

# Performance Boards



# ligning Stratagy & Operations

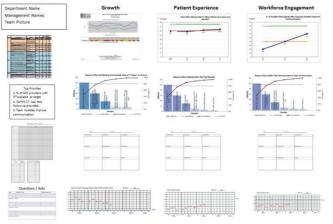
Organizational Balanced Scorecard

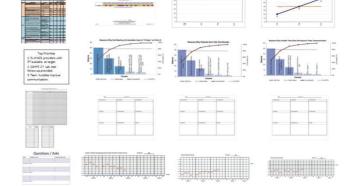
							Yun	ia Re	gion	ai me	edical	Cen	ter							
								Ba	lance	d Sco	recar	ď								
	Objective	Measurement	FY17 Goal	Jan-16	Feb.16	Mar-16	Apr.16	May-16	Jun-16	Jul-16	Aug-16	Sep.16	Oct-16	Nov-16	Dec-16	Jan-17	FY17 YTD	Trend	Responsible Executive	Source
		Improve Top Box Percentage Would you recommend (HCAHPS)	> 02.6%	71.1%	67.1%	62.1%	60.0%	67.0%	65.7%	00.2%	68.2%	05.5%	66.7%	63.4%	66.0%	00.0%	60.4%	1	Marshall Jones	HCAHPS, Press Garwy
н	Improve Patient Value	Eliminate Preventable Harm - AHRQ PSI 90	£0.3	0.11	0.26	0.28	0.20	0.33	0.20	0.18	0.08	0.13	0.27	0.13	6.02	0.10	6.12	1	Sharat Magu	Milde
Ħ		Annual Per Capita Cost (Medicare Patient)	\$29,242	Under Floring	Under Review	Under Review	Under Review	Under Review	Under Redex	Under Review	Under Fleview	Under Review	Under Review	Under Flexion	Under Review	Under Review	Under Review			Currently In Development
•	Improve Access to Healthcare Services	Average 3rd Available Appointment in days - YRMC Ambulatory_Primary Care	£ 15									4		0	7	3	6	1	Ricci Sanchez	FMC and business days to 3rd available appt
ŧ	Reduce Cost	Internal Cost per Adjusted Discharge (monthly ytd)	\$8,000	50,142	\$8,006	\$7,959	\$7,972	\$7,738	\$7,570	\$7,656	\$7,707	50,378	58,807	59,097	\$4,027	\$7,095	\$8,279	1	Deb Aders/ Ricci Sanchez	Cost/CM/Wage Adj Dlach - Hospital-elde
ŧ	Increase Return on Assets	Operating Income/Loss (in thousands)	\$13,433	88,942	\$3,660	\$3,585	\$1,635	8797	\$1,968	(\$4,256)	(\$4,118)	(\$310)	(\$154)	82,167	8831	86,523	84,347	1	David Willie	Francial Statements
ğ		Operating Return on Assets (RCA)	121%	1.50%	0.77%	0.80%	0.40%	0.21%	0.39%	-0.79%	-0.79%	-0.01%	0.01%	0.51%	0.20%	1,13%	1,97%	1	David Willie	Financial Statements
ŧ	Diversity Revenue	% of Non-Traditional Revenue to Net Patient Service Revenue	21.1%	0.9%	0.0%	1.9%	1.2%	1.1%	03%	1.196	0.0%	1.0%	0.7%	1.6%	1.5%	0.9%	1.9%	4	Justin Farren	Financial Statements
	Increase Value-Added Activities	Increase Top Box Percentage Overall Rating' (IRCANPS)	2 79.2%	62.3%	62.8%	50.5%	60.4%	66.4%	60.7%	70.5%	61.6%	72.4%	73.5%	05.8%	60.2%	63.8%	67.9%	$\downarrow$	Marshall Jones	Overall Rating of Hospital, HCHAPS, Press Garey (F117 Goal = CMS 2019 VBP Target)
	Debug Non-Volum Added Artistian	Overall Length of Stay (LOS)	£45	4.2	4.4	4.5	4.5	4.5	4.4	4.4	4.4	4.0	3.9	3.9	40	4.2	4.0	4	Deborah Aders	Financial Statements
8	PARTIE TO TELEVISION PARTIES	Average ED Time in Minutes - Arrival to Disposition	€ 329	900	395	977	302	266	279	262	290	256	261	258	291	215	293	4	Deborah Aders	YPMC Care
£	Increase in Migration	Encounters from Outside the Primary Service Area (PSA)	3.0%	10.6%	11.2%	10.0%	5.2%	3.2%	2.5%	2.2%	1.0%	24%	3.5%	5.0%	7.5%	10.0%	CON	1	Headington/Famen	Trendetar
	Increase Alternative Payment Structures	Flevenue from Alternative Payment Models	2 \$1,700,000	\$40,500	\$146,637	\$130,363	\$191,626	\$197,817	\$139,670	\$183,581	\$160,136	\$179,662	\$182,728	\$140,730	\$182,482	\$110,219	\$010,164	$\downarrow$	Headington/ Famen' Sanched	Fruncial Statements
		Engagement of Coregivers-Overall Commitment Indicator (Press Garwy EE)	2 500h %68e	-		-	-				-	400		- 1	-		400.	<b>→</b>	Marshall Jones	Press Garey
	Increase Caregiver and Physician Engagement	Engagement of Physicians - Overall Commitment Indicator (Press Garwy EE)	2 200h Niddle	-			-		-		-	1901	-		-	-	190.	<b>→</b>	Sharat Magu	Press Ganey
1		% of ALT Implementation of Lean Management System	100%	0%	0%	14%	14%	14%	14%	25%	20%	25%	20%	25%	39%	39%	39%	$\rightarrow$	Justin Farren	Value Capture Database
ì	Improve Capital Investment Prioritization	Total New Projects Combined NPV Over 7 Year Feriod (in thousands)	\$100,000	-					-		-	-	50	50	50	50	50	4	David Willie	Capital Plan
	Improve Provider Collaboration	# of Participating Providers in Atlemative Payment Models	≥ 61	0	0	0	0	0	0	0	0	0	0	0	0	22	22	1	Sharat Magu	YON Participating Provider List
	Improve Leadenship Alignment and	# of Scorecards Deployed	273	0	0	0		0	0	٥	- 1	1	73	73	73	73	73	<b>→</b>	Justin Farren	Business Development

