Objectives

This session will prepare you for the EPIQ workshop and address:

• What is QI and what isn’t QI
• How QI projects are organized
• Addressing project ethics
• Analyzing and presenting data
• Planning for publication
# 10 Steps Workbook

<table>
<thead>
<tr>
<th>Steps</th>
<th>Tool</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNDERSTAND</td>
<td>5 Whys</td>
<td>Make a short list of 3 to 5 things you would like to improve and pick one. Have your facilitator ask 5 whys to “scope” the problem down to a manageable size.</td>
</tr>
<tr>
<td></td>
<td>Force field analysis</td>
<td>Select your team members relevant to your problem from step 1. Use the force field analysis to ask what the driving and restraining factors are. Use the force field analysis to make sure that your team is complete.</td>
</tr>
<tr>
<td></td>
<td>Fishbone</td>
<td>Use the fishbone to identify possible root causes for your problem. Identify two or three causes that your team member feel that they can tackle.</td>
</tr>
<tr>
<td></td>
<td>Feasibility tool</td>
<td>These 2 or 3 root causes lead to possible interventions. Use the feasibility tool to select the intervention that is most practical for your team. Remember that you want a quick success – so select wisely.</td>
</tr>
<tr>
<td></td>
<td>Process map</td>
<td>Map the process that you wish to improve as it is currently happening. Choose a start and end-point first then fill in the gaps. Once done, ask yourselves how you might improve the process and create a second map.</td>
</tr>
<tr>
<td></td>
<td>SMART indicators</td>
<td>Select and define at least one process indicator and one outcome indicator from your process map. Both indicators should be “SMART”. You may wish to select one or more balancing indicators.</td>
</tr>
<tr>
<td></td>
<td>EPIQ Aim form</td>
<td>Complete the EPIQ Aim form with a clear title, aim, and indicators. The rationale may be completed later with best available evidence. Do not forget to identify the dimensions of quality that are being targeted.</td>
</tr>
<tr>
<td></td>
<td>Engagement tool</td>
<td>For the engagement tool, draw a table describing where your team, families, administrators, or community are with respect to readiness on the scale of being unaware to awareness, planning, acting, or maintenance. Discuss how you will engage them using.</td>
</tr>
<tr>
<td></td>
<td>EPIQ Change form</td>
<td>Complete the EPIQ Change form (aim-plan-do-study). You cannot complete act except for planning a date.</td>
</tr>
<tr>
<td></td>
<td>Run charts</td>
<td>Plan how you will present your results to your team, administrators, families, other sites.</td>
</tr>
</tbody>
</table>
What is Quality Improvement?

• Quality improvement is a process of identifying and measuring a problem, setting an improvement aim, and testing and learning from multiple changes, knowing whether progress is being made, and striving to reach the aim

- My own definition
What is Quality Improvement?

• The science of using measurement to understand and improve the performance of a system

• In healthcare, quality improvement refers to systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups

Quality Improvement, Health Resources and Services Administration, 2011
Model for Improvement

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What change can we make that will result in improvement?

Act | Plan
--- | ---
Study | Do

Associates in Process Improvement, 1992
QI Involves Systems

• “The System” = how things are done now

<table>
<thead>
<tr>
<th>Resources (Inputs)</th>
<th>Activities (Processes)</th>
<th>Results (Outcomes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td>What is done</td>
<td>Service delivery</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>How it is done</td>
<td>Behaviour change</td>
</tr>
<tr>
<td>Materials</td>
<td></td>
<td>Health status change</td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td>Patient experience</td>
</tr>
<tr>
<td>Technology</td>
<td></td>
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</table>

“Every system is perfectly designed to get the results it gets.” - Paul Batalden, IHI

Adapted from Donabedian, 1980
Terminology

- **Quality Improvement** is the purposeful measurement of a process and analysis of change with the goal of improving an outcome.

- **Quality Assurance** is the process taken to provide confidence that a satisfactory outcome will result.
  - Alberta Evidence Act (S.9) uses the term “Quality Assurance” to describe activities that “study, assess or evaluate the provision of health services”.
How is QI different from research?

