



AT THE FOREFRONT

UChicago
Medicine

11,000 Problem Solvers: E3 Leadership at UChicago Medicine

IAHQ 2018 Conference

Greg Horner, Vice President
Operational Excellence

UChicago Medicine at a glance



4 Inpatient Facilities

- Center for Care and Discovery
- Bernard Mitchell Hospital
- Comer Children's Hospital
- Ingalls Memorial Hospital

1296 Licensed Beds

- 804 Med Surg
- 171 ICU
- 67 OB-GYN
- 77 Gen Peds
- 53 NICU
- 78 Acute Mental Illness
- 46 Rehabilitation



43 Operating Rooms

8 Ambulatory Care Facilities

- Duchossois Center for Advanced Care
- Center for Advanced Care at Orland Park
- Center for Advanced Care at South Loop
- 3 Ingalls Family Care Centers: Calumet City, Flossmoor, Tinley Park
- 2 Ingalls Care Centers: Crestwood, South Holland

Leading Growth in the Market

1.14M Ambulatory Encounters

44K Admissions

253K Patient Days

26K Surgical Cases

141K Emergency Room Visits



\$1.88B Net Patient Service Revenue

\$242M EBIDA

\$109M Operating Income

\$425M Community Benefit

~11,500 UCM Employees

1,292 Physicians

3,231 Nurses

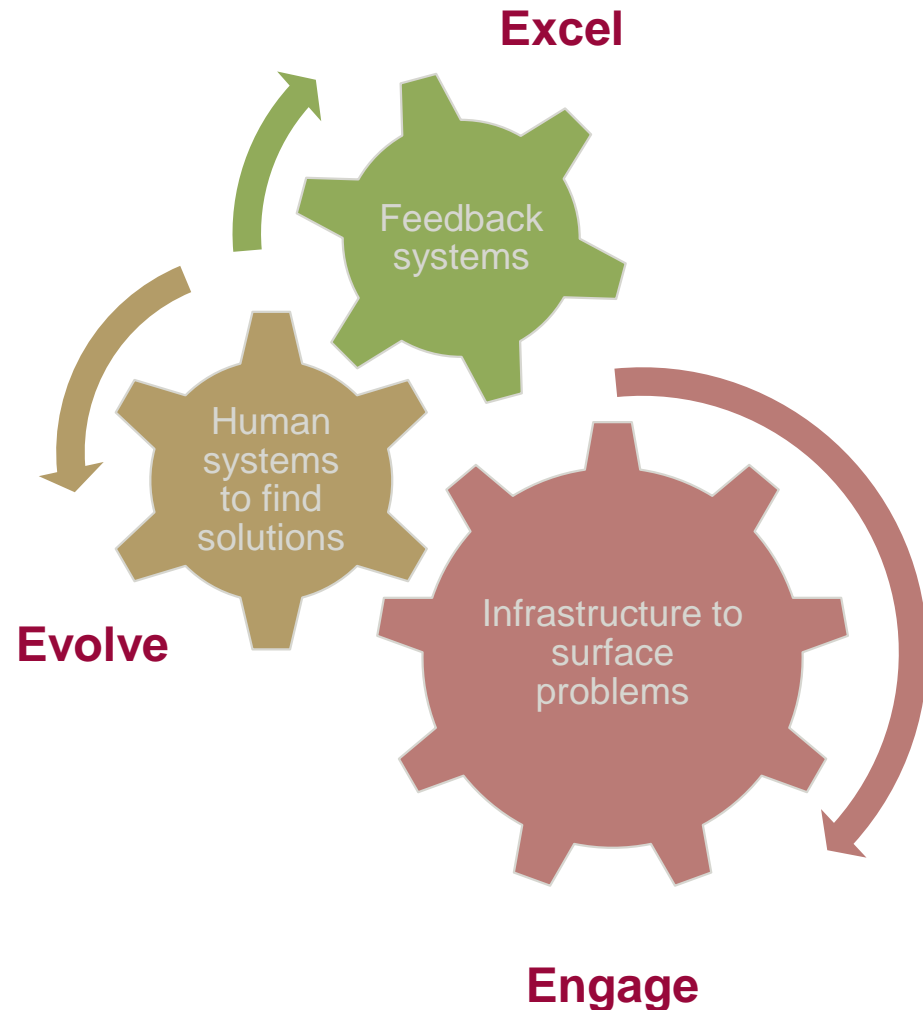
1,132 Residents & Fellows



E³ Leadership

- ✓ E3 Leadership means that we are all **Engaged** in improvement efforts
- ✓ We **Evolve** in our understanding of what works best to serve our patients and are willing to change the way we work to meet their needs.
- ✓ We **Excel** in implementing this knowledge and ensuring that we remain at The Forefront in all we do.

E3 Leadership develops each of our employees to be one of 11,500 interdependent problem solvers throughout UChicago Medicine.





