EMSC NPRQI Collaborative

QI Review and Peer Learning

October 20, 2026

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Acknowledgements

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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.

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Before We Begin

- Please submit all questions using the Q&A feature during the session.
- To support engagement, we encourage you to turn on your camera when asking a question.
- For follow-up questions after the event, contact us at collaboratives@emscimprovement.center.

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Roadmap to a QI Project

Building your improvement plan step-by-step

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Your Improvement Journey

Five Steps: From understanding your current state to spreading what works.

Start where you are. Most teams cycle through Phases 2-4 many times before they spread to other units/EDs.

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Step 1: Understanding Current State

Identify Your Data Strategy

Build a strategy that's repeatable and can be sustained month to month.

Develop a Data Sampling Strategy

List every pediatric visit (<18) in chronological order

Determine your monthly pediatric volume

Select every "n"th chart for review

Plan Your Data Submission

Baseline
Minimum of 30 charts, spanning days, weeks, or months depending on ED pediatric volume

Ongoing
Decide how many charts you can realistically enter each month

Avoid These Approaches

Random: Hard to reproduce consistently

Stratified: Overkill for a single-site launch

Convenience: Biased toward whoever is easiest to capture

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Step 1: Understanding Current State

Establish Your Baseline

Quantify the gap before you act. Look through two lenses.

Pediatric Readiness Assessment: Structural Gap Report

Scores your ED's infrastructure against the national readiness standards.

NPRQI Platform: Performance Dashboard

Tracks your measures against a volume-matched cohort as well as national performance.

The Evidence Behind It

Donabedian

Structure shapes process - which shapes outcomes.

Readiness → Survival

Higher Pediatric Readiness is linked to lower mortality. QI associated with 25pt increase.

Audit and Feedback

Measuring and tracking performance improves clinical practice.

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Step 1: Understanding Current State

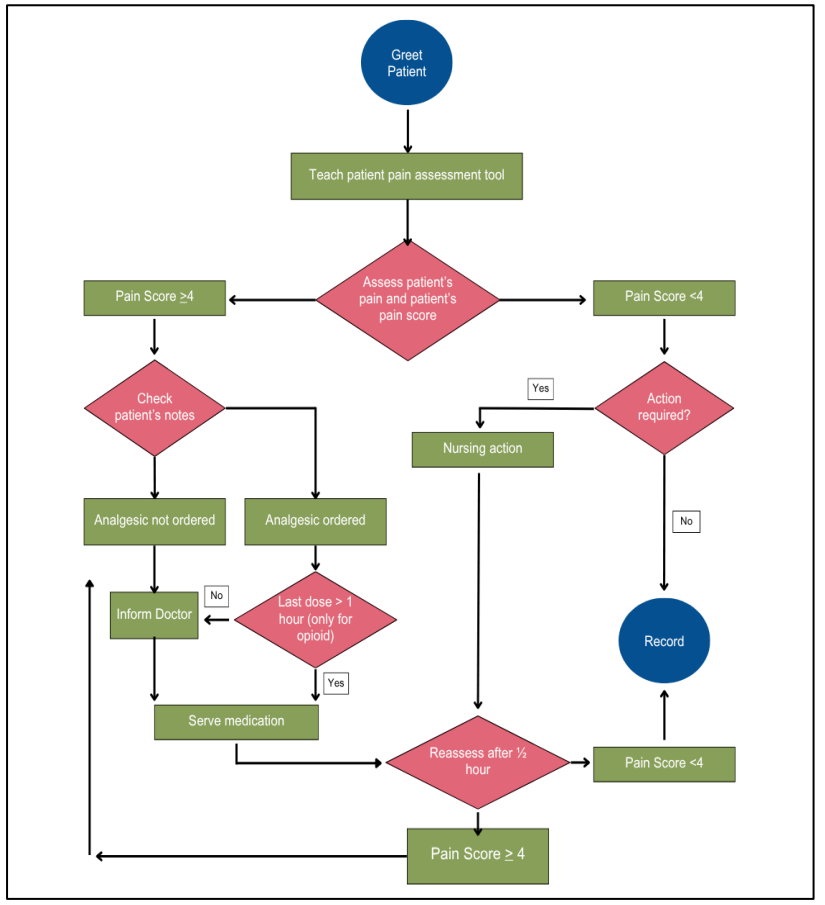
Diagnose the Gap

Map the workflow to understand where and why the gap exists.

Process Map

- Draw it before you change it
- **When:** Early, to see how the work actually flows, step by step.
- **Why it Helps:** Makes the invisible visible, surfacing delays, hand-offs, and gaps where care falls through the cracks.

The next tool, the key driver diagram, comes next, once you've set your aim.



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Start with Root Cause — Not Solutions

The most common mistake in QI: jumping to interventions before understanding why the problem exists

⚠ **Common Pitfall:**

Selecting an intervention before diagnosing the issues leads to wasted effort — and improvement that doesn't stick.

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Step 2: Establishing a Plan

Build Your Starting Lineup

Recruit a team that can drive and sustain the improvement work.

🎯 Physician / Nurse Champion

Passionate about improving pediatric care and willing to lead the effort

🏥 ED Infrastructure & Policies

Knows how to hardwire changes into workflows and systems

📊 Data Knowledgeable

Comfortable with NPRQI dashboards and tracking progress over time

🏥 ED / Hospital Leadership

C-Suite and/or ED Nurse Managers with buy-in authority

✨ Any Early Adopters!

