

iPACE™ UPDATE

Kalli Varaklis, MD, MEd
Designated Institutional Official MMC
Senior iPACE Advisor
November 2023

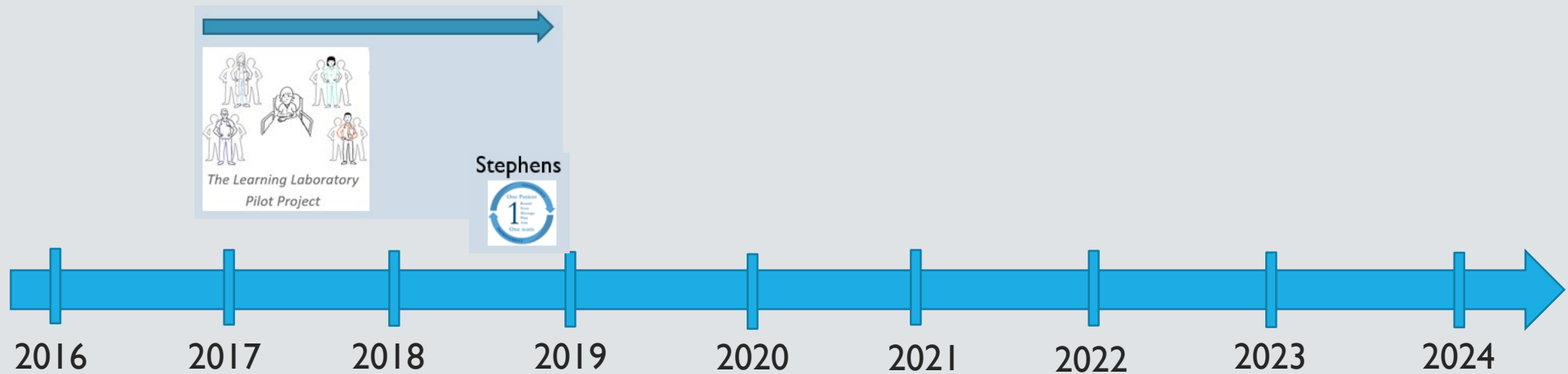


OBJECTIVES

iPACE: A Life History

- Quick review of where we've been
- Update on where we are
- Where we're going next...

