How Patient- and Family-Centered Hospital Communications Reduce Medical Errors

May 20, 2024

National Alliance of Healthcare Purchaser Coalitions
Driving Health, Equity and Value

Moderator & Panelists

Moderator
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National Alliance
of Healthcare Purchaser Coalitions
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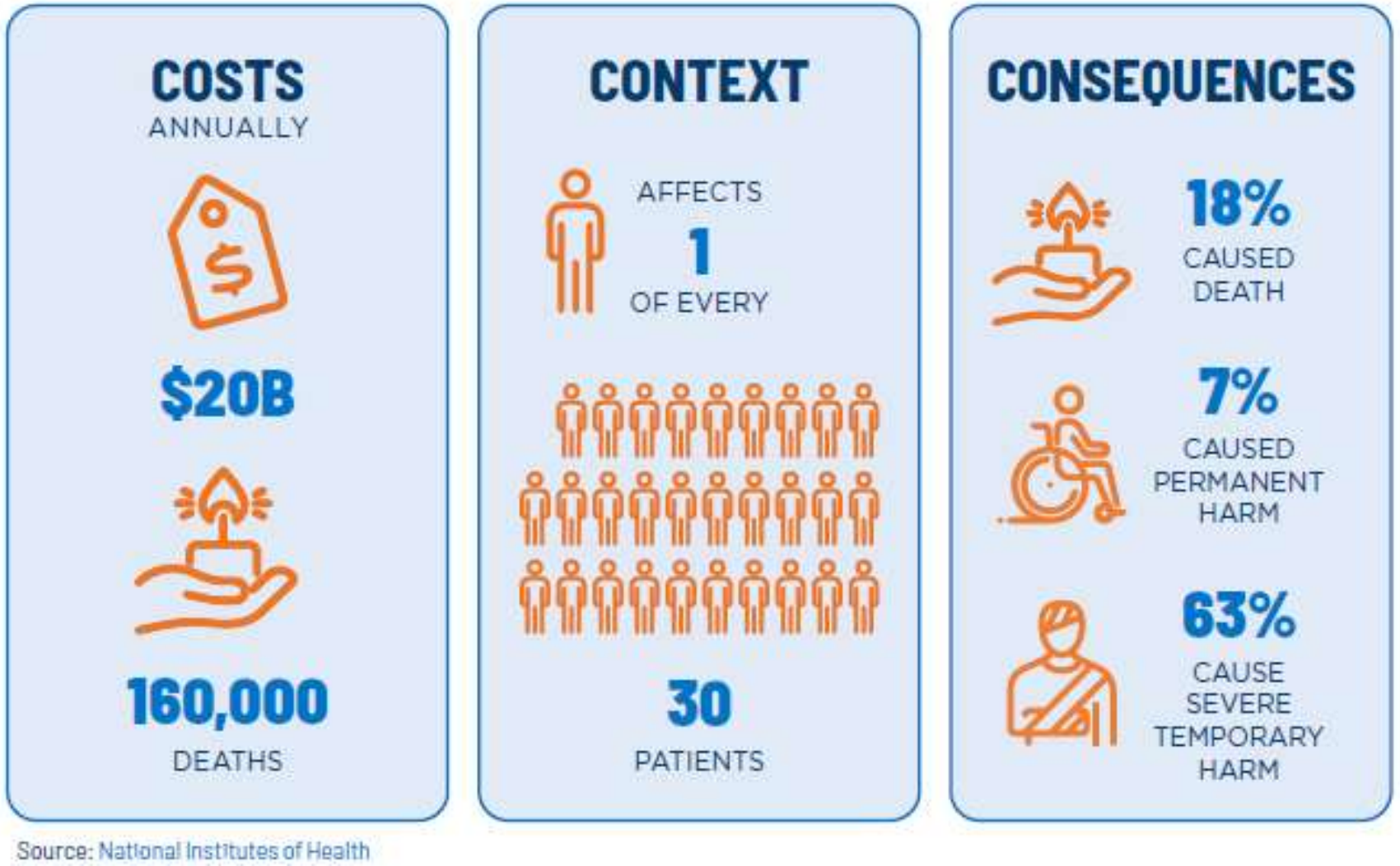
Webinar Background

The National Alliance is disseminating relevant PCORI Research to coalitions and employer purchasers across the country that will have a measurable impact on patient-centered experiences and can serve as a model for future and continual dissemination.

The materials educate employers on the value of using stronger evidence-based approach in their health care planning

PCORI helps people make informed healthcare decisions, and improves healthcare delivery and outcomes, by producing and promoting high-integrity, evidence-based information that comes from research guided by patients, caregivers, and the broader healthcare community.

Facts about ***preventable*** hospital errors in the US



Source: National Institutes of Health

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CHRISTOPHER P. LANDRIGAN, MD, MPH

PCORI-Funded Investigator,

Chief, Division of General Pediatrics, Boston Children's Hospital

Director, Sleep and Patient Safety Program, Brigham and Women's Hospital

William Berenberg Professor of Pediatrics and Professor of Medicine, Harvard Medical School