Frontline staff who are excited and ready to try something new

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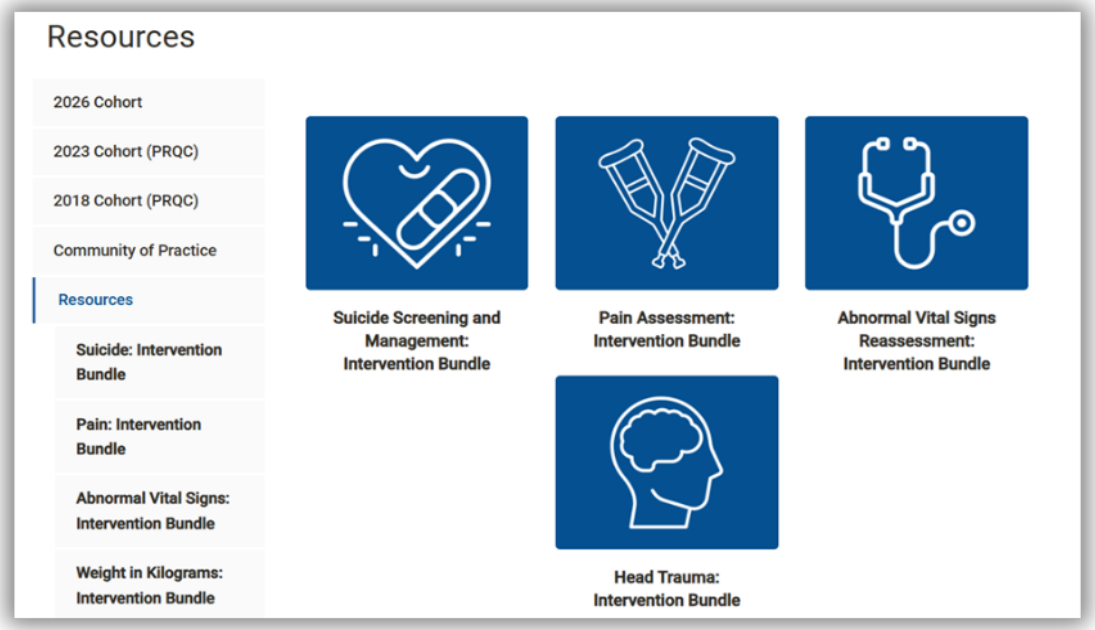
Step 2: Establishing a Plan

Connect Your Focus Area to the Gap

Let your baseline point you to the gap - then choose the matching bundle

- **Suicide Screening and Management**: Structured suicide-risk screening and safe management for adolescents.
- **Pain Assessment**: Timely, validated pain assessment for pediatric ED patients.
- **Abnormal Vital Signs Reassessment**: Recognition and timely reassessment of abnormal pediatric vital signs.
- **Head Trauma**: PECARN-guided imaging decisions for pediatric blunt head trauma.



Use your baseline data to identify the specific measure within your focus area where improvement is needed.

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Step 2: Establishing a Plan

Set Your Aim and Map the Drivers

A SMART aim, then the key driver diagram, are your one-page game plan for getting there.

Write a SMART Aim

Specific · Measurable · Achievable · Relevant · Time-bound

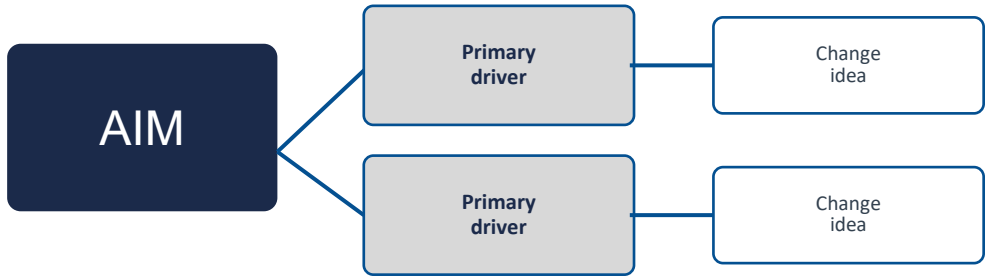
Sharpen it with the IHI five questions: What? How much?

By when? For whom? Where?

Avoid three pitfalls:

- **Aim Drift**: Restate it at every meeting.
- **Too Broad**: One measure at a time. Don't boil the ocean!
- **Disconnected from Data**: Anchor it to your baseline.

Map it with a Key Driver Diagram



Pick your first change by matching it to the root cause. System-focused changes (decision support, defaults) are highest-yield.

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Five Questions to Build Your Aim

THE IHI FRAMEWORK

WHAT?	What's the problem or opportunity? Relate it to a real patient need.
HOW MUCH?	By how much will you improve? Set a numerical stretch goal.
BY WHEN?	Specify month and year — not 'within 6 months.'
FOR WHOM?	Who is the population that will benefit from this work?
WHERE?	What are the boundaries of the system you're improving?

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Source: IHI Aim Statement Worksheet — Model for Improvement

Three Ways Aim Statements Fall Apart

Aim Drift

Your aim slowly shifts from specific to vague over time. Example: "Reduce median time from vital sign collection to first intervention from 52 to 25 minutes" drifts to "Get faster at responding to our sickest patients."

Fix: Start every team meeting by restating the aim. Review progress quantitatively.

Too Broad

Trying to boil the ocean. "Improve all pediatric care in our ED" sounds ambitious but gives no one a clear next step.

Fix: Focus on one NPRQI measure at a time. Pick the gap you can close first.

Disconnected from Data

The aim sounds good but nobody knows what the baseline is or how to measure progress.

Fix: Use your NPRQI dashboard to identify your current state before writing your aim.

Source: IHI — Setting Aims; Petrilli et al., PRiMER 2025

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Practical Tips for Your Team

Start with your data	Log into NPRQI. Look at your dashboards. Find the measure where you have the biggest gap — or the most energy to change.
Involve your team early	Don't write the aim alone. Engage the people who will do the work. QI literature consistently shows that engaging frontline staff leads to better adoption.
Make it visible	Put your aim on the huddle board. Start every meeting with it. IHI says: repeat the aim continually to prevent drift.
It's OK to revise	Your aim isn't set in stone. As you learn from PDSA cycles, you may need to adjust. Just make the change explicit — don't let it drift silently.
Use this collaborative	Share your draft aim in the chat. Get feedback. Learn from what others are doing. That's why we're here.

