



# The Role of QI in Improving Birth Outcomes

Presented by Debra Bingham, DrPH, RN, FAAN

# 17 Year Research to Action Gap

“It now takes an average of 17 years for new knowledge generated by randomized controlled trials to be incorporated into practice, and even then application is highly uneven.”

Institute of Medicine (2001). Crossing the quality chasm: A new health system for the 21<sup>st</sup> Century, pg. 5.

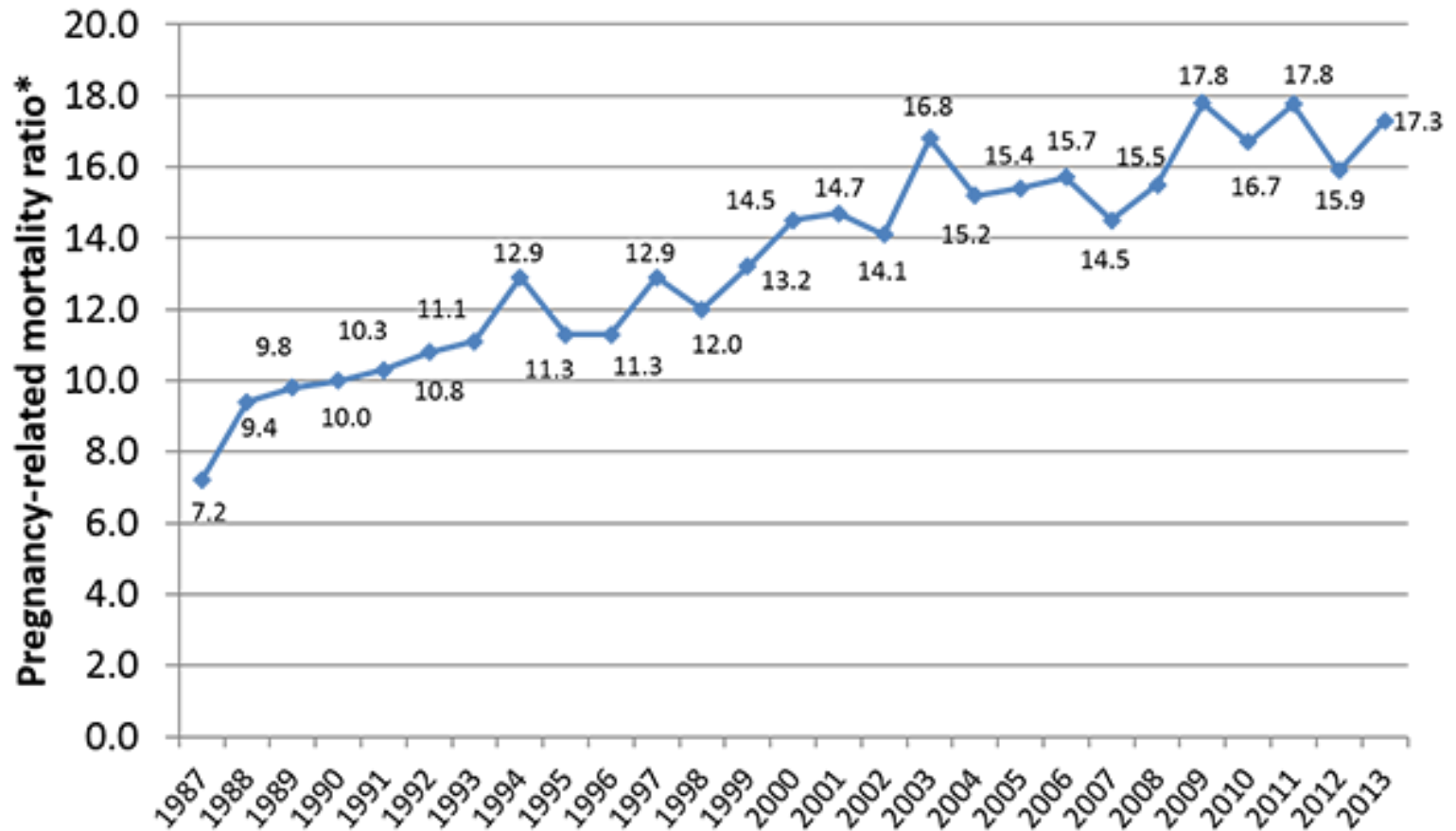
# Objectives

- Objective 1: Describe key components of the Hasting Report on Quality Improvement (QI) in healthcare.
- Objective 2: Outline available options that are designed to expand the use of improvement science.
- Objective 3: Discuss how to expand the use of improvement science methods among perinatal clinicians.

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Trends in Maternal  
Morbidity and  
Mortality

## Trends in pregnancy-related mortality in the United States: 1987–2013



\*Note: Number of pregnancy-related deaths per 100,000 live births per year.