<table>
<thead>
<tr>
<th></th>
<th><strong>Research</strong></th>
<th><strong>Quality Improvement</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Discover new knowledge</td>
<td>Use knowledge to fix a problem</td>
</tr>
<tr>
<td>Starting point</td>
<td>Hypothesis</td>
<td>Aim</td>
</tr>
<tr>
<td>Strategy</td>
<td>Interventions planned <em>a priori</em></td>
<td>Tests of change inform next steps</td>
</tr>
<tr>
<td>Ethics Review</td>
<td>Performed by a research ethics board</td>
<td>Performed according to local guidelines (ARECCI in Alberta); REB confirms exempt</td>
</tr>
<tr>
<td>Variation and Bias</td>
<td>Reduced by using inclusion and exclusion criteria, randomization</td>
<td>Reduced by standardizing processes, so that change can be detected</td>
</tr>
<tr>
<td>Sample size</td>
<td>Calculated to ensure power to detect a meaningful difference; study ends when enrolment met</td>
<td>Focus on gathering enough information to reliably measure; project ends when aim is met (or when you declare defeat)</td>
</tr>
<tr>
<td>Analysis</td>
<td>Occurs after data collection complete or at a defined interim analysis; often utilizes hypothesis testing</td>
<td>Occurs in an ongoing manner throughout tests of change; often utilizes run charts or control charts</td>
</tr>
<tr>
<td>Reporting standards</td>
<td>Determined by study type (e.g. CONSORT for clinical trials)</td>
<td>SQUIRE 2 guideline (Standards for Quality Improvement Reporting Excellence)</td>
</tr>
</tbody>
</table>
You would like to reduce the median time to treatment of pain in your ED, currently 30 minutes, and decide to test if a nursing directive to provide analgesics at triage can produce a statistically significant change.

You compare time to analgesia before and after the order set change using a t-test.

Research or QI?
You would like to reduce the median time to treatment of pain for limb injury in your ED from 30 minutes to 15 minutes.

You work with your team to identify possible changes and decide to begin with a nursing directive for analgesia to be given in triage.

You create a chart to measure your progress toward the 15 minute aim.

Research or QI?
Your primary purpose is QI if:

- You are doing it to directly attempt to fix a local problem
- The work is valuable regardless of publication
- Your team is willing to do more than one thing to address the problem
- You’re not simply trying to conclude whether or not one thing worked
Imagine you have finished your research project. What problem can you address with this new knowledge?

Write a problem statement for the QI project you could design after finishing your research.
QI ETHICS: ARECCI

- A pRoject Ethics Community Consensus Initiative
- Created in 2003 by representatives from Alberta REBs, regional health authorities, and Alberta Health and Wellness
- Recognition that all projects involving individuals and their health records can involve risk
- Standard process to review projects according to primary purpose (research or quality) and level of risk
Our impact

ARECCI helps project leads to address and mitigate ethical risks through decision support tools, training opportunities and project ethics consultation.

ARECCI decision support tools

ARECCI decision support tools consists of two complimentary tools to assist project sponsors.

1. The ARECCI Ethics Screening Tool and
2. ARECCI Guideline Tool.

These tools have been co-developed and validated. They help determine:

1. level of risk of your project,
2. types of ethical risks, and
3. appropriate type of ethics review.

Each tool aids in the identification of ethical areas of concern.
**Legend**

- Provides more information about a question (if available).
- **Save the current state of the tool and retrieve a URL for bookmarking.** *Note: This is not the same as selecting File > Save As in your browser. Please use this save function instead.*
- E-mail the results of the tool.
- Print the results of the tool.
- Submit feedback regarding the tool.

**Project Title:**

Date Completed: October 08, 2014

**Step 1: Preliminary Questions**

1. Is there an explicit requirement for review of this project by a Research Ethics Board as part of its funding arrangements?  
   - Yes  
   - No

2. Are there any local policies that require this project to undergo review by a Research Ethics Board?  
   - Yes  
   - No
13. Is the current project part of a continuous process of gathering or monitoring data within an organization?

Notes:

Your score indicates that the most probable purpose of your project is Quality Improvement or Program Evaluation. Please proceed to determine the category of risk to your participants.

Does your project involve...

14. Likelihood that a breach of confidentiality could place participants at risk of legal liability, denial of insurance or other damage to financial standing, employability, or reputation?

