



ACGME

Clinical Learning
Environment Review Program

**Pursuing
Excellence**
in Clinical Learning
Environments

Pathway Innovators



ACGME

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**Pursuing
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Environments



Initial Project Themes

Patient Safety and Health Care Quality

- Cleveland Clinic Foundation, Cleveland, OH
- Maine Medical Center, Portland, ME
- The University of Texas at Austin Dell Medical School, Austin, TX
- Strong Memorial Hospital of the University of Rochester, Rochester, NY

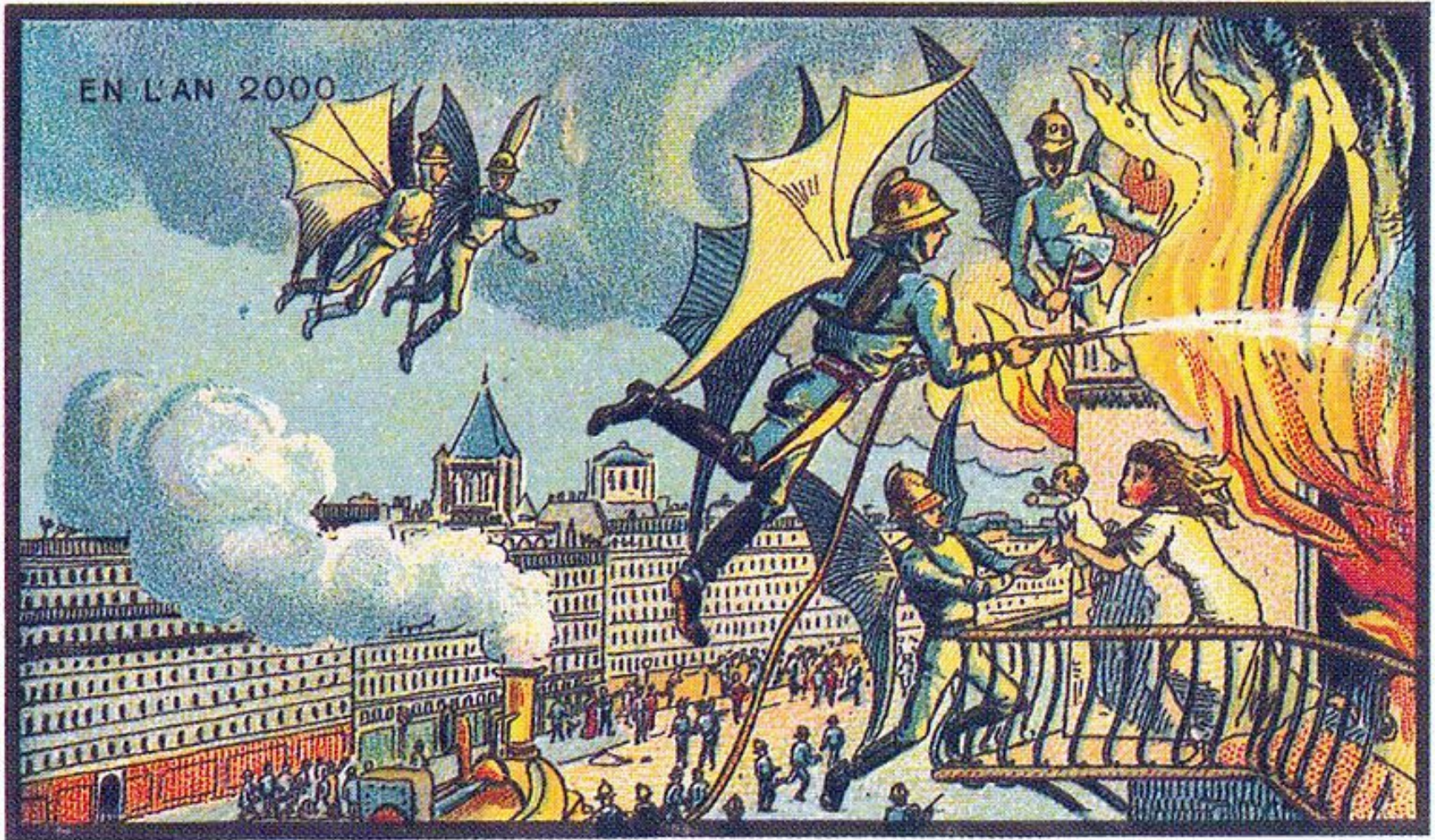
Interprofessional Development

- Children's National Medical Center, Washington, DC
- University of California, San Francisco (UCSF) School of Medicine, San Francisco, CA
- University of Chicago Medical Center, Chicago, IL
- Our Lady of the Lake Regional Medical Center, Baton Rouge, LA