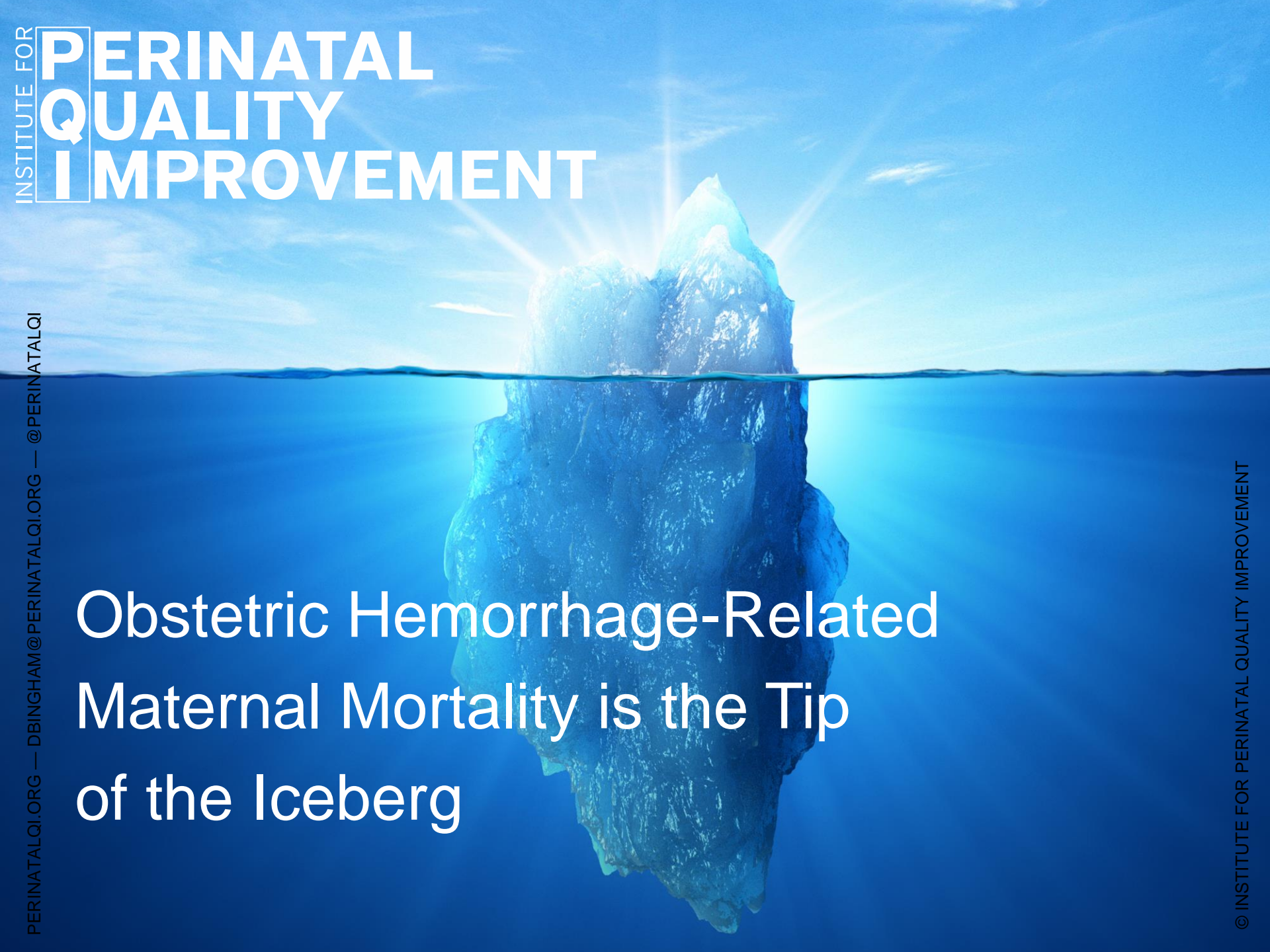
<https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.htm>

# In the United States Racial Disparities Persist

- 12.7 deaths per 100,000 live births for white women.
- 43.5 deaths per 100,000 live births for black women.
- 14.4 deaths per 100,000 live births for women of other races.

Much of these disparities are due to  
structural racism

<https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.htm>

A large iceberg is shown floating in a deep blue ocean. The top of the iceberg is above the water line, while the vast majority of its mass is submerged below the surface. The sun is shining from behind the iceberg, creating a bright glow and lens flare effects. The water is a deep, clear blue, and the sky is a lighter blue with some wispy clouds.

**Obstetric Hemorrhage-Related  
Maternal Mortality is the Tip  
of the Iceberg**

# PERINATAL QUALITY IMPROVEMENT

- 1998-1999 compared to 2008-2009
- 75% increase in severe maternal complications
  - 183% increase in blood transfusions

Callaghan, W.M., Creanga, A.A., and Kuklina, E.V. (2012). Severe maternal morbidity among delivery and postpartum hospitalizations in the United States. *Obstetrics & Gynecology*.



Women die or suffer injuries because they do not receive early, effective and aggressive lifesaving treatments.



California Department of Public Health (2011). The California pregnancy associated mortality review: Report from 2002 and 2003 Maternal Death Reviews.



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*[www.perinatalQI.org](http://www.perinatalQI.org)*

# Definition of QI

*“When we use the term “QI” in this report, we mean systematic, **data-guided** activities designed to bring about immediate, **positive changes** in the delivery of health care in particular settings.”*

Baily, M.A., Bottrell, M., Lynn, J., & Jennings (2006). Special report: the ethics of using QI methods to improve healthcare quality and safety. The Hastings Center: Garrison New York, pg. S5.

