



# Welcome to our webinar!

## Coalition Quality Improvement

**October 29, 2015**

1:30 – 3:00 pm EST

**Presenter: Karen Errichetti, DrPH, MPH**  
Health Resources in Action



It's easy to join our email updates list!

Just send your email address  
by text message:

Text

**TRAININGINST**

to **22828** to get started.



Message and data rates may apply.

Twitter hashtag #MACoalitions

Please take a moment to answer this poll question.

## How This Webinar Works



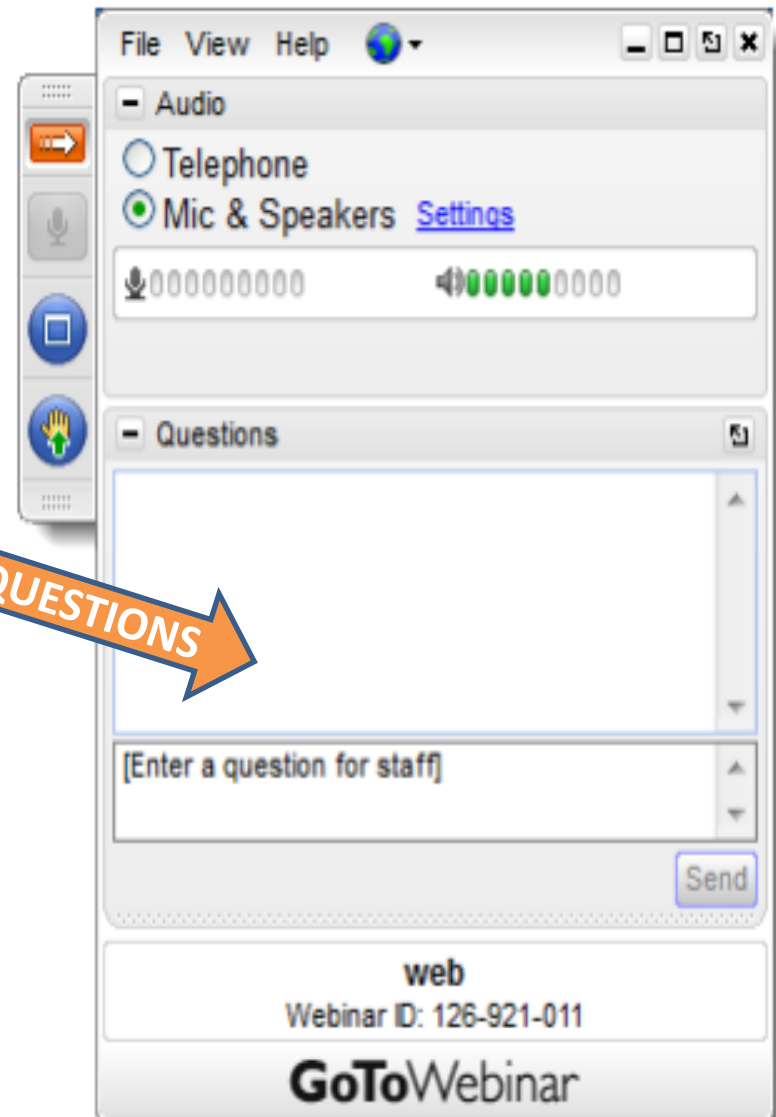
- Ask questions during the webinar by typing into the “Question” box of your control panel on the right side of your screen.
- Questions will be addressed during the Q & A at different points in the webinar.
- A few days after the webinar you will receive a link to the slides and recording.
- A few days after the webinar you will receive a link to the slides and recording.
- Also, we encourage you to use **#MACoalitions** to tweet questions or comments to @HRiAInstitute during or after the webinar.

# GoToWebinar:



All attendees will be muted during the webinar.

Use the **Question Box** to type in your questions.





Health Resources in Action  
*Advancing Public Health and Medical Research*



Community Health  
Training Institute

# Coalition Quality Improvement

Karen Errichetti, DrPH, MPH  
Health Resources in Action  
October 29, 2015

# About Health Resources in Action

- Non-profit organization based in Boston with over 50 years of experience promoting public health and biomedical research
- **Our Vision:** A world where social conditions and equitable resources foster healthy people in healthy communities.
- **Our Mission:** To help people live healthier lives and create healthy communities through prevention, health promotion, policy and research.



# Learning Objectives

- Define quality improvement in the context of multi-sector initiatives
- Name the elements of the Model for Improvement and its method, the PDSA cycle
- Identify core concepts in QI to organize a collaborative effort
- Describe how to use QI data to assess improvement over time
- Describe strategies for sustaining coalitions engaged in long-term QI efforts



# Webinar Overview

Time	Topic
1:30-1:35pm	Welcome and Introductions
1:35-1:45pm	What is Quality Improvement? (And Why Should Coalitions Use It?)
1:45-2:00pm	The Model for Improvement and the Plan-Do-Study-Act Method
2:00-2:20pm	Organizing a Coalition Using a Quality Improvement Approach
2:20-2:40pm	Using Quality Improvement Data
2:40-2:50pm	Sustaining Quality Improvement Coalitions
2:50-3:00pm	Q&A, Next Steps





# What is Quality Improvement? (And Why Should Coalitions Use It?)



# Quality Improvement in Community Health

- QI is not new: started in the 1950s in manufacturing
- Calls to action by IOM and others to improve quality
- Health care payment system increasingly tied to quality through pay-for-performance/value-based purchasing strategies
- Affordable Care Act has expanded opportunities to improve health care quality & promote community health, including enhanced measurement efforts
- Training and resources for QI have expanded over the last two decades