iPACE TIMELINE

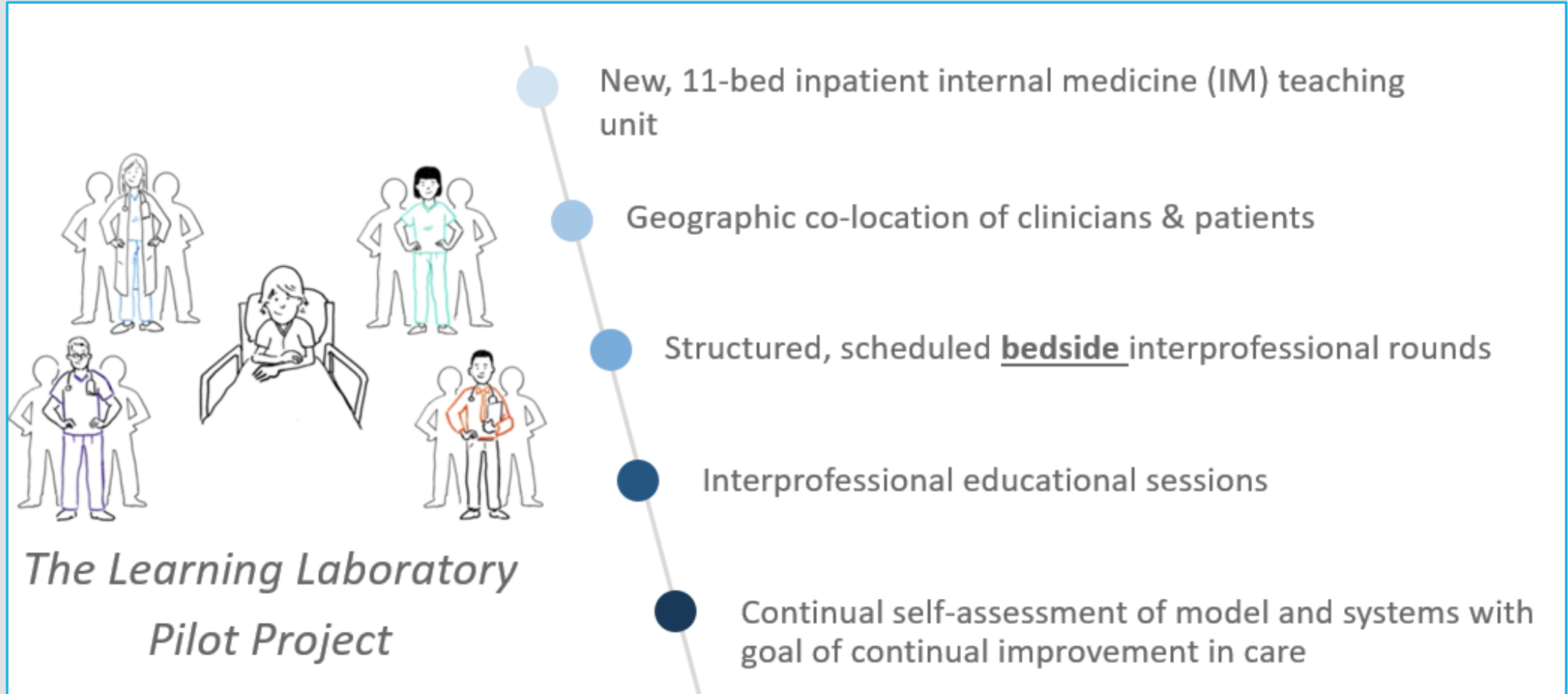


ACGME PEI grant

Family Medicine




iPACE – 2 YEAR PILOT

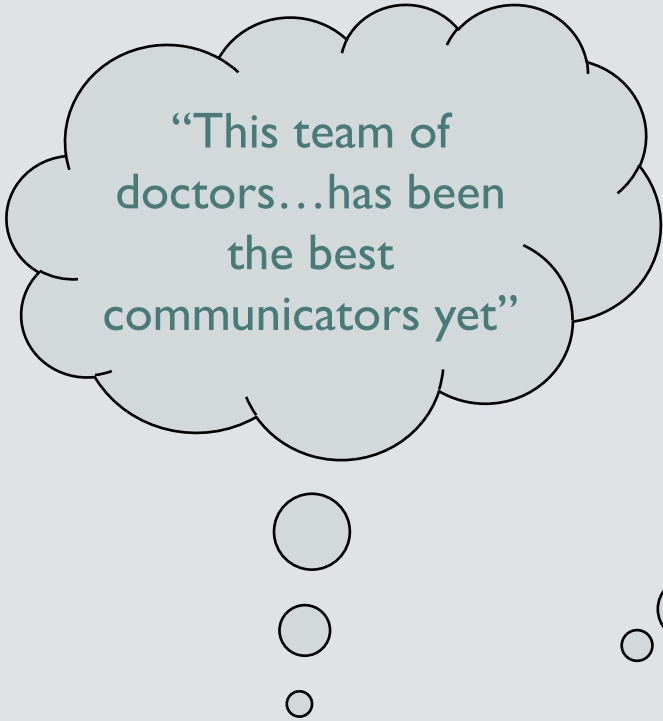


Key Findings 2 year Pilot project


Patient and family experience
overwhelmingly positive



“My family has been notified of every move. We have NOT felt confused at any time. It has been made very clear who does what! The communication has been exceptional and we appreciate it so much.”



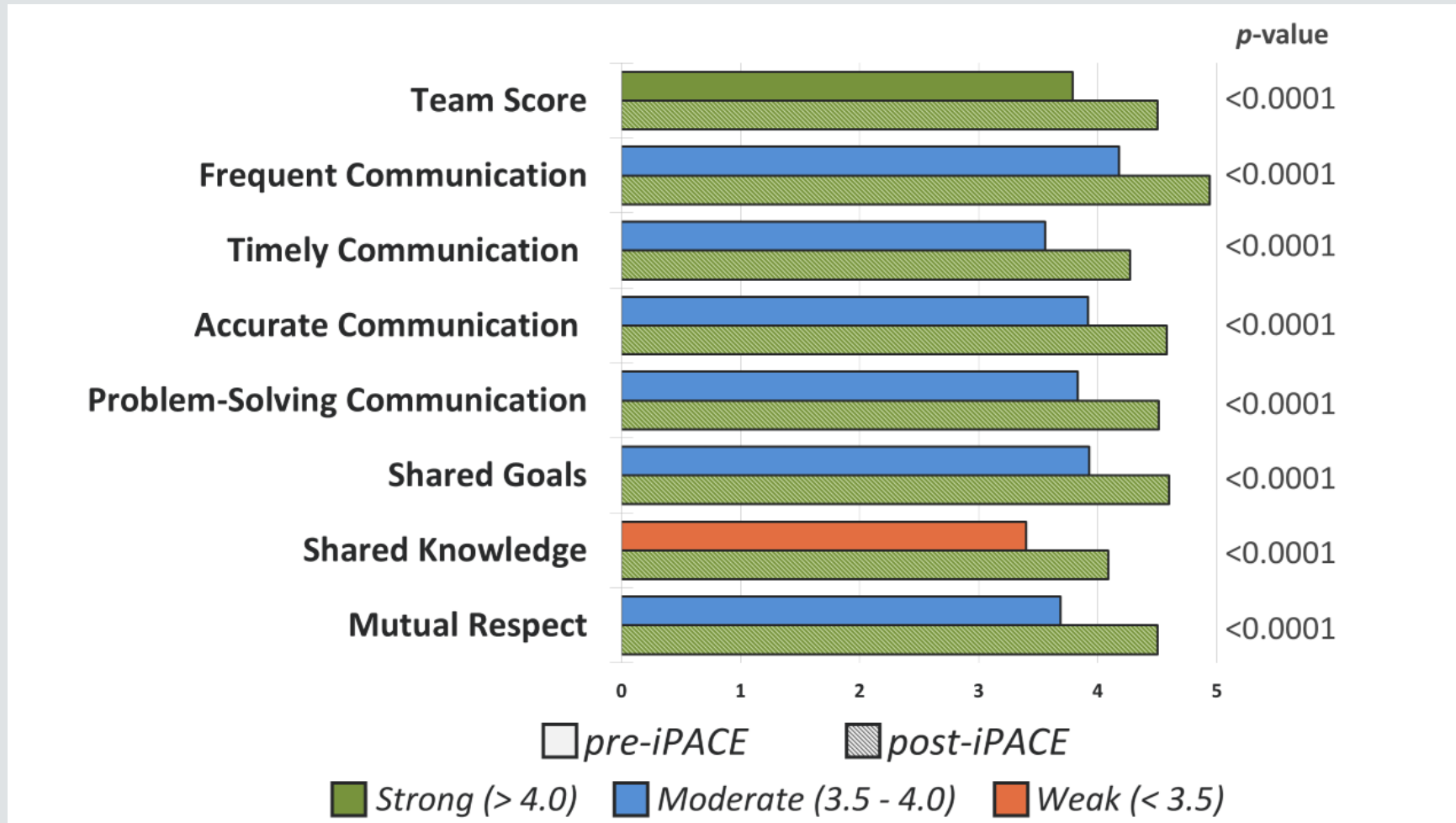
“This team of doctors...has been the best communicators yet”



“Each team member has been on the same page and has been wonderful including the RN's. I am completely comfortable leaving mom alone.”

