National PRQI

Pediatric Readiness Quality Initiative

Measure • Reflect • Improve

Improving Emergency Pediatric Care Nationwide

Advancing Pediatric Readiness Through Quality Improvement

Katherine Remick, MD, FAAP, FACEP, FAEMS
Associate Professor, Pediatrics and Surgery/Perioperative Medicine
Associate Chair, Quality, Innovation, and Outreach
Co-Director, National EMS for Children Innovation and Improvement Center
Dell Medical School at the University of Texas at Austin

Acknowledgements

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The EMSC and NPRQI are supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award (U07MC37471) totaling $2.5M with 0 percent financed with nongovernmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement by, HRSA, HHS or the U.S. government. For more information, visit HRSA.gov.

NPRQI is also supported by Toyota Way Forward Fund.

The NPRQI is housed at the Dell Medical School at The University of Texas at Austin. The University of Texas IRB has reviewed this initiative in full and determined the project to be exempt from human subject research.

Understanding Pediatric Readiness and Quality Improvement

Healthcare systems have embraced quality improvement.
Pediatric patients have been largely excluded.

The Importance of Pediatric Readiness

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- >85% of children receive emergency care in general emergency departments (EDs), not in pediatric-specific facilities.
- However, many EDs see low pediatric volumes making it harder to prioritize pediatric-specific training, equipment, and systems.
- Pediatric Readiness means having the people, processes, and resources in place to provide high-quality.

What is Quality Improvement?

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You can't improve what you don't understand.

- Quality Improvement (QI) is the systematic, continuous actions that measurably improve care.

- It is the leading driver of Pediatric Readiness and is linked to better clinical care and outcomes for children.

60% reduction in mortality risk among injured children treated in trauma centers with high Pediatric Readiness

50% of EDs include children in pediatric QI processes, only 1/3rd are tracking pediatric-specific indicators

High Quality Care: The Challenge

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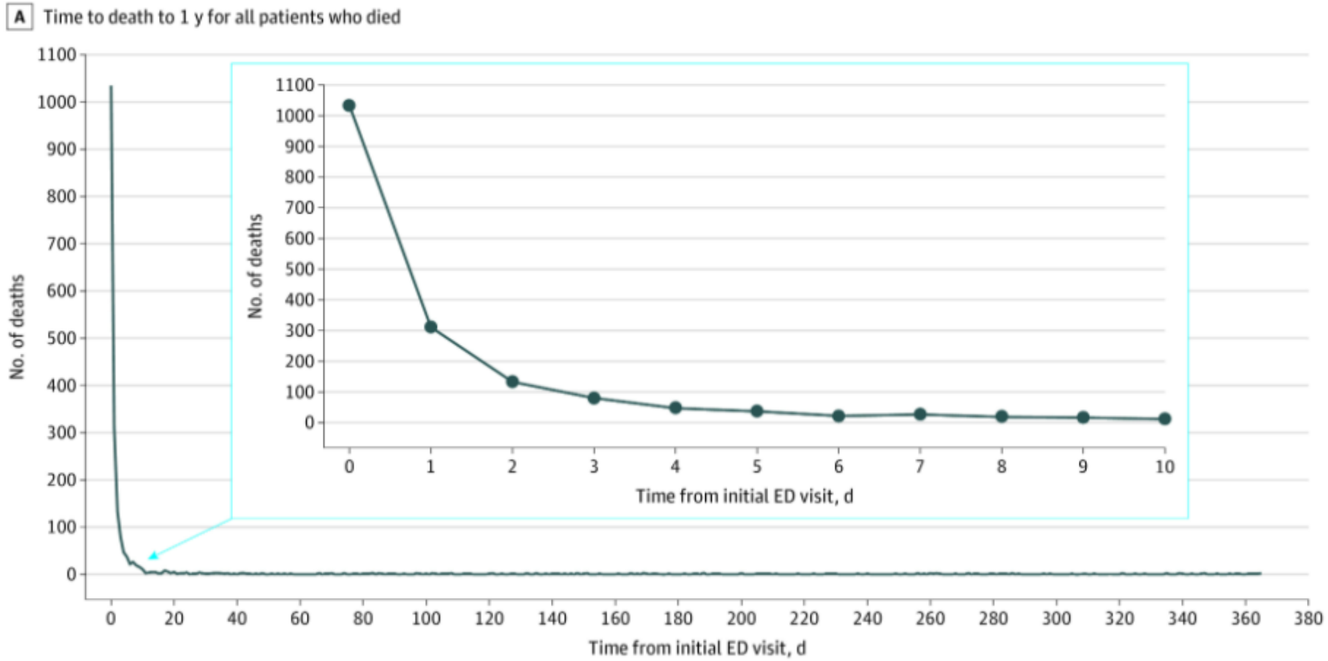
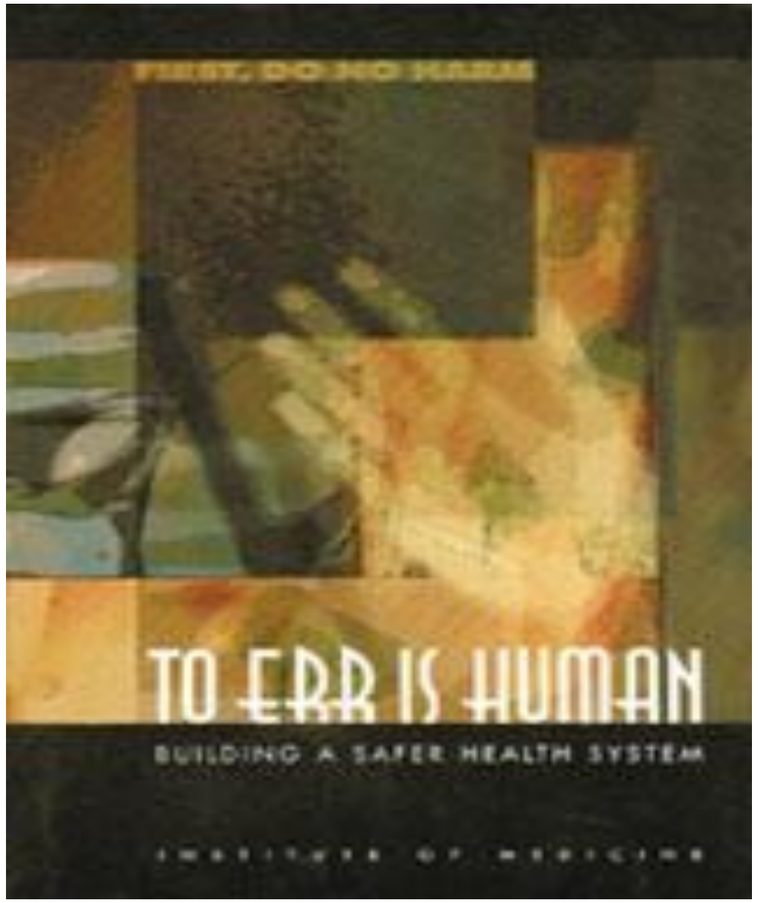
Every system is perfectly designed to get the results that it gets.