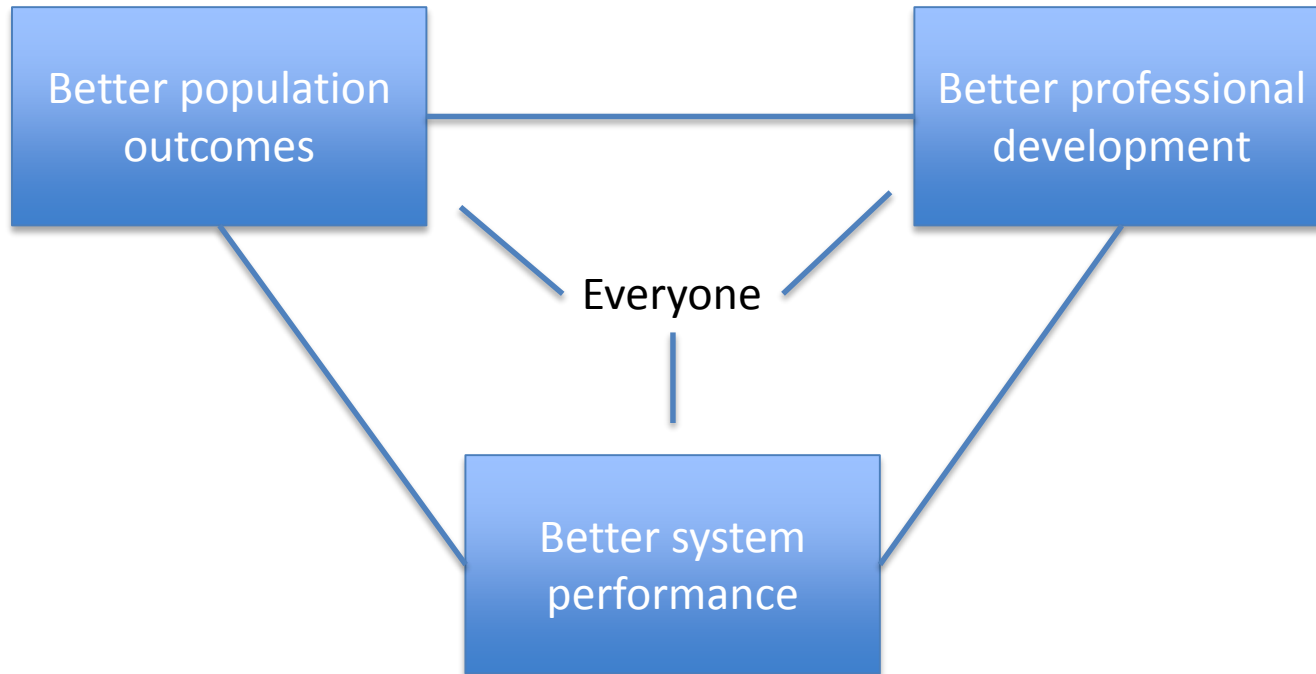


# Examples of Quality Improvement Models

- Six Sigma (DMAIC) – Uses the Lean change management strategy
- **The Model for Improvement (PDSA method)**
- Total Quality Management (TQM)
- Focus/Analyze/Develop/Execute/Evaluate Model (FADE)



# What is Quality Improvement?



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

Source: Bataldan & Davidoff, 2007, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2464920/pdf/2.pdf>



# Solving Today's Public Health Challenges

- Majority of today's public health problems are complex and require collective action to solve
  - Technical solutions:
    - Occurs at the organizational level
    - Identifying, testing, and spreading technical innovation (e.g., evidence-based practice) across organizations
  - Adaptive solutions:
    - Occurs at multiple levels (individual, organizational, community)
    - Requires multi-sector partnership engagement
    - Can be difficult to sustain



# Pitfalls of Efforts Organized by Coalitions

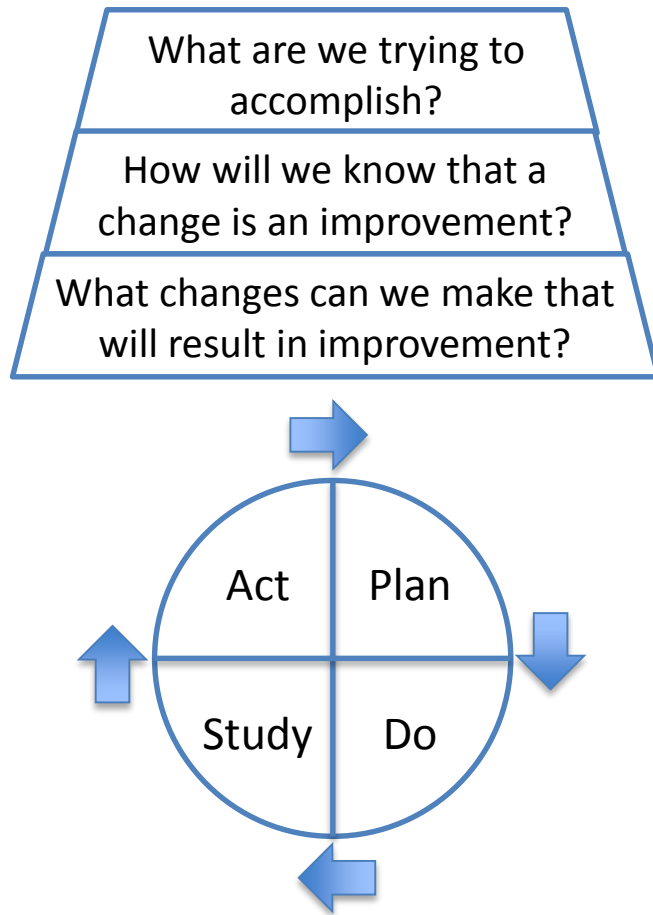
- Lack of clear, shared vision
- Plan that is too big to fail
- Inconsistent or weak leadership
- Challenges in recruiting stakeholders
- Stakeholder attrition/burnout
- Limited time, human resources, and financial backing
- Too much planning!
- Ineffective management or organization
- Policy changes



