CHANGING MEDICINE.
CHANGING LIVES.®

Precision Implementation Approach™

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National Summit

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Implementation is among the most complex steps in the EBP process

- Many implementation strategies have been reported (~ 70) Cullen & Adams, 2012; Cullen et al., 2018; Powell et al., 2015
- A phased approach helps the team plan for strategies that can be used over time Cullen & Adams, 2012; Levoy et al., 2019; Rogers, 2003; Wensing et al., 2010
- Research supports the need to adapt the implementation plan to the context and address clinician and patient perceptions and behaviors Damschroder et al., 2009; Greenhalgh, 2018; Grol et al., 2013; Jager et al., 2016
- Formative data are needed to decide when and how to effectively and efficiently use implementation strategies American Evaluation Association, 2012; Bick & Graham, 2010; Cullen et al., 2019; Parry et al., 2013; Russell et al., 2011

Link process and outcome data for decision making

In order to change outcomes, we need to change processes.

- **Process** data to determine if the protocol or strategies need revision
- **Outcome data** to determine if the change was beneficial

Use an EBP evaluation framework

PROCESS

IMPACT

Knowledge
- Practice
- Intervention
- Technique

Attitude
- Importance
- Support
- Resources

Behavior/skills
- Technique
- Compliance checks

Outcomes
- Patient
- Staff
- Cost

Balancing Measures
- Patient risk
- Staff risk
- Adverse events

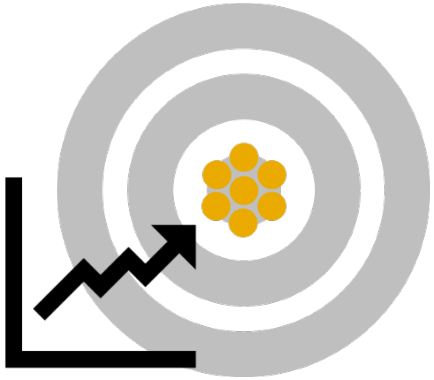
Local data

Cullen et al., 2018

The Precision Implementation Approach™

Randomly select strategies

Accurate strategies, not localized



Precision Implementation Approach

Precision Implementation Approach uses local data to drive decisions for selecting the most effective and efficient implementation strategies for making and sustaining EBP change.

Cullen et al., 2019

Use local data to drive selection of implementation strategies

Implementation Strategies for Evidence-Based Practice

	Create Awareness & Interest	Build Knowledge & Commitment	Promote Action & Adoption	Pursue Integration & Sustained Use
Connecting with Clinicians, Organizational Leaders and Key Stakeholders	• Highlight advantages* • Highlight Compatibility* • Anticipated impact* • Continuing education programs* • Sound bites* • Journal club* • Slogans & logos • Staff meetings • Unit newsletter • Unit inservices • Distribute key articles • Posters and postings/fliers • Mobile 'show on the road' • Announcements & broadcasts	• Education* live, virtual or computer-based* • Pocket guides • Link practice change & power holder/stakeholder priorities* • Change agents (e.g., change champion*, core group*, opinion leader*, thought leader, etc.) • Educational outreach or academic detailing* • Integrate practice change with other EBP protocols* • Trying the practice change* • Disseminate credible evidence with clear implications for practice* • Observable impact* • Gap assessment/gap analysis* • Clinician input* • Local adaptation* & simplify* • Focus groups for planned change* • Match practice change with resources & equipment • Sound bites* • Resource manual or materials (i.e., electronic or hard copy) • Case studies	• Educational outreach/academic detailing* • Reminders or practice prompts* • Demonstrate workflow or decision algorithm • Resource materials and quick reference guides • Skill competency* • Feedback evaluation results to colleagues* • Incentives* • Trying the practice change* • Multidisciplinary discussion & troubleshooting • Provide "elevator speech" or three key talking points • Data collection by clinicians • Report progress & updates • Opinion leader and change agents* • Role model* • Troubleshooting by change agents at the point of care/bedside • Change agents provide recognition at the point of care *	• Celebrate local unit progress* • Individualize feedback* • Public recognition* • Personalize the "what is in it for me" messages to staff (e.g., reduces work, reduces infection exposure, etc.) based on actual improvement data • Share protocol revisions with clinician that are based on feedback from clinicians, patient or family • Peer influence • Update practice reminders
Building Organizational System Support	• Knowledge broker(s) • Senior executives announcements • Advertize new equipment	• Teamwork* • Troubleshoot use/application* • Benchmark data* • Inform organizational leaders* • Report within organizational infrastructure* • Action plan* • Report to senior leaders	• Audit key indicators* • Actionable and timely data feedback* • Non-punitive discussion of results* • Checklist* • Documentation* • Standing orders* • Patient reminders* • Patient decision aides* • Rounding by unit & organizational leadership* • Report into quality improvement program* • Report to senior leaders • Action plan* • Link to patient/family needs & organizational priorities • Unit orientation • Individual performance evaluation	• Audit and feedback* • Report to senior leaders* • Report into quality improvement program* • Revise policy, procedure or protocol* • Competency metric for discontinuing training • Project responsibility in unit or organizational committee • Strategic plan* • Trend results* • Present in educational programs • Annual report • Financial incentives* • Individual performance evaluation