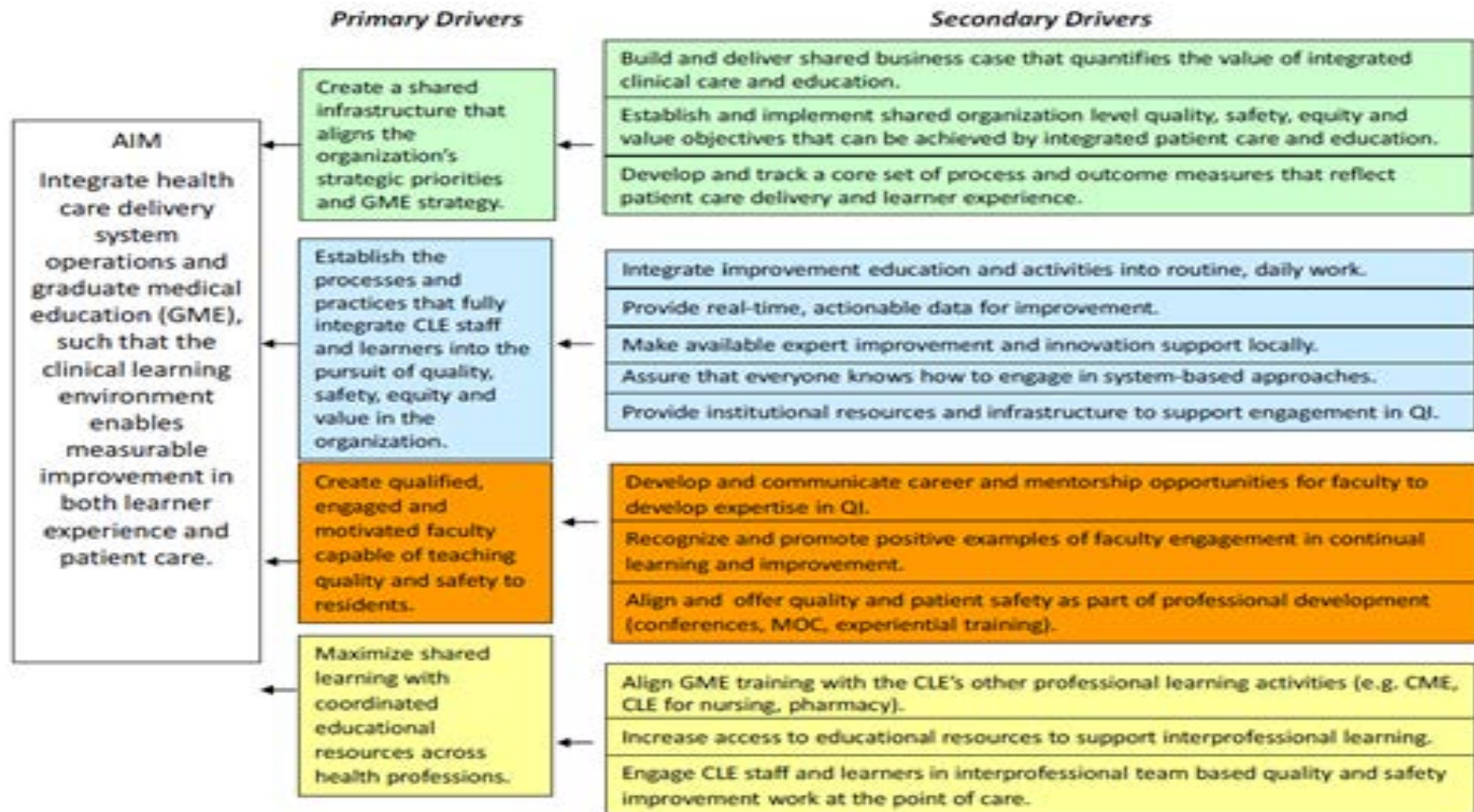
Pursuing Excellence

What future are we creating?



