

QI: Making it Part of Everyone's Practice

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Objectives

1

define quality
improvement

2

identify the
importance of quality
improvement in
nursing practice

3

discuss strategies to
incorporate QI into
NICU care



Why do we
need
improvement

May seem like a silly question, of course we want to be better

In 2001 The Institute of Medicine reported that between 44,000-98,000 Americans die each year from medical errors.

This report started a journey to improve the quality of care across our health care systems

- **Quality improvement** is critical in reducing morbidities and improving outcomes



NICHD

Does QI make a difference?



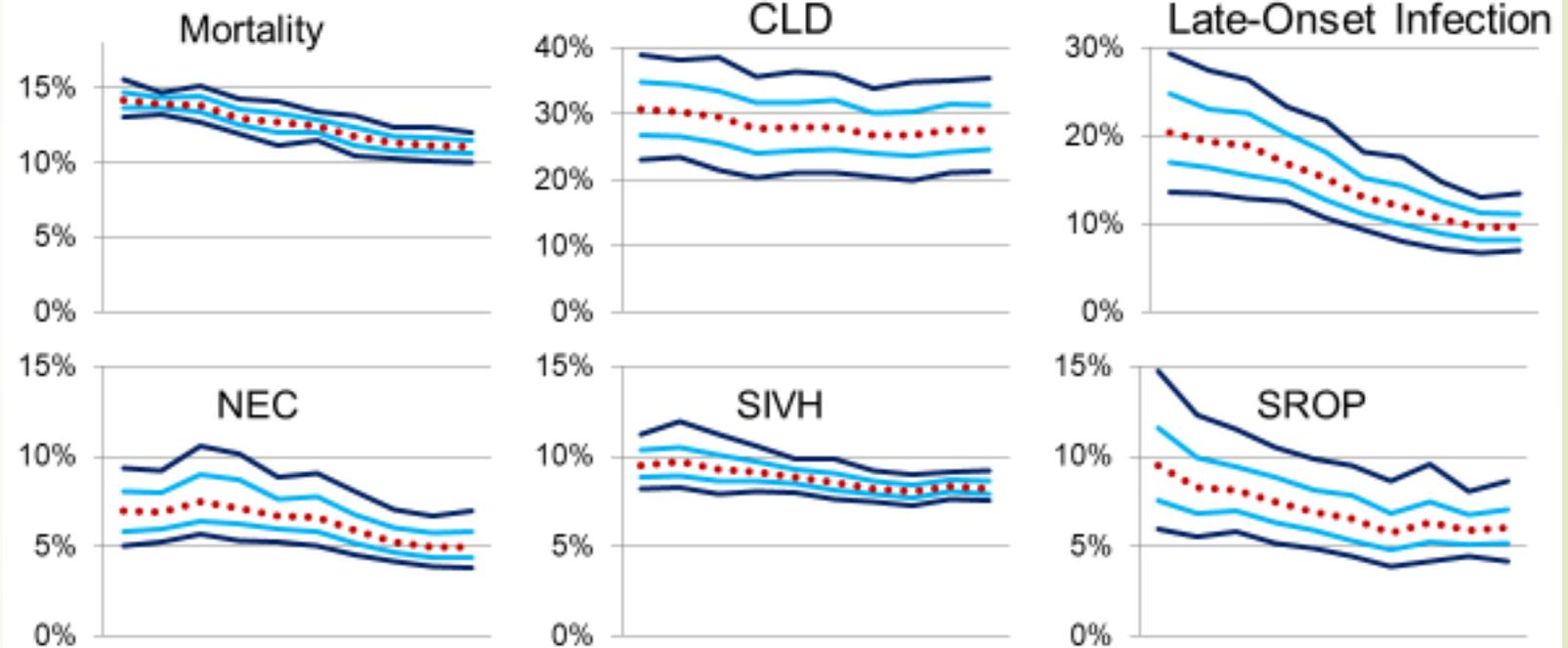
Credit: Morgan Walker for NPR

Vermont-Oxford Network: 2005-2014

➔ Horbar et al JAMA Pediatrics 2017

Results

Risk-Adjusted Rates of Outcomes in the NICU at the 10th, 25th, 50th, 75th, and 90th Percentiles, 2005-2014, With the Dark Blue, Light Blue, and Dotted Red Curves Indicating 10th/90th, 25th/75th, and 50th Percentiles, Respectively





What is
'quality
improvement'

- Quality improvement is the "combined and unceasing efforts of everyone- healthcare professionals, patients and their families, researchers, payers, planners and educators- to make changes that will lead to better patient outcomes (health), better system performance (care) and better professional development (learning)."