15. A real or potential conflict of interest between an investigator and the sponsor of the investigation?

16. A power relationship between the investigator and participants (e.g., manager/employee, therapist/client, service provider/recipient, teacher/student)?
Your score is 19. The project involves Somewhat More Than Minimal Risk and should be reviewed by a Second Opinion Reviewer.

Questions that affected your final score:

19. Collection of data through technical procedures or diagnostic tools routinely employed in the setting?  

20. The use of tests, surveys, interviews, oral history, focus groups, or observation of public behaviour where the participants can be directly or indirectly identified through the information recorded?  

22. Personally identifiable data, documents, records or specimens originally collected solely for purposes not related to the current study?  

23. Special populations or any individuals or groups in a socially vulnerable position?  

26. A person who does not normally have access to participant records and whose use of records is for a secondary purpose?  

Ethics Screening Score Cutoff Points
4. HOW WILL YOU MAXIMIZE BENEFITS AND MINIMIZE OR MITIGATE THE ETHICAL RISKS IN THE PROJECT?

POINTS TO CONSIDER

- How will your organization and participants benefit from the project?
- What are the risks identified by the ARECCI Ethics Screening Tool and how will you minimize and mitigate them?
- What are the risks of not doing this project?
- Will your organization tolerate the risks that remain in your project?

Describe the benefits to participants and to your organization.
What about Implementation Science?

• IS = the study of methods to promote uptake of evidence into practice
• Both IS and QI share goal of improving quality
• QI has the primary purpose of fixing a quality gap and may be shared for others to learn from
• IS has the primary purpose of developing knowledge about evidence implementation that will apply beyond the local quality gap

What is “QI Research”?

• Efforts to build knowledge that add to understanding the science of quality improvement
• Examples
  – What contextual factors or strategies support improvement?
  – What factors contribute to successful spread?
  – Is an improvement project generalizable?
    (This would be an example of implementation science.)
How is QI conducted?

1. Identify the Problem
2. Form a Team
3. Consider Ethics
4. Understand the Problem
5. Set the Aim
6. Plan the Change
7. Measure the Change
8. Repeat Cycle as Needed
9. Sustain Success
10. Share
The problem statement

• Identify an area where a quality gap exists
  – Ideal conditions for QI success:
    • Solid evidence to inform a standard of care
    • Accessible data
    • Gap between current and desired practice
    • Motivation to change/improve
    • Resources to match scope of project
ACH ED example

• Review of data on all children presenting with limb injury over a one-year period
  – 20% were given a pain score at triage
  – 32% received medication for pain during their visit
The problem statement: which is best?

• Pain in the emergency department is undertreated.
• Only 20% of children with limb injury receive a pain score upon ED arrival because the electronic record is not user-friendly.
• For children presenting to the ED with acute limb injury, 20% receive a documented pain assessment at triage.
Reflection

• Think about your project for this course.
• What is your primary purpose?
• If it is to learn something new, how will the knowledge solve a future problem?
• Write an imaginary problem statement that could be used by someone in the future who wants to improve quality with your new knowledge.
Forming a Team

• You need a team when...
  • The task is complex, and no one person has the knowledge, skills, and experience to implement a solution.
  • Change will require commitment and cooperation across units or disciplines.
    – Discuss team membership with leadership and include members from all groups who will need to participate in a change
Consider Ethics

- Think again about your primary purpose
- Are you mostly trying to fix a local problem or mostly trying to learn something that you can share?
- If fixing a local problem, probably QI
- Proceed with ARECCI process
- Contact REB to confirm exemption
  - Send protocol, ARECCI screening tool document, ARECCI guidelines document, and copy of Second Opinion Review letter if obtained
Understanding the Problem

• You will learn many tools for understanding the problem in the EPIQ workshop
  – 5 Whys
  – Force Field Analysis
  – Fishbone Diagram
• One other that may be helpful is a Failure Mode and Effect Analysis (FMEA)
• No right tool as long as you understand your problem before trying to solve it
FMEA diagram

- Outlines steps in process
- Indicates potential failures
- Identifies potential solutions
Process: Pediatric limb injury pain assessment and treatment at triage

**CURRENT PROCESS**

- Pt arrives; does pre-triage or full triage
- RN decides whether to ask about pain
- Patient reports pain
- RN chooses analgesia approach
- RN retrieves analgesia
- RN administers analgesia
- Pt to WR or treatment room