Aerial Firemen

Pursuing Excellence Driver Diagram



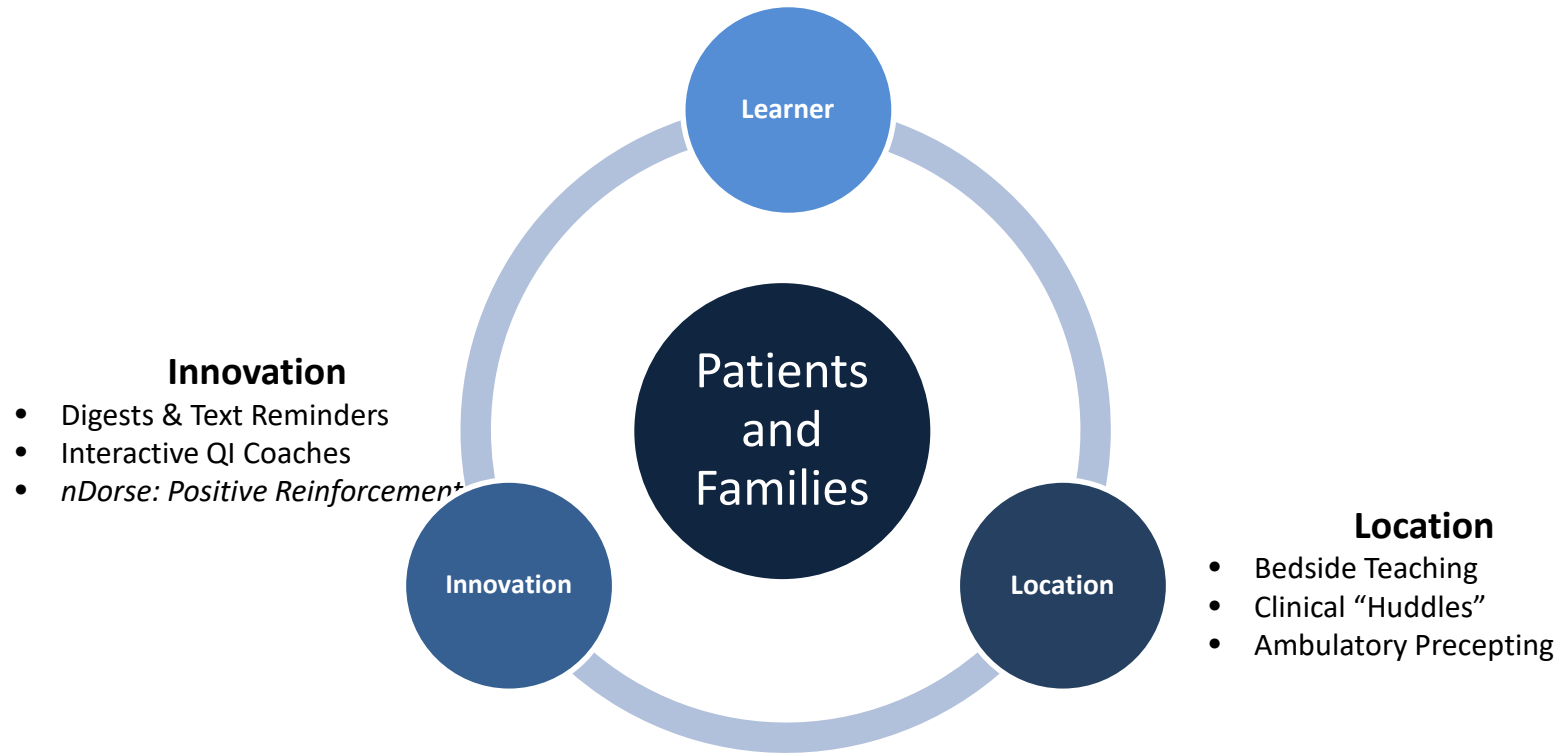


OUR LADY
OF THE LAKE

QI ON THE FLY INITIATIVE

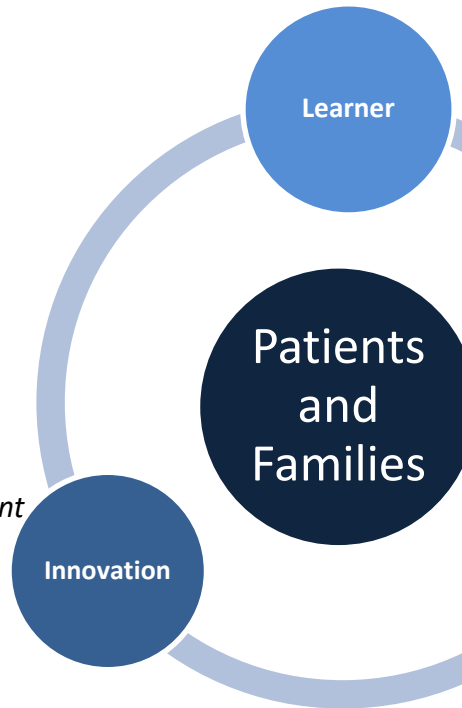
ACGME Pursuing Excellence
Pathway Innovators

QI on the Fly Model



QI on the Fly

- Innovation**
- Digests & Text Reminders
 - Interactive QI Coaches
 - *nDorse: Positive Reinforcement*