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Inclusion and Ownership

Ensure the Transformation is Comprehensive

- Senior leaders ensure the transformation is inclusive so everything we do moves us towards the true north.
- Ensure one language. Together senior leaders must ensure that everyone moves in the same direction. This requires one common language.
- To create a culture of continuous improvement, senior leaders must understand what that means and share the vision.

Actively Engage in Improvement

- Senior leaders support daily improvement and ensure the system reflects the strategic direction of the organization.
- They actively engage in teaching and development.
- This requires alignment across the senior leadership team.

Build Diverse Teams

- Diverse organizations produce more revenue, customers and profit
- **Diverse teams process facts more carefully and deliberated more effectively**
- **Homogenous teams feel easier – but easy is bad for performance**
- Overcome fluency heuristic bias and raised correct solutions from **29%** to **60%**

Diversity Doesn't Stick Without Inclusion

Inclusive Leaders:

- Ensure team members **speak up and are heard**
- Make it **safe** to propose **novel ideas**
- **Empower** team members to **make decisions**
- Take advice and **implement feedback**
- Give **actionable feedback**
- **Share credit** for team success

Innovative E3 Leadership Integration

E3 Leadership + Equity

Engage in improvement

Evolve in our understanding

Excel in implementing

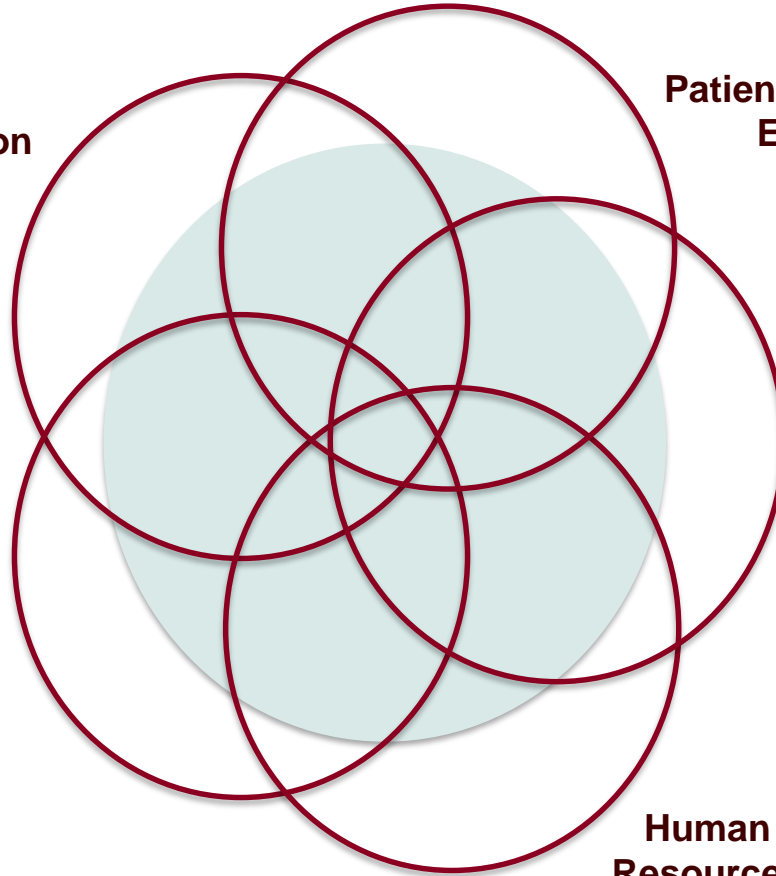
**Diversity, Inclusion
and Equity**
Finding Answers