* = Implementation strategy is supported by at least some empirical evidence in healthcare

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Cullen & Adams, 2012

Link knowledge data to strategies for targeted implementation

Knowledge	Options for implementation strategies
Practice	• Gap assessment • Clinician input
Evidence-based intervention	• Distribute key evidence • Case studies • Academic detailing
Technique	• Mobile show on the road • Education • Skills competencies • Trying the change

Link attitude data to strategies for targeted implementation

Attitude	Options for implementation strategies
Value importance of topic for quality	• Highlight advantages • Highlight compatibility
Feeling supported	• Teamwork • Inform organizational leaders
Knowing who can help troubleshoot	• Change agents and EBP change champion • Multidisciplinary discussion & troubleshooting
Access to resources	• Resource manual or materials • Reminders and practice prompts
Ease documenting	• Documentation system changes • Standing orders

Link patient/family attitude data to strategies targeted implementation

Attitude	Options for implementation strategies
Value importance of topic for quality	• Highlight advantages • Highlight compatibility
Feeling supported	• Family education • Lay or peer outreach • Community resources
Access to experts	• Electronic record portal for asynchronous discussion • Facilitated support group
Access to resources	• Resource materials • Correct equipment

Design questions for data that will guide decision making

Tool 9.4 Clinician Questionnaire

Unit/clinic: _____ **Date:** _____

INSTRUCTIONS: Please take a few minutes to provide valuable feedback related to <topic>. Your responses are anonymous and will be used to improve care for patients with <topic>.

SECTION I: Knowledge assessment

INSTRUCTIONS: Please select the ONE best answer for each question.

1. <insert item>	☐ a. ☐ b. ☐ c. ☐ d.
2. <insert item>	☐ a. ☐ b. ☐ c. ☐ d.
3. <insert item>	☐ a. ☐ b. ☐ c. ☐ d.
4. <insert item>	☐ True ☐ False
5. <insert item>	☐ True ☐ False
6. <insert item>	☐ True ☐ False

SECTION II: Perception or attitude assessment

INSTRUCTIONS: Please indicate the number that best describes your perception or attitude about <topic>.

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. All patients in <clinic/unit> receive <insert topic> care at least <frequency>.	1	2	3	4
2. I am able to identify which patients need to have <insert topic> prevention.	1	2	3	4
3. Using <insert topic or product> enhances the quality of nursing care in the <clinic/unit>.	1	2	3	4
4. I feel knowledgeable about carrying out <insert topic>.	1	2	3	4
5. Completing <insert topic> enables me to meet the health needs of most patients.	1	2	3	4

continues

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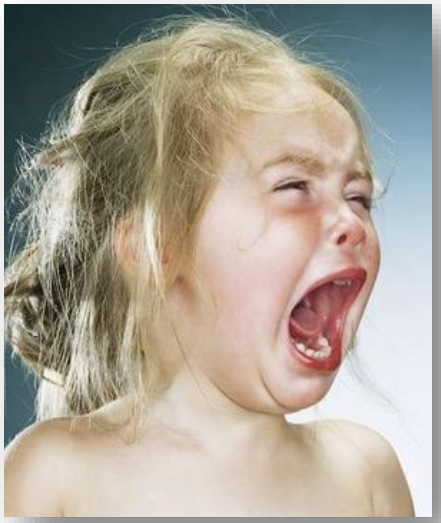
Cullen, L., Hanrahan, K., Farrington, M., DeBerg, J., Tucker, S., & Kleiber, C. (2018). *Evidence-based practice in action: Comprehensive strategies, tools, and tips from the University of Iowa Hospitals and Clinics.* Indianapolis, IN: Sigma Theta Tau International.