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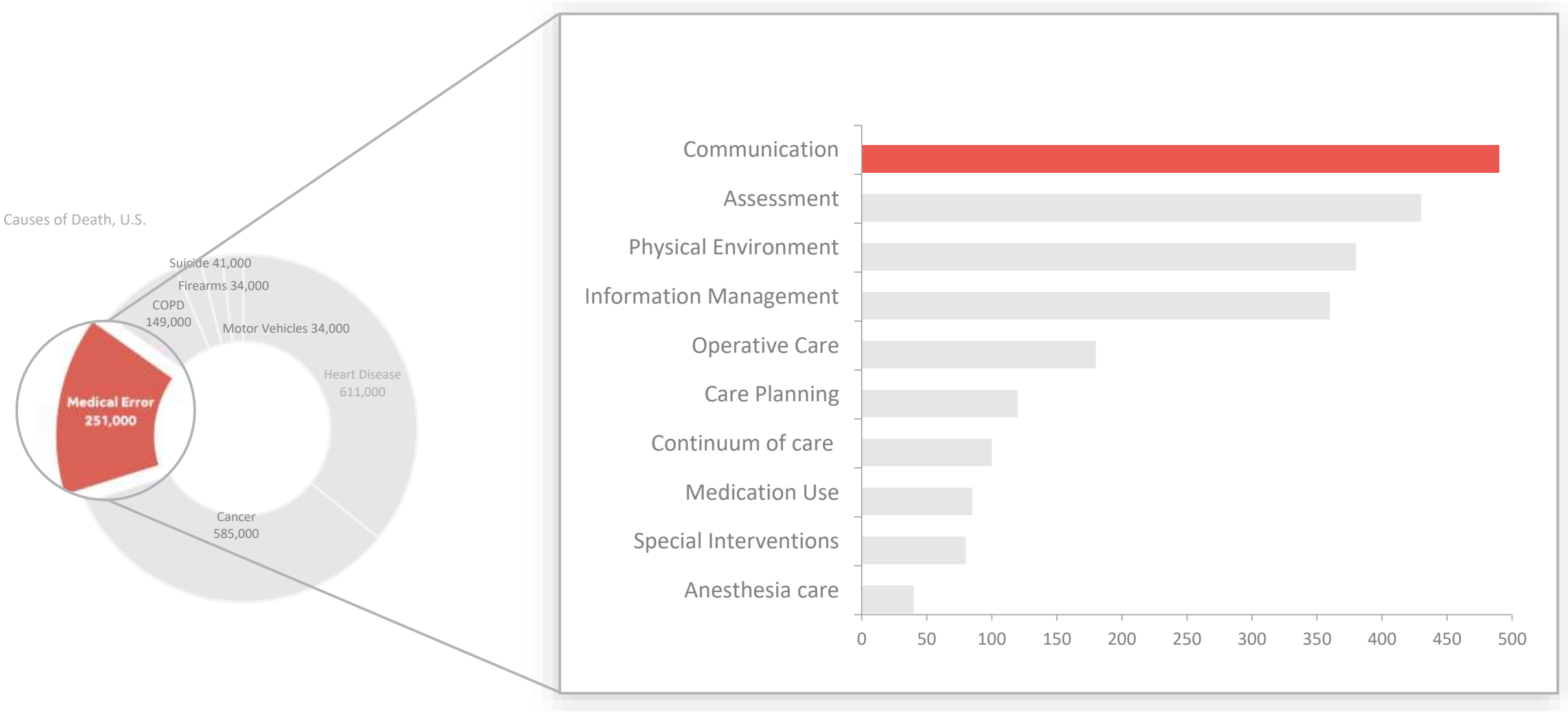
Medical errors are the third leading cause of death in the U.S.

The leading cause of medical errors is **communication failures**.



Joint Commission. (2011). Sentinel Event Statistics Data – Root Causes by Event Type (2004 – Third Quarter 2011)

I-PASS Institute Handoff Bundle

Structure / Universal Language

I — Illness Severity
Stable, "Watcher," Unstable

P — Patient Summary
Summary statement; events leading up to admission; hospital course; ongoing assessment; plan

A — Action List
To do list; timeline and ownership

S — Situation Awareness & Contingency Planning
Know what's going on; plan for what might happen

S — Synthesis by Receiver
Receiver summarizes what was heard; asks questions; restates key action/to do items

Comprehensive Change Management Bundle

I-PASS Evidence

JAMA® The Journal of the American Medical Association

The NEW ENGLAND JOURNAL of MEDICINE

Journal of Hospital Medicine

crico | Protecting Providers. Promoting Safety.

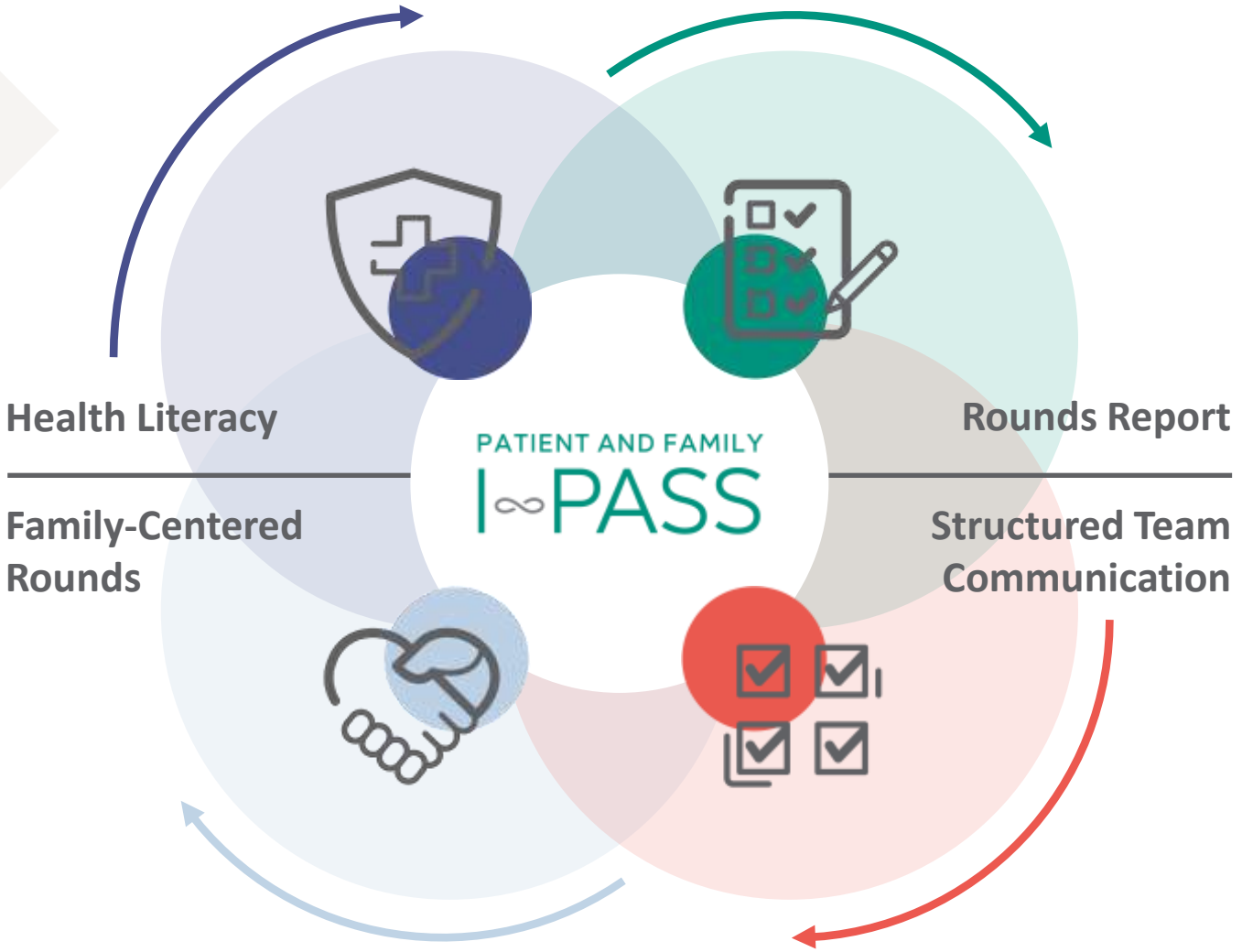
- Single center pilot study at Boston Children's Hospital found significant **reduction in medical errors** after handoff bundle implementation. (JAMA 2013)
- 9-center federally funded study found **30% reduction in injuries from medical errors** after I-PASS implementation. (NEJM 2014)
- Maximum benefits achieved with robust change management: **47% reduction in handoff-related harms** in AHRQ-funded 32-center I-PASS study in nursing, internal medicine, surgery, and across other clinical areas (JHM 2022)
- CRICO-funded study of ~500 randomly selected cases: found **49% of all malpractice claims involve miscommunications.** 40% of miscommunications involved a failed handoff, most potentially averted using I-PASS