Division/Dept Balanced Scorecard



Berformance Boards





CSL & Ambulatory Services

Improvement Activities

Kaizen, A3, 5S Activity

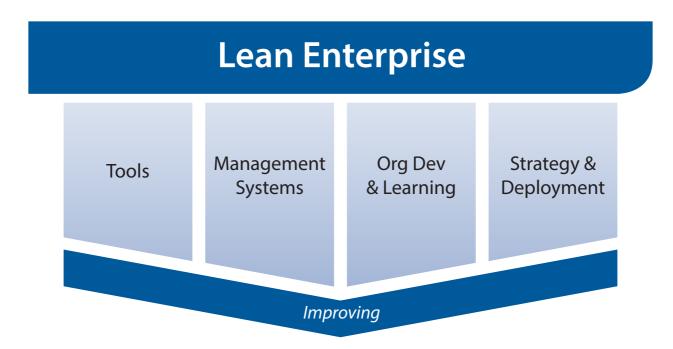
Kaizen, A3, 5S Activity

# Our Approach

	Commitment	Foundation	Integration		Diffusion		
	Commit to Lean as our Business Approach	Build Infrastructure for Lean Management System	Integrate Lean wit Strategic Planning		Make Lean a Way of Life in All Areas		
Performance	Preparing the Org.  • Lean Foundations  • Types of Waste  • Rules-In-Use  • Observation  • Value Stream Map  • A3 Problem Solving  • Pull Systems  • Mistake Proofing  Continuous Improvemer  • Kaizen Events  • 5S	- Visual Managen - Leadership Star - A3 Deployment	ment n Leaders g : Change lanager Development nent ndard Work	9 5	hin gh Reliability		
	Activity	Process		Cultu	ire		

**Time** 

# Our Approach



Quality, Time, Satisfaction & Financial Outcomes

# Our Path



One Free Tuition at the Belmont Lean Certificate Program (Anytime within the engagement)

### LEGEND

### PROJECT KICKOFF & START UP

- Leadership On-site training
- Assessment-Observation & Value Stream Mapping activities
- Planning Meeting

- Rapid Improvement Activity (4.5 day)
- Activity Preparation, Planning, Follow-Up (4 day)
- Manager Workshop (1/2 Day)
- Coaching (3-4 Day)

### Lean Management Systems:

Developing Lean Leaders
 Implementing Visual Management
 3. A3 Deployment
 A Leader bin Standard Work