Newgard et al. JAMA Netw Open. 2023;6(1):e2250941; Newgard et al. JAMA Surg 2022 Apr 1;157(4):e217419
Agency for Healthcare Research and Quality; https://www.ahrq.gov/

Washington (DC): National Academies Press (US); 2000.

Pediatric QI and NPRP Score Connection

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25-pt increase in the adjusted pediatric readiness score

2,143 children's lives could be saved across the U.S. each year[3]

For references, visit https://bit.ly/pedsreadyimpact

The National Pediatric Readiness Project (NPRP) empowers EDs to improve their ability to provide high-quality care for children.

- NPRP provides free assessments and resources to identify readiness gaps.
- Pediatric QI provides a framework to address gaps, implement solutions, and track improvements.
- Raising a hospital's Pediatric Readiness Score could be life-saving.

Barriers to Implementing Pediatric QI

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- Low pediatric volumes limit exposure to high-risk, low-frequency conditions
- Limited pediatric- or QI-specific training and resources
- Competing priorities
- Sustaining QI efforts over time is challenging without appointed personnel and support.

What is NPRQI?

What is NPRQI?

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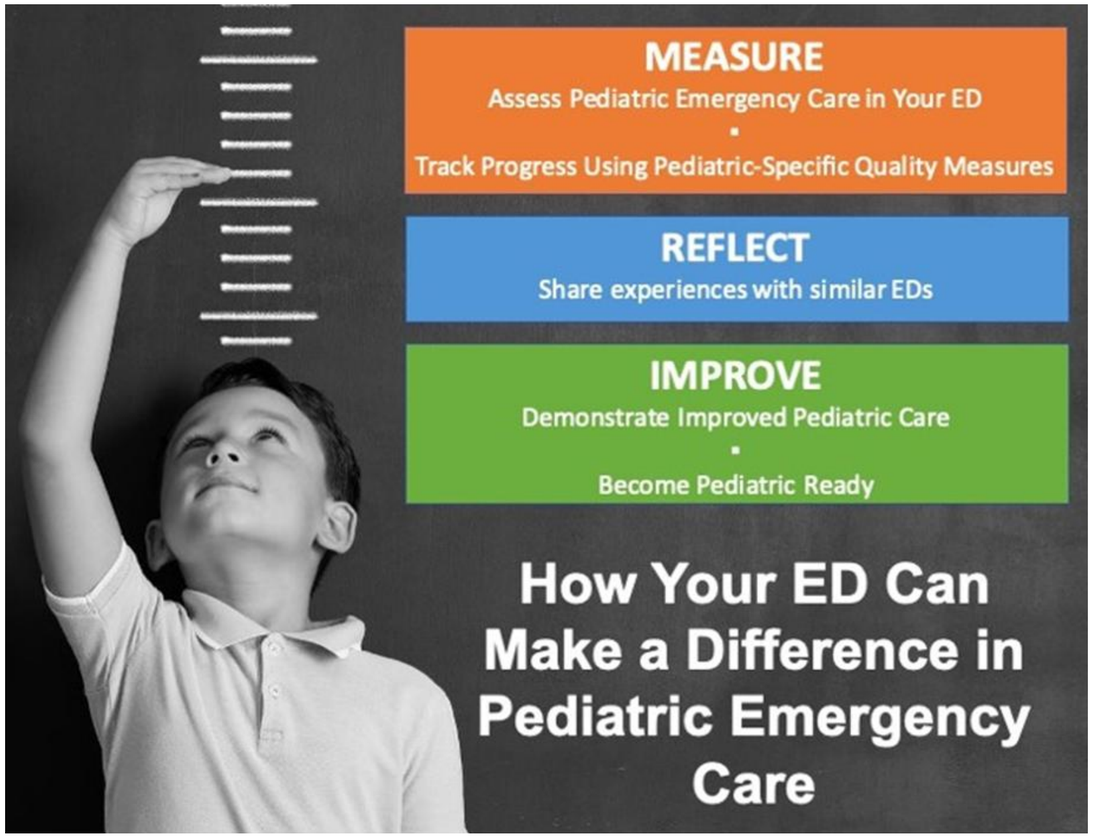
- NPRQI is a **free, self-paced platform** that enables EDs to securely measure, benchmark, and enhance their performance on essential pediatric processes.

- Offers participating hospitals a **framework and toolkit for continuous quality improvement (QI)**, aimed at improving pediatric readiness.

- Designed to inform and empower frontline staff who provide care to pediatric patients.



The Path to Better Pediatric Care Through NPRQI

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1. Access a Free and Secure Web-Based Platform
2. Capture the Pediatric Encounter
3. Measure and Transform Data
4. Reflect and Align Strategies
5. Improve and Drive Results

Supporting Frontline Health Care Teams

- Built for nurses and physicians on the front lines
- No QI expertise required
- No C-suite financial resources
- Built for multi-disciplinary collaboration, not physician-centric