QI on the Fly Model

Learner

Innovation

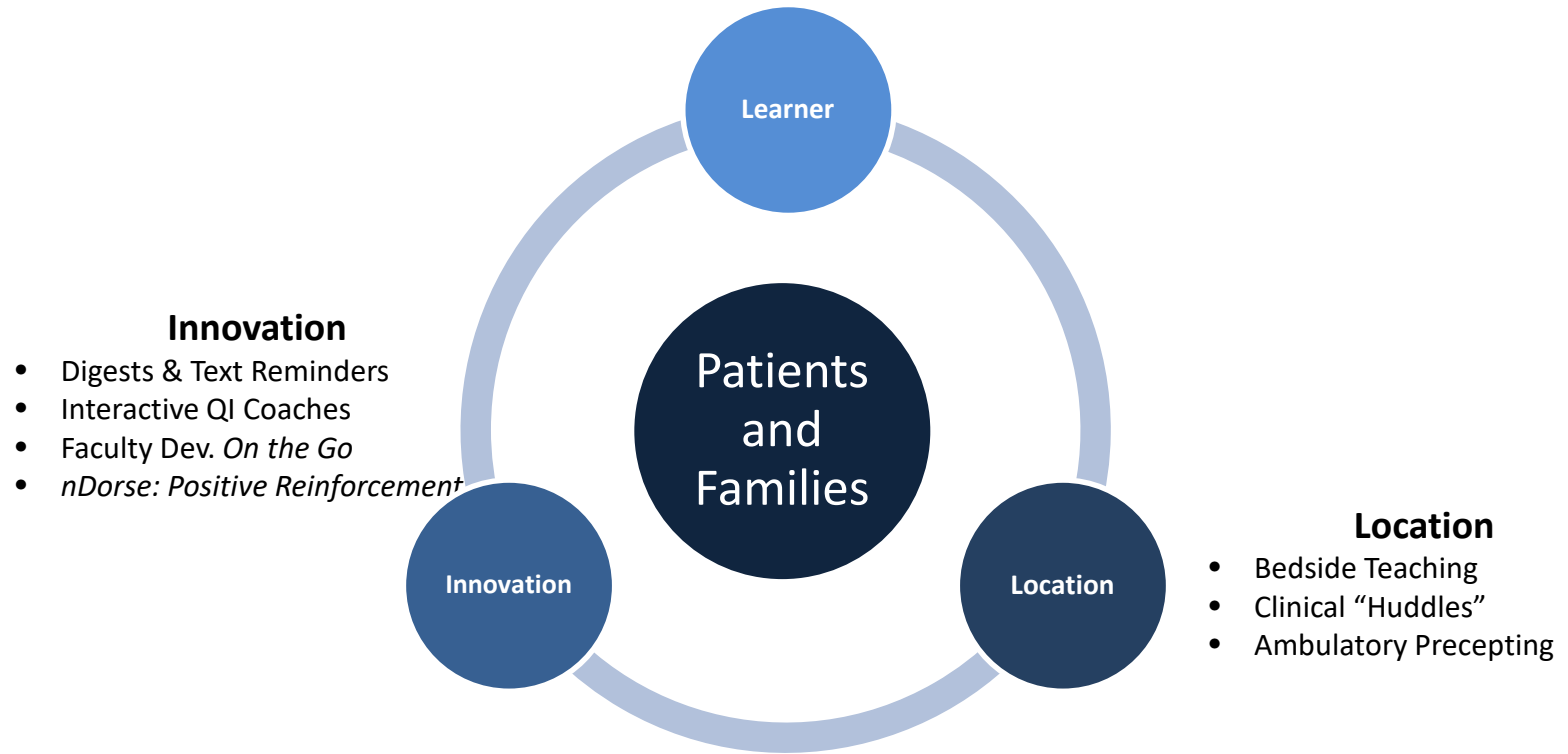
Location

Location

- Bedside Teaching
- Clinical “Huddles”
- Ambulatory Precepting



QI on the Fly Model



Goals/Outcomes

- Increase & Enhance Patient Safety Reporting
- Survey Analysis, nDORSE engagement, Reduction in Safety Event Severity
- Inter-Professional Teamwork



Lesson(s) Learned: Alignment

Example: Task of Developing a Business Case for Faculty Development

- Defining ROI can sharpen and strengthen the initiative's focus



Lesson(s) Learned: Alignment

Example: Task of Developing a Business Case for Faculty Development

- Relationship coordination between C-Suite and Academic leadership is essential... but can mask operational goal alignment



Lesson(s) Learned: Alignment

Example: Task of Developing a Business Case for Faculty Development

- The metric of success for planning and proposing an academic business case should be more than just getting a “Yes.”