Adapting I-PASS for Patient & Family Centered Rounds

Patient and Family I-PASS Study

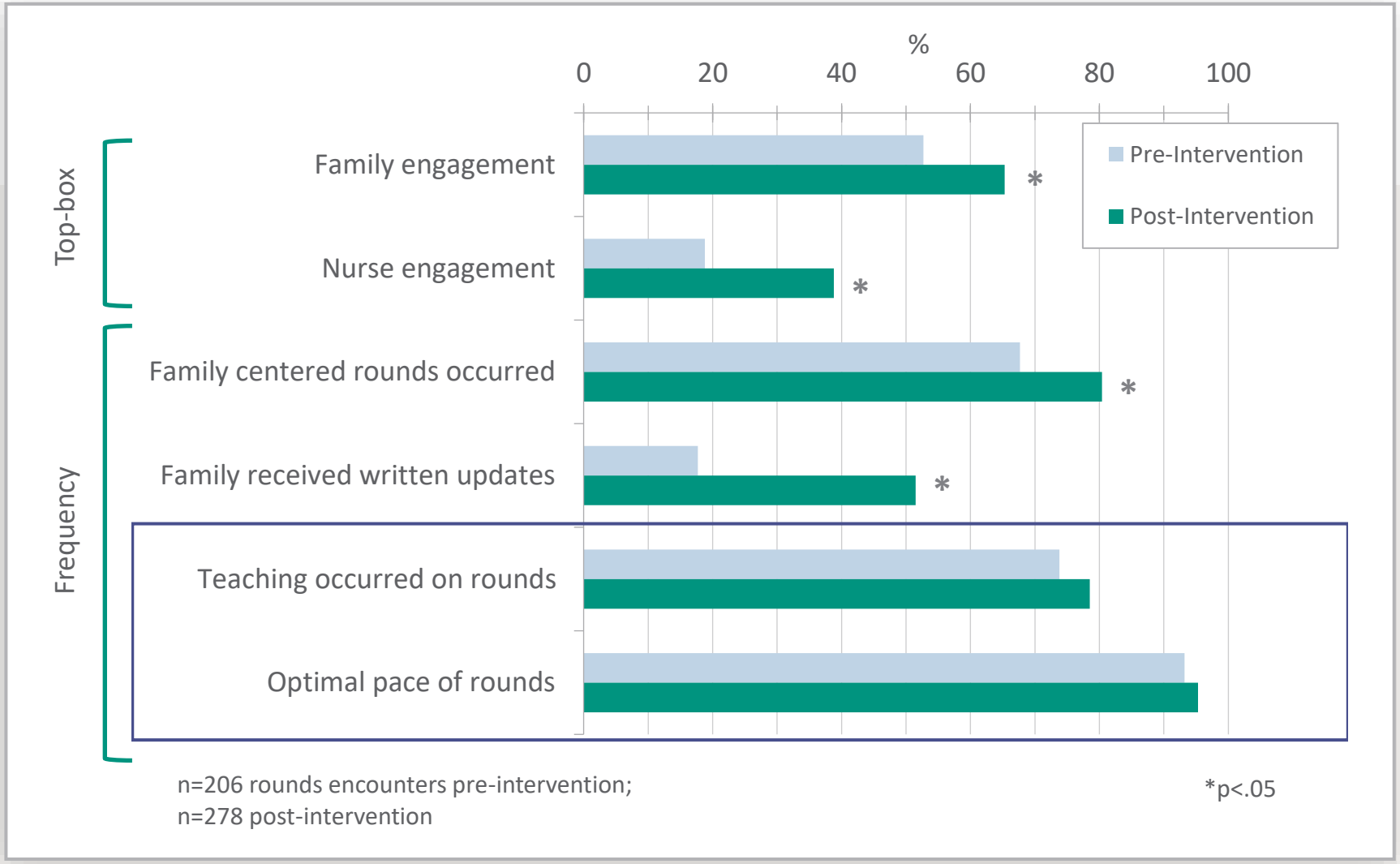
- **Funded by a grant from PCORI**

- **Aim:** To determine if improving communication and integrating patients/families into all aspects of decision-making during hospitalization will
  - Improve patient safety
  - Improve patient and family experience