**Operational
Excellence**

**Patient Experience and
Engagement**

**Clinical Effectiveness
Quality**

**Human
Resources**





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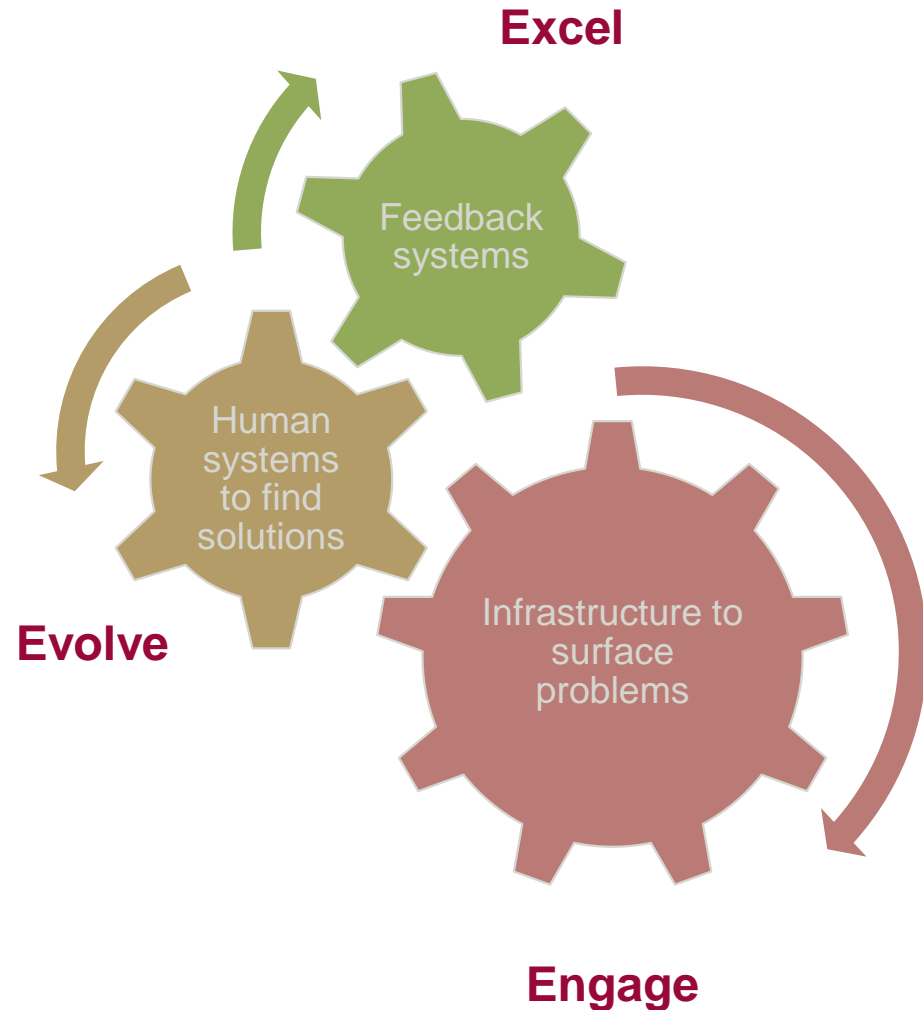
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Infrastructure to Surface Problems