# Who has the responsibility for improving the quality of care?

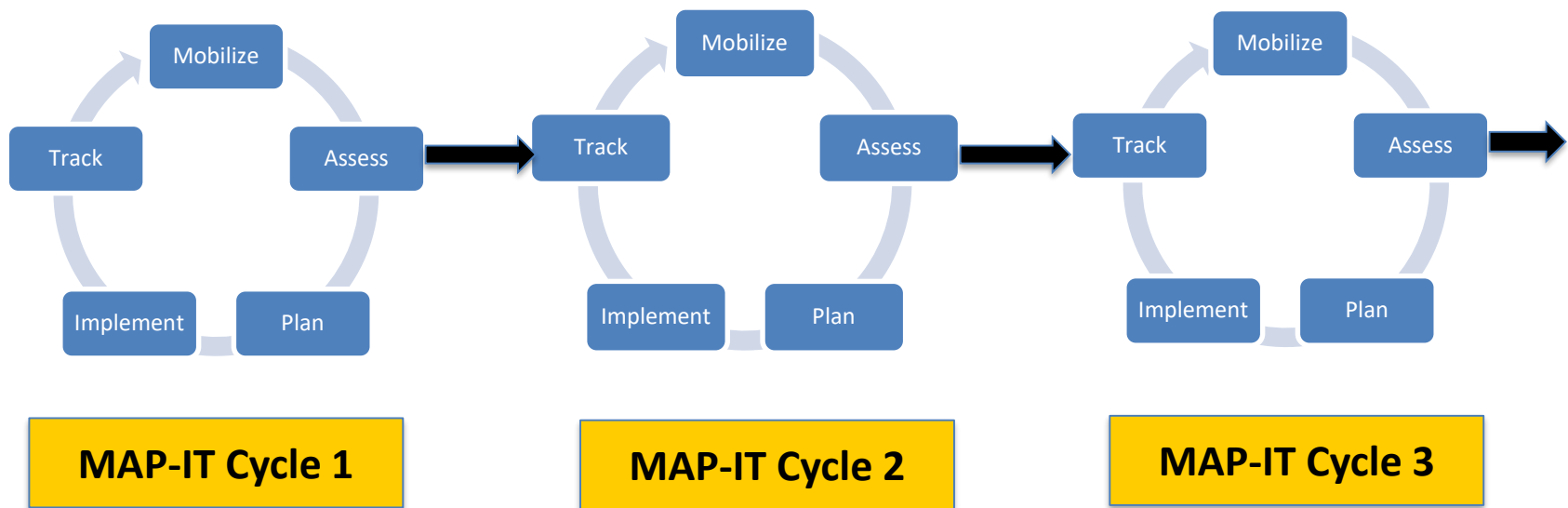
*“We conclude that engaging in quality improvement is **NOT** purely **Discretionary**; health professionals, managers, delivery organizations, patients, and government all have an ethical responsibility to cooperate with one another to improve the quality of care.”*

Baily, M.A., Bottrell, M., Lynn, J., & Jennings (2006). Special report: the ethics of using QI methods to improve healthcare quality and safety. The Hastings Center: Garrison New York, pg. S6.

*Have you received education on QI concepts, methods, and tools?*

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Perform Small Tests of Change  
Learn then Adjust (as often as needed)



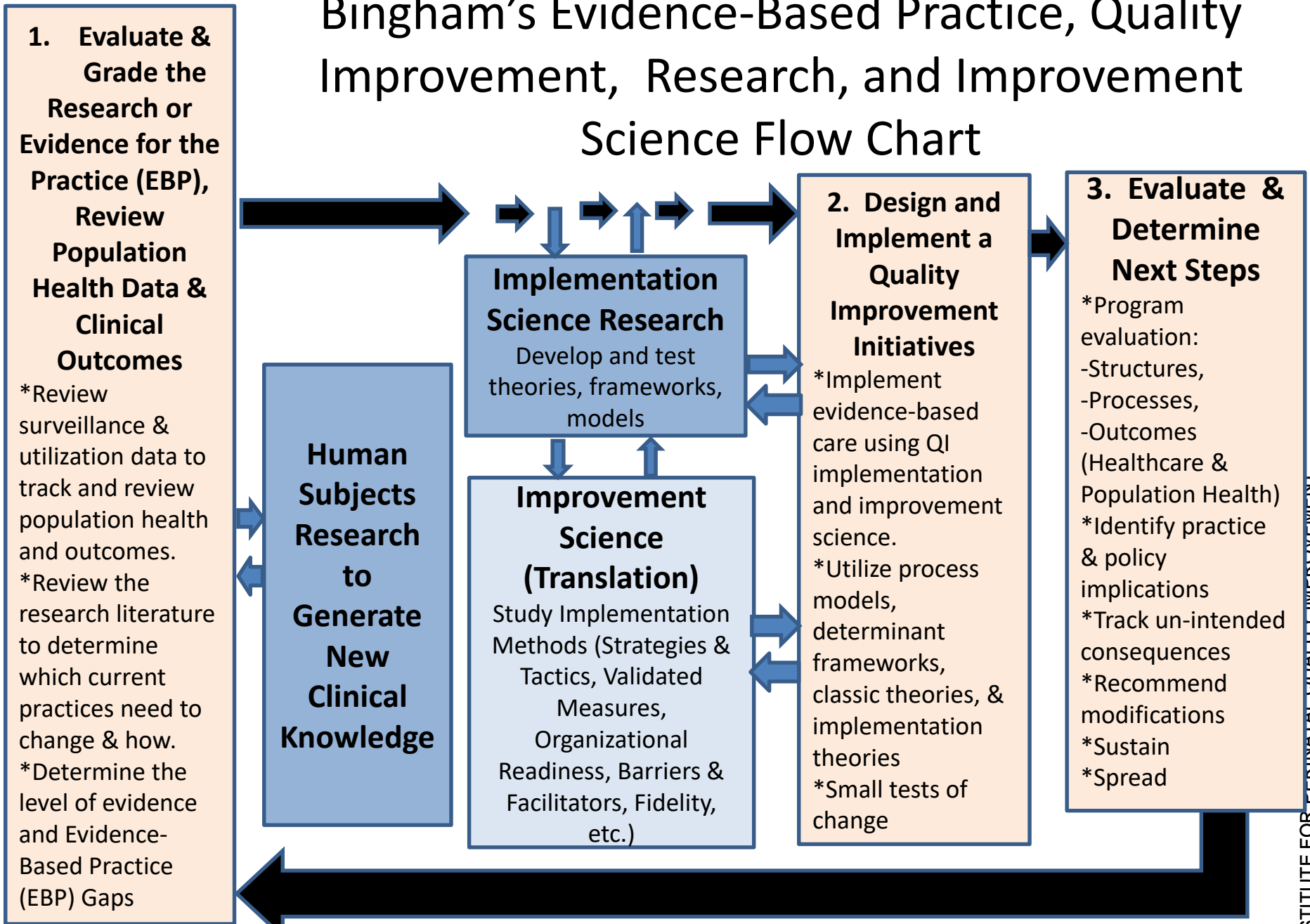
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# What is the relationship between?