Communication Process Scores

Khan et al, BMJ 2018

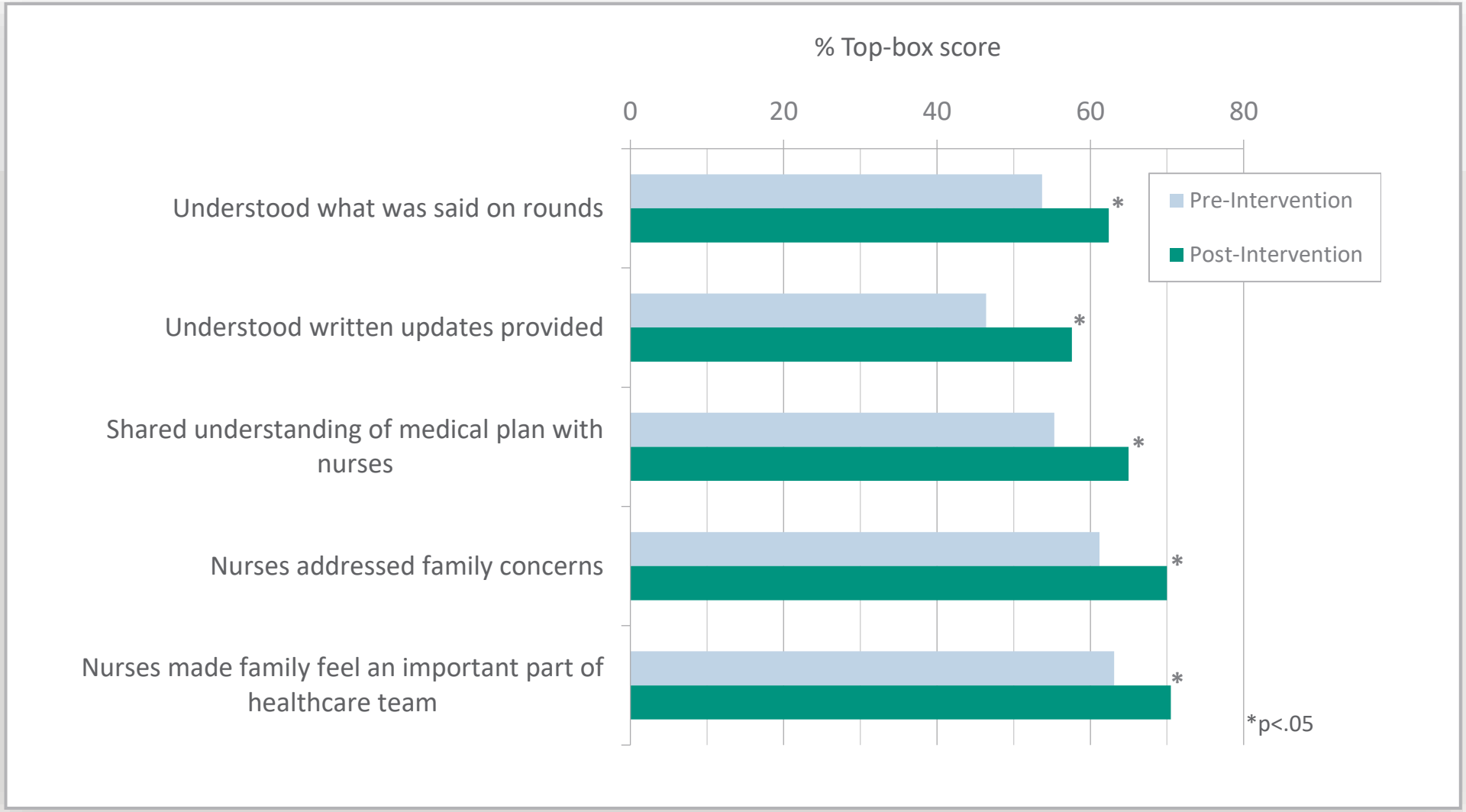


Medical Error Rates

Khan et al, BMJ 2018

Per 1000 patient-days	Pre	Post	P-value
Medical errors	41.2	35.8	0.21
Harmful errors/ Preventable AEs	20.7	12.9	0.01
Nonharmful errors/ Near misses	20.0	22.0	0.50

Aspects of Family Experience that Improved



CAROLE HEMMELGRAN

Georgetown University, MedStar Institute for Quality & Safety

National Alliance of Healthcare Purchaser Coalitions
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Children's Hospital Colorado

PATIENT SAFETY


A Tale of Two Cousins and their Sepsis Outcomes – Carole Hemmelgarn and Maree Lenz
Background
Alyssa was a nine year-old girl and reader, budding artist, and soccer player.
For a week, Alyssa had a cold sore that would not heal, was tired, and had a bloody nose.None of these signs were normal for her. She saw her Pediatrician on a Monday morning and was admitted to the hospital by Monday evening with a diagnosis of Leukemia (ALL) (February 2007).
Background
Maree was a sixteen year old young woman, basketball player, strong student, and Alyssa's cousin.
Maree had appetite loss, nausea, and achiness. She remained in bed all weekend till she had fainted in the shower Monday morning and went to urgent care immediately after. They had thought she potentially had appendicitis and suggested she go to the emergency room at the children's hospital (May 2019).
Presentation
Upon admission to the hospital, Alyssa was seen by a second year resident on the last day of her rotation, and she documented in her chart that she was anxious. Alyssa's course of care followed an Acute Lymphoblastic Leukemia study protocol for eight days.
Presentation
Maree was admitted to the hospital and placed on the medicine floor. She was seen by two different consulting services, rheumatology and infectious disease trying to determine a diagnosis. She had a low-grade fever, and her white blood cell counts was off.
Alyssa's Vital Signs
Hospital Course
On the evening of Alyssa's ninth day in the hospital and only the early morning her vital signs were changing. She was losing her lucidity frequently and required a diaper, put on oxygen because her respiratory rate was dropping, pulse ascending, blood pressure dropping and was cognitively declining.
When Alyssa started deteriorating, they thought she was anxious and kept meeting her with Ativan. This went on for twelve hours until a rapid response team was called, and she was rushed to the PICU. She was a classic case of failure to rescue. She had a hospital acquired infection (Clostridium difficile) and was septic. She died ten days after being diagnosed with ALL.
Hospital Course
Maree's vital signs started changing on the second night of her hospital stay. She became short of breath and required oxygen, was uncomfortable and becoming disoriented.
Maree's Mum called me in the early morning hours telling me she was not [illegible] alone. Maree She recognized her [illegible] Kiss, wanna like when Alyssa [illegible] their (late) [illegible] her diagnosis [illegible] sepsis. [illegible] burts of sepsis.
Conclusion
I was there with Alyssa throughout her ten days in the hospital and have worked in healthcare my whole career. When Alyssa started failing, I knew something was wrong and kept articulating my concerns to the care team. I could not get them to listen to me. They kept saying she was anxious and would give her more Ativan when they could.
Conclusion
Maree course of care was different. When [illegible] septic the care team listened. This was because importance of listening to parents because
Correct Diagnosis
Sepsis from a hospital acquired infection (Clostridium difficile)
What if?
What if they would have asked if Alyssa was an anxious child, we could have told them no they would have listened to me on the night she was deteriorating and ask me questions have been different and she would be alive today.
Opportunities and Action Items
This is a story about two cousins. The first who died and the second who survived because of positive changes in the organization.
After Alyssa died, a rapid response team was implemented to respond to any concerns across the hospital. I was part of making it about their child.
The organization created a sepsis committee which I am a member of. This committee has created resources to support teams in doing on recognizing sepsis, order sets for providers, and efforts on educating parents and loved ones on looking for signs of sepsis. They [illegible] areas.
References
Alyssa, 4th Grade School Photo
Maree, High School Homecoming