# The Model for Improvement and the Plan-Do-Study-Act Method



# The Model for Improvement



The Model for Improvement is a tool to accelerate improvement:

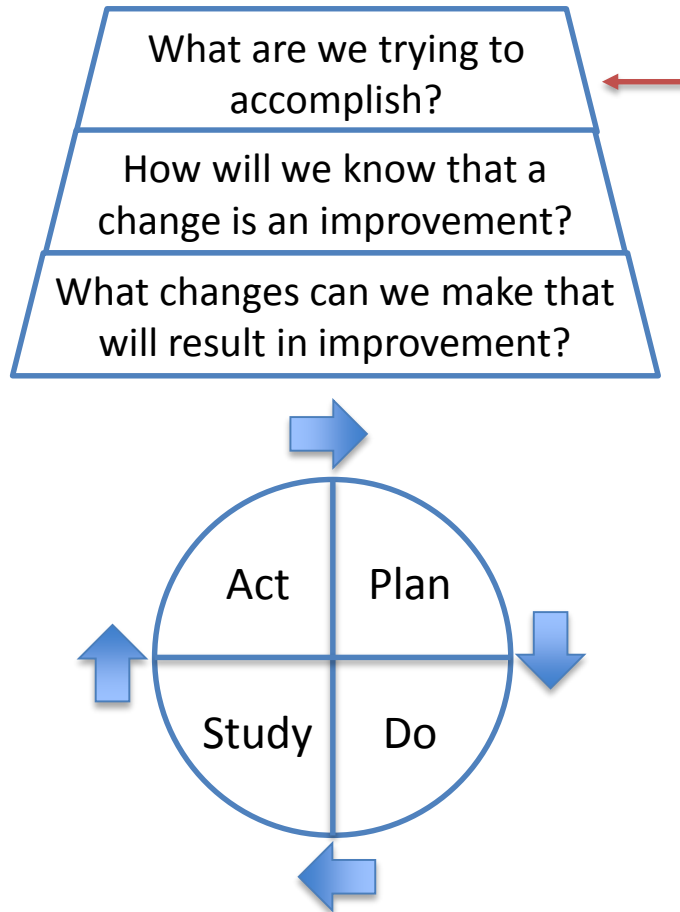
- 3 questions (any order)
- PDSA cycle to determine whether a change is an improvement

Source: Associates in Process Improvement





# The Model for Improvement



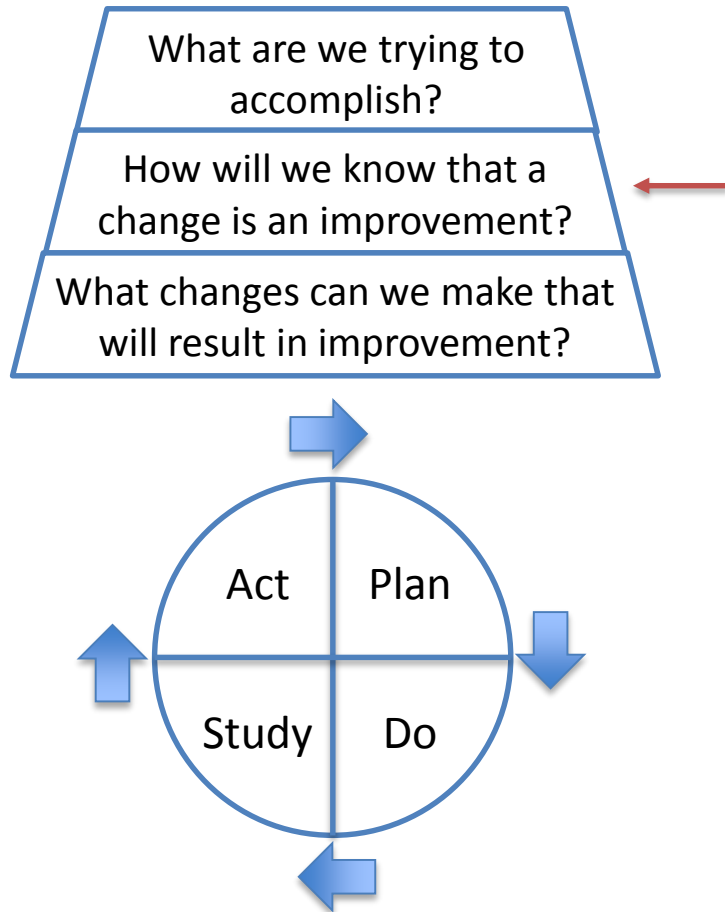
**Aim:** For whom, how much, and by when?

By December 2018, the ABC County Coalition will reduce the number of injuries among people aged 18 to 30 due to violence by 30%.