Key Findings 2 year Pilot project

Team Communication significantly improved improved



Key Findings 2 year Pilot project

Care Team Experience highlights

Measure	<i>pre-iPACE^a</i>	<i>post-iPACE^a</i>	<i>p-value</i>
	Mean (SD)	Mean (SD)	
Experience professionally rewarding	3.5 (1.00)	4.4 (0.62)	<0.0001
Team communication	3.7 (0.81)	4.1 (0.84)	0.03
Team actively doing things to improve patient safety	4.0 (0.95)	4.4 (0.83)	0.05

^aLikert scale of 1 - 5, where 5 is strongly agree and 1 is strongly disagree

Key Findings 2 year Pilot project

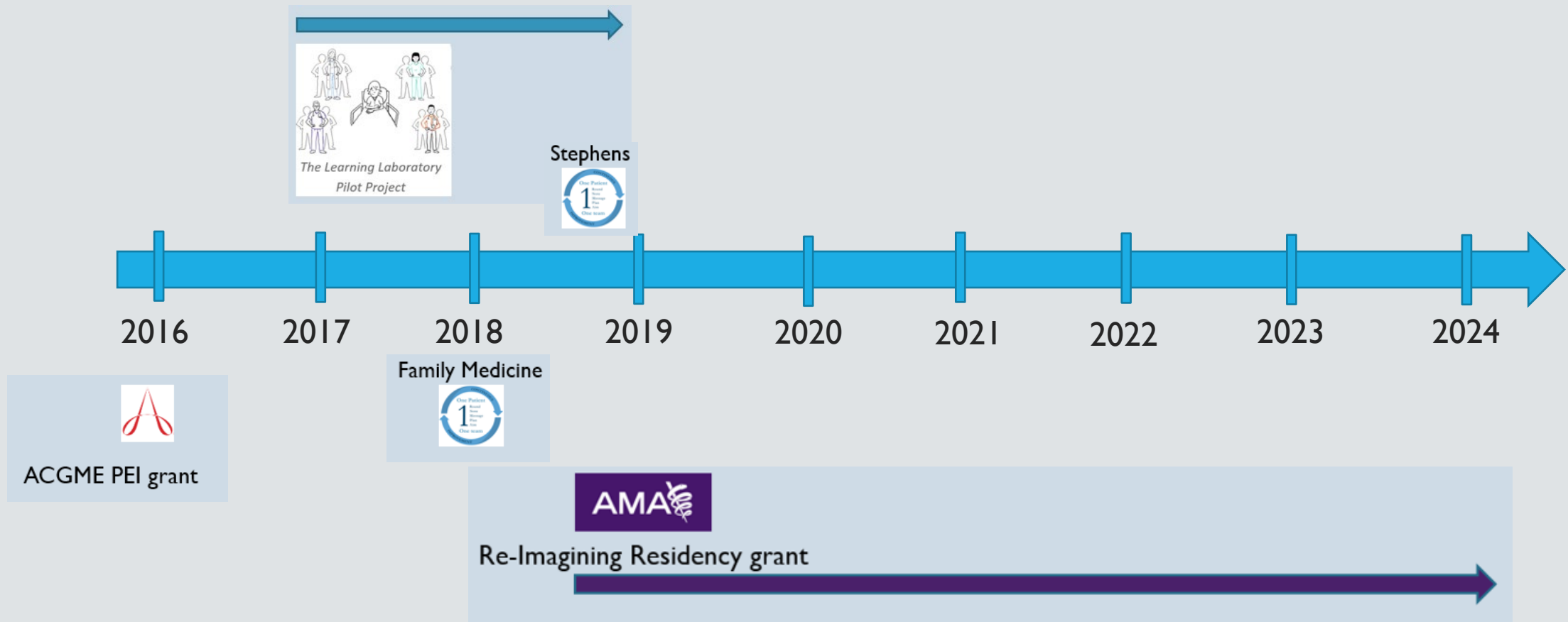


Narrative evaluations completed on the iPACE unit were significantly longer, “better”

(iPACE™ = 109 words, Traditional = 69 words, $p < 0.001$)

Type of Feedback	iPACE™ % (N) N = 193	Usual % (N) N = 499	p-value ^b (Alpha = 0.05)
Direct Observation	48.2 (93)	25.9 (129)	<0.001
Interprofessionalism	14.5 (28)	5.2 (26)	<0.001
Specific	91.2 (176)	79.8 (398)	<0.001
Actionable	61.7 (119)	44.5 (222)	<0.001
Personality-based	14.5 (28)	13.6 (68)	0.76
General	58.5 (113)	62.7 (313)	0.31
Reinforcing	97.4 (188)	93.4 (466)	0.03
Corrective	66.3 (128)	50.7 (253)	<0.001