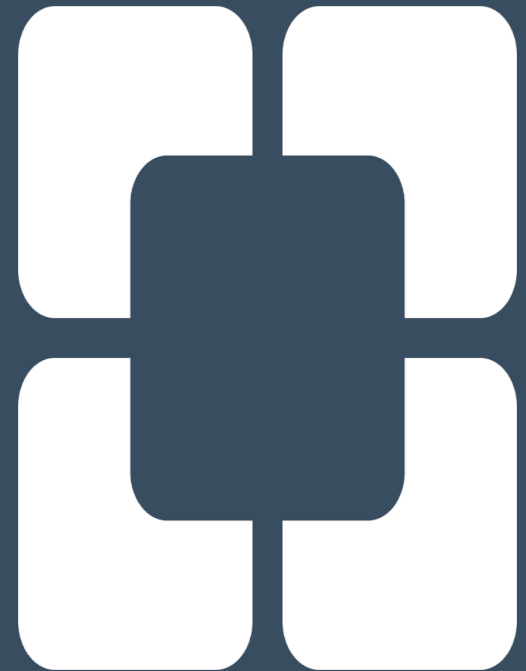


Transitions of Care

April 5, 2018

Lori Smith, MBA

Pursuing Excellence
in the Clinical Learning Environment



Transitions of Care



Hospital to Hospital



OR to Floor



Day to night resident



TOC Project AIM

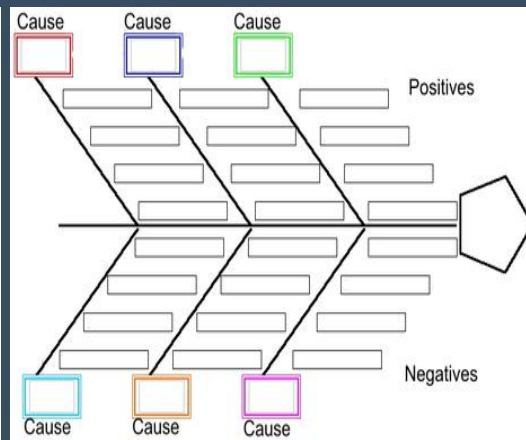
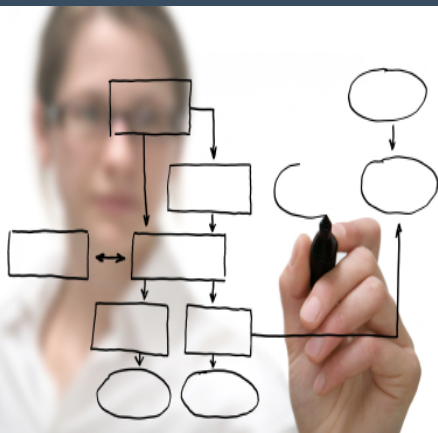
- Allow residents to learn and apply principles of QI practice to real life problems
- Improve communication
- Improve patient care
- Eliminates silo-based care through inter-professional teamwork
- Create a cadre of healthcare professionals with experience in quality methods to apply to patient care

Intervention

- Resident led teams complete SOLVE (Solutions for Value Enhancement)*
 - 12 week experiential program
 - Teams explore problems, learn quality improvement science principles and provide solutions
- Projects directed towards individual TOCs
 - Propose improvements
 - Identify generalizable best practices for rollout

What Did the Teams Do?

- Process Mapping
- Observation
- Fishbone Diagrams
- A3



Title:		Owner:	
Context:	Our problem is...	Actions:	To prove/disprove the hypothesis we will...
Hypothesis:	We believe we can solve it by...	Results:	We will declare success or failure when...
Rationale:	We believe this because...	Follow-up:	As a result of success or failure we will...
		Success	Failure
		Success	Failure

Experiment A3 Karl Scotland Ltd

SoIvE

- Good feedback
 - team members felt SoIvE was useful
- Time intensive
 - Currently developing “mini” program in effort to involve more individuals
- 3 Cohorts to date
- Increased knowledge of process improvement tools noted in participants
 - Participants are using tools learned

Results

- Formation of an EPIC utilization task force
 - Dot phrases/smart notes creation to simplify process
 - Creating specific transfer note to assure pertinent data passed on
 - Transfer dashboard
- Enhanced communication
- Sharing of knowledge



Every life deserves world class care.

Every resident and fellow deserves a world class education



Interprofessional Partnership to
Advance Care and Education

iPACE

Interprofessional Partnership to Advance Care and Education

Kalli Varaklis MD, MSEd
Maine Medical Center



Interprofessional Partnership to Advance Care and Education

Challenge:



- **How do we re-design the clinical learning environment to have a positive impact on the quadruple aim?**
 - To more fully integrate residents into quality of care?
 - To provide a more robust experiential inter-professional experience?
 - To improve team efficiencies? Better workflows?
 - To enhance the patient and family experience?
 - To impact provider satisfaction and engagement?



Innovation



- **Wholesale redesign** of the clinical learning environment with GME integrated in the healthcare system from the beginning
 - Systems engineering experts
 - Brand new unit
 - Engagement of interprofessional stakeholders in the design of a new unit
 - » Nurses, attendings, residents, pharmacists, physical therapists, medical students, patients, GME leadership, hospital administrators
 - ACGME PEI grant



CARE TEAM
WELL BEING



HEALTHY
COMMUNITIES



AFFORDABLE
CARE



PATIENT CENTERED
CARE

Based on the concept of **ONE**:
One team,
working, rounding
and learning
together, to
provide **one** plan,
with a **single**
coherent and
cohesive message
for patients and
families.

iPACE



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iPACE Principles

- Emphasize **interprofessional collaboration** and team learning
- Enhance patient and family-centered care through **improved communication**
 - Patient and care team (learner) cohorting on clinical units
 - Interprofessional rounding including patients and families
- **Improve care transitions** and care coordination
- **Support clinical reasoning** and promote reflection
- Promote and encourage a **healthy work environment**
- Encourage and support a culture of **team ownership**
- Health system engineering pre-assessment of **time management, care processes and waste**
- “**Learning laboratory**” through full team engagement in PDSA cycles

So...what's different on iPACE?



- Rounds...
 - planned the night before and include the entire team:
 - » nurses, attending, resident team, pharmacist, care coordinator, medical student, patient and their families
 - One note with contributions by all team members
 - Patients, families and consultants aware of time when rounds will take place

Who	Task	
	Prior to Rounds (Before entering the room, everyone should know what his or her role is. All parties sitting if possible. One resident opens the computer in the room to access data as needed, enter orders and document as the other resident presents the patient.)	
Nurse	Preps patient for rounds, gets permission for bedside discussion, invites family.	
Whole Team	Introductions Greet patient and family Everyone introduces self and role	
Intern (or Resident if Primary Resident Patient)	Update Status Important test results & Consultant inputs inputs from patient, family & nurse	
Nurse	Subjective and RN Data Significant Overnight events Patient's goal for the day (i.e. OOB to chair, work with PT, procedures etc.) Vitals & pain control Fluid & food intake Urine & Bowel output Mental status & ADLs	
Patient	Patient Input Patient and Family add any pertinent info or pose questions they would like answered.	
Bedside teaching: Engage all learners, limit the number of teaching points (e.g. one each from hx, physical exam and clinical reasoning). Less is usually more.	Pharmacist	Medication overview Complete medication overview checklist* Review current and new medications Review potential side effects
	Resident/Attending	Examine Patient Focused physical exam on pertinent areas Teaching point relating to the physical exam when appropriate
	Intern	Data Review of any radiographic tests from the day prior and lab results
	Resident	Quality & Safety Checklist Foley catheter Central line VTE Prophylaxis Pressure ulcer & stage Hypo/Hyperglycemia Telemetry
	Intern (or Resident if Primary Resident Patient)	Plan of Care Problem based summary of plan of care. Anticipated DC date & discharge plan
Whole Team	Diagnostic timeout	
Nurse	White Board Update white board	
Patient	Patient Perspective Teach-back "Doctors aren't always good at explaining things, so what is your understanding of the plan?" What questions do you have at this point? What concerns can we address? May we call your family (if family not present)?	