MISSY DANFORTH

The Leapfrog Group

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About The Leapfrog Group

- National not-for-profit organization, founded by employers and purchasers, and headquartered in Washington, DC
- On a mission to trigger giant leaps forward in the safety, quality, and affordability of health care by using transparency to drive informed decision-making and promote high-value care
- The data we collect and the ratings we publish are used by national and regional health plans, employers and purchasing groups, transparency vendors, researchers, policy makers, healthcare consumers, and many others

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LEAPFROG HOSPITAL SURVEY

EXPLORES QUALITY AND SAFETY

The Survey is annual, includes broad range of patient safety, quality, and resource use measures, and is applicable to **all** hospitals.

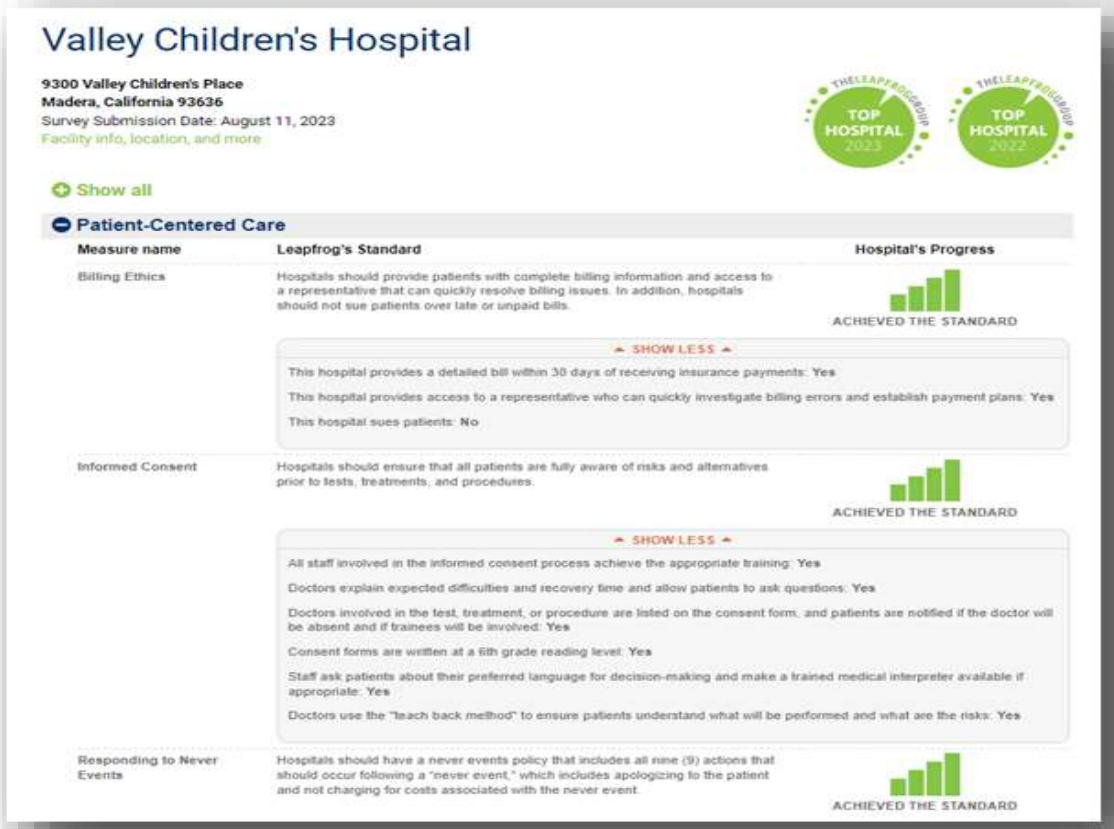
HOSPITALS SUBMIT A SURVEY

Hospitals **voluntarily** submit data via an Online Survey Tool.

PROGRESS TOWARDS MEETING NATIONAL STANDARDS IS REPORTED

Expert panels establish national standards for performance on each measures, and progress is publicly reported.

Hospital Survey Results – ratings.leapfroggroup.org



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Current Survey Standards focused on Communication with Patients and Family Caregivers

Informed Consent: Assesses whether hospitals have a robust informed consent process in place that includes training for staff, a process to ensure clinicians explain risks and patients can ask questions, forms written at a 6th grade reading level, ample access to trained medical interpreters, and the use of the "teach back method" with patients to ensure that patients/legal guardians understand what will be done, why it will be done, and what are the primary risks.

Patient Reporting of Concerns: Assesses whether hospitals have a protocol to follow-up on patient-reported concerns about their care that includes notifying all patients how to report concerns, having a hospital representative follow-up within 30 days of making the report, and logging all patient reports in an incident reporting system.