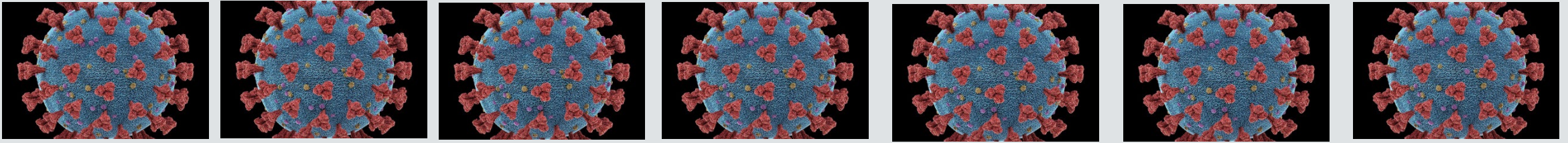
iPACE TIMELINE





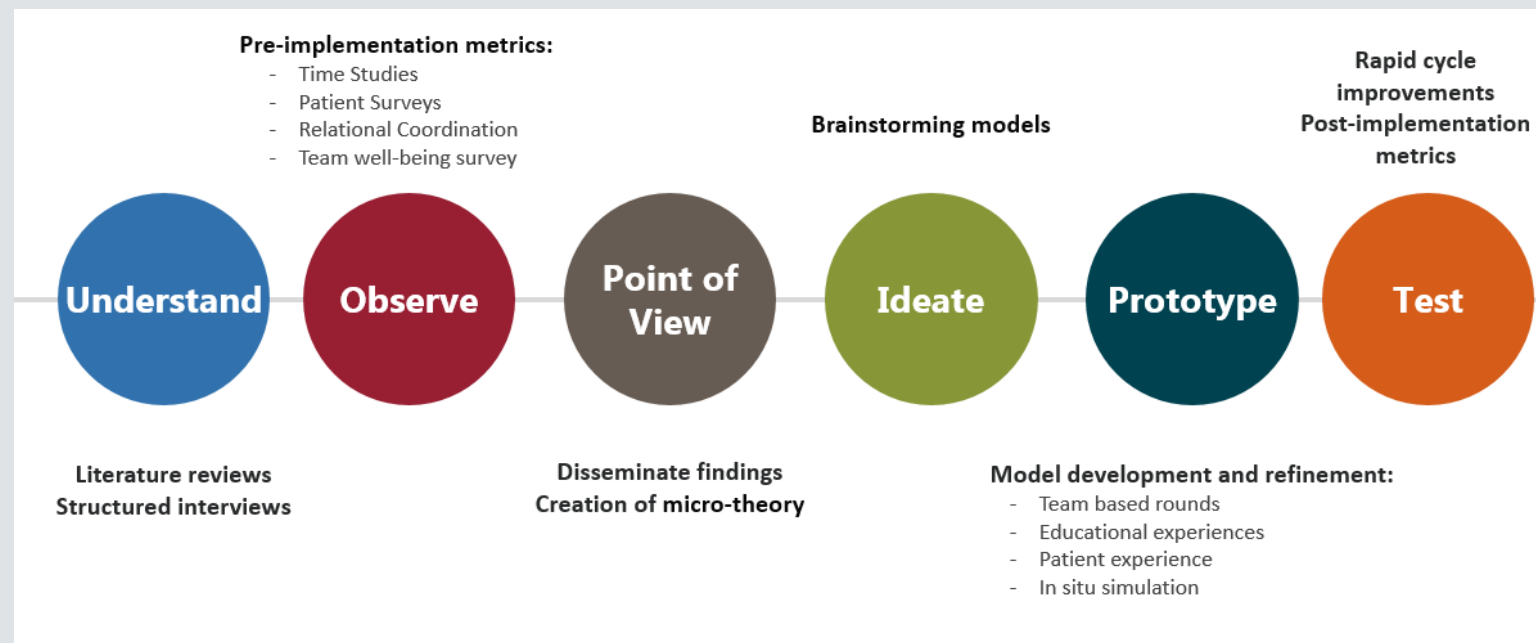
2019: AMA “Re-imagining Residency” \$2M Grant to build on the pilot project outcomes to expand the inter-professional team-based rounding and care model over 5 years:

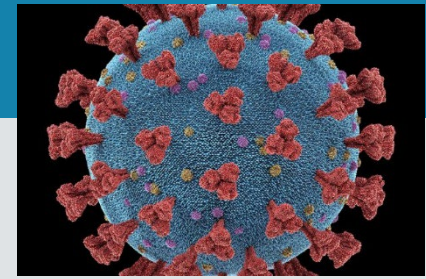
- **ACROSS:**
 - Spread the iPACE model in **inpatient clinical learning environments**
- **OUT:**
 - Introduce the core principles of iPACE into **outpatient and rural training settings** to investigate the effect of interprofessional, team-based care **on health care disparity outcomes**
- **OVER:**
 - “Imprint” interprofessional, team-based care in **medical school electives**



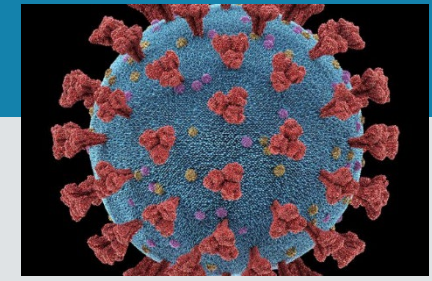
- How to move innovation forward during a pandemic?
- How to modify iPACE approach to incorporate technology to keep families “at” the bedside?
- What construct to consistently spread iPACE to different units?

Design Thinking





- Original iPACE pilot quickly re-purposed to COVID unit
- Family Medicine iPACE unit launched 2019
 - Persisted through pandemic by adding iPads to keep family at bedside
- Pediatrics iPACE launched June 2022
- Internal Medicine
 - Re-launching July 2023 on all teaching units
- Inpatient Substance Abuse Unit
- Surgical Intensive Care Unit



- Rural Hospital launched iPACE in 2019 – suspended with COVID
 - Re-launched in 2022 in ICU setting
- Community Hospital
 - Launched iPACE in 2022 on non-teaching Adult Internal Medicine Unit
- Family Medicine Outpatient Clinic
 - Did not gain traction and pilot abandoned after 2 years
 - Reasons?
 - FM already very interprofessional
 - No “bedside” to congregate at in the outpatient clinic
 - ?? Is iPACE uniquely an in-patient strategy

Existential crisis 3 years into the AMA grant ...

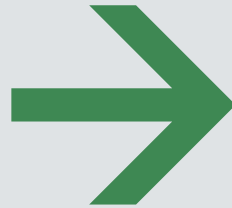
- How do we take ~7 years of iPACE experience and success and make ***sustained*** change?



What if.... we “Picked up the iPACE”



*iPACE™ - Innovate
Innovative medical
education model in Medical
Education*



*iPACE™ - Ops
The healthcare delivery
model at MaineHealth*

Let's pick up the iPACE!

The iPACE model is ready to be the catalyst to redesign inpatient healthcare delivery at MaineHealth



We are better together!

Why should we pick up the iPACE?

- *Will help achieve the Quintuple Aim*
- *Aligns with Accountable Health Organization value-based patient care*
- *Supports Interdisciplinary Care Rounds*
- *Aligns Magnet and Nursing Initiatives*
- *Significant financial benefit demonstrated in pilot project*