### Executive Workshop (1/2 Day)

1/2 Day Executive Workshops: A, B: Change Management

# Our Team & Partners









**Dave Munch, M.D.**Senior Vice President
and Chief Clinical Officer



**Tom Stoffel** *Vice President of Lean Consuling* 



**Linda Duvall**Director of Lean Consuling



**Eric Watkins** *Sr. Manager* 



# Our Work: ED Arrival to Departure

•ED Annual visits: 72,000

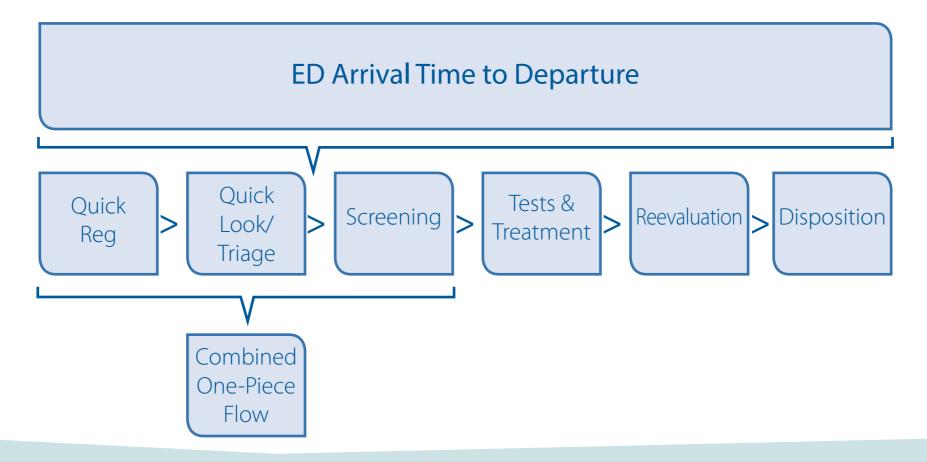
• Previous Beds: 41; Current Beds: 72

•Ultimate Goal to reduce ED Time from 378 to 240 minutes. 320 minute FY2017 Goal.

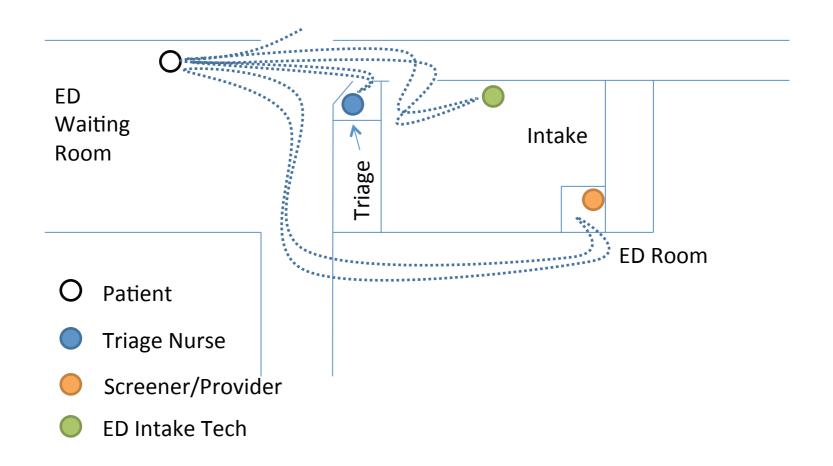
Value Stream Mapping event team identified

•220 minutes of non-value-added activity

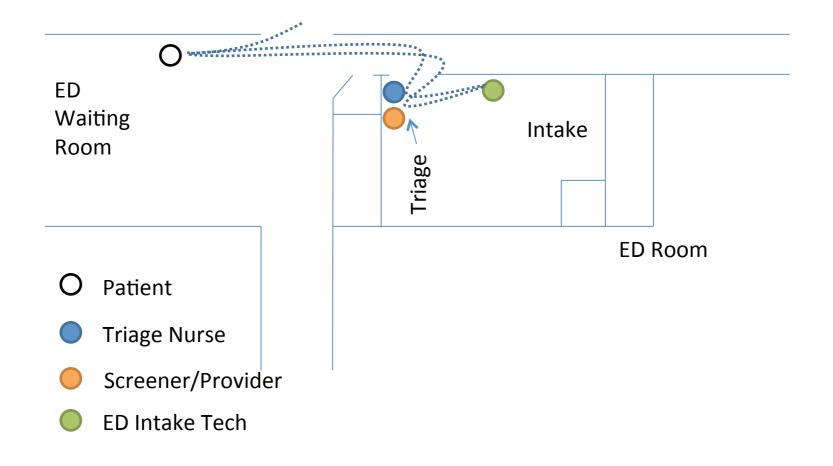
# Our Work: Combining RN Triage & Provider Screening