Source: Associates for Process Improvement



# The Model for Improvement



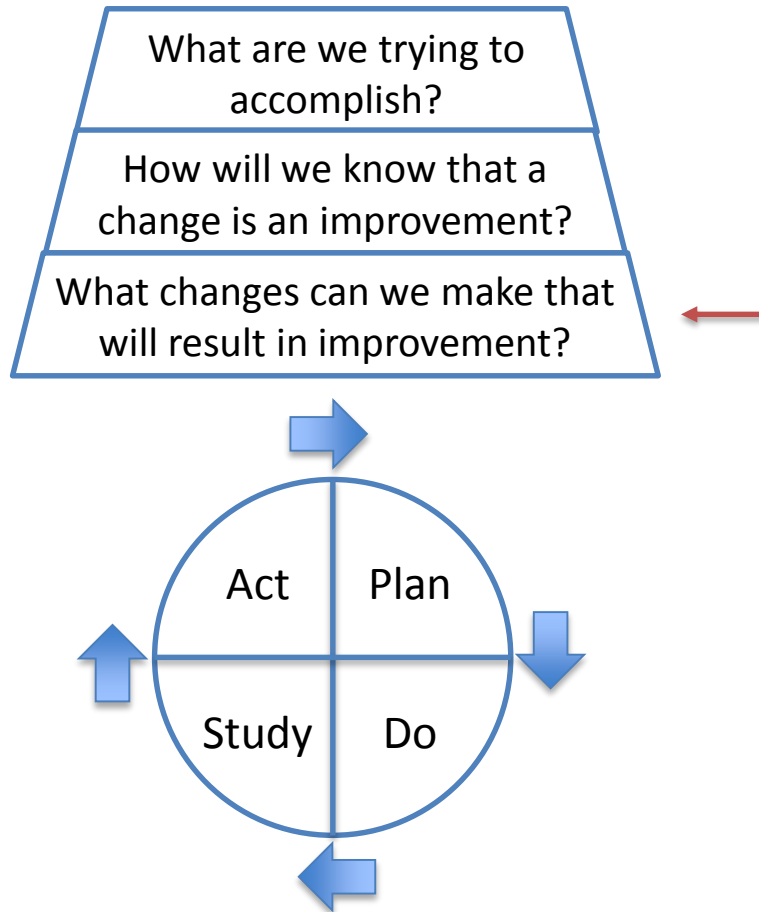
- **Measures:** Collection of quantitative data to see if changes result in improvement

Percentage of people with opioid addiction who find a bed in a treatment facility within 48 hours of ER admission

Source: Associates for Process Improvement



# The Model for Improvement



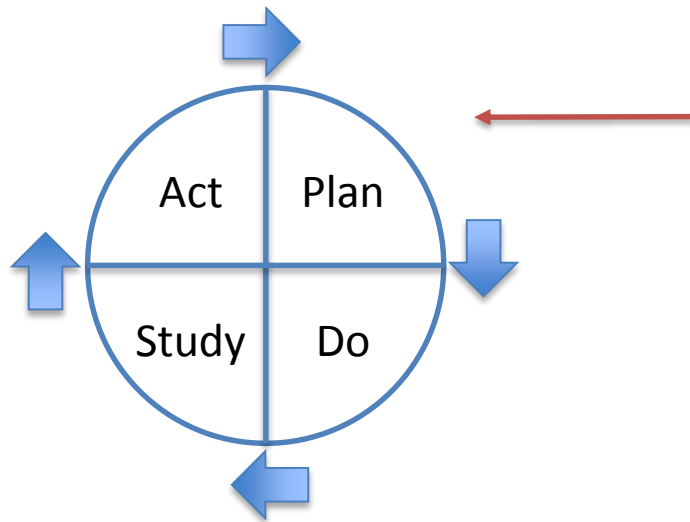
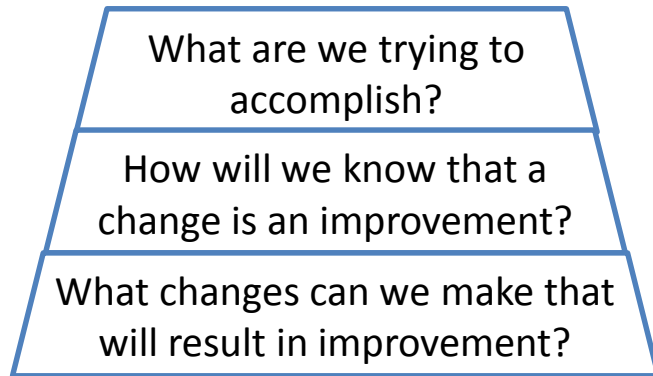
- **Changes:** Our ideas, theory of change, evidence-based strategies that we think will accelerate improvement toward the aim

Opening of farmer's markets in each town to promote access to healthy food

Source: Associates for Process Improvement



# The Model for Improvement



**Plan-Do-Study-Act**  
cycle is the method for  
bringing about  
improvement

- Change is continual
- Application of the scientific method
- Starts small

Source: Associates for Process Improvement



# Your Turn: Poll

What is your experience with plan-do-study-act cycles?

- A. I have conducted several PDSA cycles
- B. I have conducted a few PDSA cycles
- C. I have planned PDSA cycles but never executed them
- D. I have never done a PDSA



# How Do I Plan a PDSA Cycle?

## ➤ Plan:

- What do you predict will happen?
- How will you execute this change? (Who's doing it, where will it take place, what will be done, and when will it take place?)
- What data will you collect and how will you collect it?