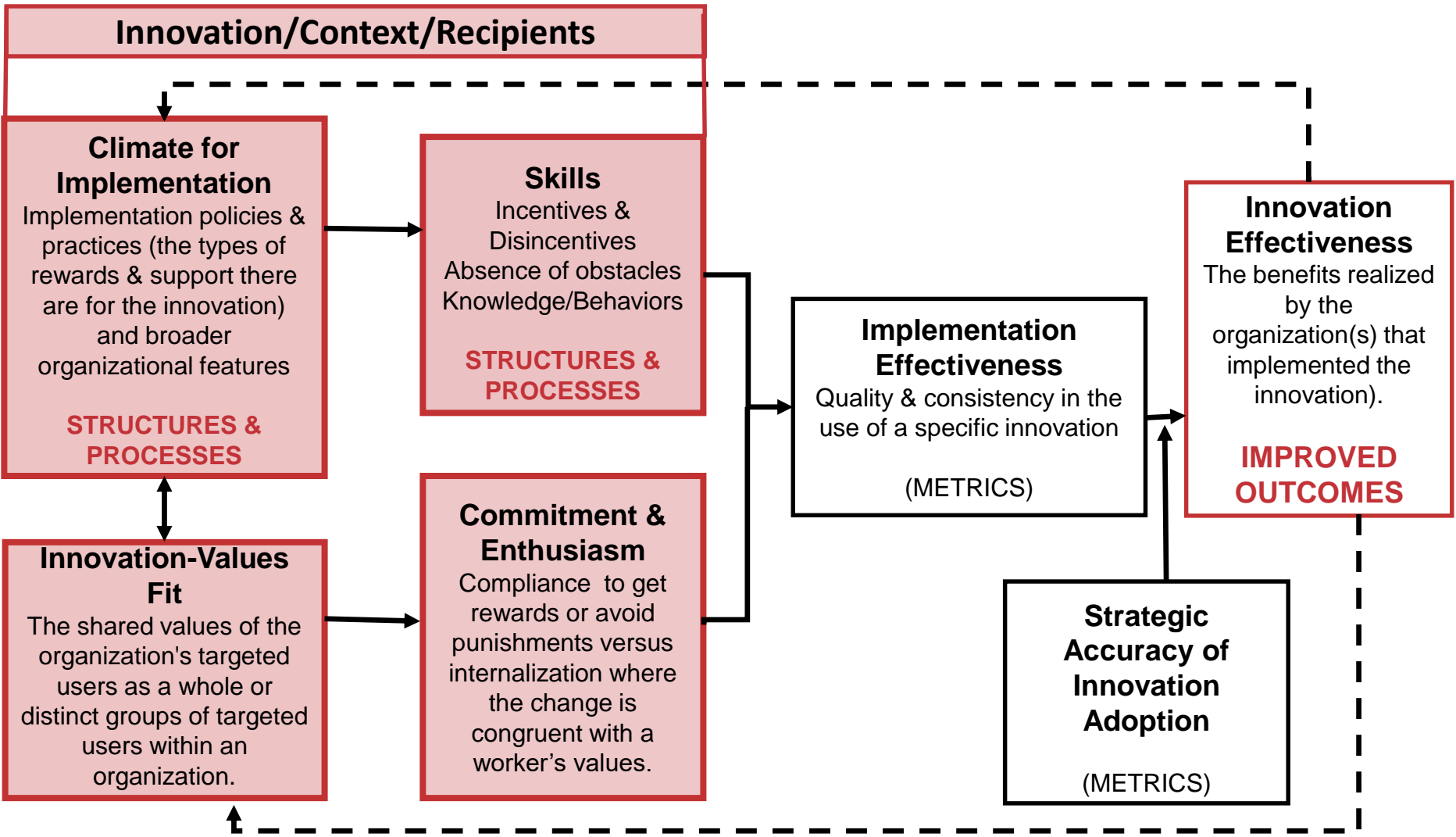
- Evidence-based practice – PICO
- Research
- Implementation Science
- Improvement Science
- Quality Improvement



# Bingham's Evidence-Based Practice, Quality Improvement, Research, and Improvement Science Flow Chart



# Klein & Sorra's Determinants and Consequences of Implementation Effectiveness merged with Donabedian and iPARHIS



Definitions, clarification, and merging with Donabedian added by the Institute for Perinatal Quality Improvement

Klein, K.J., & Sorra, J.S. (1996). The challenge of innovation implementation. *The Academy of Management Review*, 21(4), 1055-1080.

Weiner, B.J., Belden, C.M., Bergmire, D.M., & Johnston, M. (2011). The meaning and measurement of implementation climate. *Implementation Science*, 6:78, pp. 1-12.