What's different on iPACE?



- Residents integrated into operational excellence and key performance indicators (KPI's)
 - Gemba walks
- Daily huddles to improve communication
- Lunch and learns
- Clinical reasoning didactics
- Close connection with care planners to facilitate discharges
- Orientation to the unit before the rotation

A day on iPACE

Emphasis on:

- Team communication
- Interprofessional learning
- Time to reflect and think
- Hardwiring workflow to support best patient care practices

Tuesday		Wednesday		Thursday	
Time	Activity	Time	Activity	Time	Activity
515	Night team Happy Huddle	515	Night team Happy Huddle	515	Night team Happy Huddle
600	CNA Handoff	600	CNA Handoff	600	CNA Handoff
630	Charge RN Handoff	630	Charge RN Handoff	630	Charge RN Handoff
645	Resident/Intern Handoff	645	Resident/Intern Handoff	645	Resident/Intern Handoff
700	RN Handoff	700	RN Handoff	700	RN Handoff
700	"Team Prep"	700	"Team Prep"	700	"Team Prep"
725	Morning Introduction Huddle	725	Morning Introduction Huddle	725	Morning Introduction Huddle
730	iPACE bedside rounds begin	730	iPACE bedside rounds begin	730	iPACE bedside rounds begin
834 (during rounds)	Gemba	834 (during rounds)	Gemba	834 (during rounds)	Gemba
1030 (during rounds)	iPACE Team Huddle	1030 (during rounds)	iPACE Team Huddle	1030 (during rounds)	iPACE Team Huddle
1330	iPACE bedside rounds end	1330	iPACE bedside rounds end	1330	iPACE bedside rounds end
1330-1400	- plan next day schedule - prep for next day discharges - new admissions	1330-1400	- plan next day schedule - prep for next day discharges - new admissions	1330-1400	- plan next day schedule - prep for next day discharges - new admissions
1400-1500	Clinical Reasoning Session	1400-1430	IPE Lunch & Learn	1400-1500	Clinical Reasoning Session (Replaced with Simulation session 1/month)
1500-1715	- plan next day schedule - prep for next day discharges - new admissions	1430-1715	- plan next day schedule - prep for next day discharges - new admissions	1500-1715	- plan next day schedule - prep for next day discharges - new admissions
1715	Day team Happy Huddle	1715	Day team Happy Huddle	1715	Day team Happy Huddle
1730	Resident Handoff	1730	Resident Handoff	1730	Resident Handoff
1800	CNA Handoff	1800	CNA Handoff	1800	CNA Handoff
1830	Charge RN Handoff	1830	Charge RN Handoff	1830	Charge RN Handoff
1900	RN Handoff	1900	RN Handoff	1900	RN Handoff
2200	iPACE Team Huddle	2200	iPACE Team Huddle	2200	iPACE Team Huddle

TOPIC	OUTCOME MEASURES	PROCESS MEASURES	BALANCING MEASURES
Inter-professional Care and Education "Teamness"	Relational Coordination (RC)	Participation - QI activities - iPACE elements	Perceived Educational Value on other clinical rotations
Education	Perceived Effectiveness (Focus groups)	Participation - QI activities - iPACE elements	Perceived feasibility and acceptability
Patient Centered Care	Patient experiences with communication and care (HCAHPS)	RL Solutions reporting	Staff Satisfaction Perceived acceptability of intervention
Provider Well-Being	Burnout (Mini-Z)	Teaching service provider workload (#orders, pages, time/duty hrs, time in documentation)	Non-teaching service provider workload and burnout
Quality of Care	Adverse events Readmissions Mortality	KPIs	
Efficiency of Care	Length of Stay, Utilization, Delay Days	KPIs	Time financial costs, training



iPACE: Experience to Date

- **Best practices**

- Rounding schedule/posting schedule
- Partnering with Care Manager for discharge rounds
- Resource Nurse & Unit Coordinator roles
- Re-focus Lunch & Learn sessions
- Interprofessional Practice & Quality Committee
- Residents report almost *no* pages in the day on iPACE

- **Biggest challenges**

- Fitting the model to the patient vs fitting the patient to the model
- Time management
- Attending continuity
- Space issues/Renovations/Satellite unit
- Patient placement/cohorting



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Early Feedback- Team Members