EBP in Action tools -free

Example

Distraction for Pediatric Procedural Pain



Distraction is drawing attention away from the painful stimulus and engaging in enjoyable activities

Distraction is an evidence-based intervention for painful procedures in children Hanrahan et al., 2017; Hanrahan et al., 2012; McCarthy et al., 2010

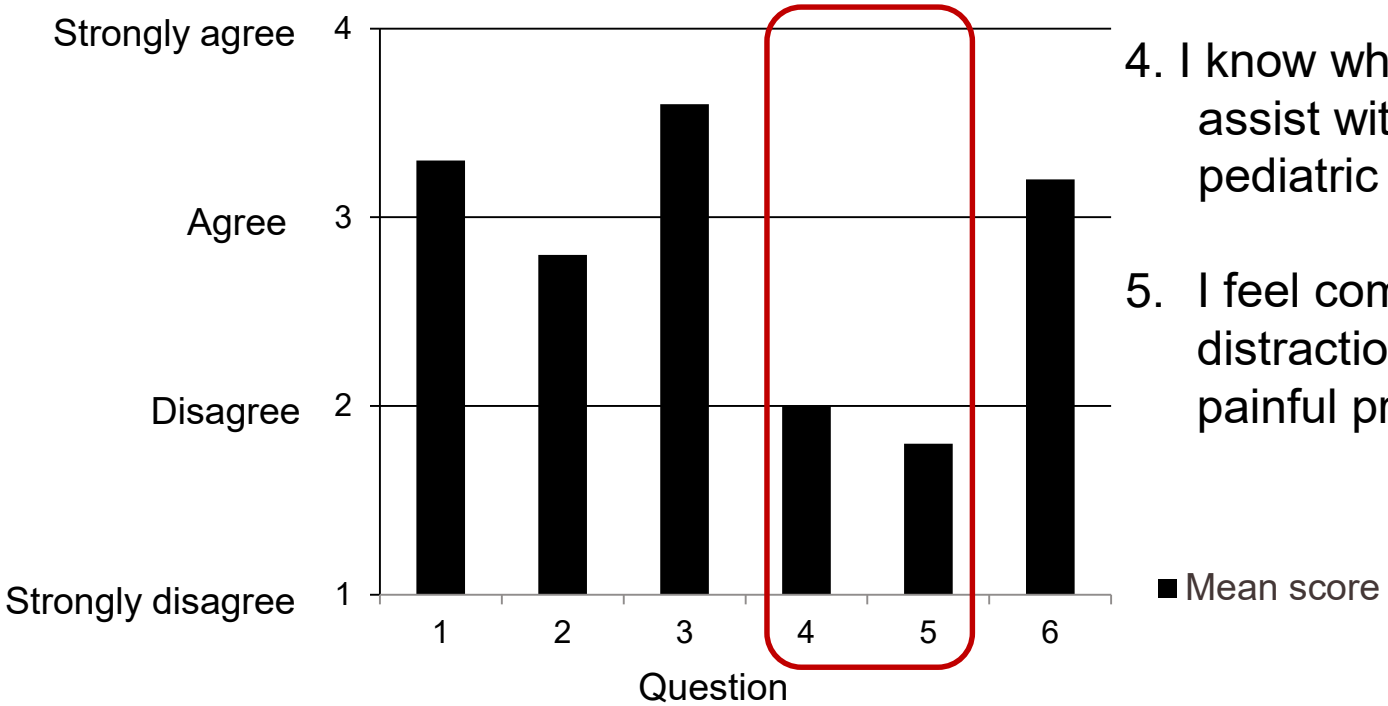
Sample Evaluation

Distraction for Pediatric Procedural Pain

Item	Strongly Disagree	Agree	Disagree	Strongly Agree
My unit/clinic effectively manages pediatric painful procedures.	☐	☐	☐	☐
I feel supported in using distraction for pediatric painful procedures.	☐	☐	☐	☐
A variety of novel toys are conveniently located for easy access.	☐	☐	☐	☐
I know who in my area can assist with distraction during pediatric painful procedures.	☐	☐	☐	☐
I feel comfortable using distraction during a pediatric painful procedure.	☐	☐	☐	☐
I can easily document interventions used for pediatric painful procedures.	☐	☐	☐	☐