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Selecting the Right Intervention

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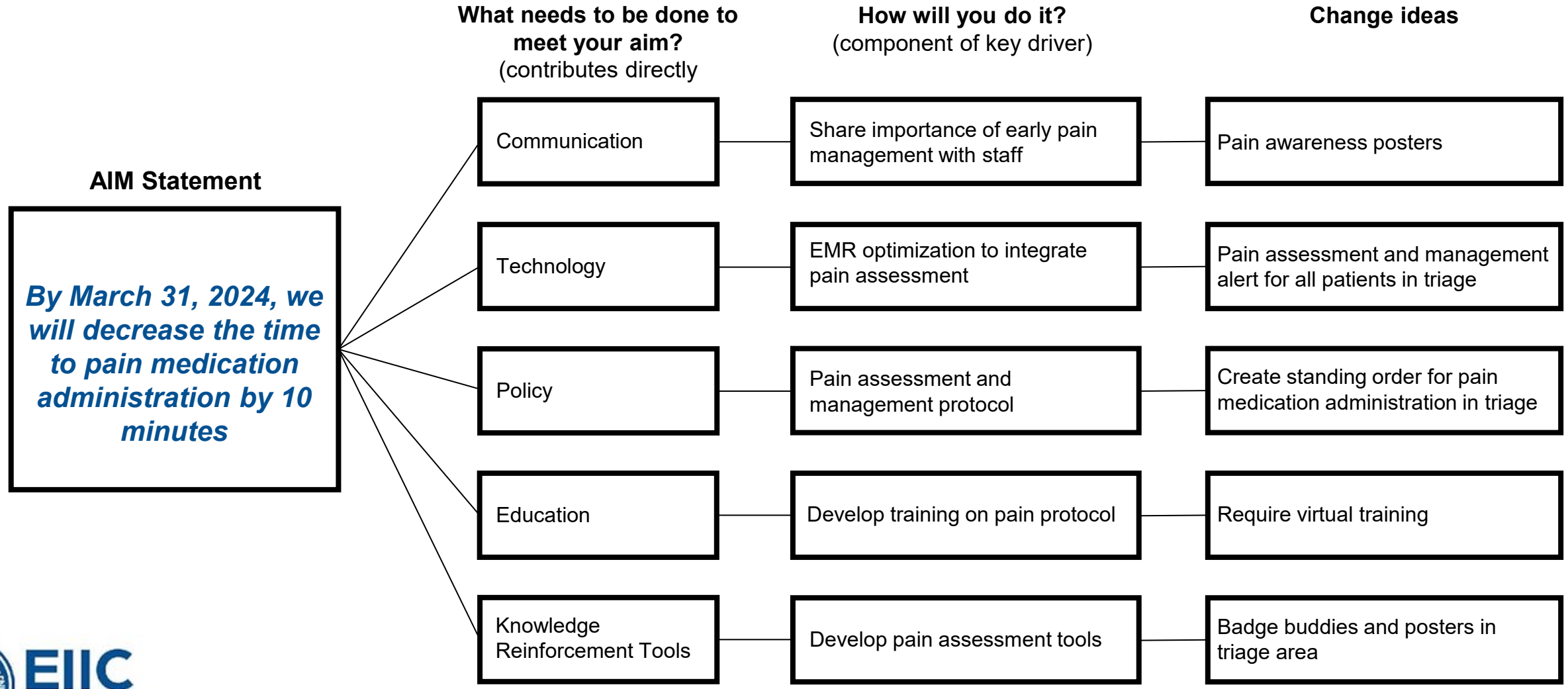
Adding Interventions to Key Driver Diagram