- “We should do this on every service”
- “Working in this type of interdisciplinary environment has changed the way I look at rounding. In the future, I hope I can bring what I’ve learned on iPACE to any other type of setting I work in.”
- “This is a model that truly practices and teaches the MMC values of Respect, Patient Centered, Integrity, Excellence, Ownership and Innovation.”
- “The rounding model provides a more intimate patient interaction experience, which is much appreciated especially from pharmacy standpoint.”
- Rounding interferes with Morning Report and Grand Rounds attendance on this rotation
- The long rounding takes some time to get accustomed to

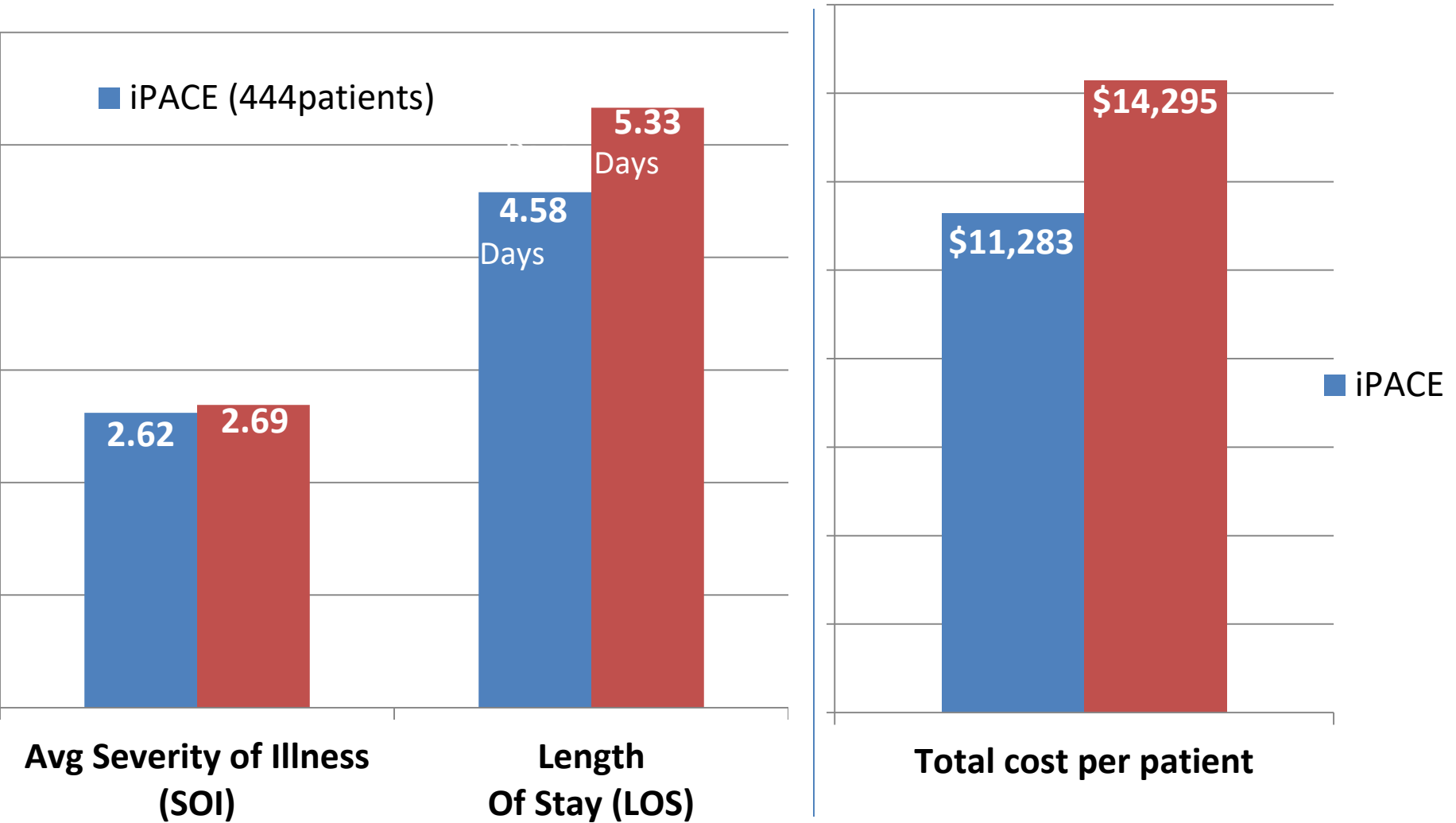


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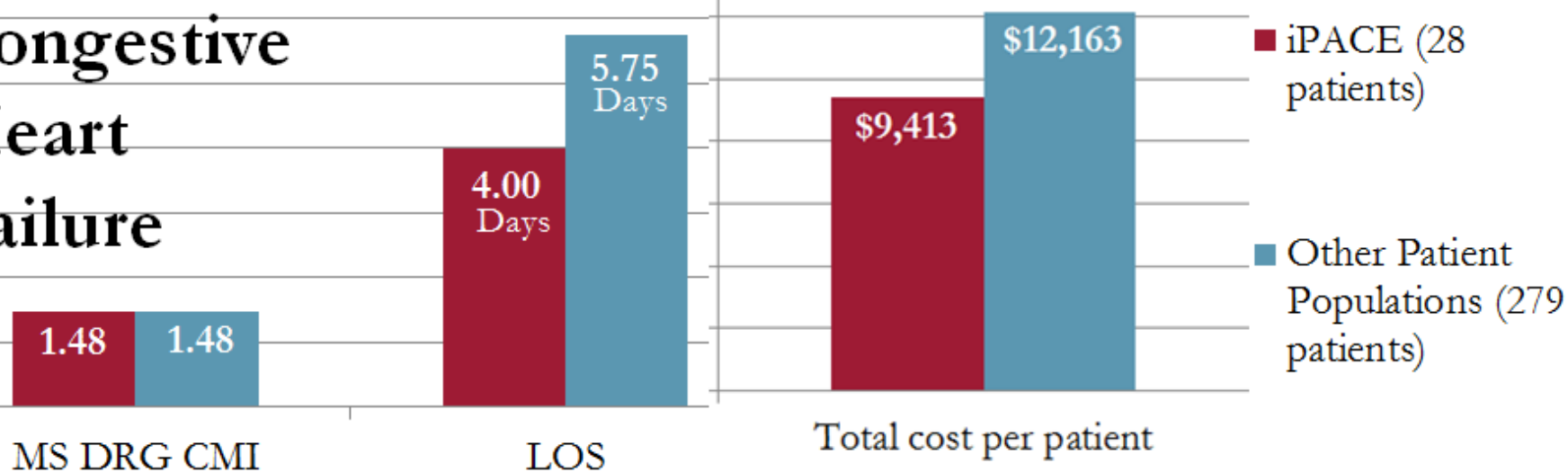
Feedback- Patients and Family Members

- “The team concept on this unit is just what families need: doctors, nursing, students etc., all giving and taking information. I wish the whole hospital could adopt this team model. My mother died on 8/21 – those few days prior to hospice with the team model was a wonderful experience.”
- “This type of rounding is really good for families who want to know what the plan is. Other instances, by the time we arrive to the hospital, the doctors have already left and we don’t know what’s going on”