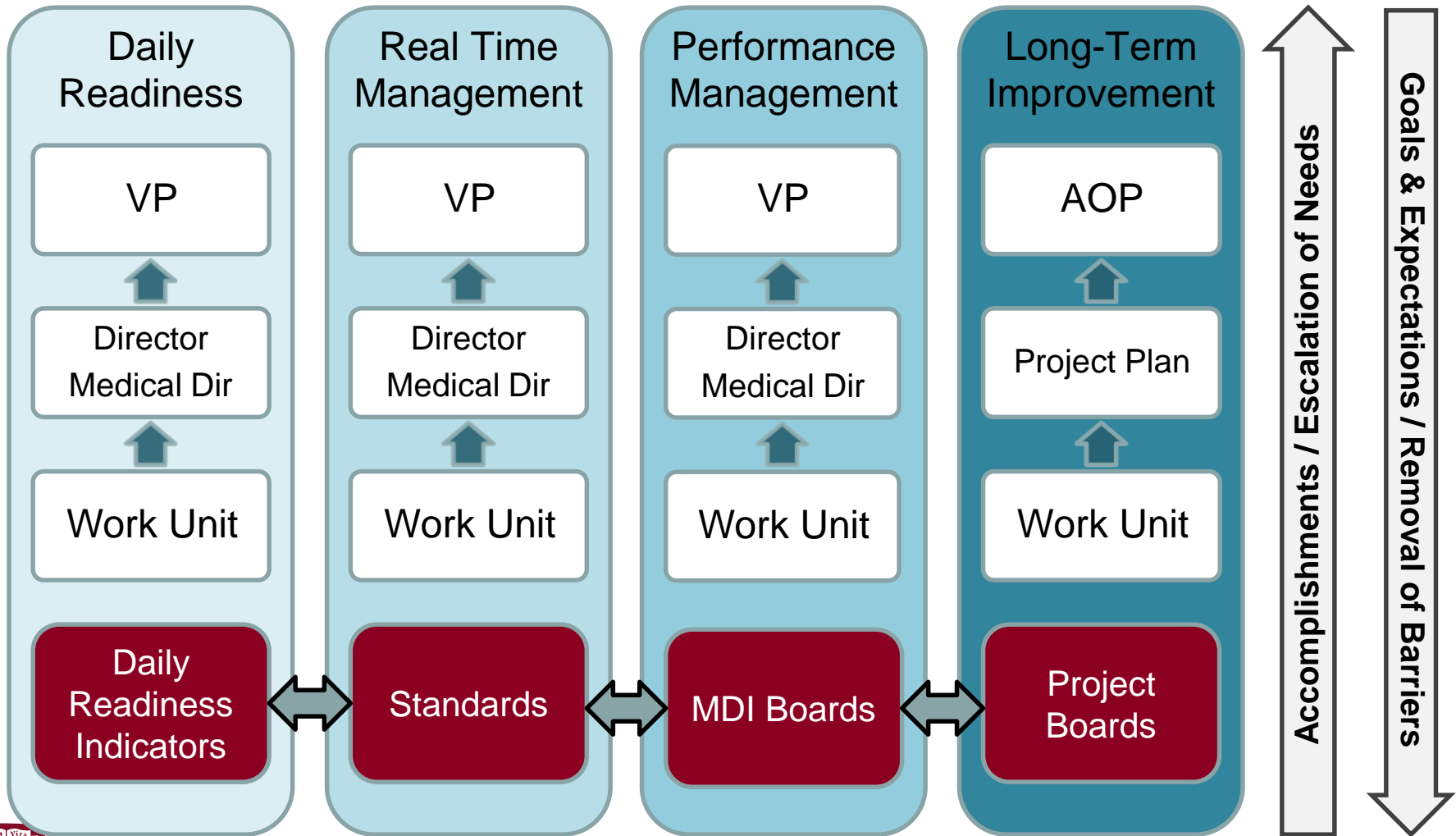
E³ Leadership Infrastructure to surface problems

E3 Leadership means that we are all **Engaged** in improvement efforts

- Kaizen
- Rapid Improvement - REI
- Making a Difference Every Day – MADED
- hArt of Medicine
- Cultural Competency
- ECLIPSE
- Managing for Daily Improvement – MDI