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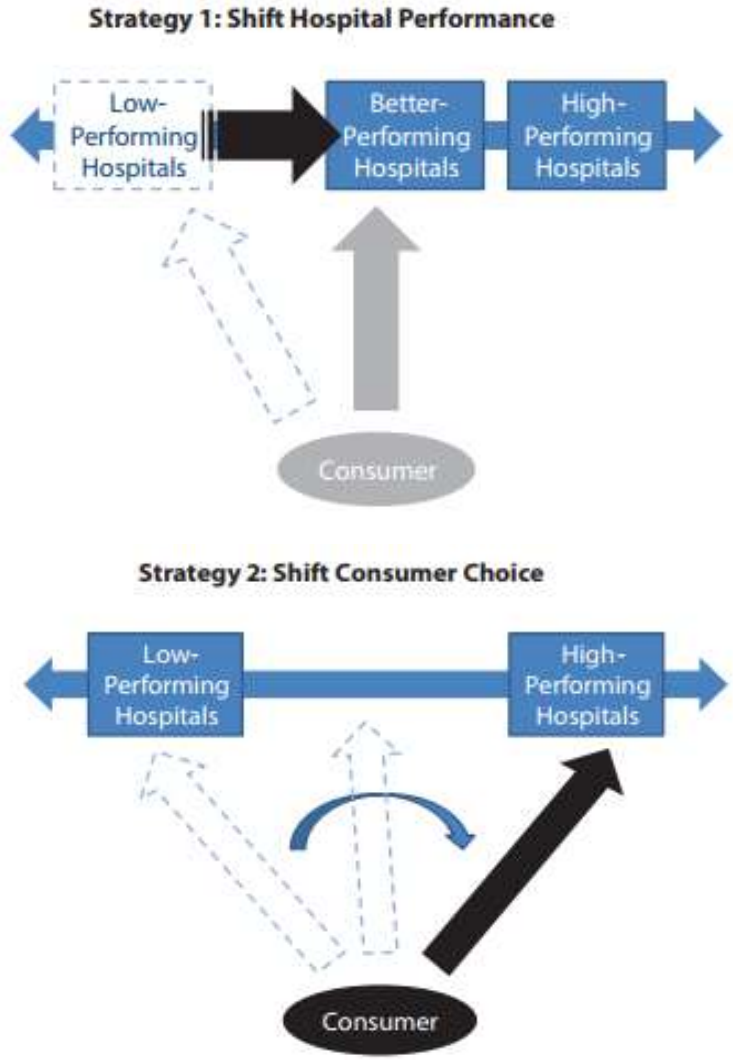
Employers/Purchaser Initiatives

- Educate their employees on choosing a place to receive care
- Leverage purchasing power to structure value-based payment arrangements
- Design benefits to steer employees to the most high-quality facilities
- Encourage transparency and accountability in hospitals in their community



Source: Altarum Institute

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Purchasing Groups and Business Coalitions

Purchasing Groups and Business Coalitions use Survey Results to engage their employer members around patient safety and quality and to inform value-based strategies.

GPBCH Greater Philadelphia Business Coalition on Health
DRIVING INNOVATION AND VALUE IN HEALTHCARE

GPBCH LEAPFROG BRIEF

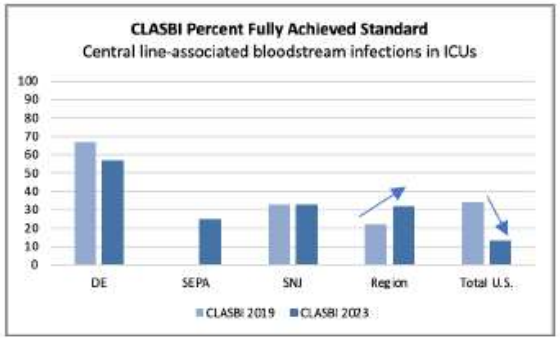
2019 vs 2023 Hospital Survey Findings

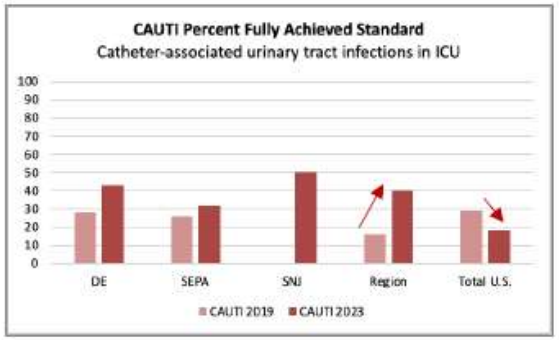
Healthcare-Associated Infections

Hospitals in Greater Philadelphia Region improved on fully meeting some Leapfrog standards during pandemic
More improvement still needed

Healthcare-Associated Infections (HAIs) are common and complicating, yet largely preventable for hospitalized patients. Each day approximately 25 patients in U.S. hospitals contracts an HAI. These infections can delay recovery, increase expense of a hospital stay, and even result in death. Of approximately two million American patients who acquire an HAI annually, an estimated 90,000 will die. Studies have shown that selected HAIs can be reduced by as much as 70% with the help of the proper patient-safety interventions. The direct cost of HAIs to hospitals is estimated at between $28 billion and $45 billion. These costs are passed along to insurers and employers, as well as to patients in the form of higher out-of-pocket costs. (Leapfrog Group Castlight HAI Report)

This Brief shares Leapfrog Hospital Survey findings for HAIs for hospitals in Delaware (DE), Southeastern Pennsylvania (SEPA) and Southern New Jersey (SNJ), comparing 2019 and 2023, pre- and post- pandemic. The results below show the aggregate of hospitals that reported on these measures each year and fully meet the Leapfrog Standard. Excluded are Unable to Calculate for Survey participants and hospitals that Declined to Respond to Survey. See page 2 for individual 2023 hospital results in the region.