- “Much more organized and an overall pleasant experience.”

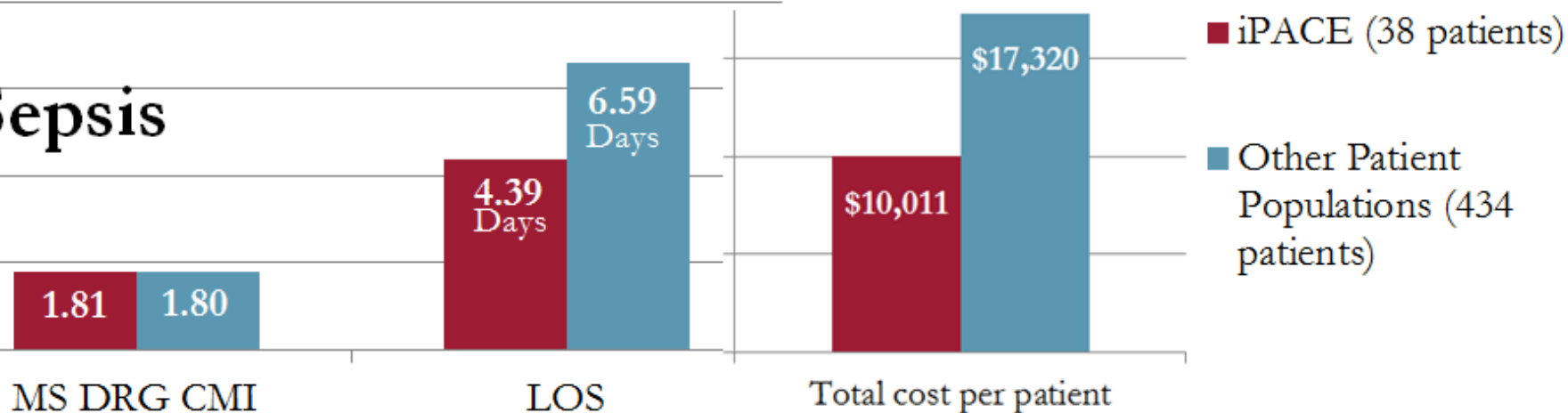
Preliminary Financials



Congestive Heart Failure



Sepsis



What iPACE Principles Might be Scalable?

- Interprofessional collaboration
- Healthy work environment
- Team ownership

- Improve care transitions and care coordination
- Support clinical reasoning



- “Learning laboratory”
- Health system engineering pre-assessment

- Patient and family-centered communication (rounds)
- Patient and care team cohorting



“Yeah, but....”

- iPACE model built into a new unit may have unique advantages that might not be scalable
- Geographic patient cohorting on a larger scale may create patient flow issues
- Provider and learner cohorting may present challenges
- Work flows in other clinical units (Surgery) may not easily adapt to this model
- Traditional learner educational experiences may be a barrier
- Service Lines and units are very busy and may not have the bandwidth for this work

Next Steps.....



- Expand iPACE model to other units
 - Adapt to uniqueness of other clinical learning environment (surgery, Ob/Gyn, rural hospital, etc)
- Continue PDSA cycles
- Continue careful metrics

Questions/Comments?

iPACE



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