## ➤ Do:

- Carry out your plan and collect data

## ➤ Study:

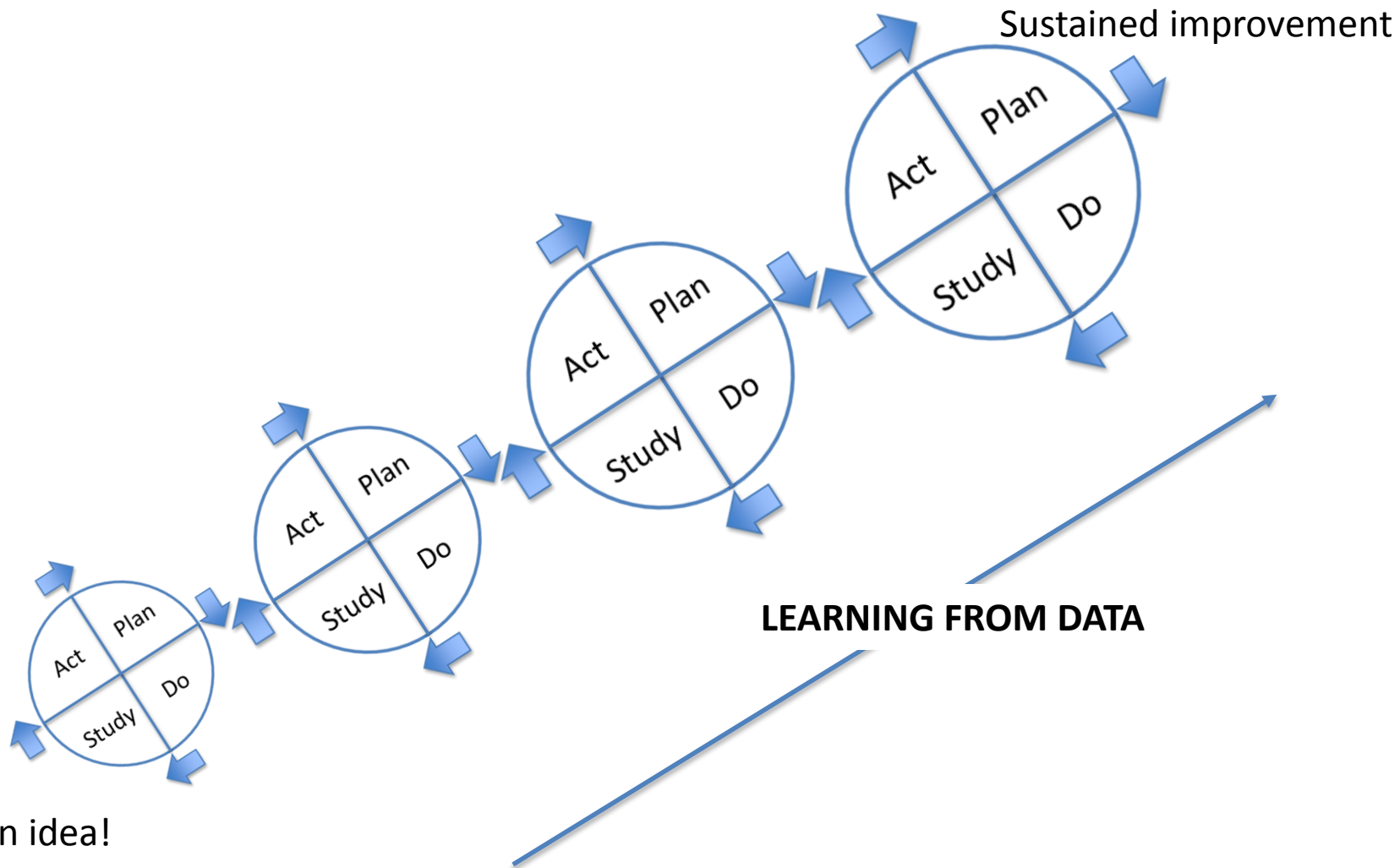
- What happened compared to your prediction? Why did this happen? What have you learned?

## ➤ Act:

- Should we do another test? If so, how much bigger?



# From Testing to Implementation



I've got an idea!