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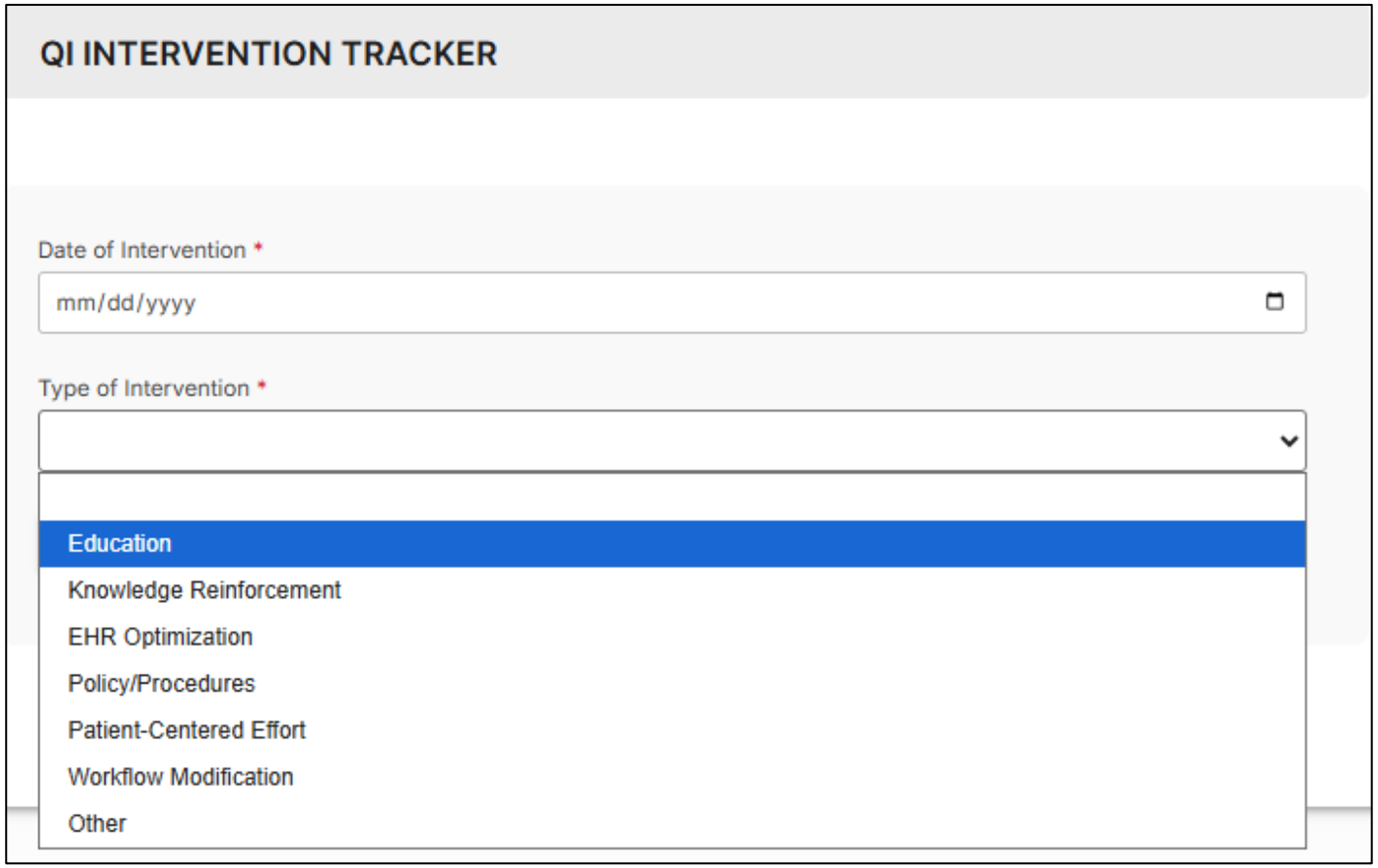
Track What Drives Improvement

The NPRQI dashboard provides a structured way to:

- Document your interventions
- Connect changes to outcomes
- Identify what is working (and what isn't)



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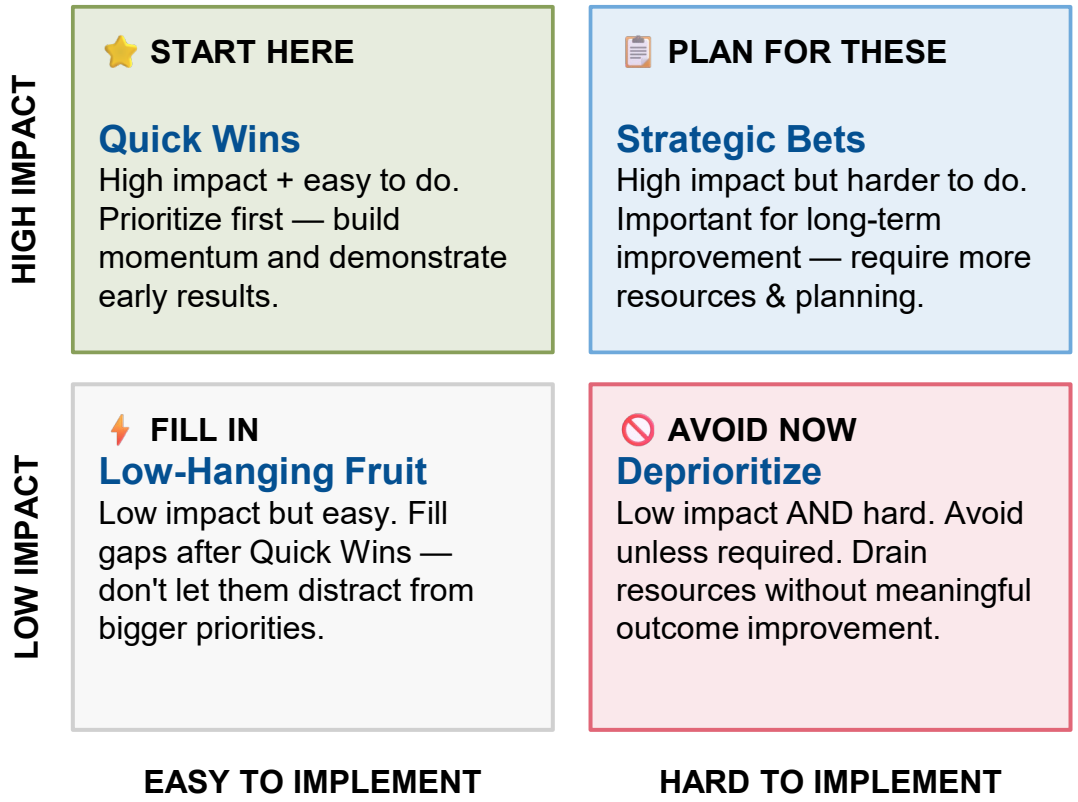
Prioritization: Not Every Idea is Equal

Use a structured approach to focus on high-yield, low-barrier changes first.



PRIORITIZATION CRITERIA

Impact on the Goal
Will this change move your aim measure meaningfully?

Ease of Implementation
Time, skill, and resources required to test and spread?

Cost
Financial and operational investment needed?

Stakeholder Buy-In
Do frontline staff and leadership support this change?