Havey, G. and Kitson, A. (2016). PARIHS revisited: from heuristic to integrated framework for the successful implementation of knowledge into practice. *Implementation Science*. 11:33.

Donabedian, A. (1966). Evaluating the quality of medical care. *The Milbank Memorial Fund Quarterly*, 44(3), Suppl:166-206.

# Clinicians need QI Education & QI Support

- QI Methods and Concepts
  - Implementation Frameworks
  - QI Process Models
  - QI Ethics
- QI Tools
  - Process Maps
  - Fishbone Diagrams
  - Logic Models
  - Driver Diagrams

- Physicians, RNs, & Midwives have critical insights that will help improve quality and safety
- The more clinicians understand about QI methods, concepts, and tools the faster care can be improved!



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Space is Limited

# Implementing Perinatal Quality Improvement

[www.perinatalQI.org](http://www.perinatalQI.org)

Conference on February 1, 2018, New York City

# Objectives

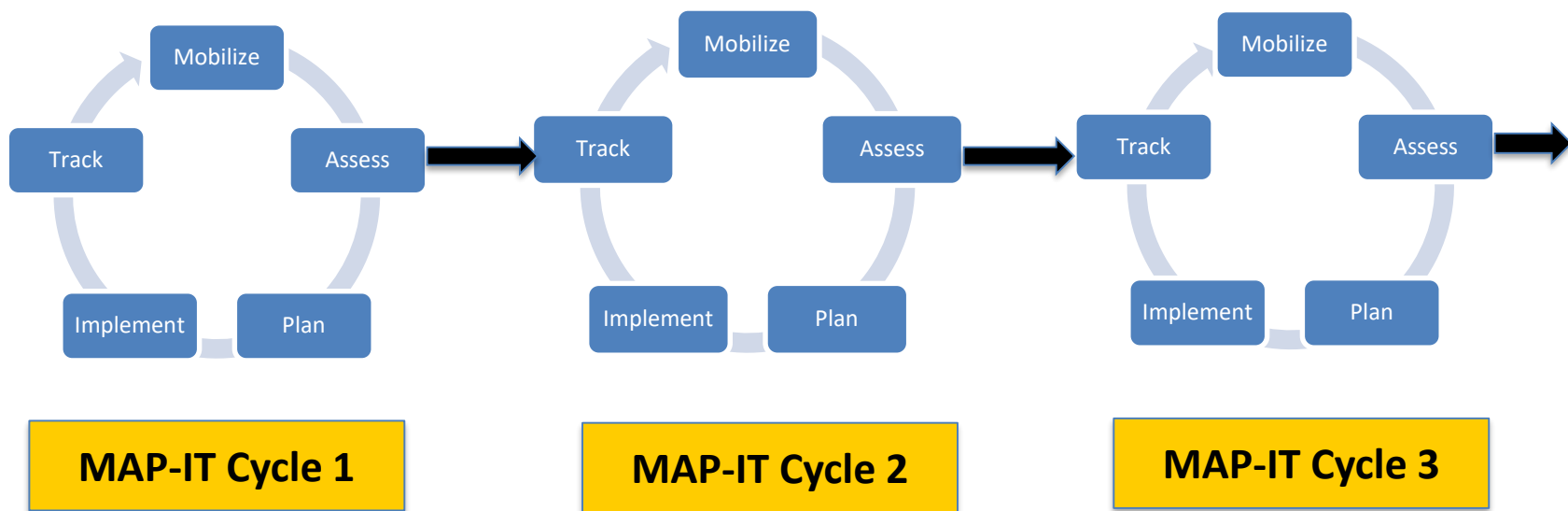
- Objective 1: Describe key components of the Hasting Report on Quality Improvement (QI) in healthcare.
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Quality  
Improvement  
is like  
climbing a  
spiral  
staircase

Each cycle gets you closer to your goal

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# PQI Options

- 2 Action Briefs a year  
(1 maternal and 1 neonatal)
- QI Project Maps
- Action Communities
- PQI Blog
- Tools and Resources

# New Jersey QI Project Map Pilot Project



A one-year PQI Premium  
subscription for all  
Birthing hospitals in New  
Jersey!

*Thank you to the Tara Hansen Foundation*

# www.perinatalQI.org

ing started

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Enter search criteria...