# Prior Patient Flow

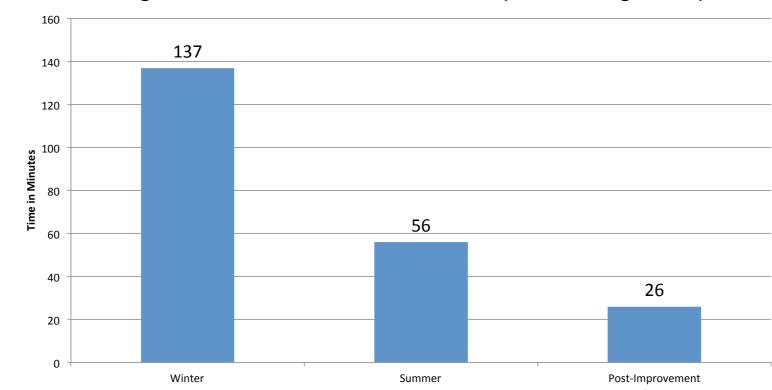


# Improved Patient Flow



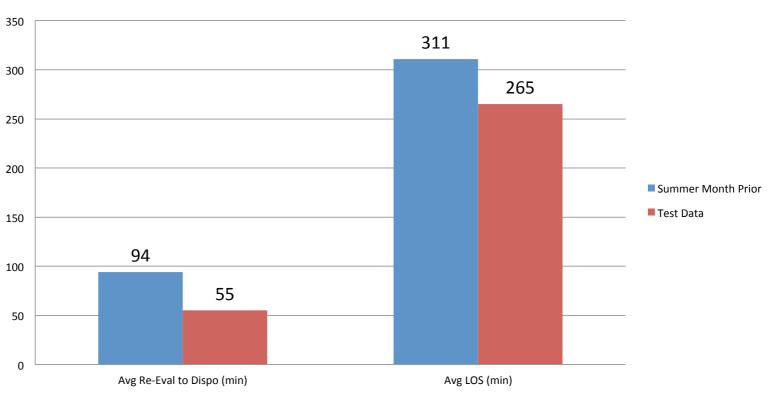
# Quick Look / Screening Before and After Time