Source: AHRQ Section 4; IHI Model for Improvement

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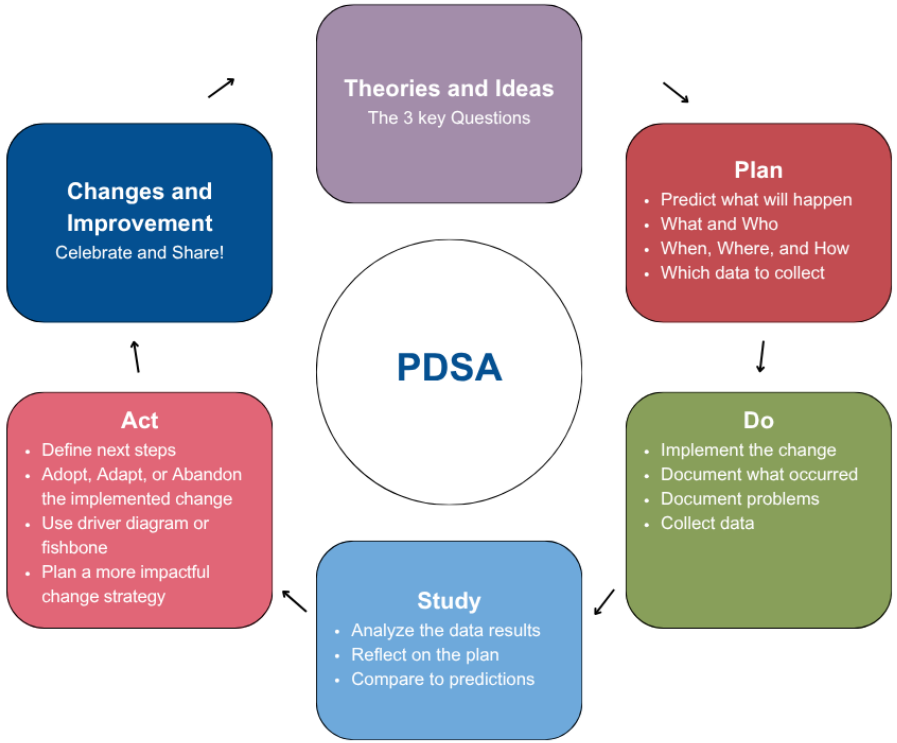
Step 3: Executing the Plan

Test Your First PDSA Cycle

Start small, one cycle, learn fast.



- **Plan**: State the objective, predict the result, plan who/what/when, scoped as small as possible.
- **Do**: Run the test in the ED and document problems and unexpected observations.
- **Study**: Compare results to your prediction and reflect on what you learned.
- **Act**: Adopt, adapt, or abandon, then plan the next test.

Why Small, Why Fast

A test, not a rollout: Build belief the change works in your ED first.

“What can we test by next Tuesday?” Don’t wait for perfect!

Buy-in is earned through visible results.

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Implementation Essentials

What separates a good idea from a sustained change in practice.

Leadership Support & Visibility

Strong, consistent leadership commitment — in writing and in person — is the most commonly cited enabler of successful QI. Leaders who remove barriers and celebrate progress accelerate adoption.

Frontline Staff Engagement

QI literature consistently shows: the people doing the work must be involved in designing the solution. Early adopters are critical. Bring in skeptics early — they identify the real barriers.

Measurement from Day One

Define your process and outcome measures before you begin. Track them in real time. Visible data — on a dashboard or huddle board — keeps teams focused and accountable.

Clear Communication of the Aim

Restate the aim at every team meeting. If the team can't recite the aim, it hasn't been communicated enough. Aim drift is real — repetition is the antidote.

Source: IHI; AHRQ Section 4; AAP Hospital Pediatrics — A Practical Guide to Assessing and Addressing Pediatric Readiness (2025)

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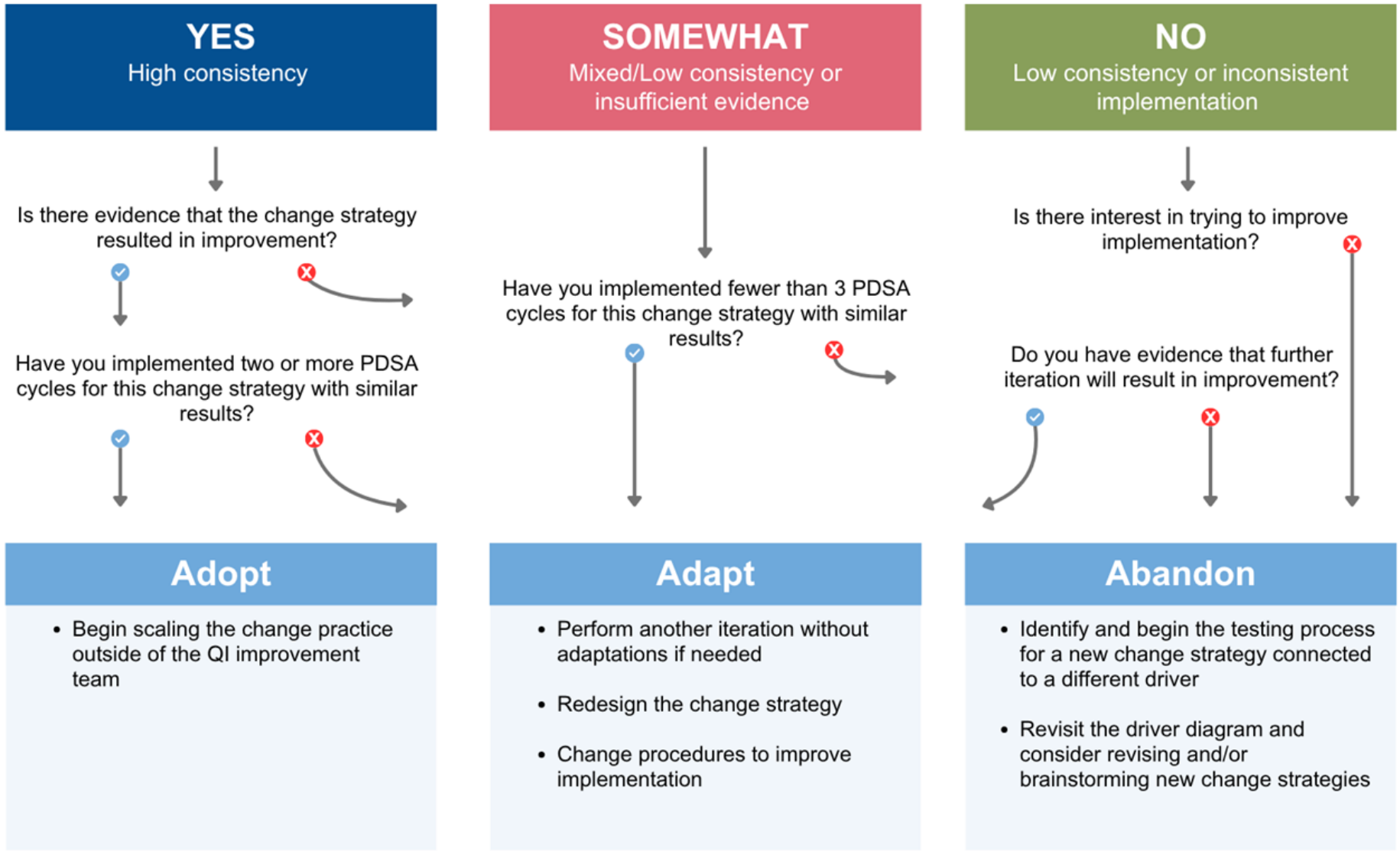
Implementation Consistency