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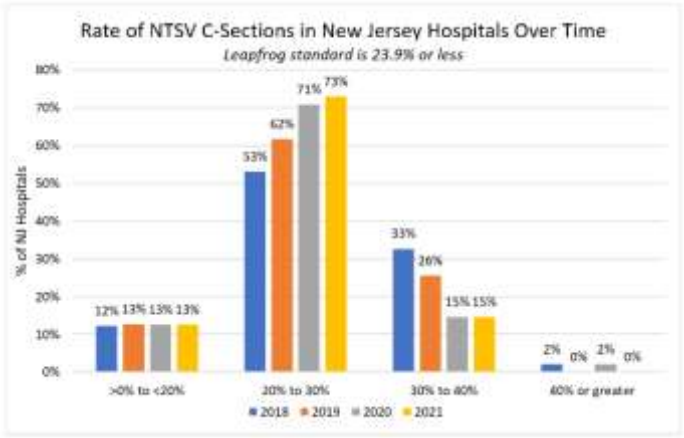
Health Plan Collaboration for Network Quality Improvement



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Q & A

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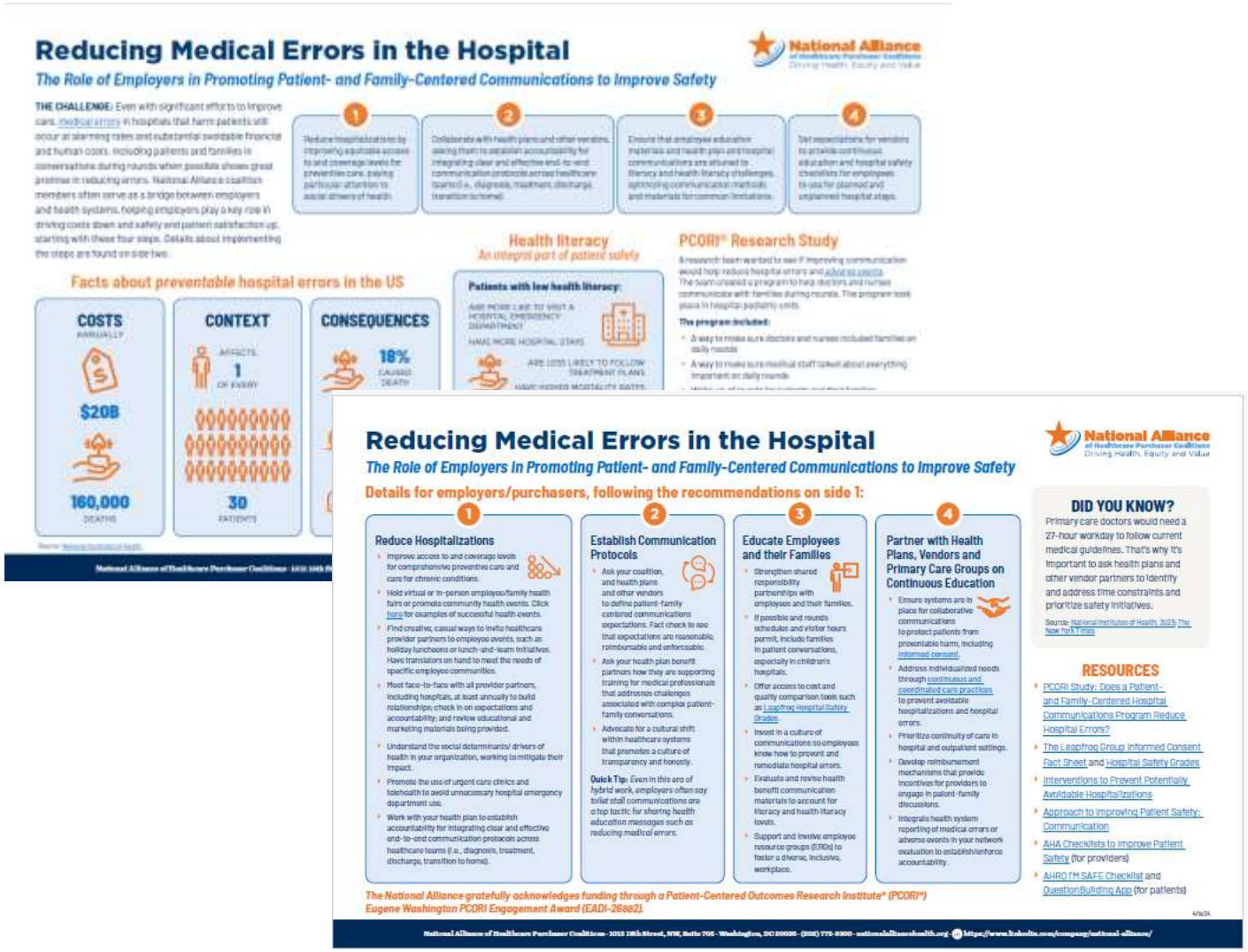
Resources

NEW Infographic released on "**Reducing Medical Errors in the Hospital**"

It includes:

- PCOR/CER research study
- Medical error fast facts
- The role of employers
- Recommendations for employers
- Additional resource links



Learn more at: https://www.nationalalliancehealth.org/strategic-partners/pcori/

Thank You

We would appreciate your feedback!

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Developed to Scale the I-PASS Methodology

I-PASS BETTER HANDOFFS. SAFER CARE.