Hanrahan, in submission

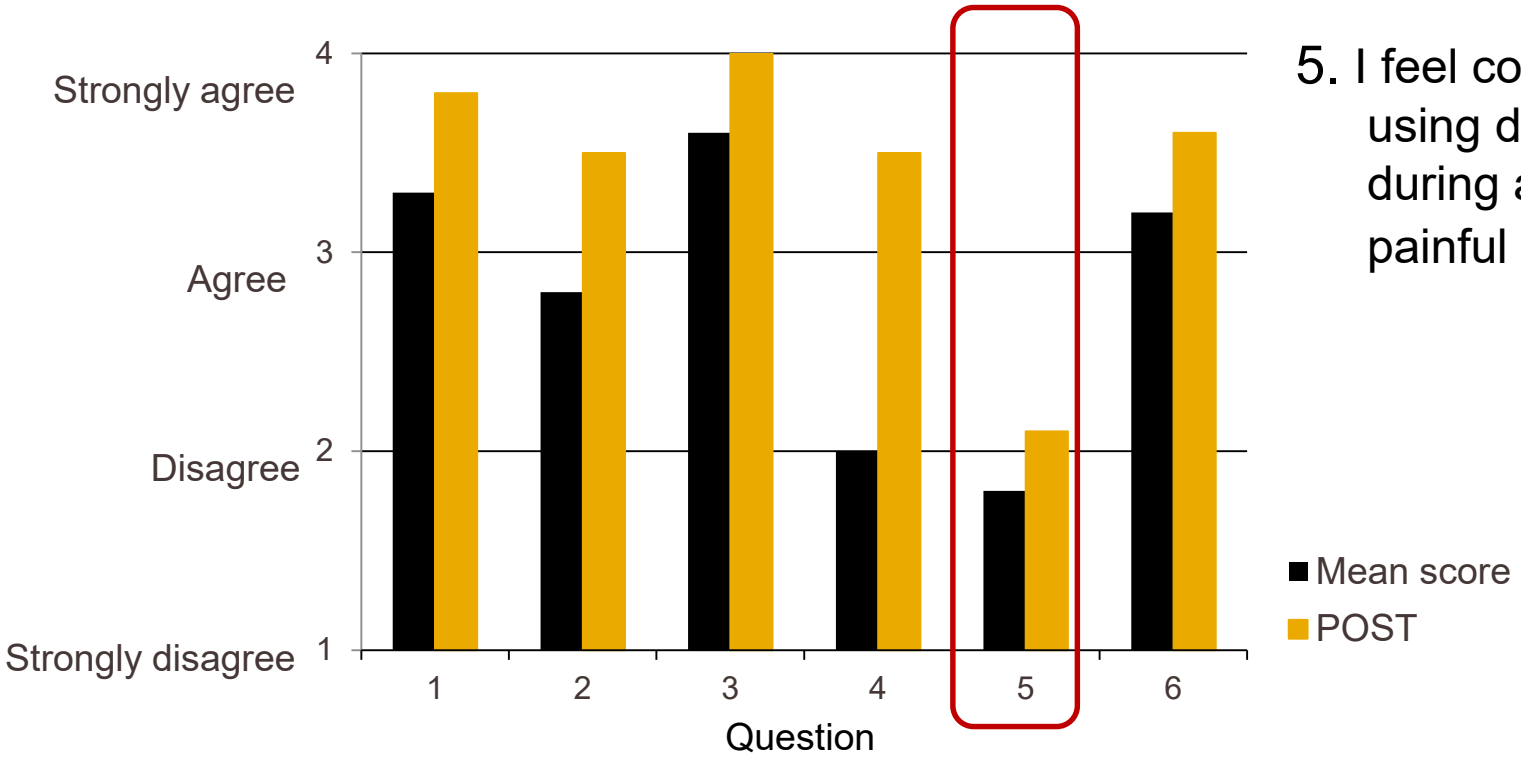
Apply pre-data to implementation strategies