Managing for Daily Improvement System





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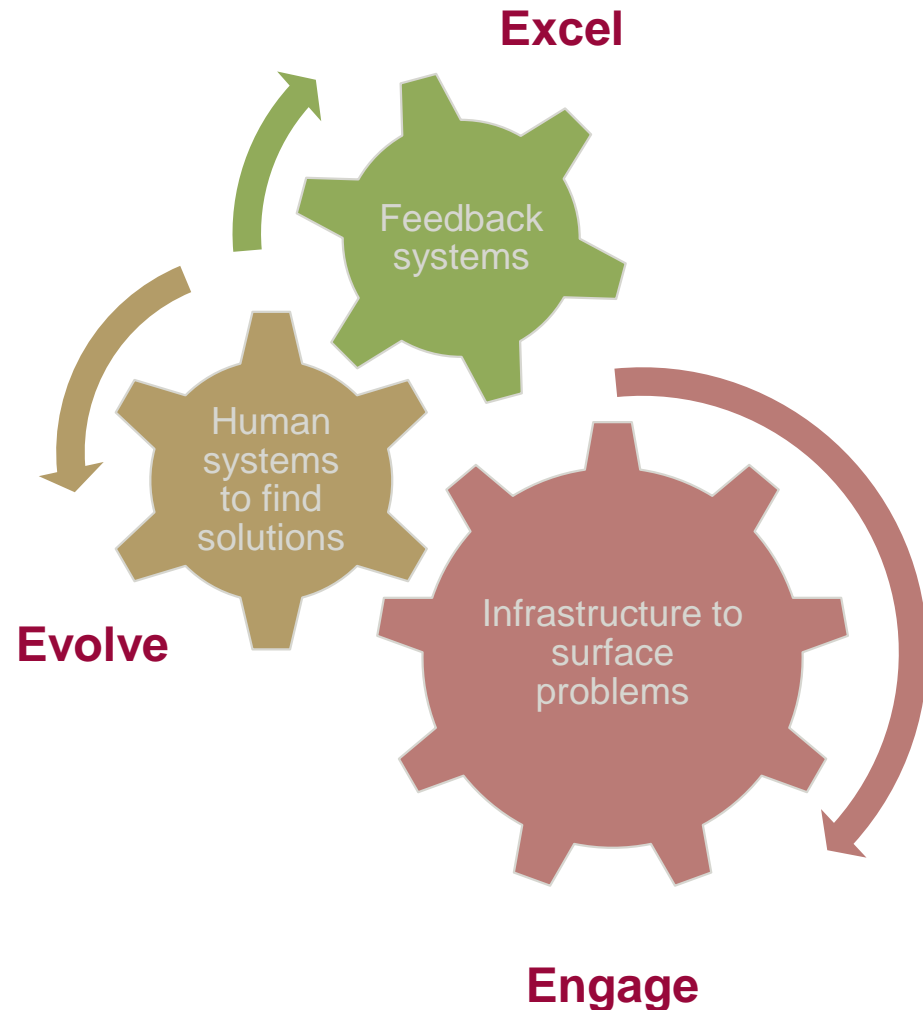
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Leveraging the Infrastructure

E³ Leadership

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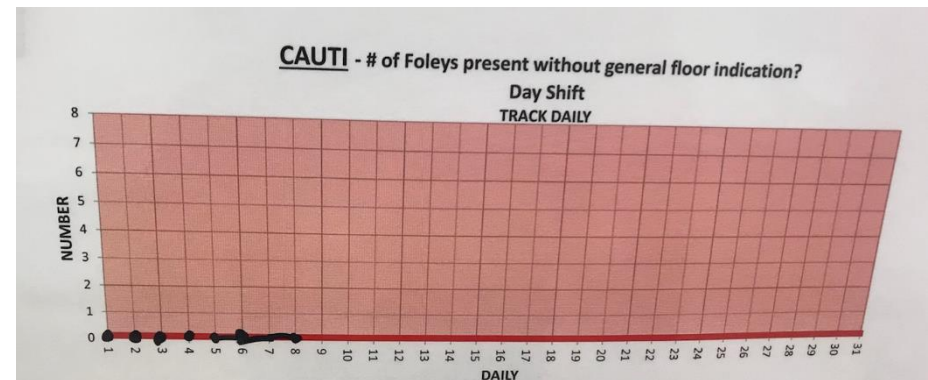
Multidisciplinary Team CA-UTI Reduction on an In-Patient Unit