NPRQI Framework

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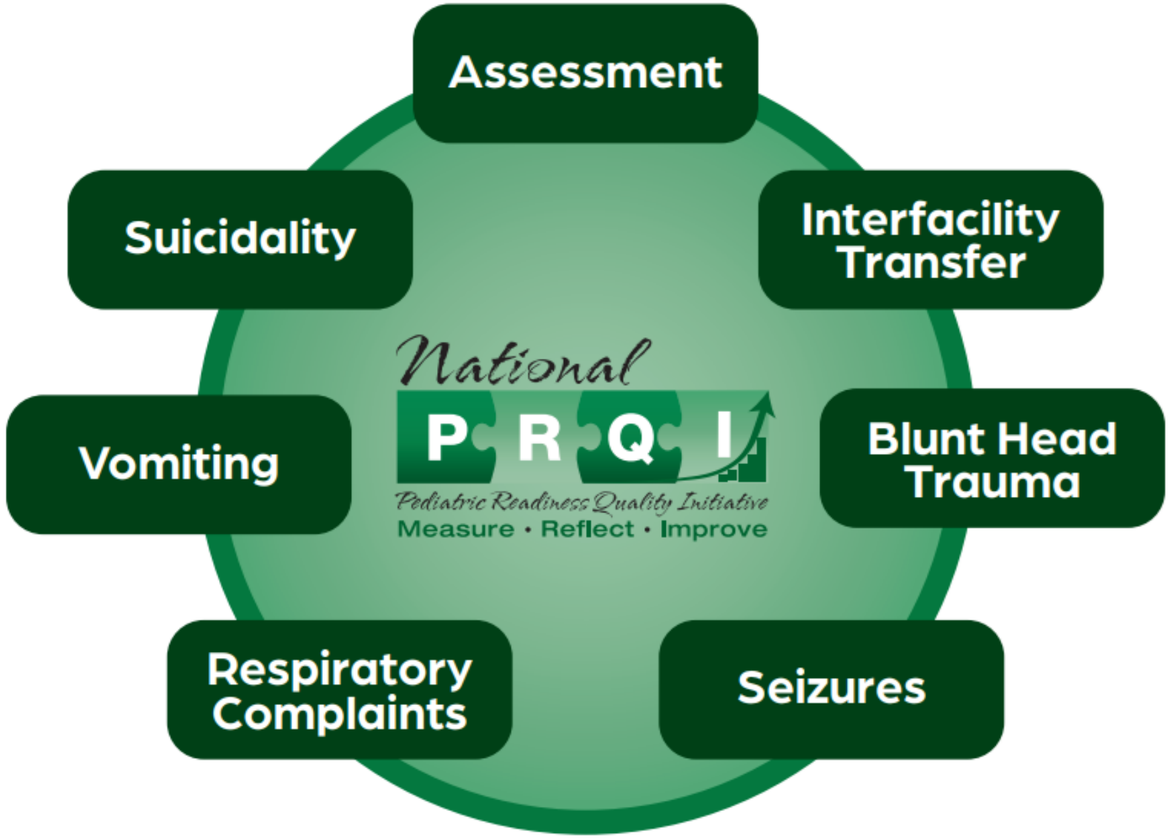
NPRQI's Seven Clinical Conditions



How NPRQI Measures Were Developed

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NPRQI's **28 evidence-derived quality measures** were developed using a **modified Delphi process** involving more than 25 national organizations, including:

- ACS Committee on Trauma (ACS-COT)
- Pediatric Trauma Society (PTS)
- Experts in emergency medicine, pediatrics, EMS, nursing, and regulatory bodies

Why This Matters:

- The 7 clinical conditions reflect common pediatric presentations that are relevant and actionable for low-volume EDs.

- Together, these 28 measures form a comprehensive, nationally endorsed framework designed to strengthen pediatric readiness and support trauma center performance improvement.

https://hcup-us.ahrq.gov/reports/statbriefs/sb277-Top-Reasons-Hospital-Stays-2018.jsp

BMJ Open Quality. *2022;11:e001803.*

Quality Measures

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Clinical Condition	NPRQI Quality Measures
Assessment	% of pediatric patients with a weight documented in kilograms only
	% of pediatric patients with pain assessed
	% of high acuity pediatric patients with vital signs re-assessed
	ED length of stay
	Median time from triage to first intervention

Quality Measures

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Clinical Condition	NPRQI Quality Measures
Interfacility Transfers	% of transferred pediatric patients who met the site-specific criteria for transfers
	% of transferred pediatric patients that were discharged from the receiving center within 24 hours of arrival
	Median time from ED arrival to transport

Quality Measures

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Clinical Condition	NPRQI Quality Measures
Blunt Head Trauma	% of pediatric patients with a full set of vital signs obtained
	% of pediatric patients with a Glasgow Coma Scale reassessment
	% of pediatric patients with a head CT that met one or more of the PECARN criteria
	% of pediatric patients that received hypotonic saline

Quality Measures

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Clinical Condition	NPRQI Quality Measures
Seizures	% of pediatric patients who had a mental status reassessment
	% of high acuity seizure patients who received at least one non-benzodiazepine anti-epileptic medication
	% of pediatric patients who underwent head CT
	% of pediatric patients who underwent laboratory evaluation

Quality Measures

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Clinical Condition	NPRQI Quality Measures
Suicidality	% of pediatric patients who had a structured suicide screen
	% of pediatric patients with a positive suicide screen who had a structured suicide assessment
	% of pediatric patients with a positive suicide screen who had a consultation with a licensed mental health professional
	% of discharged pediatric patients with a positive suicide screen that received a discharge safety plan

Continuum of Care

Patient Population

All Pediatric Patients

Extends Across the ED Encounter

- Assessment
- Diagnostics
- Interventions
- Disposition

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How Trauma Centers Can Get Involved with NPRQI