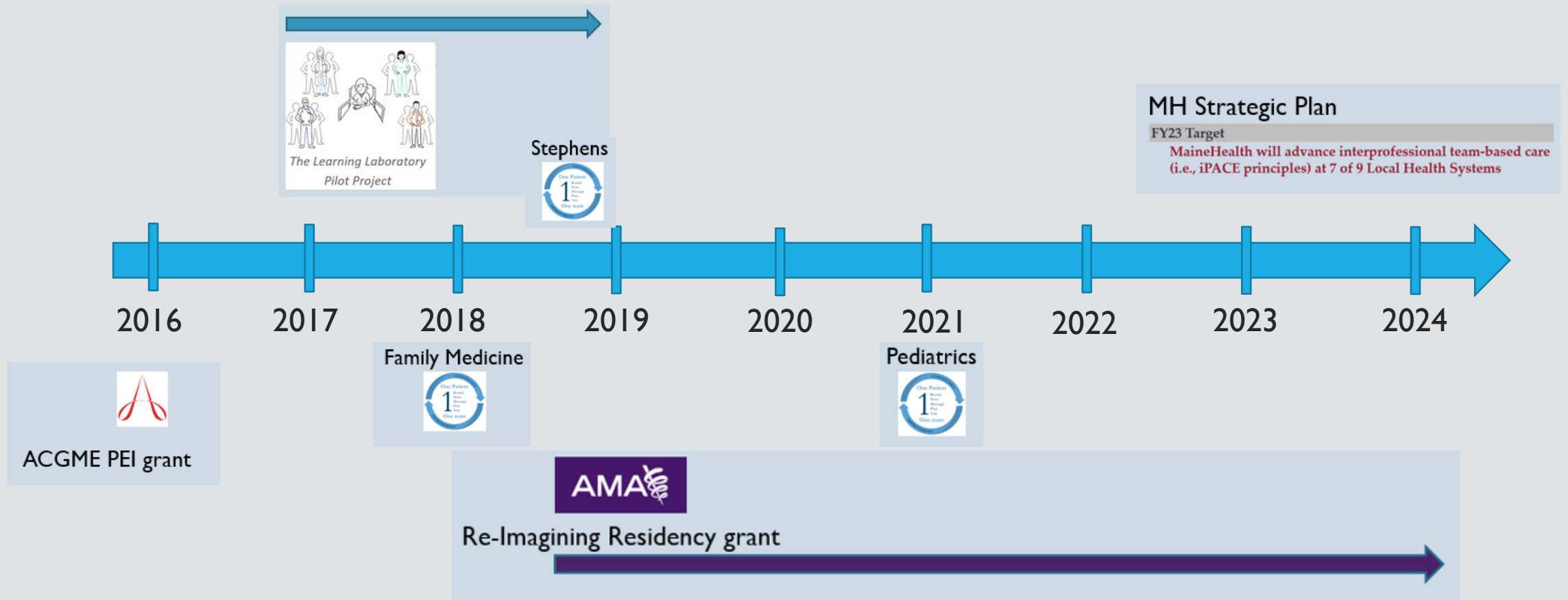
Measure	<i>pre-iPACE^a</i> Mean (SD)	<i>post-iPACE^a</i> Mean (SD)	<i>p-value</i>
Experience professionally rewarding	3.5 (1.00)	4.4 (0.62)	<0.0001
Team communication	3.7 (0.81)	4.1 (0.84)	0.03
Team actively doing things to improve patient safety	4.0 (0.95)	4.4 (0.83)	0.05

^aLikert scale of 1 - 5, where 5 is strongly agree and 1 is strongly disagree

PRINCIPLES OF OPERATIONALIZATION:

- Simplify the model
 - iPACE = rounding that includes at least 2 interprofessional team members **and the patient/family**
- Customize the model for each unique rounding unit
- Collect enough data to support continued operationalization

iPACE TIMELINE



MAINEHEALTH STRATEGIC PRIORITY



PROCESSES

Strategic Goal

MaineHealth will advance a culture of innovation, continuous learning, and performance improvement; promoting a discipline of accountability.

Five Year Target

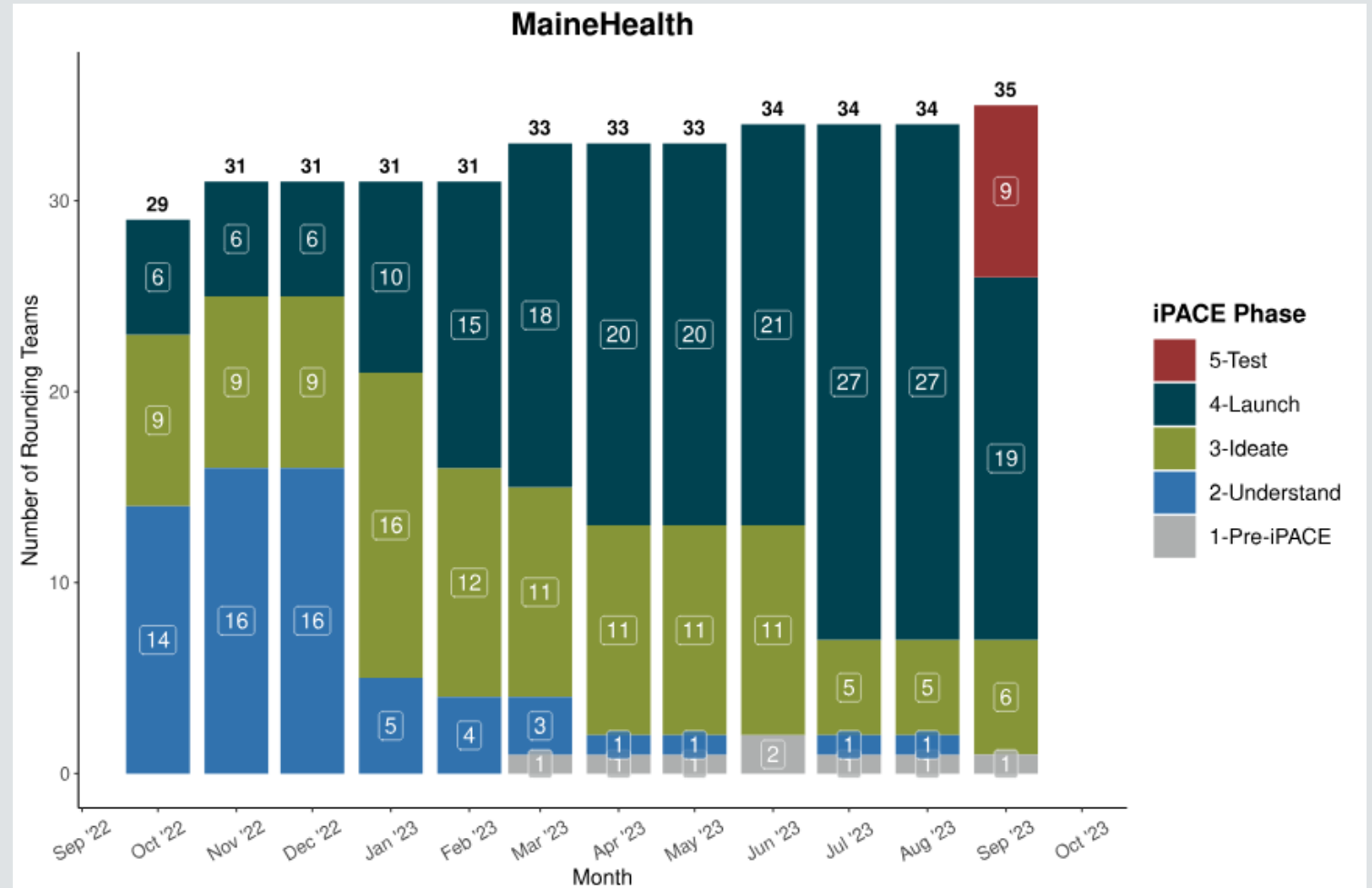
MaineHealth will become a **Learning Health System** by aligning science, informatics, incentives and culture to accelerate continuous improvement and care innovation.