QI MAPS ▾

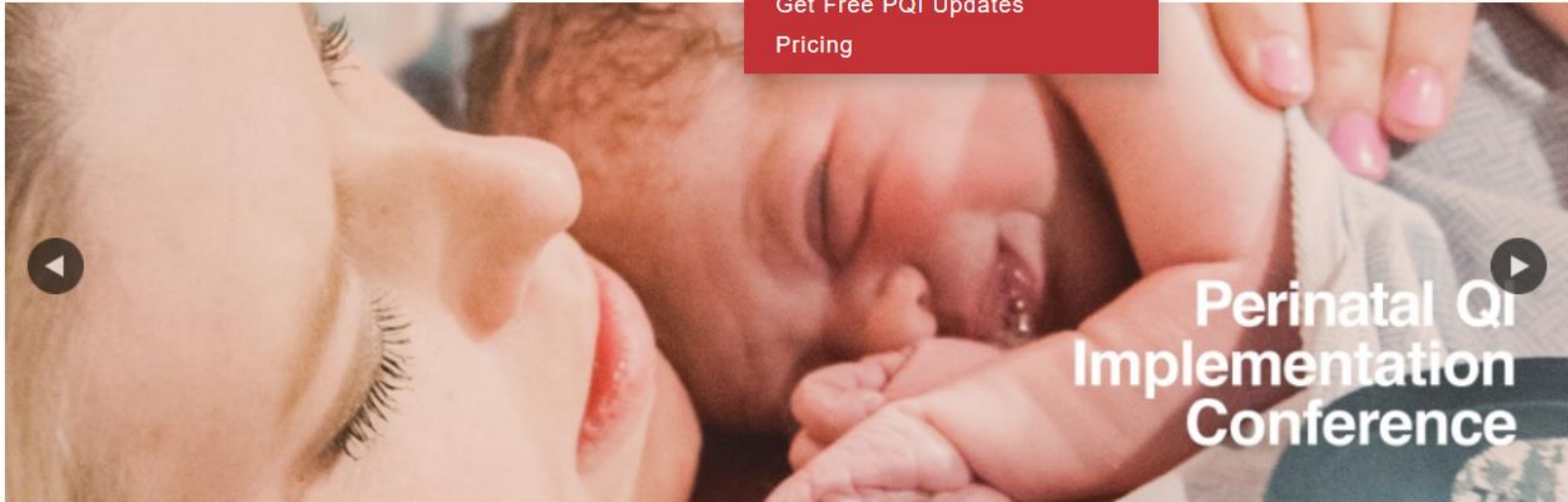
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Subscribe as Premium or Basic  
Get Free PQI Updates  
Pricing



Helping perinatal health professionals expand their use of improvement science in order to eliminate preventable perinatal injuries and deaths.

## QI SAVES LIVES!

Mothers and newborns depend on quality improvement (QI) leaders to implement safety bundles and other evidence-based care practices. However,

SIGN IN

SIGN IN SECURELY

HAVEN'T REGISTERED YET?

al/register\_start.asp

# Premium Subscriptions Include

- **FREE - Premium Subscriptions (based on volume of births)**
  - Additional seat licenses – allow more QI Projects to be added to the QI Project Maps
  - Full search capability on the QI Project Maps – provides opportunities for collaboration with colleagues
  - Includes 2 Action Briefs a year
  - Discounts on other PQI Support
    - Coaching
    - Action Communities
    - Priority for hosting the Implementing QI Conference
  - Discounts on the Implementing Perinatal QI Conference

*QI Saves Lives!*

*[www.perinatalQI.org](http://www.perinatalQI.org)*

# Receive Action Briefs

- 2 Action Briefs a year (one maternal and one neonatal)
  - Powerpoint slide set case study
  - Facilitator guide
  - Summary of QI Opportunities
  - 2 Free Webinars summarizing the Action Brief Contents and tips for utilizing the Action Briefs in your facility
  - Action Template
    - Step-by-step approach
    - Example Action Plan
    - Example Logic Model
    - Example Driver Diagram
    - Example Cause and Effect Diagram

Sign-Up at: [www.perinatalQI.org](http://www.perinatalQI.org)

# Action Brief Benefits

- Save time by using pre-developed slides
- Be proactive - learn from morbidity and mortality cases how to prevent similar negative outcomes
- Expand Improvement Science expertise for yourself, Action Teams and staff by following the step-by-step guide
- Inexpensive way to provide inter-disciplinary education

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[www.perinatalQI.org](http://www.perinatalQI.org)

# Feedback Is Needed

- Actions Briefs and Action Templates are new tools
- We will need your feedback as we roll out these tools nationally

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PERINATAL QUALITY IMPROVEMENT

Map your perinatal QI Projects at  
[www.perinatalQI.org](http://www.perinatalQI.org)

# NJ QI Project Map Pilot Project



- QI Project Leaders free subscription makes it possible for them to MAP their Perinatal QI Project(s) details

## Benefits:

- Facilitates networking among NJ Leaders
- Facilitates networking among leaders in other states who purchase a subscription

*QI Saves Lives!*

# Members of the New Jersey PQI Maps Pilot Project Work Group

## Robyn D'Oria, State Leader

- JFK Medical Center
  - Donna Weeks
- Capital Health
  - Pam Graziadei
  - Kathy Donaldson
- Community Medical Center (Toms River)
  - Lisa Schlesinger
- Jersey Shore University Medical Center
  - Roselyn Young
- AtlantiCare Regional Medical Center
  - Laurie Trongone
  - Tracy Reighard
  - Sherry Martin
- Virtua Voorhees
  - Barbara Hansen
- Morristown Medical Center
  - Pam Mellin
  - Donna Poplawski

# PQI Website Sign Up Process



- Click “Sign Up” on the website’s main menu, then:

## Select Your Subscription Type

Please select your subscription type below.

Click **here** to learn about PQI Premium Hospital subscription benefits and pricing.

**QI Saves Lives!**

- Premium 1 Facility Subscription (1-999 Births)**
- Premium 2 Facility Subscription (1000-2999 Births)**
- Premium 3 Facility Subscription (3000+ Births)**
- Basic Individual Subscription (Free)**

- Complete your registration by entering the promo code shown and then click “Submit” down below

If you are signing up for the first time, this is the last step of your registration.

### Membership Information

One-Year Premium 1 Facility (1-999 Births) — \$488.00

*Includes up to 3 seat licenses and education for all of the clinicians who work at this facility. Price per clinician is as low as \$9.76 per year (based on the estimate of 50 clinicians per facility).*

### Promotional Code

Enter a Promotional Code:  { **Apply Code** } { **Clear** }

### Member Information

**First Name**      frank

**Last Name**      sinatra

# Sub-Accounts or Seat Licenses

- There is one master account holder.
- The number of seat licenses includes the primary or master account holder.
- They will need to make sure that they enter the name of the hospital or facility exactly the same as the primary or master account holder.
- Each person with a seat license can enter 2 projects into the maps.