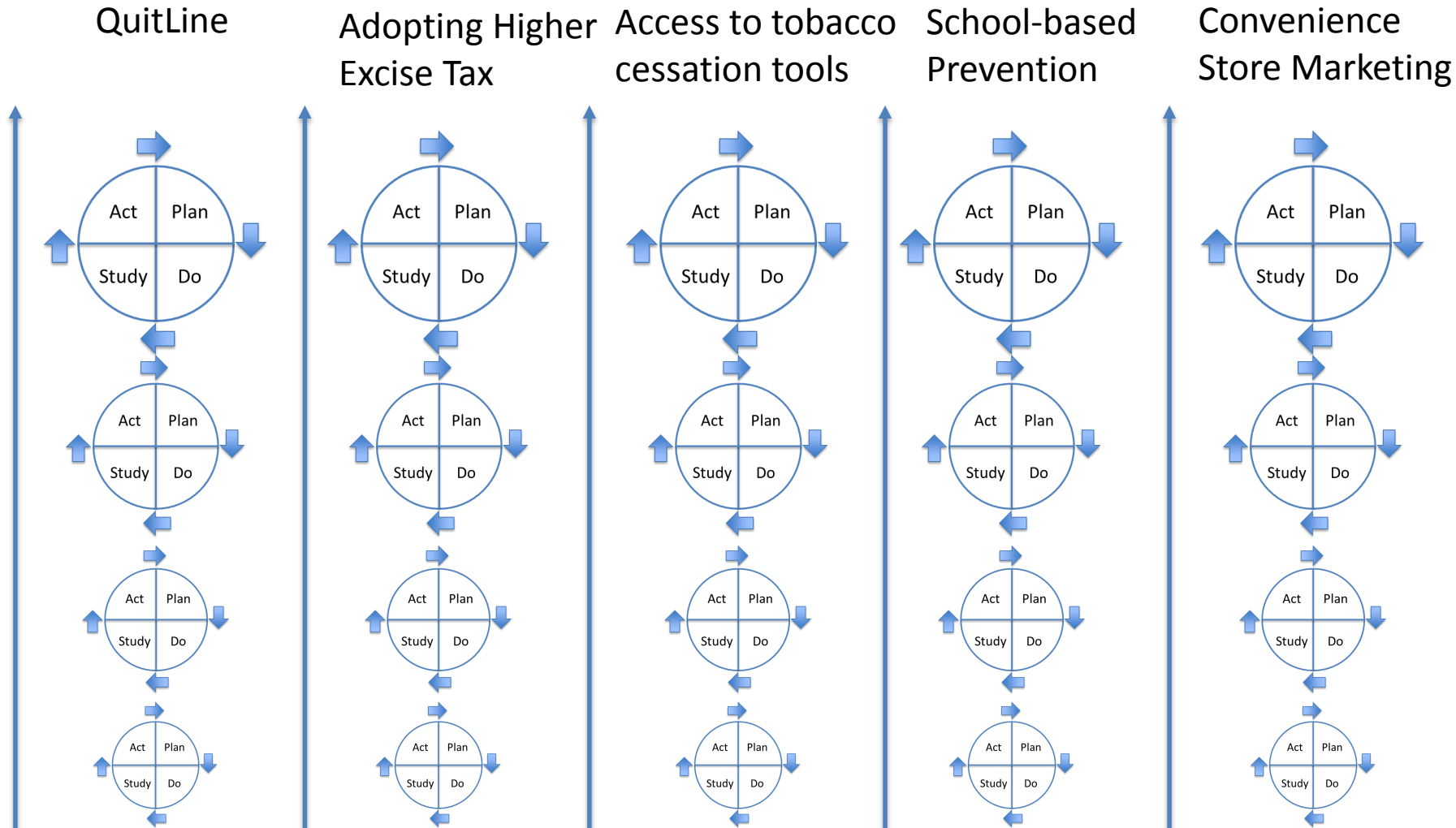
# Example PDSA

- Three child care centers are involved in a coalition to reduce obesity in their County. They want to see if they can get children to eat more fruits and vegetables.
  - **Plan:** If we make apples and carrots available during snack times, we predict half the children will eat one serving of fruit/vegetables every day. We will test this out on Thursday at ABC Child Care Center.
  - **Do:** ABC Child Care Center makes apples and carrots available at snack time on Thursday afternoon.
  - **Study:** Only a third of children chose to eat fruit or vegetables during the test. Most of the children ate cookies or crackers.
  - **Act:** ABC Child Care Center will repeat the test on another afternoon, but this time there will be more apples and carrots available compared to the crackers and cookies. Superior Child Care Center will conduct the same test on the same afternoon.





# Tobacco Cessation Example of Multiple PDSAs



# Multi-Sector PDSA: Collaboration Example

The ABC Integrated Behavioral Health Care Initiative is trying to improve access to primary care for people with severe mental illness. The coalition includes two outpatient mental health centers and several community health centers and transportation partners. For your PDSA, one of the two mental health centers gives out transportation vouchers to 5 of its patients with severe mental illness. The vouchers are good for transportation to any community health center through the coalitions taxi and public transit partners. You predict that half of the patients will use their voucher to seek primary care at a partner community health center. However, when the test was done, only 1 patient used a voucher. The coalition will do another test with 5 patients but make an appointment for the patient first before they leave the mental health clinic.



# Questions?



# Organizing a Coalition Using a Quality Improvement Approach



# Steps to Organizing a Coalition with QI

1. Pick a topic (narrow or broad)
2. Convene a team
3. Define data-driven aim of multi-sector partnership
4. Select the changes your coalition will make
5. Determine a measurement strategy
6. Test the changes and study the results
7. Refine your tests and implement successful changes to scale



# 1. Pick a Topic (Narrow or Broad)

- Look at baseline data – what direction is it telling you to go?
- Organize your coalition to select priorities – what is feasible for us to achieve?
- Pick multiple topics if your coalition is motivated to tackle multi-pronged problems (e.g., healthy living, public safety, financial literacy)



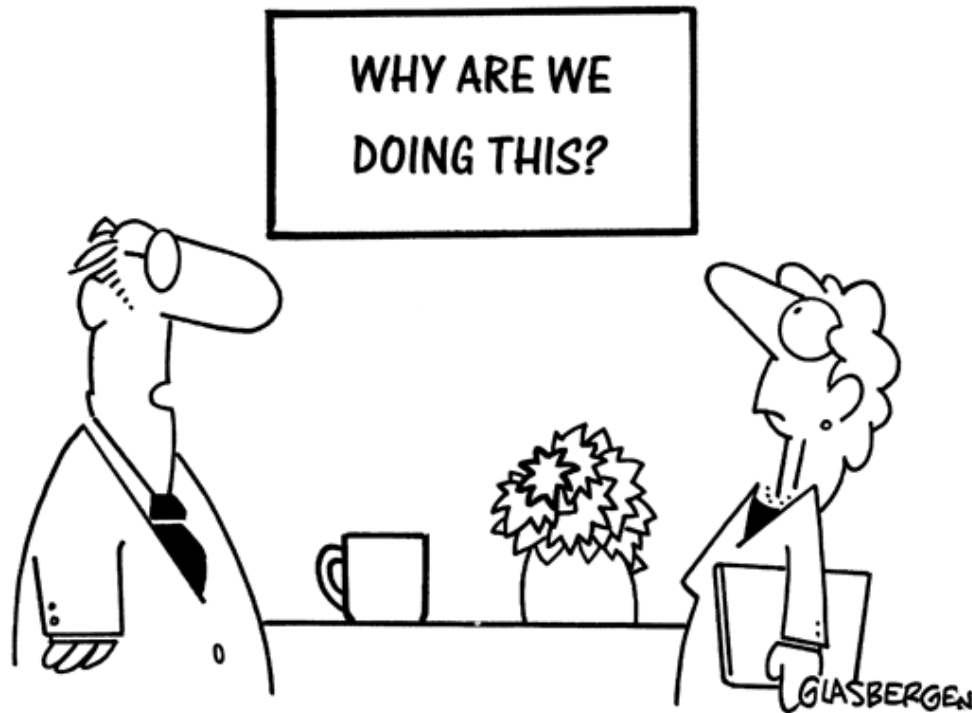
## 2. Convene a Team

- The QI team carries out the work of implementation
  - Sponsors
  - Content
  - Project management
  - Technical experts
  - Consumers (i.e., patients and families)
- Teams are diverse and task oriented
- Coalitions are made up of several QI teams: Consider using workgroup structure
- Do not forget to include patients and families in your QI teams!