**INTERVENTIONS**

- Pain protocol
- May wait in line
- May not report pain if not asked
- Inconsistent use of pain scale
- Inconsistent documentation
- Under-appreciation of importance of assessing pain
- Time pressures
- Inconvenient tools
- Lack of convenient, standardized tools
- Language/cultural barriers
- Lack of easy access to common analgesics at triage
- Lack of standardized approach
- Time pressures
- Unable to obtain patient weight for appropriate dosing
- Inability to access appropriate doses of medications
- Requirement of physician orders prior to administration
- Triage support to Triage RN
- Standing MD orders for analgesics
- Pharmacy support to Triage RN
- E-pod RN

**FAILURE MODES**

- May refuse/not take
- Inconsistent approach to reassessment
- Inconvenient tools
- Lack of convenient, standardized tools
- Language/cultural barriers
- Lack of easy access to common analgesics at triage
- Lack of standardized approach
- Time pressures
- Unable to obtain patient weight for appropriate dosing
- Inability to access appropriate doses of medications
- Requirement of physician orders prior to administration
- Inconsistent approach to reassessment
Setting Your Aim

Example:

We will increase the proportion of patients with limb injury who receive analgesic medication at triage from 32% to 40% within 6 months.
What is wrong with these aims?

- We will improve care of children with pain within 6 months.
- We will increase the proportion of patients with limb injury who receive analgesia by 50% within 6 months.
Return to your problem statement.

Write a SMART aim for your imaginary future QI partner who will use your research to improve care.
Planning the Change: Key Driver Diagrams

Source: The Illustrated Guide to Quality Improvement by Sonia Sparkles, NHS Foundation Trust
https://qi.elft.nhs.uk/qi-illustrations/
KEY DRIVER DIAGRAM: Improving pain treatment

SMART AIM
We will increase the proportion of patients with limb injury who receive analgesic medication at triage from 32% to 40% within 6 months.

GLOBAL AIM
Improved pain management for ED patients.

KEY DRIVERS
- Family awareness and empowerment
- Standards for pain treatment
- Accurate pain assessment and documentation
- Resource availability - Medications, Tools and supplies
- MD and Nursing prioritization of pain assessment and treatment
- Staffing/patient volume

INTERVENTIONS
- Provide signage and tools to empower families and raise awareness of options
- Develop a guideline for acute pain assessment and treatment. Have tools available
- Redesign fast track workflow to improve efficiency
- Share feedback from families and progress toward goals; solicit input from front lines

Key
Green shaded = what we have begun working on
How are you feeling?

Let's work together to reduce pain.

We can help by:
- helping kids rate their pain
- providing pain medicine
- asking about no-needle options
- using comfort positions for procedures
- offering items on our comfort menu

Kids can help by:
- talking to us - ask questions and let us know what we can do for you

Grown-ups can help by:
- letting us know if your child isn't comfortable
- providing distraction, reassurance, a soothing voice, or a loving touch
- asking about how to support your child during a procedure

Our commitment to comfort:
We'll do our best to promote comfort by helping to lessen pain and anxiety. Please let us know what we can do to help.

Is your child having a needle?

Please ask if Numbing Cream (Maxilene® or Ametop®) is right for your child.

Our goal is to use numbing cream BEFORE ALL POCKES For IV starts & blood work (as long as your child doesn't need their IV or blood work right away).

It takes at least 30 minutes to work. If we forget, remind us early!

AHS Commitment to Comfort®
Measuring Change

"If you can't measure it, you can't improve it."

• QI saying of uncertain attribution
4 Types of Measures

• **Outcome measures**
  – Are changes leading to improvement of the end result?
  – Are we reducing pain with our pain management?

• **Process measures**
  – Are the parts and steps in the system functioning as planned?
  – Are we giving pain medication earlier?

• **Structure measures**
  – Do we have necessary structures in place?
  – Do we have an appropriate analgesia care guideline?
• Balancing measures
  – Are changes designed to improve one part of the system causing new problems in other parts of the system
  – Can be structure, process, or outcome
  – Are we increasing ED waiting time by adding pain treatment steps to the triage process?
Did your project result in a change?
Pain study example

- Pain scale signs were created to determine whether this would result in more patients receiving analgesia during their ED visit.
- In the week prior to the intervention, 16.6% met the target; one month after the intervention, 44.4% met the target.
- Was the intervention a success?
“Premature pizza party error”
- M. Siska, CCHMC
Proportion of patients receiving analgesia

Week

% receiving analgesia

Target: 50%
Desired direction ↑

Time 1

Time 2
Data over time

What can you conclude here?