# Enter QI Project Information

- Project type
- Project Aims, Goals or Objectives
- Date Project Began
- Implementation Tactics (dropdown)
- Implementation Barriers (dropdown)
- Implementation Facilitators (dropdown)
- Description of Project Results
- QI Tips and Lessons Learned
- Also, you can enter a 2<sup>nd</sup> project, if desired

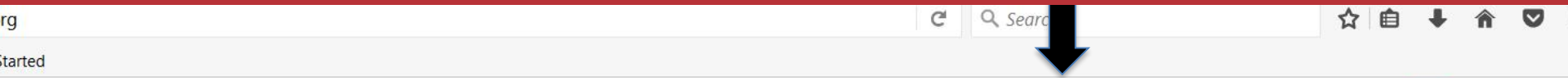
# Step-by-Step Guide

- We have developed a step-by-step guide
- During the hospital showcase session we will answer questions on how to sign-up
- You can also contact us at:  
Info@perinatalQI.org



Individual Subscriptions are not covered by the Tara Hansen Foundation funding.

# Search the QI Project Maps



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Enter search criteria...



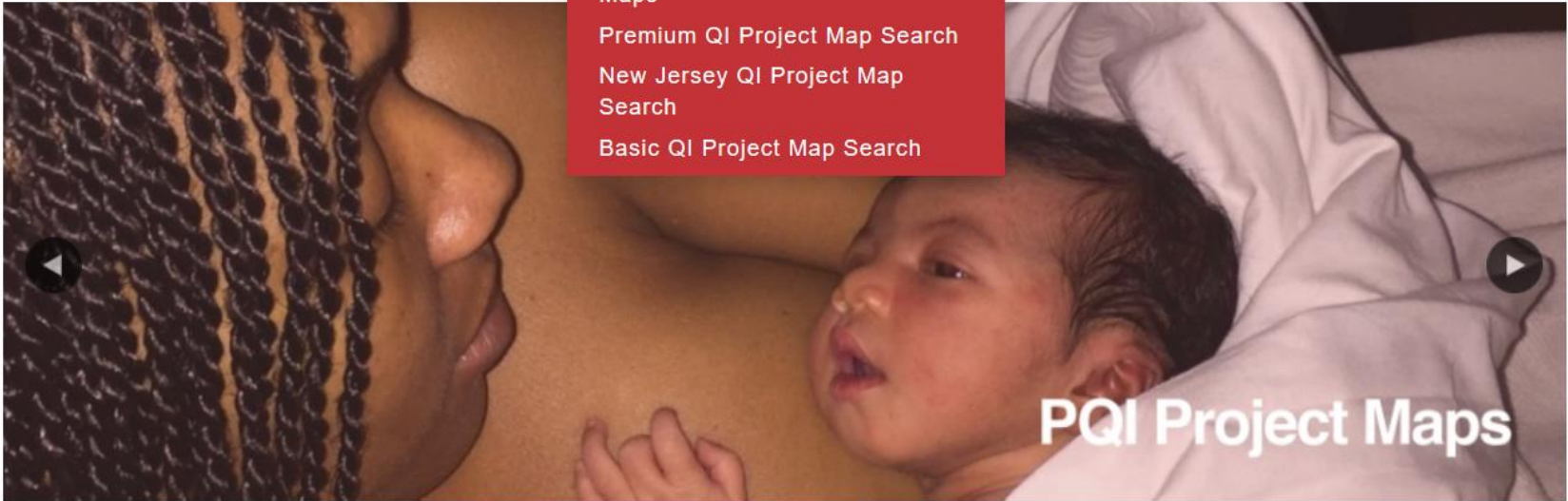
[QI MAPS](#) ▾ [SIGN UP](#) ▾ [ABOUT US](#) ▾ [EVENTS](#) ▾ [BLOG & TOOLS](#) ▾

Information About QI Project  
Maps

Premium QI Project Map Search

New Jersey QI Project Map  
Search

Basic QI Project Map Search



**PQI Project Maps**

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**QI SAVES LIVES!**

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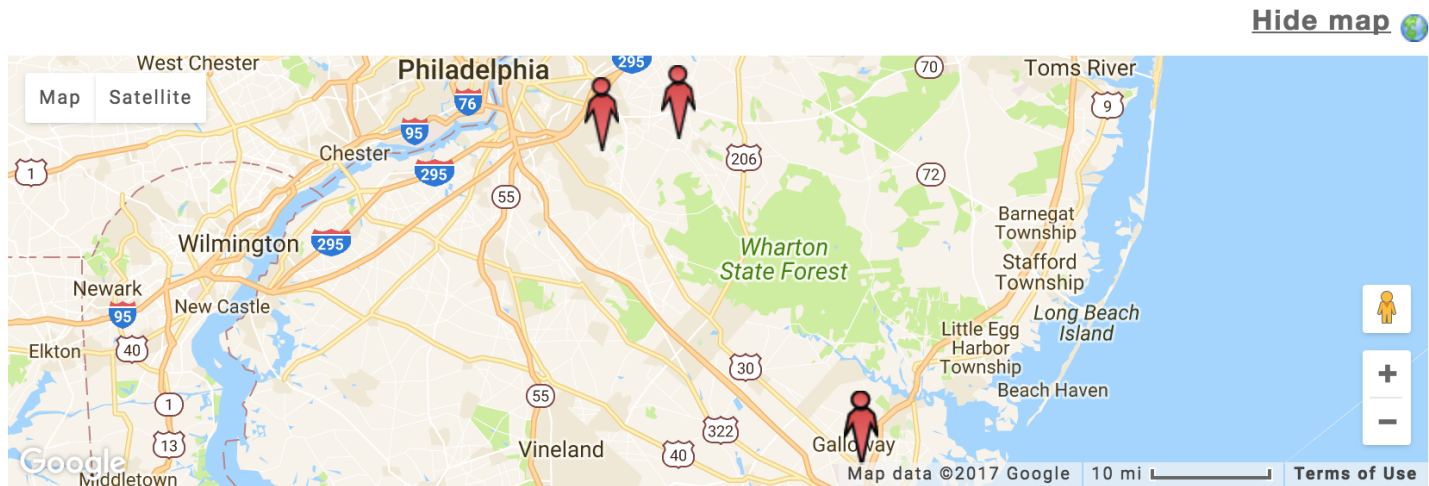
**SIGN IN**