FY23 Target

MaineHealth will advance interprofessional team-based care (i.e., iPACE principles) at 7 of 9 Local Health Systems

THE iPACE EXPERIENCE AT MAINEHEALTH

- 7/9 local health systems doing interprofessional iPACE rounds
- Increase from 6 to 28 rounding teams



SOUTHERN MAINE HEALTH CARE



Patient Placement: 8.4% increase in the percentage of patients discharged home versus to a SNF/Rehab



Patient Experience: 5% increase to Overall Rating & 6% increase to the 'Doctors Listened' as measured by Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores

Key Findings 2 year Pilot project

Financial Impact – Length of Stay

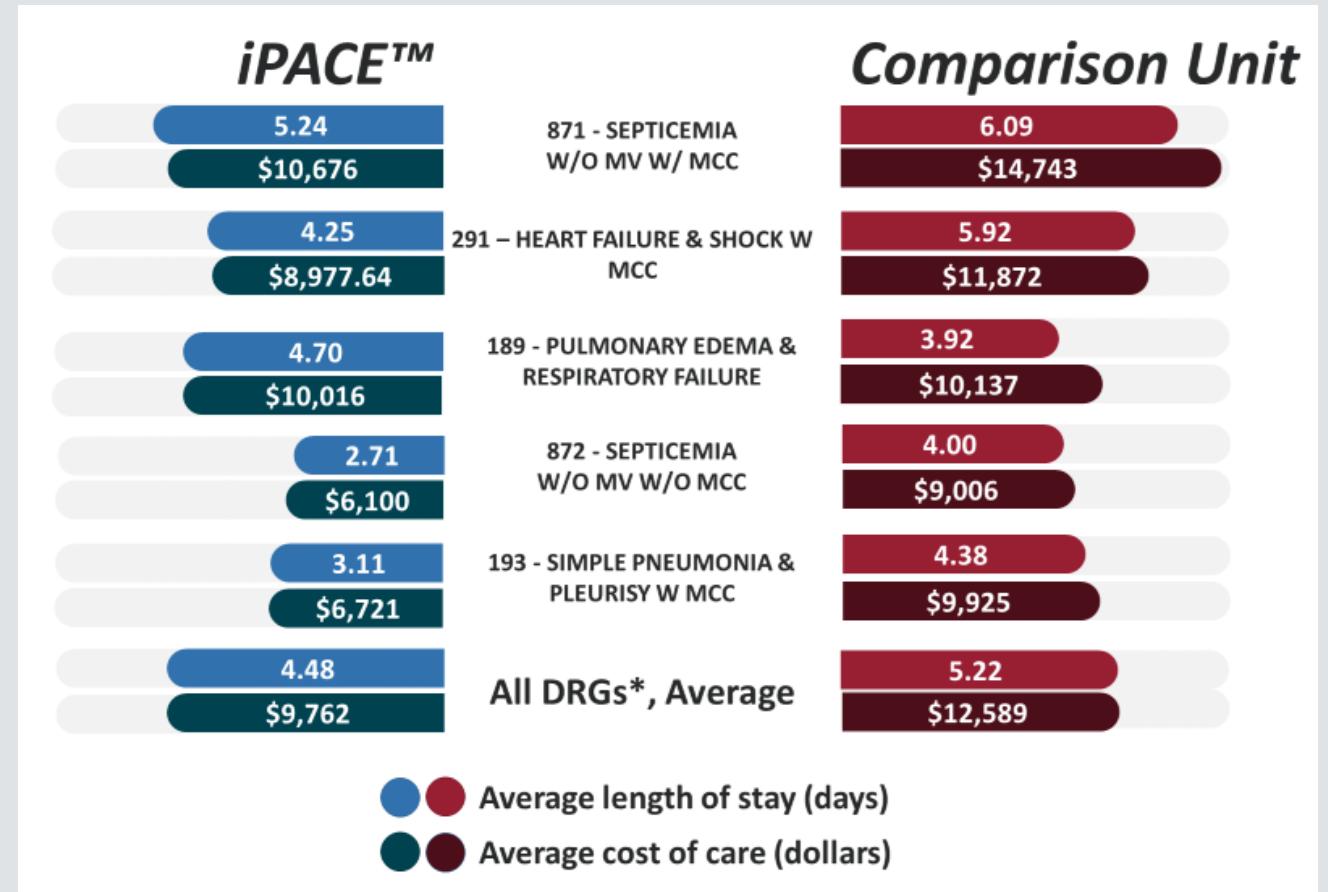
DRG - Diagnosis	iPACE unit	Control LOS (days)
871: Septicemia w/o MV	5.33	6.54
193: Pneumonia	3.05	3.81
All DRGs	4.76	5.29

Financial Impact – Cost of Care (\$USD)