# 3. Define Data-Driven Aim of Multi-Sector Partnership

Copyright 2005 by Randy Glasbergen.  
www.glasbergen.com



**“It’s not a great mission statement,  
but we’ll revise it if things get better.”**





# 3. Define Data-Driven Aim of Multi-Sector Partnership

- Set a clear vision, focused mission, with measurable goals for your coalition
  - Owned by all partners and informed by community and contextual issues
- Beware of broad agendas! Focus your partnership by establishing goals and infrastructure to support those goals:
  - Tip: Engage in a prioritization exercise based on community health data to focus your efforts
- Use the tools of QI:
  - Aim Statement: A written and measurable description of your coalition's or organization's desired improvement.



# Multi-Sector Level Aim Statement

- By April 2017, the ABC Substance Abuse Coalition will reduce the number of deaths due to opioid overdoses by half across 25 communities we serve. We will:
  - Advocate inclusion of opioid prevention in town budgets to cover training of first responders
  - Train law enforcement officers in every police department on the identification of opioid overdose and the use of naloxone
  - Train paramedics and emergency room providers in overdose protocols
  - Conduct a community-wide opioid addiction awareness campaign and referral program



# Multi-Sector Level Aim Statement Example

Over a three-year period, the ABC Oral Health Coalition will reduce school absenteeism among school-aged children caused by tooth pain by 50 percent. We will:

- Increase screening for tooth pain by 50% among school-aged children
- Increase access to on-site school dental services by 25% (e.g., dental clinic, mobile dentist service)
- Increase the number of dental providers who accept Medicaid by 30%
- Conduct a parent awareness campaign to recognize signs of tooth pain