Intervention

- Identify contributing factors related to CA-UTI incidence
- Evaluated current state related to maintenance and pericare
- Re-educated nurses regarding importance of nurse driven protocol
- Implemented CA-UTI metric to MDI
- Daily assessments of Foley catheters for proper indication
- Countdown CA-UTI quality board displayed publicly

Outcome

- 536 days without a CA-UTI on this unit
- Increased nursing empowerment/autonomy
- Built relationships amongst Multidisciplinary teams



Multidisciplinary Team Decreasing C-Diff Infections on an In-Patient Unit

Intervention

- Lattice Compliance
- Linked practice to the head-to-toe skin assessments upon admission
- Engrained practice during orientation
- Weekly PPE audits
- MDI Huddle discussions
- Hand Hygiene compliance
- Positive reinforcement

Outcome

- 10 months w/o HOA C-Diff infection on unit!

Jan - 17	0	Aug - 17	0
Feb - 17	0	Sep - 17	0
Mar -17	1	Oct - 17	0
Apr - 17	0	Nov - 17	0
May - 17	0	Dec - 17	0
Jun - 17	0	Jan - 18	0
Jul - 17	0		

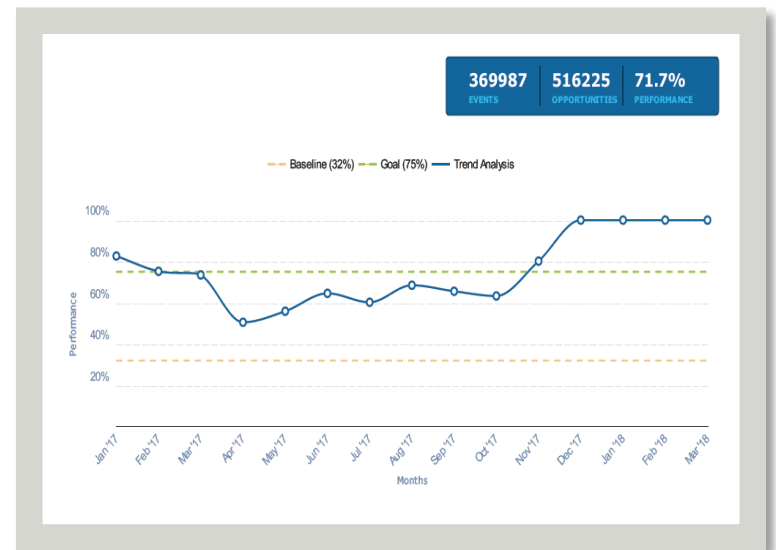
Multidisciplinary Team Improving Hand Hygiene in Burn Center

Intervention

- Focus on high traffic times/events
 - Rounds - physician leaders
- Incorporation in visitor policy discussion
 - Visitor and patient as advocates
- Shared accountability
 - From EVS to providers
- Signage

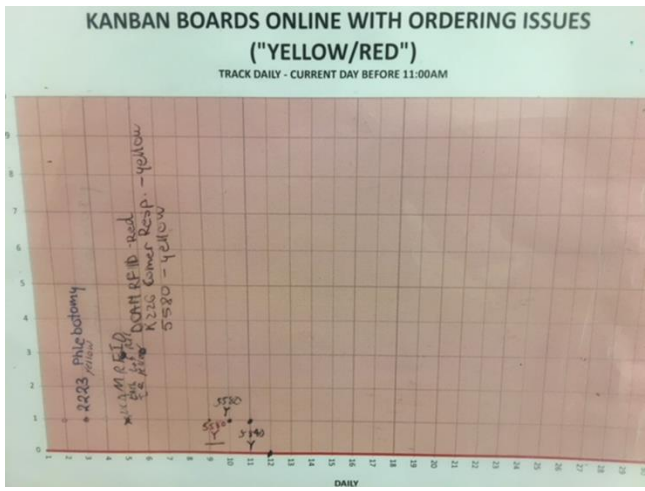
Outcome

- Culture shift: Champion dependency to individual advocacy
- Sustained improvement since April 2017
- 3 consecutive months with 100% performance average