Or here?
Run Charts and Control Charts

- How do we know if variation is not random?
- How do we look at QI data and identify non-random changes, if monitoring in real time rather than using traditional statistical methods at the end of the project?
Run Charts and Control Charts

• Statistical Process Control introduced by Walter Shewhart at Bell Labs in 1920’s

• Described “common cause” and “special cause” variation
  – Common cause is variation due to chance
  – Special cause is variation beyond what is expected by chance

• Allows surveillance for non-random change
Types of variation

• Common Cause Variation
  – Random
  – Not explainable
  – Do not waste time investigating

• Special Cause Variation
  – Non-random
  – May be explained
  – Consider investigating
# Special Causes

<table>
<thead>
<tr>
<th>Shift</th>
<th>Trend</th>
<th>Run</th>
<th>Astronomical</th>
</tr>
</thead>
</table>
| • 6 or more consecutive points either *all* above or below the median | • 5 or more consecutive points all going up or all going down | • A series of points in a row on one side of the median  
  • May have too many or too few for number of data points | • Not a statistical observation  
  • Logically obvious that a data point is unlike any of the others |
Run Charts

Rule 2: Trend

Rule 1: Shift
Run Charts

- Need to refer to a table for expected number of runs for number of data points

Rule 3: Number of Runs

- Data line crosses once
- Too few runs: total 2 runs

Need to refer to a table for expected number of runs for number of data points
Control Charts

out-of-control point

upper control limit

centerline

lower control limit

Mean of Weight

UCL = 22.01

Avg = 20.40

LCL = 18.78
Control Chart Zones

Zone A $\pm 3$ sigma
Zone B $\pm 2$ sigma
Zone C $\pm 1$ sigma

Mean or Average

$\bar{X}$
SPC: “Special Causes”

- Any point above $+3\sigma$
- 2 out of the last 3 points above $+2\sigma$
- 4 out of the last 5 points above $+1\sigma$
- 8 consecutive points above center line
- 8 consecutive points below center line
- 4 out of the last 5 points below $-1\sigma$
- 2 out of the last 3 points below $-2\sigma$
- Any point below $-3\sigma$
- 6 consecutive points trending up or down
- 14 consecutive points alternating up and down
Children 4-17 with limb injury receiving ≥1 dose analgesia

Increase from 32% to 44%

Aim: 40%
Combining Control Charts Analysis with Statistical Analysis

• Remember primary purpose is to reach the aim
• Significance of change is of secondary importance
  – May still matter if deciding whether to sustain and spread
• Interrupted time series can evaluate change over time
• Measures slope and intercept of line before and after designated time
• Accounts for underlying trends

Kontopantelis E et al Regression based quasi-experimental approach when randomisation is not an option: interrupted time series analysis BMJ 2015;350:h2750
Interrupted Time Series

- Rate of change of the proportion of patents receiving analgesia in the ED increased at the beginning of the improvement phase and was sustained through the sustainability phase (p < 0.05).
Sustainability Planning

• **Measurement**
  – What measurement will continue?

• **Ownership**
  – Who will be in charge?

• **Communication and Training**
  – How will people be kept informed?

• **Hardwiring Change**
  – How can the right actions be made easy?

• **Assessment of Workload**
  – How will impact on workload be managed?
A Framework for Spread

Phases of Scale-up

Leadership, communication, social networks, culture of urgency and persistence

Adoption Mechanisms

Learning systems, data systems, infrastructure for scale-up, human capacity for scale-up, capability for scale-up, sustainability

Support Systems

IHI, 2006
Test Scale-Up

- **Aim:** To form a quality improvement collaborative among the 3 Calgary general ED's to:
  1. Improve the proportion of children receiving analgesia for limb injuries from 23% to 40%
  2. Reduce the median time to analgesia from 89 minutes to < 60 minutes
Test Scale-Up