Register with NPRQI to get started

Enter charts to establish baseline performance

Compare performance with similar hospitals to identify strengths and gaps

Identify key interventions: Focus on what to improve first for maximum impact

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NPRQI Landing Page

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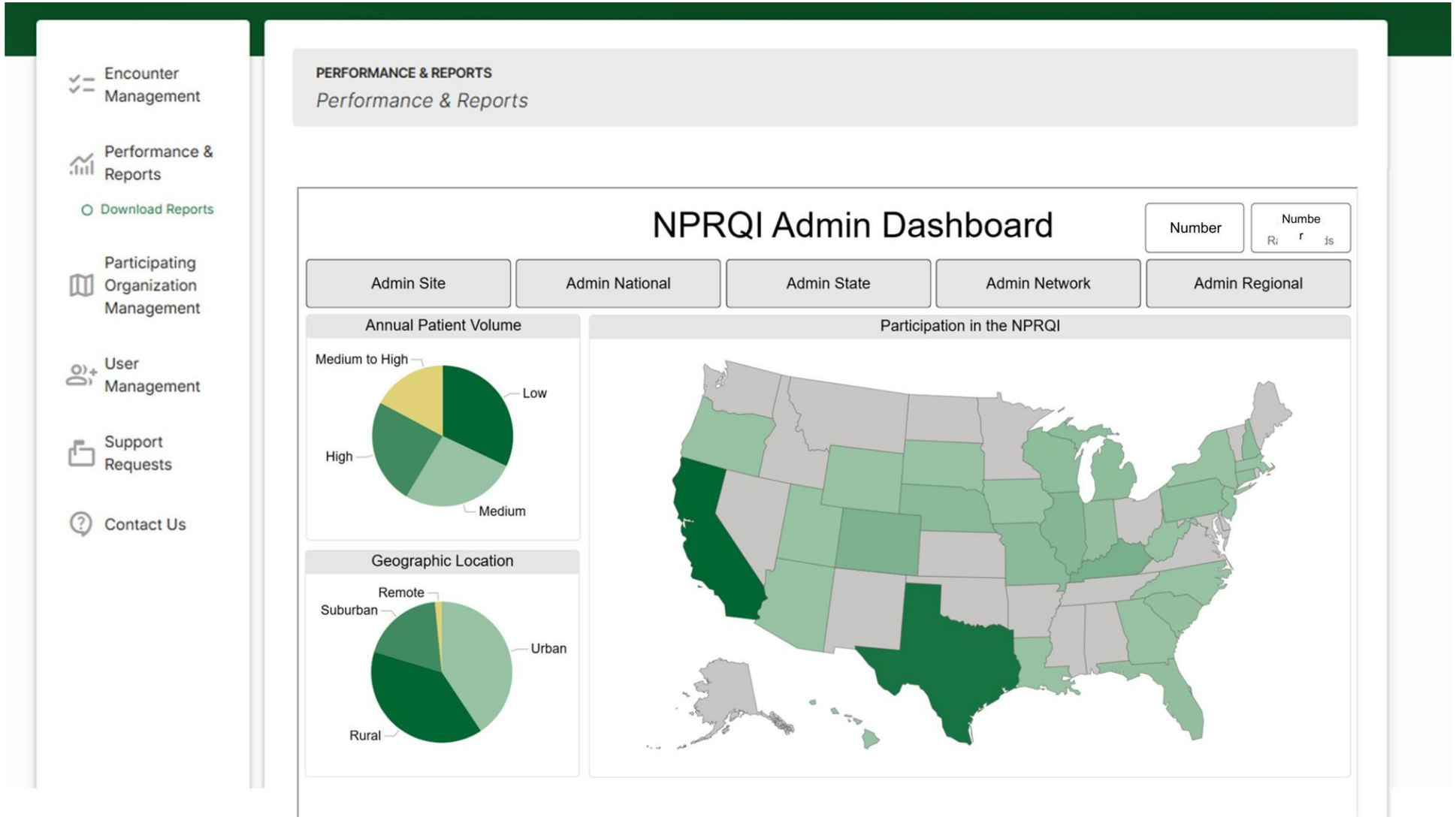

NPRQI Site Dashboard – Table View

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Performance Report:
Dates: 2023 Q1 to 2024 Q1 | Clinical Measures Group: All Patients (Core Measures)

Measures with fewer than 10 records will not be displayed

*Cohort performance represents the average of site performances for sites within the same patient volume category (displayed with minimum of 5 sites)

**National performance represents the average of site performances across all participating sites (displayed with a minimum of 5 sites)

Back to Landing

Patient Volume: Medium: 1,800 - 4,999 pediatric pa..

Bundle	# of Records	Quality Measure	Your Performance	National Performance **	Cohort Performance *
ASSESSMENT	150	% of pediatric patients with weight documented in kilograms only	96.7 %	63.9 %	63.7 %
		% of pediatric patients with pain assessed	54.0 %	79.3 %	78.4 %
		Median ED length of stay	49.5 minutes	183.9 minutes	147.5 minutes
ABNORMAL VITAL SIGNS	58	% of high acuity pediatric patients with vital signs re-assessed	56.9 %	82.5 %	78.1 %
	32	Median time from triage to first intervention	34.0 minutes	56.3 minutes	53.0 minutes
TRANSFER OF PATIENTS	6	% of transferred pediatric patients who met site-specific transfer criteria	--	96.6 %	97.0 %
		Median time from triage to transport	--	376.4 minutes	349.7 minutes
	0	% of transferred pediatric patients who were discharged from the receiving ED	--	--	--

Patient Demographics

Patient level filters are not applied to the National or Cohort Performance Metrics.

Age Category
All

Triage Level
All

Ethnicity
All

Race
All

Gender
All

Payor Source
All

Addressing Performance on Pain Assessment

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- **Education**
  - Training staff to ensure pain is assessed during triage
- **New policy**
  - Adopt validated pediatric pain scales
- **EMR Optimization**
  - Create an alert to ensure pain is reassessed following medication administration

How do you know if your proposed changes are "working"?

Tracking Performance Over Time

Enter encounter variables to keep data up-to-date (weekly, monthly, quarterly)

View NPRQI dashboard for graphical insights

Compare performance to your baseline data

Evaluate results - determine if your strategy worked or needs adjustment

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NPRQI Dashboard Graphical View

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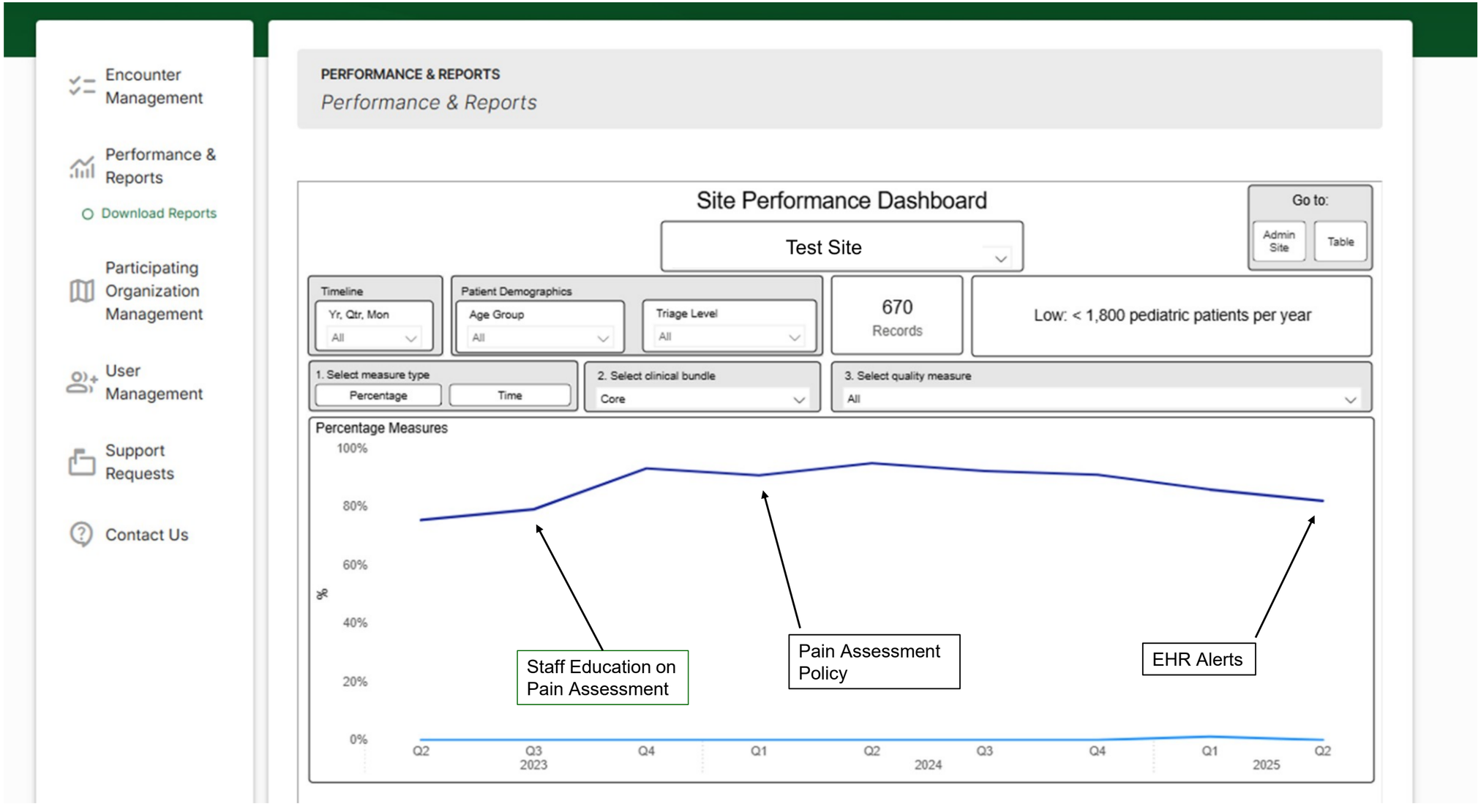