4. I know who in my area can assist with distractions during pediatric painful procedures.

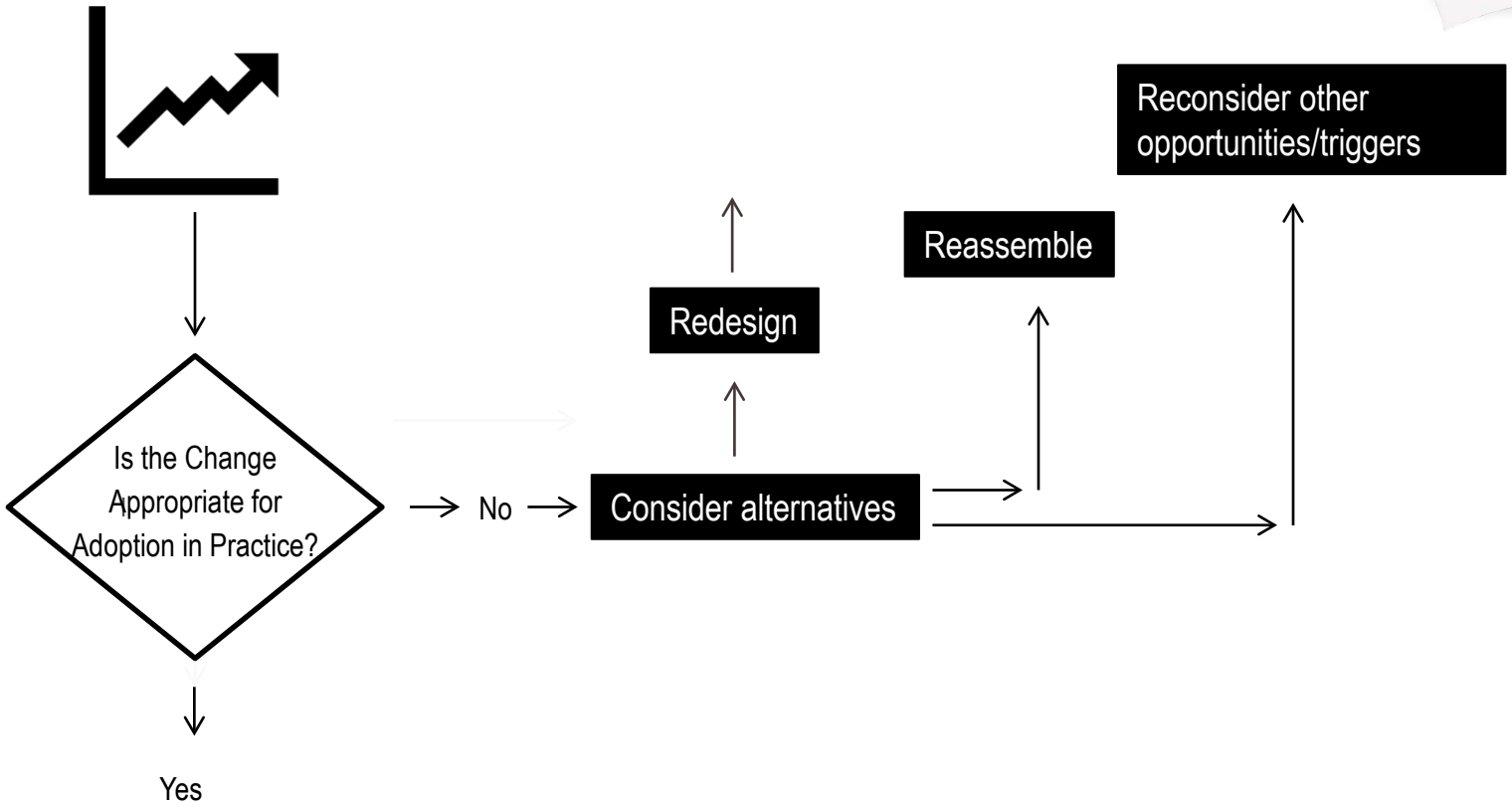
5. I feel comfortable using distraction during a pediatric painful procedure.

Make post-pilot decisions



5. I feel comfortable using distraction during a pediatric painful procedure.

Use data to plan next steps



Integration and Sustain the Practice Change

- Identify and engage key personnel
- Hardwire the change into the system
- Monitor key indicators through QI
- Re-infuse as needed

Cullen et al., 2018

The Precision Implementation Approach™ is used to target sustainable change

PROCESS

Knowledge

Attitudes

Behaviors

Outcomes

Balancing measures

IMPACT

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Cullen et al., 2019

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