Supply Chain : Multidisciplinary Team Improve Availability

Surface Problem



Improve

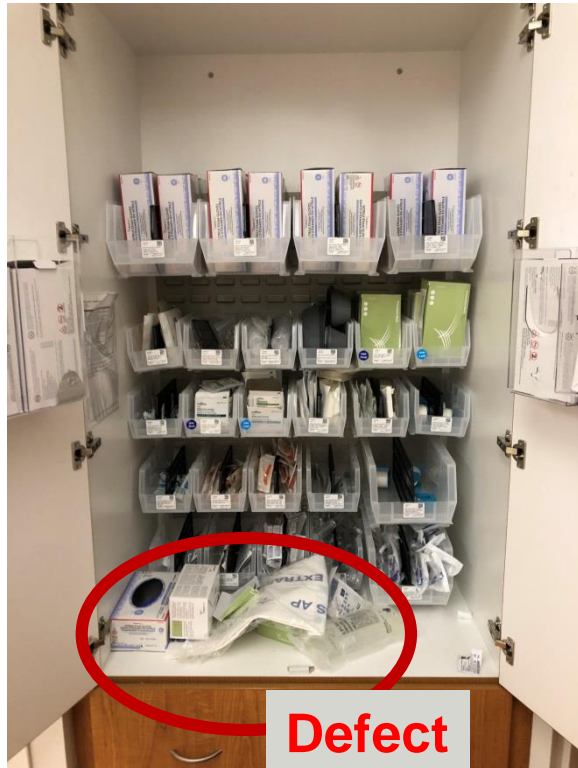
Kanban Red Boards

	From	To	Count	Period	
Before	1-Jan	7-Jan	66	Pre-update	↑ NOK
	8-Jan	14-Jan	70		
	22-Jan	28-Jan	28		
	29-Jan	4-Feb	46		
After	19-Feb	25-Feb	4	Post-update	↓ OK
	26-Feb	4-Mar	5		
	5-Mar	11-Mar	12		
	12-Mar	18-Mar	11		
	19-Mar	25-Mar	2		
	26-Mar	1-Apr	2		

99.5% Availability

Supply Chain: Multidisciplinary Team Problem Solving

Surface Problem



Improve



IGNITE Kaizen: Reducing Delays in Patient Transport

Reason for Action: To reduce delays and to improve efficiencies in patient throughput.

- Director Patient Transportation
- Director Neuro/Ortho
- Internal Medicine Resident
- Director Graduate Medical Education
- Manager NucMed/PET
- ACM Procedure Prep Recovery
- NSA Inpatient Unit
- RN Inpatient Unit
- Internal Medicine Resident
- Quality and Process Excellence Engineer
- Orthopedic Fellow
- Surgical Resident
- PSR Radiation Oncology
- RN Dialysis
- Patient Services Coordinator Inpatient Unit
- Emergency Medicine Resident
- Patient Transporter
- Asst Prof Ped Pulmonary Med
- Guest Services Ambassador
- APCM Inpatient Unit
- Emergency Medicine Resident
- Heart & Vascular Scheduler
- Operational Excellence Partner

IGNITE Kaizen: Reducing Delays in Patient Transport

Reason for Action: To reduce delays and to improve efficiencies in patient throughput.

Intervention

- Designed future state process improvements for handoffs & transport notifications
- Designed future state process improvements for RN notification and communication of delays
- Created supporting Standard Work and Leader Standard Work for Adult Inpatient, Ancillary, Procedural, and OR units.