**SIGN IN SECURELY**

# Sample Premium NJ Map Search

## You searched for:

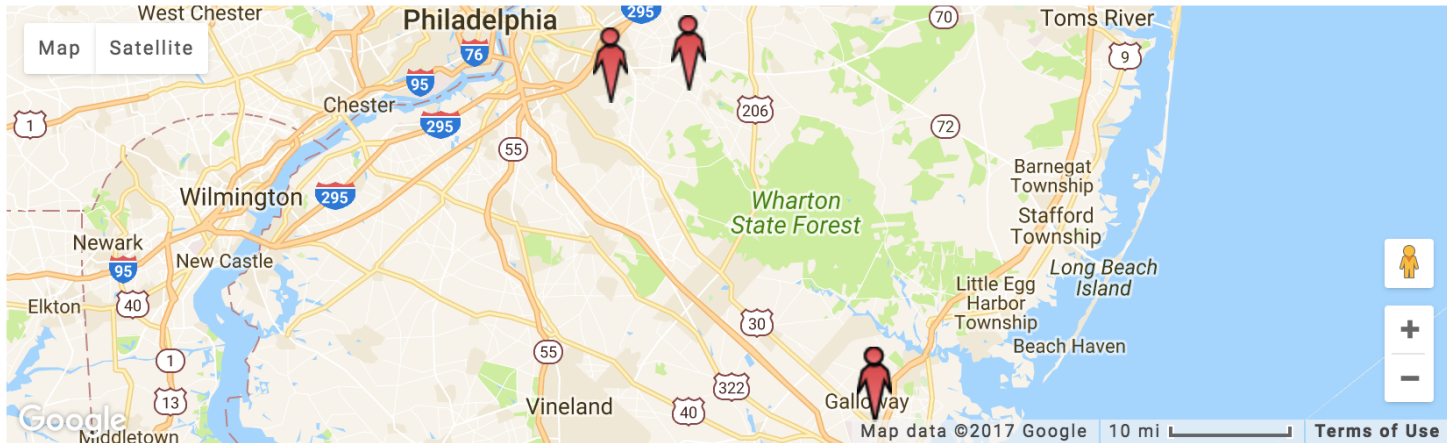
- **All Records**
- Who match **ANY** of the following Member Types '**Basic Individual Subscription (Free), Community Administrator, Editorial Advisory Board, Executive Advisory Board, Premium 1 Facility Subscription (1-999 Births), Premium 2 Facility Subscription (1000-2999 Births), Premium 3 Facility Subscription (3000+ Births)**'
- In the Country of '**United States**'
- In the following Location: '**New Jersey**'



15 Records Found

Sort by Name | Group

# Sample Premium NJ Map Search



**15 Records Found** Sort by Name | Group

**Birth Breastfeeding & Before**

Holmdel  
New Jersey  
United States

---

**Katharine Donaldson, Capital Health Medical Center Hopewell**

Pennington  
New Jersey  
United States

# Following is an example of a QI Project that was entered by Donna Poplowski

## **Project 1 - Perinatal QI Project Category or Type:**

### **Hypertension**

## **Project 1 - Perinatal QI Project Aim(s), Goal(s), or Objective(s):**

### Goal:

To decrease readmission within 14 days of discharge for postpartum hypertension by 5% by March 31, 2018.

### Objectives:

- Standardize management of postpartum hypertension
- Educate obstetric care providers and nurses on the management of severe hypertension
- Educate obstetric care providers and emergency physicians on the management of postpartum hypertension
- Educate postpartum patients on emergency warning signs

# Enter QI Project Implementation Details

## **Project 1 - Date Perinatal QI Project Implementation Began:**

9/6/2017

## **Project 1 - Implementation Tactics (Drop Down List):**

**Emails, Grand Rounds, Hospital or Unit  
Database, On-Line Education, Simulation  
Drills - In Situ**

## **Project 1 - Implementation Barriers (Dropdown List):**

**Competing Demands**

# Enter Additional QI Project Implementation Details

## **Project 1 - Implementation Facilitators (Drop Down List):**

**Active MD QI Champion(s), Active RN QI  
Champion(s), Adequate Resources - Data  
Collection and Analysis, Committed Leader(s),  
Organization Culture Encourages Teams to be  
on the "Leading Edge of Change",  
Organization Culture Promotes Respectful  
Communication, Organization Culture  
Supports Quality and Safety Initiatives,  
Positive Attitudes of the Team**



**Questions?**

email: [info@perinatalQI.org](mailto:info@perinatalQI.org)