Overcoming Common Barriers in the ED

Anticipating resistance is part of the implementation plan — not a surprise.

COMMON BARRIERS

- Resistance to change
- Staff turnover & competing priorities
- Hierarchical culture / fear of blame
- Lack of time & resources
- Inconsistent leadership support
- Workflow disruption concerns

PRACTICAL STRATEGIES

Engage frontline staff early
Involve the people doing the work in designing the solution. Use performance data to promote engagement.

Identify & activate early adopters
Find the enthusiastic few — let them lead peer-to-peer spread.

Celebrate small wins visibly
Recognize effort and progress publicly — builds culture of improvement.

Embed changes into existing workflows
Reduce burden by making the right thing the easy thing.

Source: IHI; BMC Health Services Research — Continuous Quality Improvement scoping review (2024)

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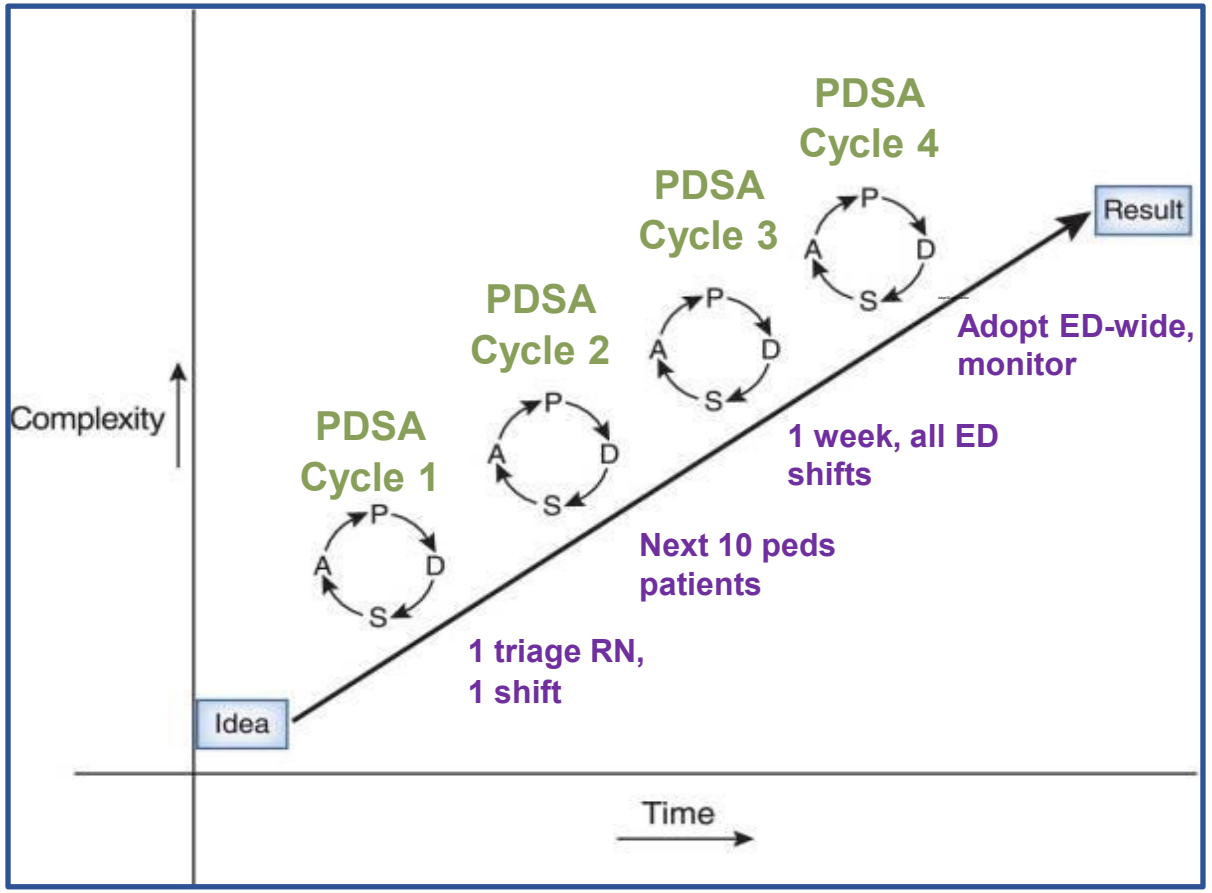
Step 3: Executing the Plan

One Cycle Feeds the Next

Link small tests into a ramp, widening scope across your ED as confidence grows.