• Interventions
  – Quality improvement collaborative (QIC)
  – Project leads taught QI skills, shared resources
  – Interdisciplinary teams at each site
    • Physicians, nurses, orthopedic technicians
  – Each site developed key driver diagrams, set aims, planned tests of change (PDSA cycles)
  – Monthly QIC meetings to share learnings
Results

% of Visits with Analgesia

- Median: 21%
- Median: 34%
- Median: 34%

Median: 89 minutes
Median: 56 minutes
Median: 45 minutes

Implementation
April 1, 2016

Sustaining change
Oct 1, 2016 – Sept 3, 2017

Median Triage to Analgesia Minutes

Median: 89 minutes
Median: 56 minutes
Median: 45 minutes
Full Scale

- 97 ED’s invited, 36 accepted
  - All geographic zones
  - 40% of pediatric ED visits in Alberta
### Process measures
- For patients 0-12 years of age undergoing phlebotomy
  - Proportion receiving topical anesthetic cream
- For patients 0-16 years of age with a fracture
  - Proportion with a documented pain score
  - Proportion who receive analgesic medication
  - Median time to analgesia

### Balancing measures
- Length of stay, opioid use
Methods

- **NACRS Fracture Visits**
- **Meditech Sunquest Millennium Bloodwork Visits**
- **alteryx Randomization**
- **REDCap**
Results

Small Multiples: Topical Anesthetic
Results

Topical Anesthetic Provided with Lab Tests
Children 0-12 years
June 2016 - May 2018

Aim: 50%

N = 2910

↑ from 11% to 30%
Special cause+
ITS p < 0.001 jump
p < 0.05 slope
Median Minutes to Analgesia
Children 0-16 with Fracture
(June 2016 – June 2018)

- Start of Webinars
- Start of Tests
Results

Balancing Measures

Opioid Given
Children 0-16 Years with Fractures

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>7/01/16</td>
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<tr>
<td>5/01/18</td>
<td>n=122</td>
</tr>
</tbody>
</table>

Length of Stay, Minutes

- Peds Participating
- Peds NP
- Adult Participating
- Adult NP

Start of webinars
Start of tests of change
SQUIRE 2.0 Guidelines

• Developed in 2008, updated in 2015, by a consensus panel of QI publication experts
• Gives authors a framework upon which to structure a QI manuscript
• The same framework can also be instrumental in project design
• Goal is to support high-quality writing about improvement efforts

http://squire-statement.org
## SQUIRE 2.0 Guidelines

<table>
<thead>
<tr>
<th>Title and Abstract</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Title</strong></td>
<td>Indicate that the manuscript concerns an initiative to improve healthcare (broadly defined to include the quality, safety, effectiveness, patient-centeredness, timeliness, cost, efficiency, and equity of healthcare)</td>
</tr>
</tbody>
</table>
| **2. Abstract** | a. Provide adequate information to aid in searching and indexing  
  b. Summarize all key information from various sections of the text using the abstract format of the intended publication or a structured summary such as: background, local problem, methods, interventions, results, conclusions |

<table>
<thead>
<tr>
<th>Introduction</th>
<th><strong>Why did you start?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3. Problem Description</strong></td>
<td>Nature and significance of the local problem</td>
</tr>
<tr>
<td><strong>4. Available Knowledge</strong></td>
<td>Summary of what is currently known about the problem, including relevant previous studies</td>
</tr>
<tr>
<td><strong>5. Rationale</strong></td>
<td>Informal or formal frameworks, models, concepts, and/or theories used to explain the problem, any reasons or assumptions that were used to develop the intervention(s), and reasons why the intervention(s) was expected to work</td>
</tr>
<tr>
<td><strong>6. Specific Aims</strong></td>
<td>Purpose of the project and of this report</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Methods</th>
<th><strong>What did you do?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7. Context</strong></td>
<td>Contextual elements considered important at the outset of introducing the intervention(s)</td>
</tr>
</tbody>
</table>
| **8. Intervention(s)** | a. Description of the intervention(s) in sufficient detail that others could reproduce it  
  b. Specifics of the team involved in the work |
Summary

- Quality improvement is a process of identifying and measuring a problem, setting an improvement aim, and testing and learning from multiple changes, knowing whether progress is being made, and striving to reach the aim.
- Always be clear on your primary purpose.
- QI projects measure progress over time.
- Methods exist to guide project design, sustaining change, and share learnings.
Questions?