The NEW ENGLAND JOURNAL of MEDICINE

JOURNAL OF PATIENT SAFETY

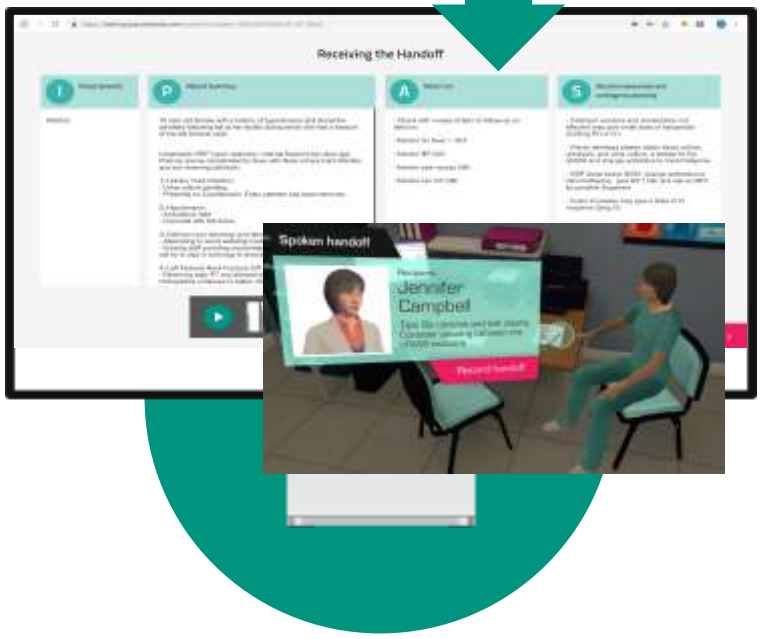
HARVARD BUSINESS SCHOOL

HARVARD MEDICAL SCHOOL

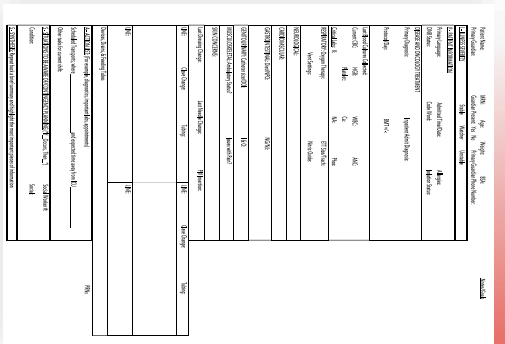
I-PASS® PATIENT SAFETY INSTITUTE

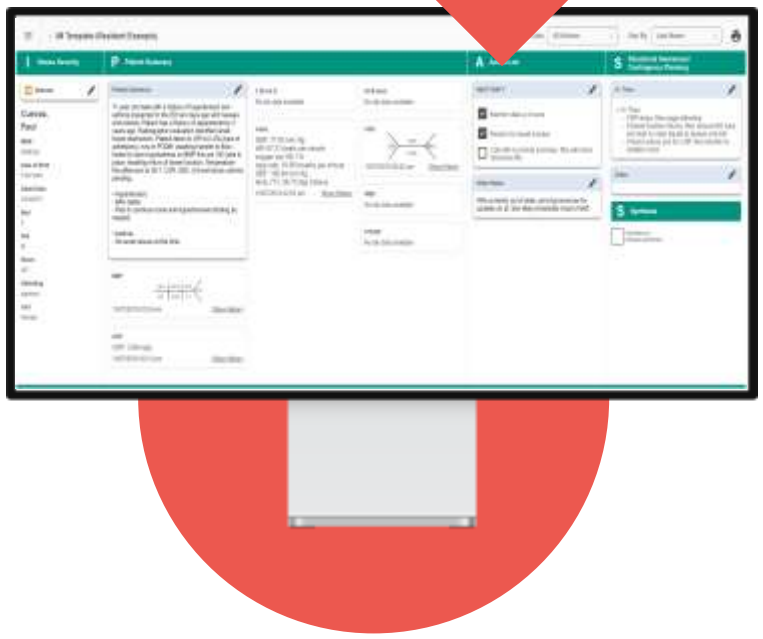
Digital Solutions Developed to Support Large Scale Hospital Implementations

LEARNING

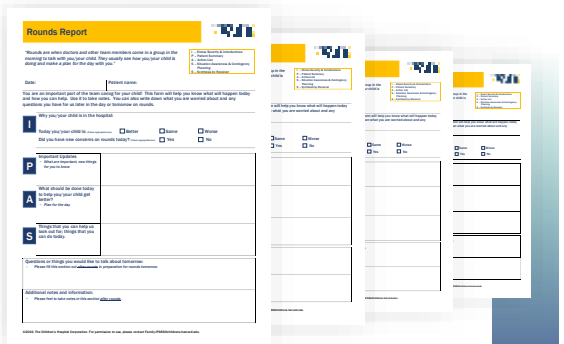


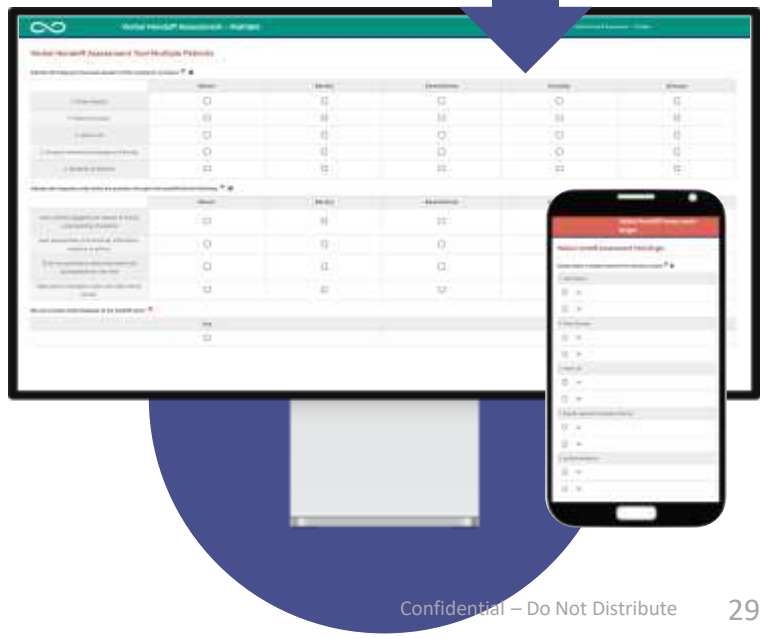
WRITTEN TOOL





MEASUREMENT





Workflow & Throughput Highlights

ED to Inpatient Callbacks

Brigham & Woman's Hospital

80%

Fewer Clarifying Callbacks

Reduced Sign Out Time

St. Jude's Cancer Research Hospital

18 mins

reduction in length of NICU sign-out per patient

Nursing Overtime Reduction

Hawaii Pacific Health

70%

reduction in Nursing Overtime

Decrease in Interruptions

Boston Children's Hospital

40%

reduction of interruptions

St. Christopher Hospital for Children's

92%

reduction in interruptions

The Evolution of I-PASS…A 15-Year Journey