Example: EHR pain-score prompt in the ED

Scope & confidence ↗

Avoid These Missteps

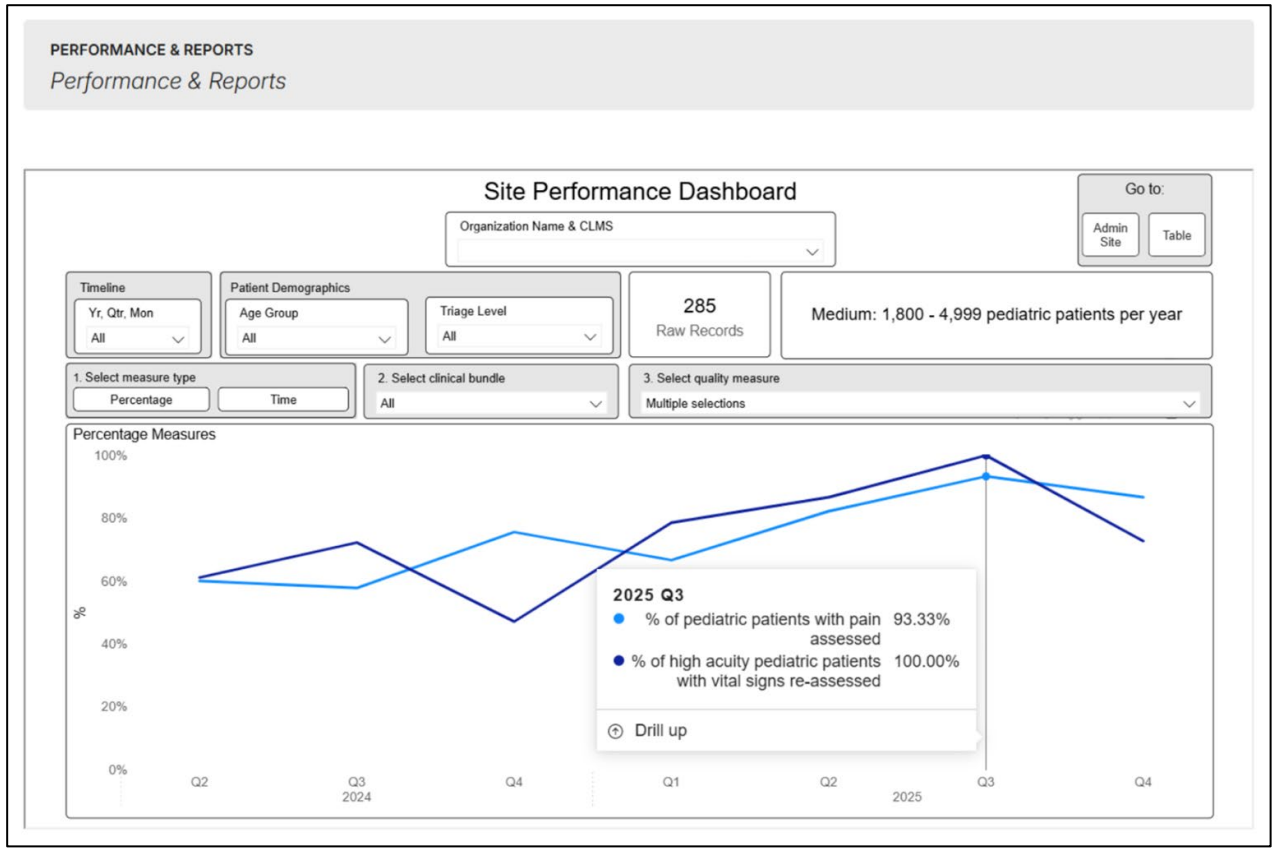
- Skipping the prediction
- Treating a failed test as failure
- Running just one cycle

McQuillan, Rory Francis et al. “How to Measure and Interpret Quality Improvement Data.” Clinical journal of the American Society of Nephrology : CJASN vol. 11,5 (2016): 908-14. doi:10.2215/CJN.11511015

Step 4: Reflection

Data Analysis and Evaluation

Study your results: Did the change actually lead to improvement?



Ask

- Did the change lead to improvement?
- How do you compare to baseline and the volume-matched cohort?

Decide

- Adapt, adopt, or abandon
- Choose what to test next
- Bring findings back to the team and leadership to keep momentum.

Keep Measuring as You Improve

Data Entry Threshold

- Minimum of 10 patient charts to ensure patient confidentiality before performance displayed

Ongoing Data Entry

- Data entered at regular intervals
- Sole discretion of ED
- We recommend a minimum of 10 charts per quarter so that you can see your performance over time.

Your Goal

- Improve performance on target measure by at least 10% from baseline

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Step 5: Dissemination and Spread

Communicate, Celebrate, and Sustain

Make the work visible, recognize the team, and spread what works.

Communicate

- Post run charts where staff see them
- Grant more members of team access to NPRQI dashboards
- Share “wins of the week” and brief leadership on progress/needs
- Tell the story: tie the data to a real patient story

Celebrate

- Recognize the team, especially the volunteers who tested first!
- Celebrate small wins, not just the final goal, to sustain momentum.
- Make success observable - it lowers resistance to the next change.

Scale and Sustain

Sustain

Hardwire the change into workflow, policy, and the EHR so gains hold.

Scale

Extend to more shifts, conditions, or sites.