Benefits For EDs

Assess: Evaluate pediatric emergency care in your ED using NPRQI's nationally vetted measures

Track: Monitor your ED's performance over time and benchmark against state and national performance

Support: Meet verification standards inclusive of pediatric patient needs

Identify: Pinpoint key focus areas for improvement efforts

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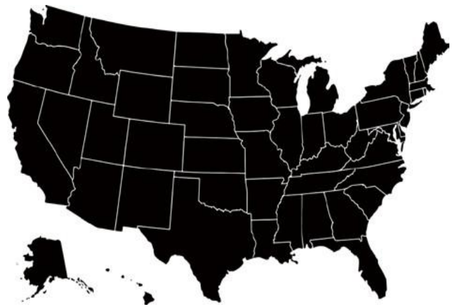
Performance Dashboards to align with State and Regional Efforts

EDs and Hospitals

Healthcare Networks

Trauma Service Regions (aggregate)



State / National (aggregate)

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How NPRQI Complements TQIP

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- **Pediatric-specific focus**: Injury is the leading cause of death in children
- **Timely feedback**: Near-real-time feedback and an annual site-specific report
- **Align with TQIP**: In the future, collaborating with ACS-COT to develop pediatric-focused outcome reports (e.g., mortality), integrating with NPRQI.
- **Professional credit**: MOC part IV credit for surgeons, ED, family medicine, and other physicians

The Future of NPRQI

New and Improved NPRQI

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We are excited to announce that NPRQI has upgraded to a new and improved data platform in January 2026.

Developed from two years of user feedback, this upgrade is designed to better align NPRQI tools and features with how ED teams work in real-world settings.

Upgrade: Modernize the platform for greater efficiency.
Developing options for electronic data entry.

Benefits: Faster performance, increased flexibility, and greater control for site users.

Impact: Ensure NPRQI continues to be a trusted resource for tracking data, supporting quality improvement, and advancing pediatric readiness nationwide.

About the Upgraded Platform

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- **Hosted in-house at Dell Medical School at The University of Texas at Austin**
- **One unified URL for everything** including registration, data entry, and dashboard. Single login.
- **Flexible reporting:** Track meaningful intermediate measures (Keppra administration in severe TBI, pain reduction, etc.)
- **Unlimited users per site** so your entire ED and trauma team can collaborate seamlessly.
- **Self-managed access** where you can add, remove, or update team members instantly without waiting for support.
- **Streamlined data entry** designed to save time and minimize errors, so you can focus on improvement.