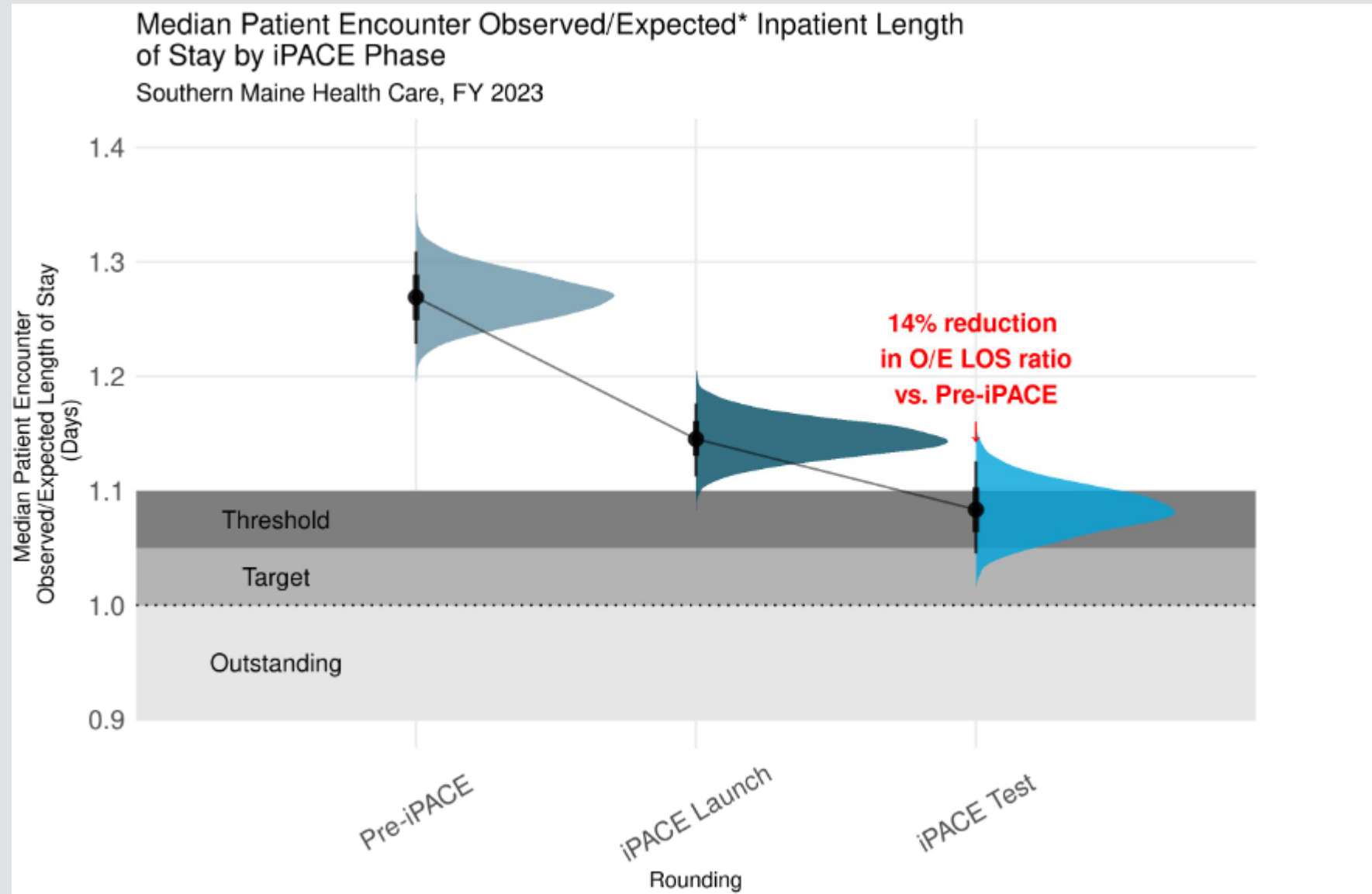
DRG - Diagnosis	iPACE Cost/Patient	Control Cost/Patient
871: Septicemia w/o MV	10,552	15,798
193: Pneumonia	6,055	7,026
All DRGs	10,662	12,268

Key Findings 2 year Pilot project

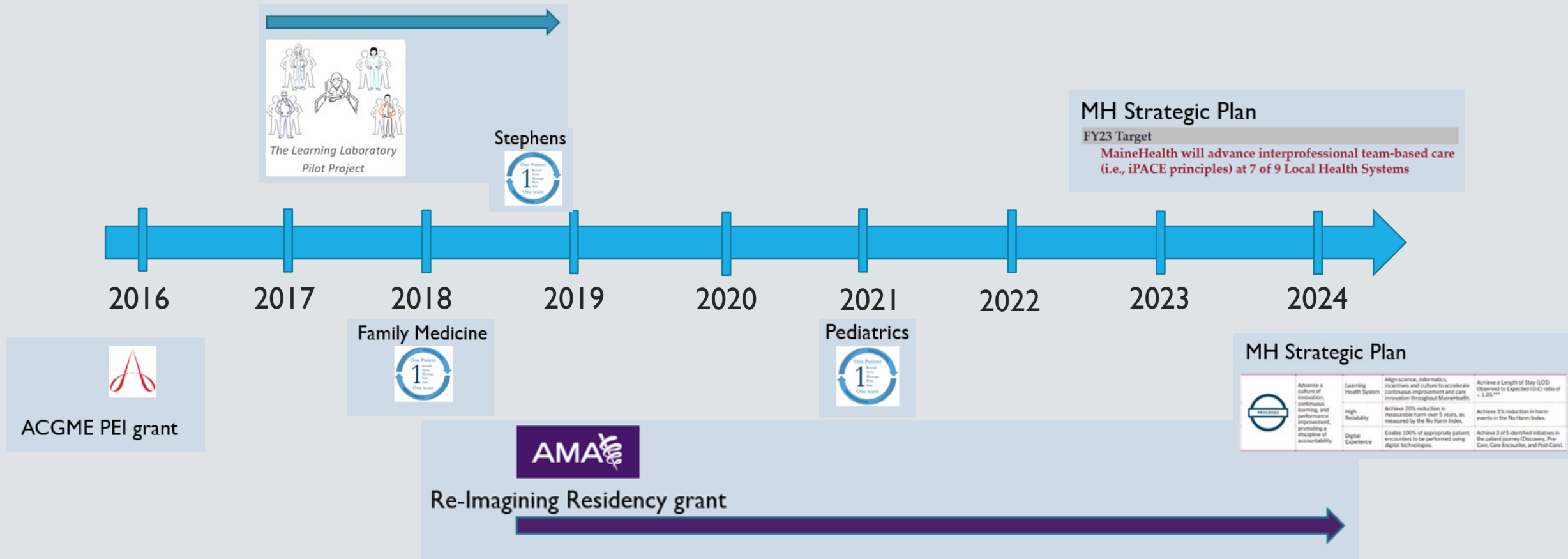
- **254** hospital days and **\$1,013,899** for the top 5 DRGs (n=355 cases) reduction
- **796** hospital days and **\$2,798,329** for all DRGs (n=964 cases) reduction