Disseminate

Turn the work into a scholarly product: abstract, poster, or manuscript.

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Hearing From You

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Hearing From You

Tell Us About Your QI Journey

- What is your focus and SMART aim?
- Who is helping lead the work?
- What are you working on right now?
- What's your next step?
- Where could peer input help?

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Our Community Goals

- Share experiences across a variety of settings and locations
- Learn from shared challenges and different approaches to overcoming them
- Exchange ideas and resources to support one another
- Strengthen Pediatric Readiness together

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Hearing From You

In November and December, we'll continue hearing directly from Collaborative teams. No final results required.

Share a brief update on:

- An introduction to your site and project team members
- Your selected area of focus and project goal
- Key activities and progress to date
- Challenges you have encountered
- Successes and lessons learned
- Next steps and what your team has planned moving forward

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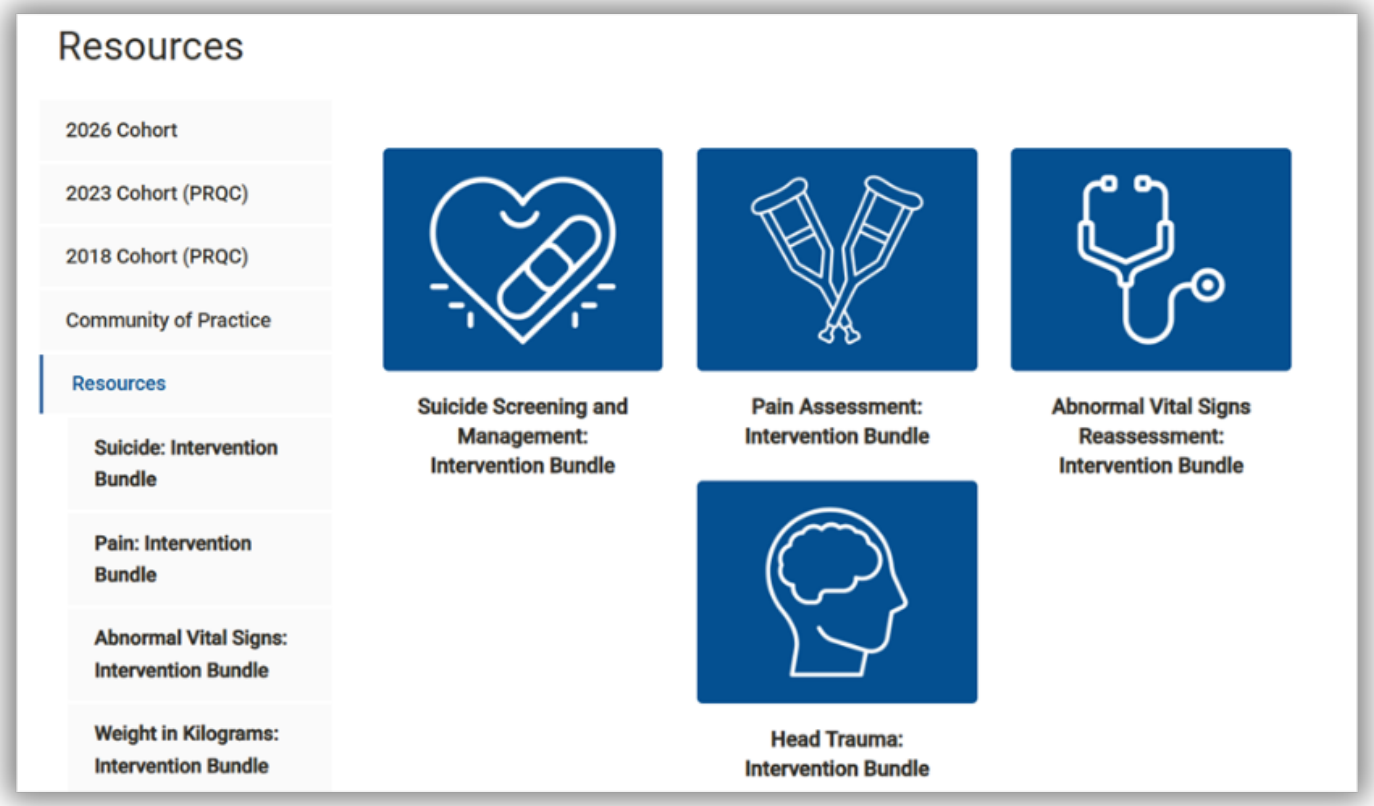
Collaborative Resources

- **Intervention Bundles:** Tools and guidance to support implementation
- **Collaborative Hub:** Centralized materials and references
- **Office Hours:** Live support and Q&A opportunities
- **NPRQI Website:** Your central access point for everything NPRQI



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Opportunities to Connect

EMSC NPRQI: Data Interpretation Support

Special Session October 21st at 11 am CT

Monthly Collaborative Sessions:

3rd Tuesday of each month at 11:00 am CT

One-on-One Support:

Schedule time with the EMSC NPRQI team for questions.

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Thank You!

We appreciate your commitment and partnership. Your work makes these initiatives possible.

- Questions and feedback
- Watch for our weekly email reminders.
- For follow-up questions, please contact us at collaboratives@emscimprovement.center.

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Session #8

QI Review and Peer Learning

October 20, 2026

To access the evaluation & post-test for **BRN CE**
Scan the QR code ***OR*** enter the link into your web browser

Must have entered **first and last name in Zoom chat AND**
attended session for at **least 50 minutes** to be eligible for CE credit

Direct link:
https://bit.ly/EMSCNPRQIOct2026

Evaluation with ***a relevant concept learned*** must be submitted by
1700 (Pacific Time) on October 22, 2026, to receive CE for this event.

BRN CE questions: robin.goodmanrn@gmail.com