Outcome

- Improve safe patient transport with handoff
- Improve safe patient transfer techniques
- Clear roles and improved teamwork
- Closed-loop communication
- Improve patient experience
- Improve staff satisfaction
- Capitalize on existing technology
- Reduce transporter wait time
- Improve throughput
- Decrease Length of Stay

Safety Huddle: Immediate response and resolution to potential harm events

Acting on today's data is one of the key challenges in transforming to a high-reliability.

UCM uses a structured mechanism to focus on events from the last 1-2 days, by bringing together physicians, clinicians, and administrators in a UCM Safety Huddle that meets multiple times each week.



- Multidisciplinary team structured huddle typically lasting between 15-30 minutes.
- Designated team members have specific metrics to report.
- This structure lets leaders identify and act on events quickly.

Preparing for Level I Adult Trauma

UChicago Medicine partnered with the community and patients to launch Level I adult trauma services

Center for Quality led multidisciplinary teams to improve capacity management and support the opening of the Adult ED and Adult Level I Trauma





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Cancer Center Outpatient Areas

E3 Leadership in Action: Cancer Center Outpatient Areas

Background – clinic and infusion therapy

- 400 visits per day between clinic and infusion
- 28 exam rooms + 54 chemo treatment chairs
- Many patients are enrolled in clinical trials>> complex care, processes, handoffs



Operations Assessment - December 2016

- Uneven Chemo RN staffing = patient delays
- Unsigned chemo orders = pharmacy and patient delays
- Slow starts to the 1st patients seen = underutilized staff; late stays
- Lack of standard work for manager, supervisors = defects aplenty

Low employee engagement and patient satisfaction scores

As an infusion center, how do we
reduce the waiting times and
improve overall patient satisfaction?

Most importantly, our patients were pleading with us:

“I have limited time on this earth. Please don’t steal any of my precious moments by making me wait.”

Schedule Optimization

- Infusion therapy scheduling is difficult due to varied appointment lengths, impacts of upstream processes, and complexity of ensuring both nurse and chair availability
- Well designed scheduling templates can result in:
 - ✓ Improved patient flow and decreased patient wait time
 - ✓ Increased balance in nurse workload
 - ✓ Decreased nurse overtime
 - ✓ Decreased peak of patients in infusion therapy and maximum chairs used (leveled schedule)
 - Allows for volume growth with current capacity

Goal:

Produce optimized infusion therapy block scheduling templates for each day of the week, to level the patients in infusion therapy throughout the day.

Fall 2009	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 AM	CHEM 101 LAB N1 (30576)		BIOL 107 LAB D19 (30399) BS CW 102		
9:00 AM		CHEM 101 LEC H1 (30544) C E1 60		CHEM 101 LEC H1 (30544) C E1 60	BIOL 107 SEM E12 (39657) BS G 116
10:00 AM					MATH 113 LAB K7 (31328) CAB 229
11:00 AM	BIOL 107 LEC A01 (32934) ETL E1 001	MATH 113 LEC K1 (31287) TL B 2	BIOL 107 LEC A01 (32934) ETL E1 001	MATH 113 LEC K1 (31287) TL B 2	BIOL 107 LEC A01 (32934) ETL E1 001
12:00 PM		ENGL 122 LEC A21 (38981) HC L 4		ENGL 122 LEC A21 (38981) HC L 4	
1:00 PM	SOC 100 LEC A2 (31818) TL 12		SOC 100 LEC A2 (31818) TL 12		SOC 100 LEC A2 (31818) TL 12
2:00 PM		CHEM 101 SEM L10 (30555)			

It Truly Takes a Village

- Medical Director
- Operations managers: clinic, infusion, lab, pharmacy
- Nursing
- Clerical staff
- Executive leadership
- Operational Excellence
- Center for Quality and Patient Safety
- Patient Experience (“PEEPS”)
- Organizational Development (Change Management)
- Patient and Family Advisory Council



It's a Marathon, Not a Sprint

- Matching staffing to demand
- Employee engagement improvement
- Modest patient satisfaction gains
- Late stays for RNs
- Missed lunch breaks
- Patient feedback: they are definitely noticing a positive change





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Thank You