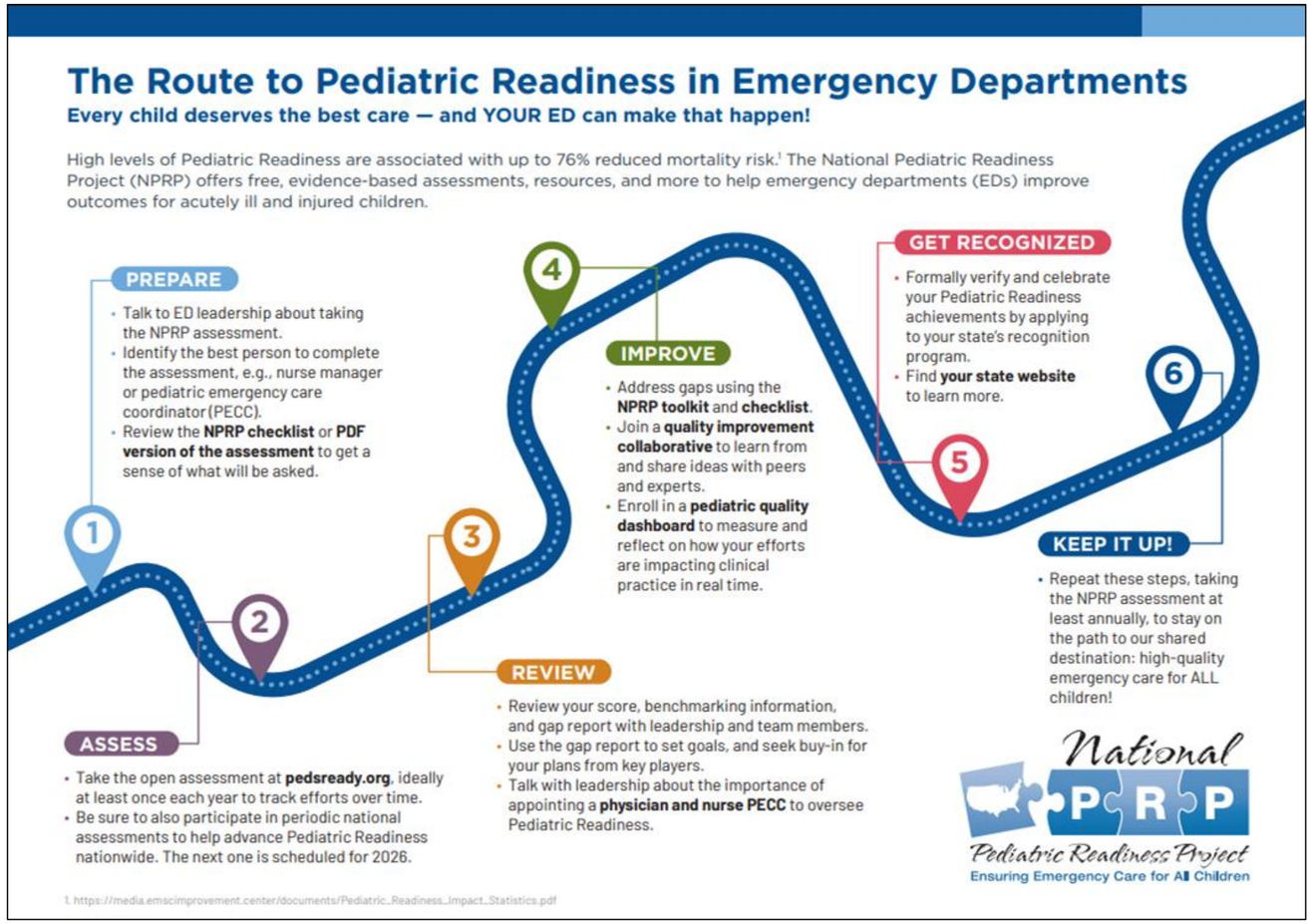
What is a QI Collaborative

How a QI Collaborative Works

A collaborative is a structured, team-based model that helps EDs test, measure, and sustain improvements in pediatric care.

Key Elements:

- Multidisciplinary teams focus on priority areas
- Share successes and resources across sites
- No prior QI experience required

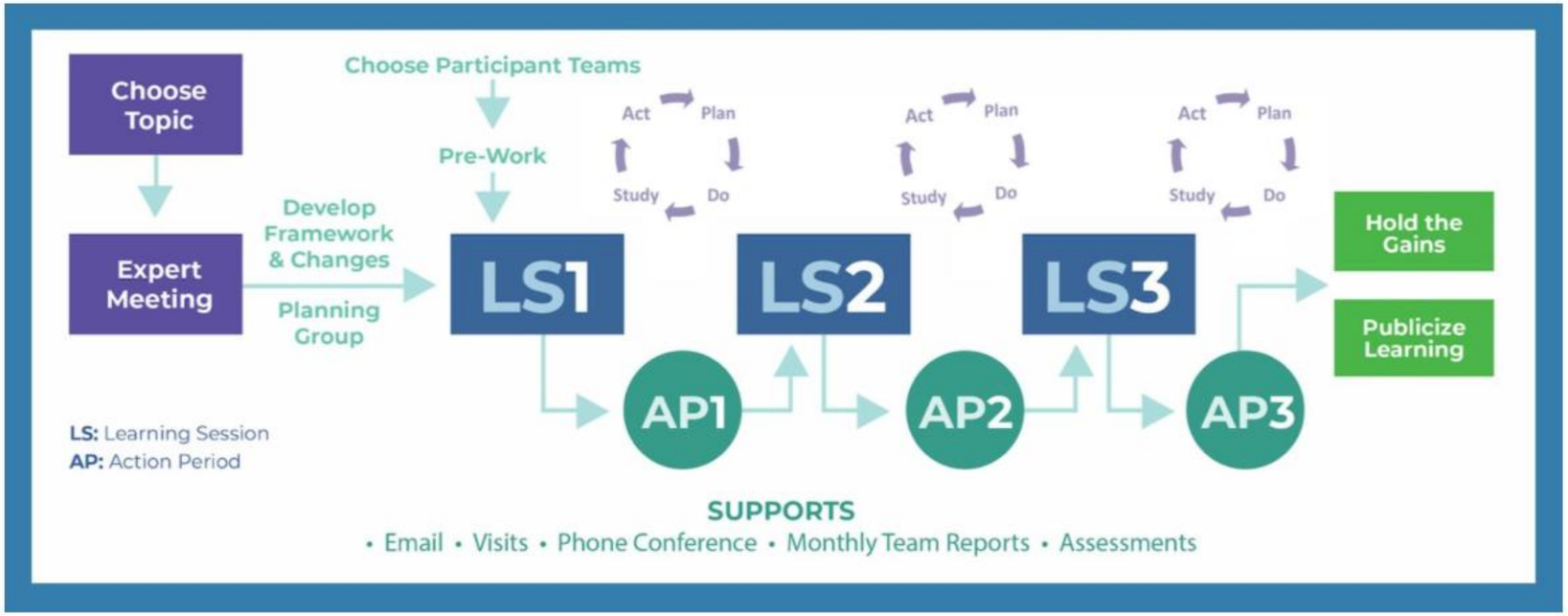


IHI Breakthrough Series Model

The IHI Breakthrough Series Model is a collaborative learning approach that helps organizations design and run successful improvement initiatives.

Core elements include:

- Organizations learn from each other and from recognized experts to drive rapid improvements.
- This IHI model helps close the gap between what we know (research) and what we do (practice) to achieve breakthrough gains in performance.



How Collaboratives Support Your ED

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- Provide evidence-based resources to address Pediatric Readiness gaps
- Offer coaching and peer learning
- Support PECCs and local champions
- Track progress with NPRQI data and benchmarks
- Archive measurable improvements that save lives

How the IHI Breakthrough Series Guides the Collaborative

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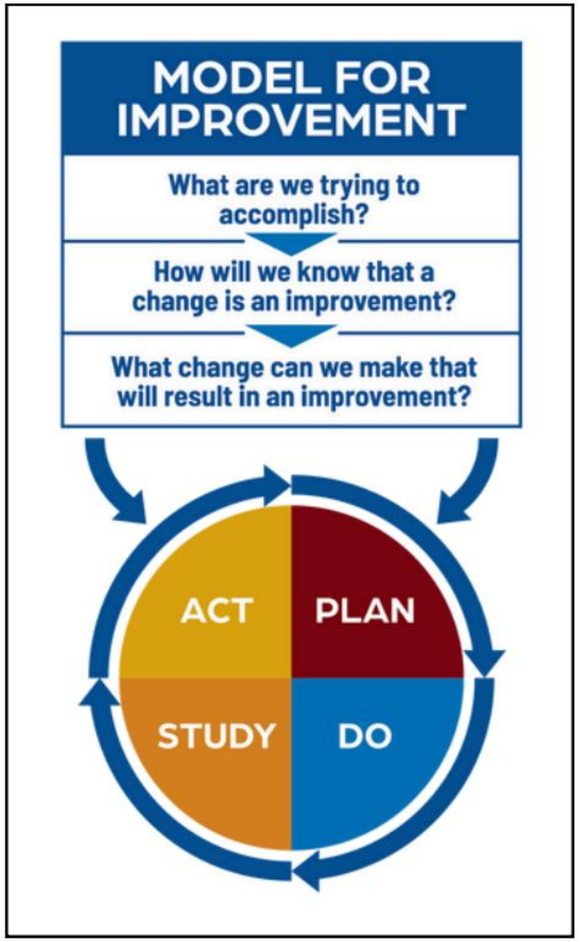
Example: Pain Reassessment PDSA Cycle

- **Plan**: Identify a gap (Only 40% of children had a pain reassessment documented within 30 minutes.)
- **Do**: Test a change (Add a reminder in the triage checklist.)
- **Study**: Measure compliance after one week (Increased to 65%.)
- **Act**: Refine Workflow (Expand to full ED team.)