DECREASED OBSERVED/EXPECTED LOS RATIO AT SMHC



iPACE TIMELINE



MAINEHEALTH STRATEGIC PLAN 2024

 PROCESSES	Advance a culture of innovation, continuous learning, and performance improvement, promoting a discipline of accountability.	Learning Health System	Align science, informatics, incentives and culture to accelerate continuous improvement and care innovation throughout MaineHealth.	Achieve a Length of Stay (LOS) Observed to Expected (O:E) ratio of < 1.05.***
		High Reliability	Achieve 20% reduction in measurable harm over 5 years, as measured by the No Harm Index.	Achieve 3% reduction in harm events in the No Harm Index.
		Digital Experience	Enable 100% of appropriate patient encounters to be performed using digital technologies.	Achieve 3 of 5 identified initiatives in the patient journey (Discovery, Pre-Care, Care Encounter, and Post-Care).

*** Specific to units where inter-professional team-based care principles have been applied

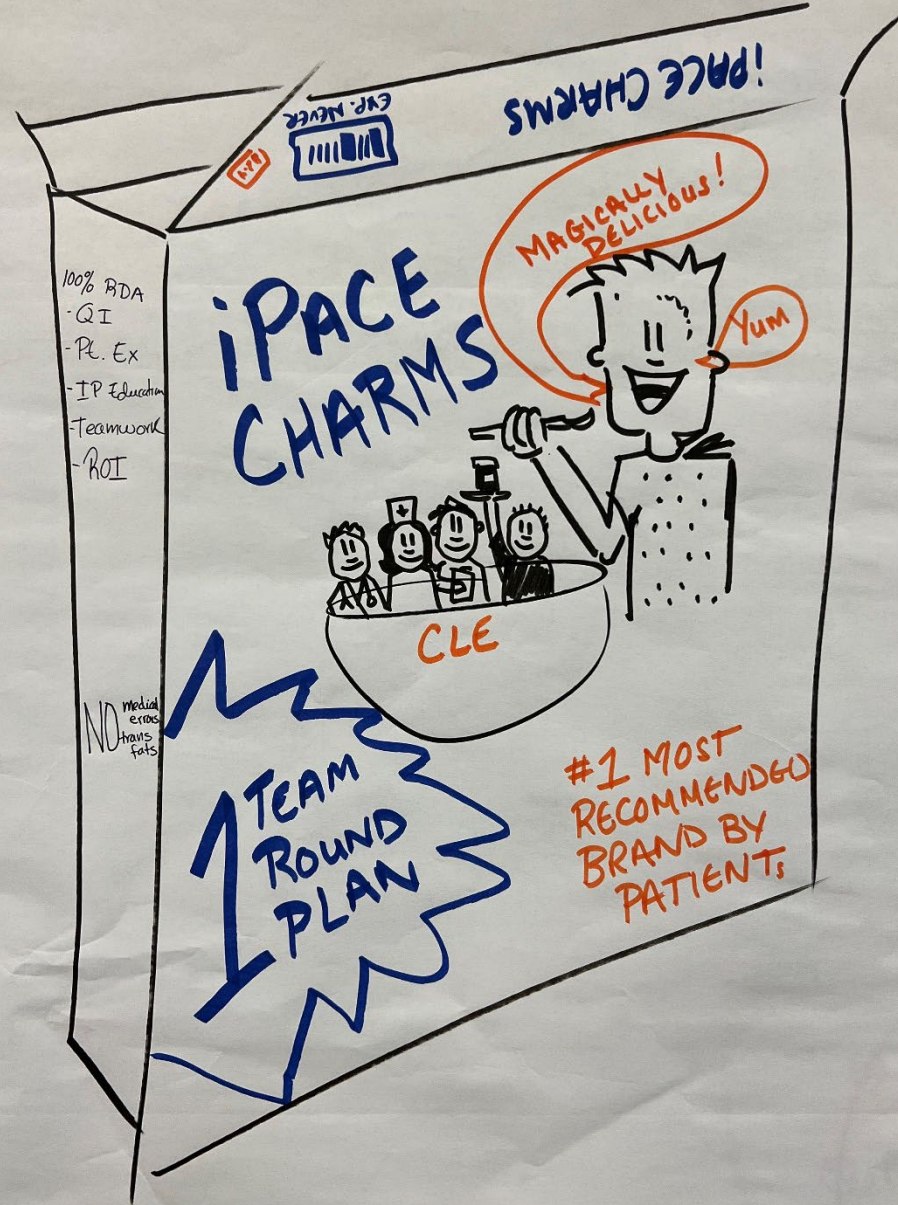
NEXT STEPS

- Support continued advancement of the model across MaineHealth
- Sustainability
 - Where does iPACE live?
 - When is the model self-sustaining and no longer a ‘model’?
- Measurement
 - At what point do we stop measuring?
 - When does inter-professional team-based rounding become part of the baseline on which other innovations are assessed?

IPACE BOOK



“This is the story about an idea.”



Email us at iPACE@mainehealth.org

Visit us at <https://ipace.us/>



Kalli Varaklis, MD, MSED



Bob Bing-You, MD,
MBA, MSED



Thomas Gearan, MD



Sarah Hallen, MD



Tom Van der Kloot, MD



Melissa Zelaya-Floyd, PhD
Program Manager



Patti White
Program Coordinator



Alec Luro, PhD
Research Data
Analyst