### Average Time from Arrival to Orders Initiated (QL, Screening, Intake)

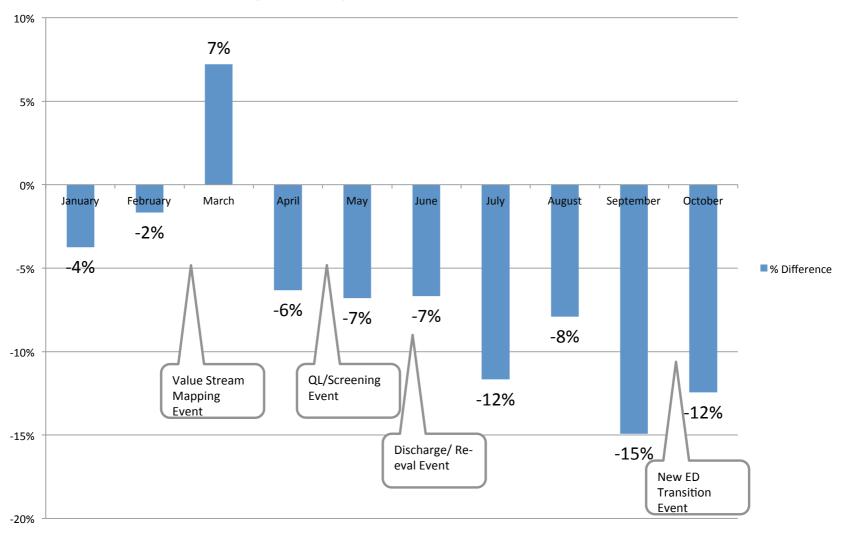


# Re-Eval Before and After Time

### **Re-Eval Test Data**

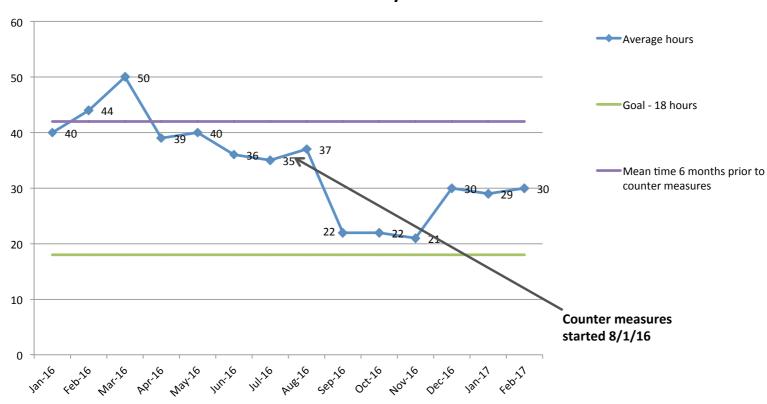


### **ED Length of Stay % Difference CY2016 over CY2015**



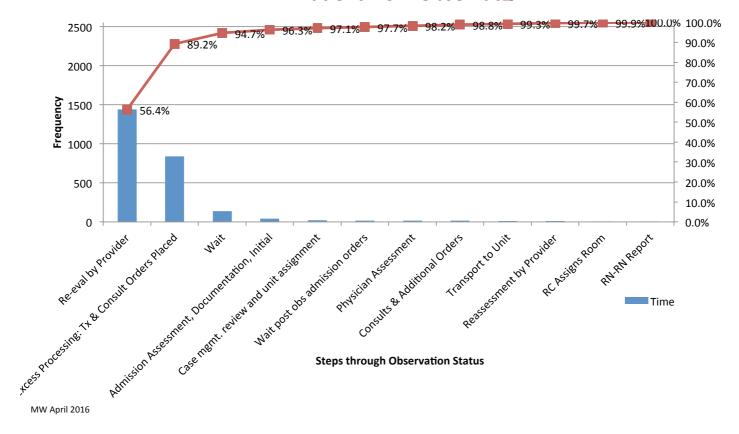
# Our Work: Observation Hours

# Observation Average LOS Patient Per Month 2016/2017



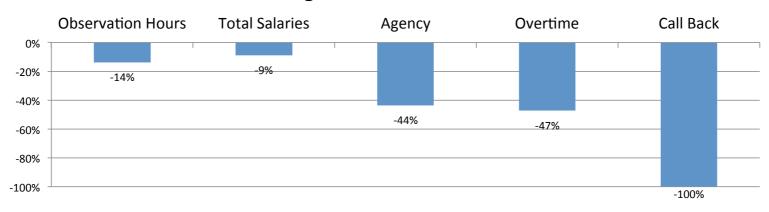
# Our Work: Observation Pareto

### **Patient Flow-Observation**



# Our Work: Impact on Staffing

### % Change from FY2016 to FY2017



	YTD 16	YTD 17	% Difference
Observation Hours	3,159	2,724	-14%
Total Salaries	\$ 1,387,560	\$ 1,264,643	-9%
Agency	\$ 35,466	\$ 19,998	-44%
Overtime	\$ 119,663	\$ 63,111	-47%
Call Back	48,976	<del>-</del>	-100%

# Our Work: Code Capacity

### **Tier One**

### **Response type: Localized**

- When constraint is identified, House Supervisor (HSR), Resource Coordinator (RC), Case Manager (CM) will huddle together to identify immediate acNon to create capacity through transfers/discharges to create capacity in appropriate care area.
- Care areas impacted start reviewing staffing and planning for the day to determine no low census, call in stand by and other activities to handle demand.

### **Tier Two**

### **Response type: Critical Leadership**

- HSR notifies the Back-up Director (BUD) to initiate communication beyond current units involved and to inform senior leadership.
- HSR initiates an emergency bed meeNng for key leadership from care areas and support services to agend within the hour.
- Post bed meeting-CMO, CNO, BUD, CM initiate contact with external facilities and discharging providers to expedite patient movement.

### **Tier Three**

### **Response type: Organizational Event Management**

- Incident command opened within an hour by Administrator On-Call (AOC).
- Roles are repurposed and clinical support resources are assigned to patient care areas and based on operational requirements.
- Clinical leadership assumes supervisor level leadership on units until capacity constraints have been resolved.
- Incident command remains open until stable operations below level 1 event have been resolved.

# Our Work: Leadership Alignment

# Organizational Leaders Implementation of Lean Management Systems



# Our Work: Financial Impact