➤ - Batalden and Davidoff, 2007



Continuous quality improvement

➤ Principles

- robust measurement
- Repeated small tests of change
- Collaborative learning through data sharing



Quality Improvement

- QI is a formal process
 - It is planned and structured
 - It is a continuous process
 - It is measurable
 - It is both retrospective (examining past and current performance) and prospective- improving future performance



What is not QI?

- QI is not one person, one role or one small group behind an office door making decisions about how to improve care
- QI is a process involving everyone at every level of care



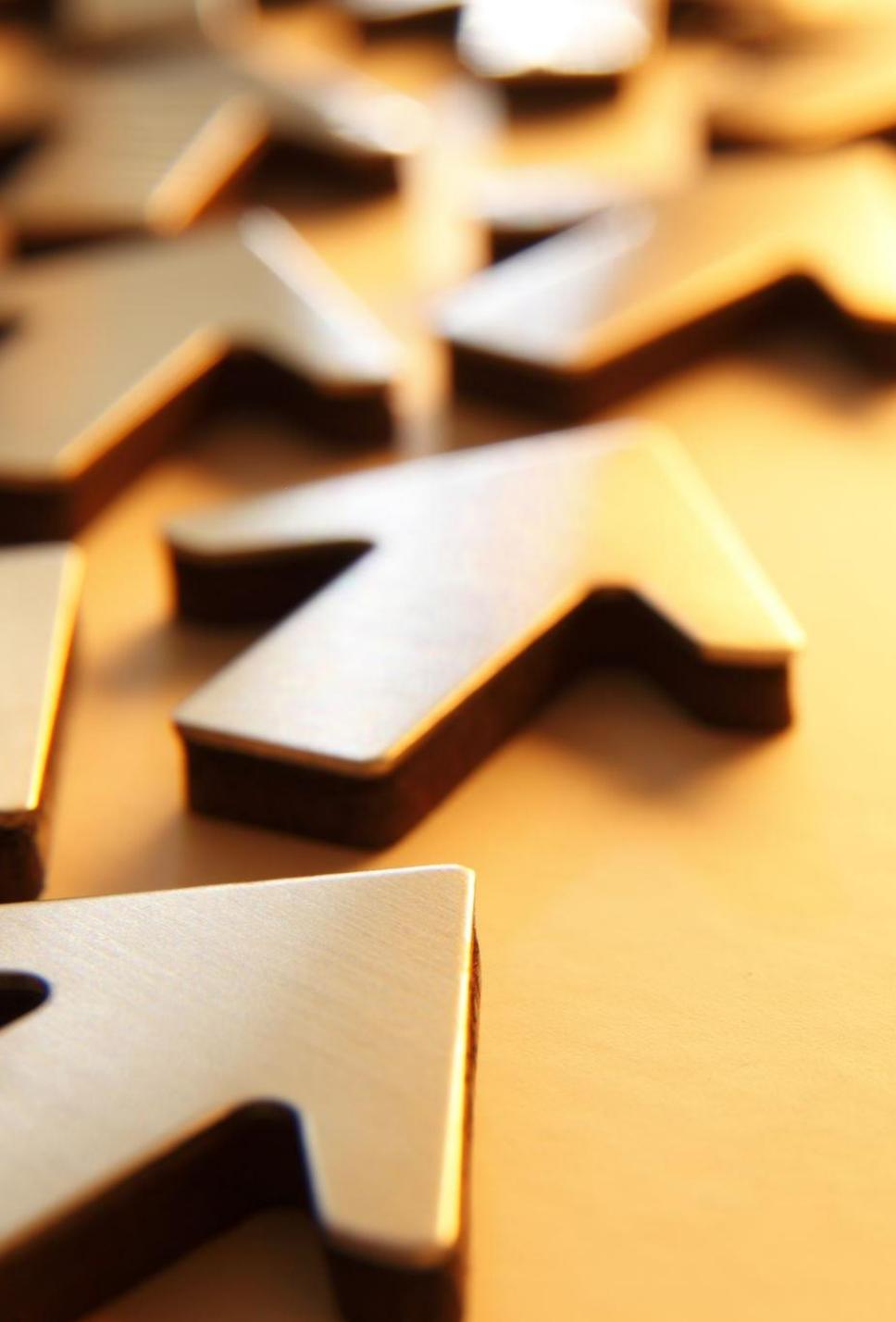
What QI is not

- It is not staff education
- It is not a new policy or guideline
- Bringing in a new piece of equipment
- It is not punitive or part of a performance review