The 2026 EMSC NPRQI Collaborative

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Focus Areas with Built-In Support

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Teams select one of four priority clinical areas, each supported by tailored resources and measures to guide meaningful improvements and patient care.

The Four Focus Areas

- Pain Assessment
- Abnormal Vital Sign Reassessment
- Suicide Assessment & Management
- Head Trauma

How the 2026 Collaborative Works

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- Select a priority clinical focus area
- Participate in learning sessions, fireside chats, and office hours (as needed)
- Apply PDSA cycles to test, refine, and sustain improvements
- Share best practices to contribute to a national movement advancing Pediatric Readiness
- Gain coaching, support, and access to best practices
- Receive recognition for your efforts

Using NPRQI in the Collaborative

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- NPRQI is a free, self-paced platform that enables EDs to securely measure, benchmark, and enhance their performance on essential pediatric processes.

- Offers participating hospitals a framework for continuous quality improvement (QI), aimed at improving pediatric readiness.

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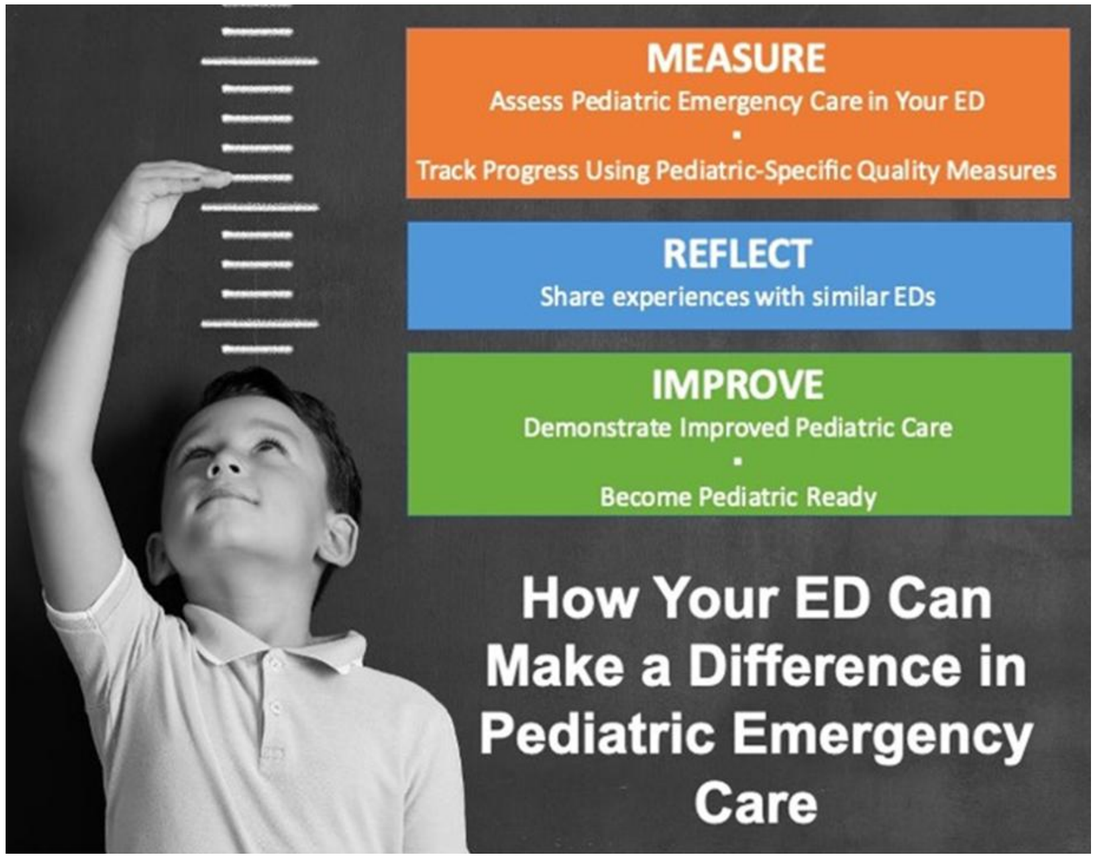

Voices from the Collaborative

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"Even though we're a small hospital, the challenges we face are the same as larger centers. The collaborative makes us feel less alone, and benchmarking helps us justify training to leadership. It's been a motivating and valuable experience for our staff."

South Lincoln County Medical Center

"Before the collaborative, we didn't have access to national benchmarking. Now our nurses know how to use data to drive QI, compare performance locally and nationally, and strengthen their ability to communicate results with leadership. It has transformed how we approach improvement."

Memorial Care Long Beach

"Hearing from larger hospitals has been incredibly beneficial. We've been able to adapt best practices from higher-resourced EDs, apply them with our staff, and see real changes in how we deliver pediatric care. The collaborative gave us tools we wouldn't have had otherwise."

Covenant Hospital

NPRQI National Impact

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310
EDs registered with NPRQI nationally

189
Trauma Centers

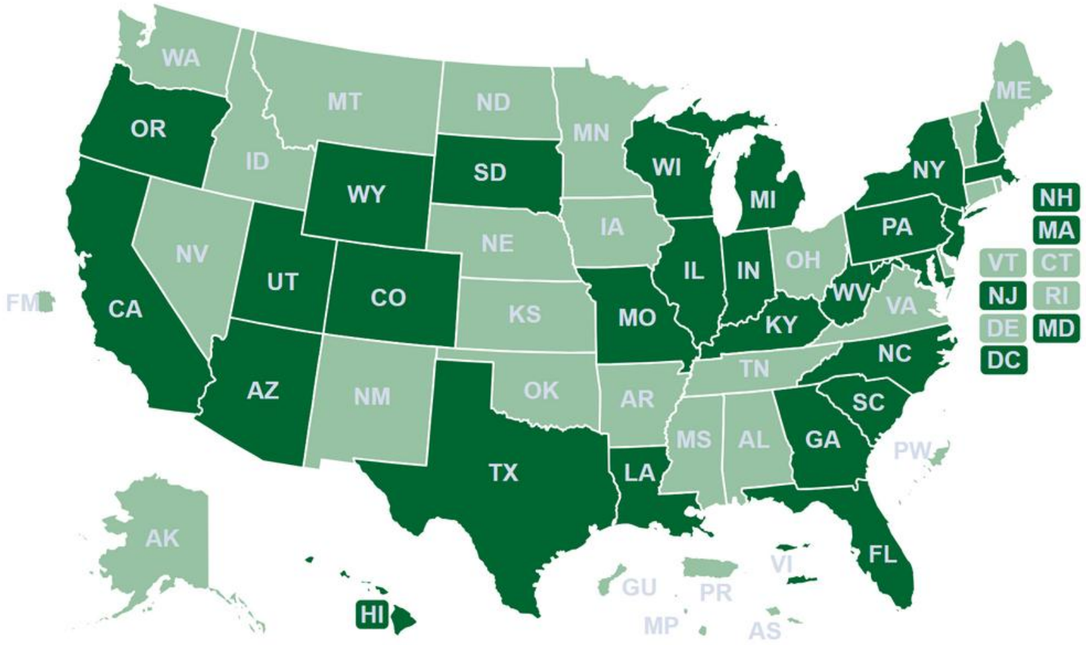
196
Sites who see fewer than 5,000 pediatric patients per year