Who is involved in QI

- ▶ If a goal is to target infection, those that clean the unit and take care of sterile supplies must be involved
- ▶ If you want to improve skin-to-skin care, parents should be involved in planning and implementing
- ▶ If you want to change *anything* that involves those caring for neonates, everyone need to be involved



What happens when the right people aren't at the table

- **Experts in organizational behavior suggest that**
- a top-down approach or a process done in isolation means that those who implement change may not be as invested in the change
- Champions for change should come from those expected to implement that change
- Resistance will be lower and change more successful if everyone involved understands the "WHY"

Lessons from Canadian work



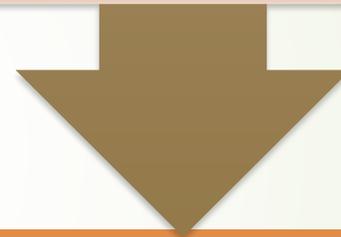
NIH.GOV



EPIQ:
Evidence-
based
Practice for
Quality
Improvement

Canadian Institute for Health Research (CIHR) funded, multi-year project aimed at reducing the incidence of five morbidities in infants <29 weeks gestation

BPD, ROP, NI, NEC, IVH



Initially 12 NICUs in Canada participated, expanding in the second phase to 32 NICUs

Canadian Preterm Birth Network

CNN – CNFUN – CNTN – CAPSNet – CSMFM





How does it work nationally?

National committees are established for each morbidity; subject experts review literature, site results and devise evidence-based bundles



The national committees hold regular teleconferences; someone from each hospital attends the teleconference and takes information back to the local team



Annually there is a national conference where each hospital presents one of their initiatives



How does
it work
nationally?

Outcome data is collected from each participating NICU, anonymized and made available in an annual report.



NICUs are encouraged to do site visits with high performing units in order to look for practices to 'bring back home.'



How does it work locally?

Each hospital has multidisciplinary teams that work through the QI process together



Teams include bedside nurses as well as RTs, dieticians, pharmacists and NNPs

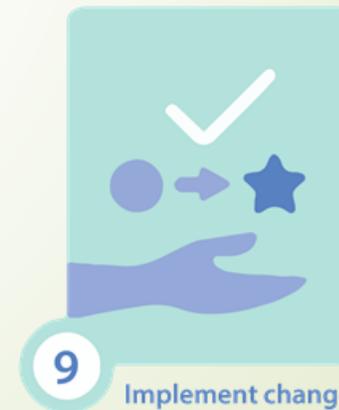
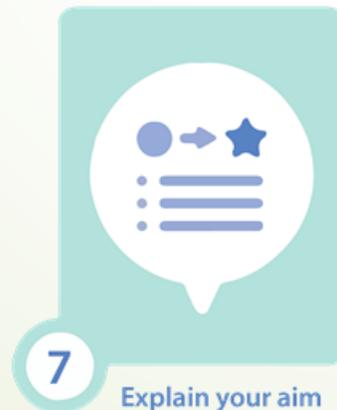
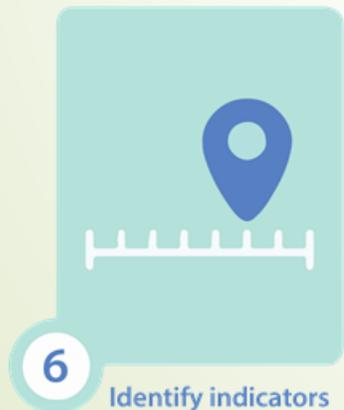
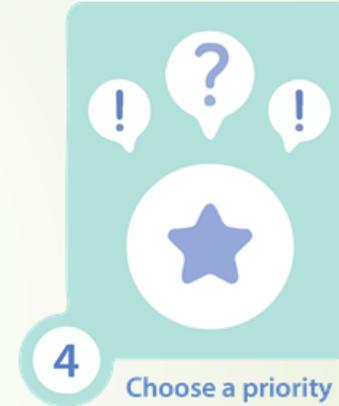