133
Rural or Remote sites (43% of the total)

30,485
ED encounters entered in the NPRQI data platform

Data reflects: 2023 - 2025

NPRQI National Impact



NATIONAL IMPACT

44 Number of Participating States/Territories

310 Registered Sites

Through the national impact, NPRQI has been able to potentially impact

1.2 million

Pediatric Patients Nationally

How to Participate in the Collaborative

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Your Path through the Collaborative

The Collaborative unfolds in four phases, guiding teams from orientation to lasting improvement. Each phase builds on the last, ensuring that progress is both achievable and sustainable.

The four phases include:

- **Phase 1: Welcome and Orientation** (January - February 2026)
- **Phase 2: Mobilization** (March - April 2026)
- **Phase 3: Improvement Cycles** (May 2026 - April 2027)
- **Phase 4: Sustainability Planning** (May - June 2027)

Steps to Join the Collaborative

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Joining is straightforward, with built-in support at every step. From registration through sustainability, every phase is designed to make participation manageable and meaningful.

1. Spread the Word

- Engage your ED leadership and staff by sharing the flyer.

2. Sign Up

- New to NPRQI? Complete your registration to create an NPRQI account, then sign up for the Collaborative.
- Existing NPRQI user? Please email us at collaboratives@emscimprovement.center.

3. Build Your Team

- Begin assembling your project team and engage your ED's PECC to champion Pediatric Readiness.

Questions

Kate.Remick@austin.utexas.edu

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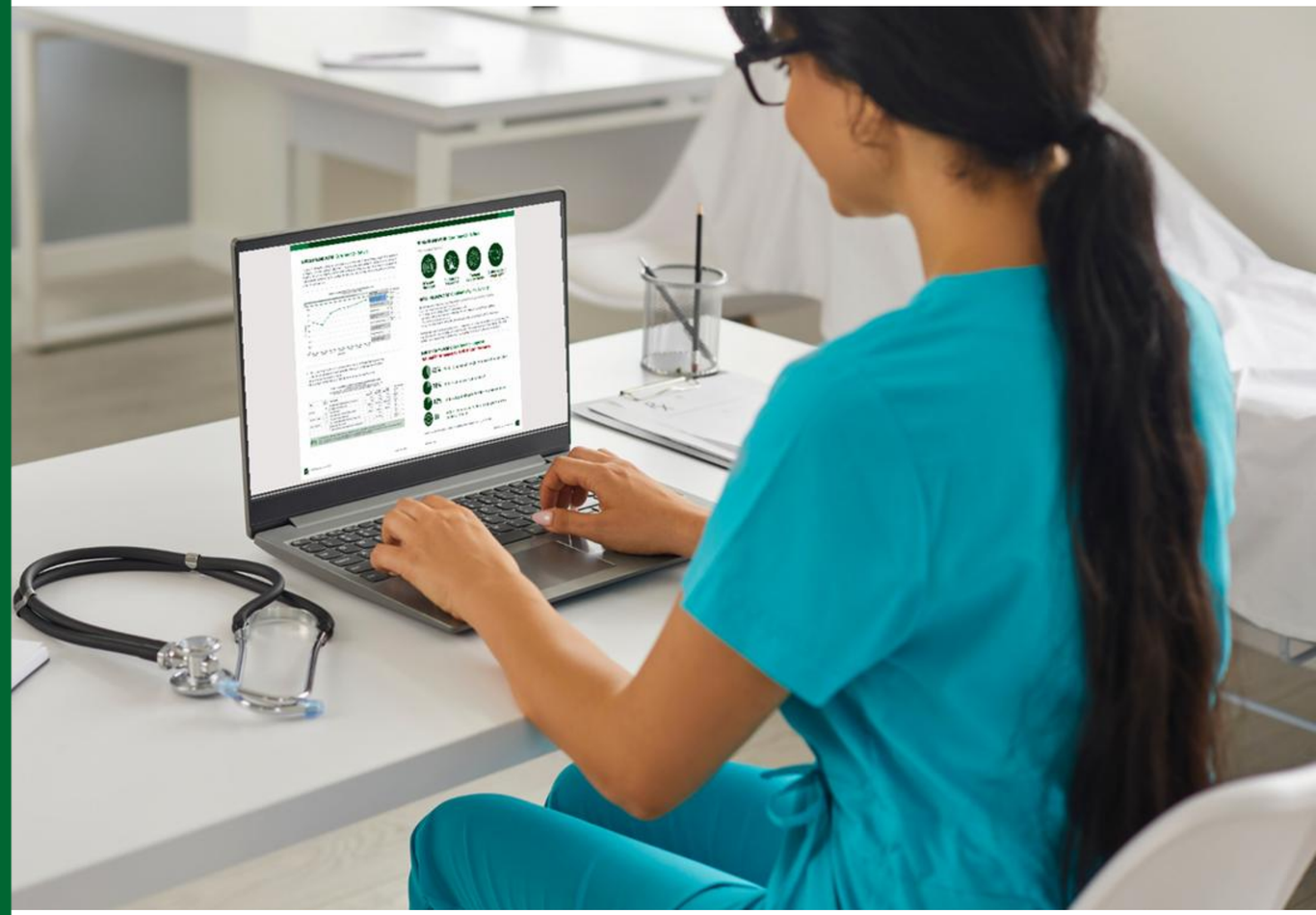
Better Data.

Better Decisions.

Better Care.

Scan the QR code to learn more, register for NPRQI, and sign up for the Collaborative.



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