Some teams have parent members or parent consultant



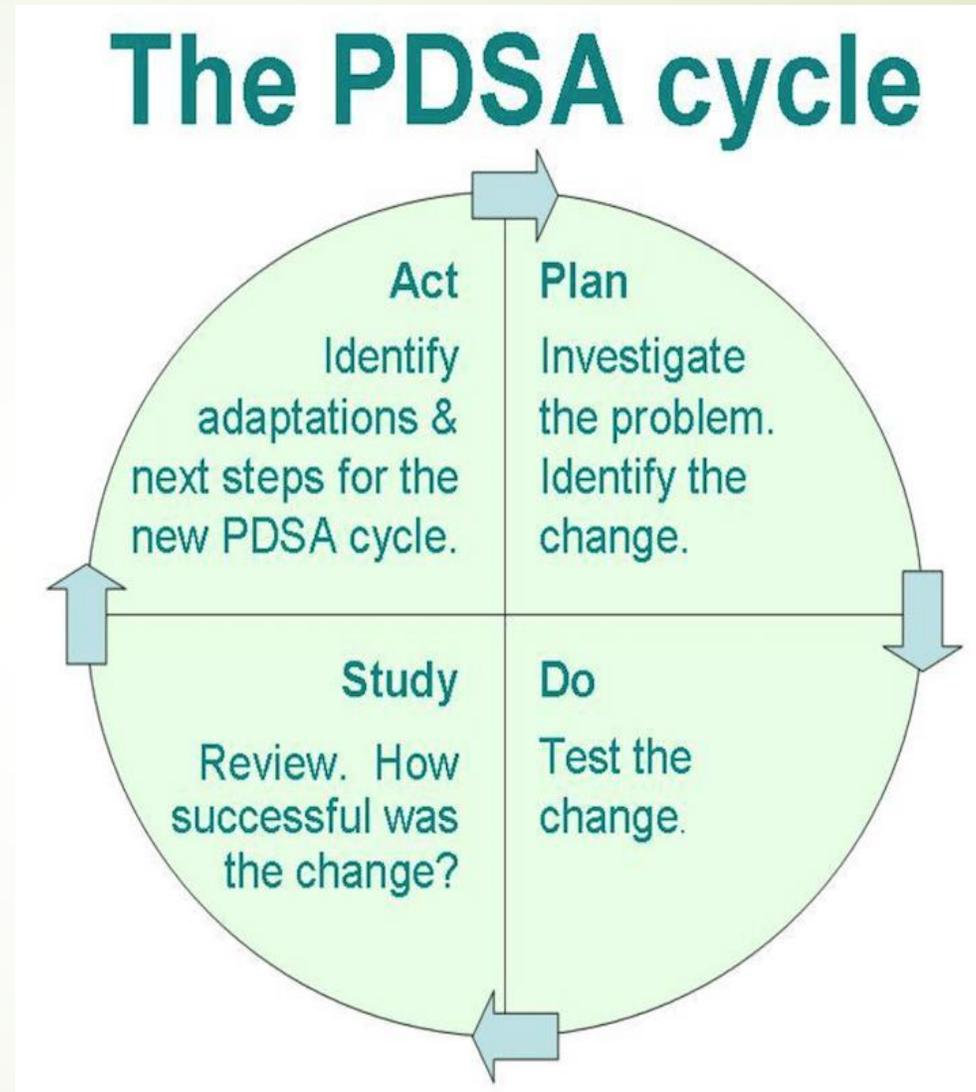
Teams meet regularly to discuss how local data compares to other units and how local practices compare to the recommended bundles

EPIQ 10 steps



QI Frameworks

- One of the most common in healthcare is the PDSA



Morgan, V. 2016
deming.org



Secrets to SUCCESS



It's a team that includes everyone



We can pick up the phone (or zoom) to connect with people from other units and compare, seek help, troubleshoot



Each unit doesn't have to re-invent the wheel



We're held accountable with the need to present a project each year

What are
some things
we have
done

- Oxygen targeting
 - Limit cards at each bedside
 - OWL audits
- Golden hour flow sheet and audits of handling and time to lid down
- Implementation of an NI bundle and Scrub the hub audits
- Liquid gold campaign
- Early initiation of first trophic feed



EPIQ Phase 1 and 2

In the first 3 years, NICUs using the evidence-based EPIQ bundles had a 44% decrease in NI and a 15% decrease in BPD

In Phase 2- more attention was given to the tools that would achieve the culture change needed to further reduce the targeted morbidities

In one participating NICU, Phase 2 saw a reduction in BPD of 27% and a 50% drop in NI

The EPIQ model has been adopted by six Latin American countries and multiple NICUs in Malaysia and China

One NICU in China decreased VAP rates by 50%

Why has EPIQ worked?

- ▶ It is supported by a national effort with broad expertise
- ▶ BUT- it is also supported at the unit level by many disciplines- medicine, nursing, dieticians, pharmacists, social workers, respiratory therapists and others
- ▶ Where possible it includes parents although this is still a work in progress



Parting thoughts

Whether you have
a formal program
or not, QI is part of
everyone's job
description

For the greatest
success make it a
team effort!



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