# Questions?

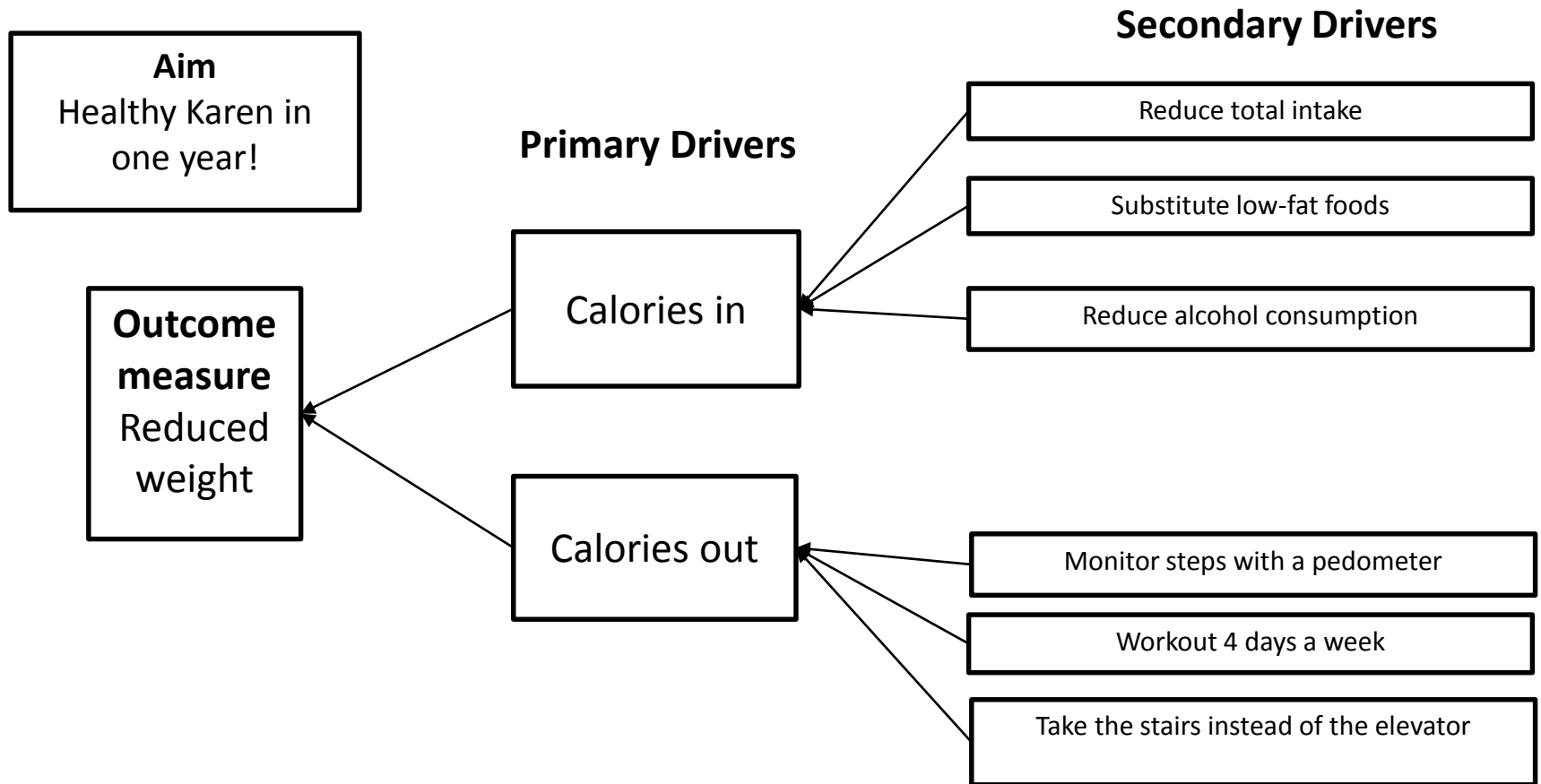


# 4. Select the Changes Your Coalition Will Make

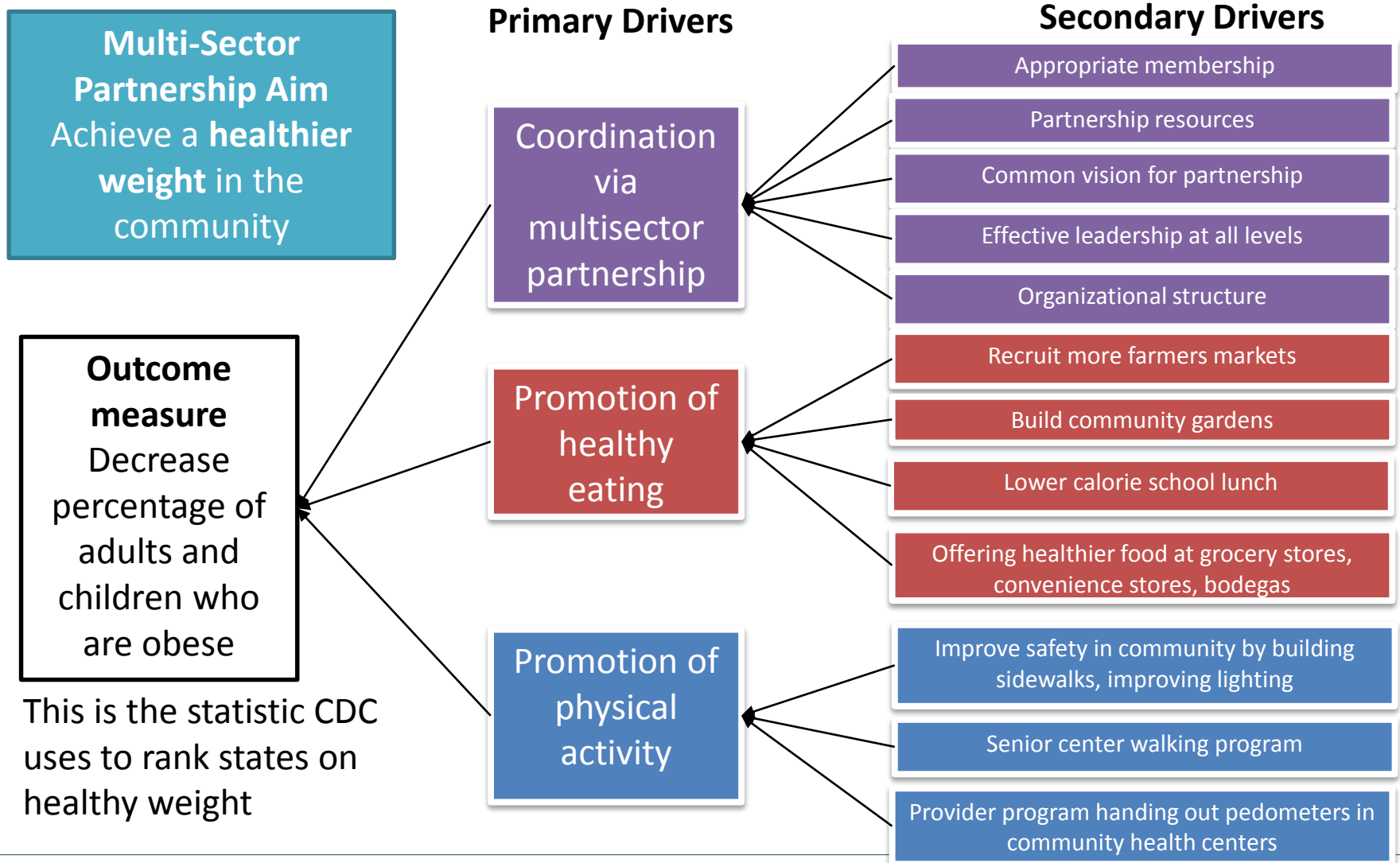
- Adopt a workgroup structure with aims for each workgroup; brainstorm change strategies
- Engage experts within and outside of your partnership
  - Your partners are experts! Good opportunity for engagement.
- Hold expert meeting to develop strategies based on any data you have collected
- Develop or apply an existing change package—a set of evidence-based strategies organized by driver



# Driver Diagram Example: Individual Level



# Driver Diagram Example: Multi-Sector Level



## 5. Determine a Measurement Strategy

- Your measurement should be tied to the changes you are making – how will you know change represents an improvement?
  - Outcome: Are we achieving our aim?
  - Process: Are we making progress toward our aim?
  - Balancing/structural: What is the context for our success (or failure) of the changes we are making?
- Use your coalition to develop a measurement strategy in these three categories – keep it simple!





# Example Measurement Strategy

## ➤ Outcome measures:

- Percentage of children who report being bullied
- Percentage of teachers who report observing bullying in the classroom

## ➤ Process measures:

- Percentage of teachers who implement anti-bullying procedures
- Percentage of students who take anti-bullying training
- Percentage of aggressors who are referred to adjustment counselors after observation of student harassment

## ➤ Balancing measure: Survey of families about student perceptions of bullying in school



## 6. Test the Changes and Study the Results

- Develop sub-teams in your coalition to test ideas and strategies that are represented in your driver diagram
- Institute regular team meetings and reporting to the larger coalition
- Emphasize shared learning, not judgement! Failure and why strategies fail are opportunities for improvement
- Take on strategies that you can implement, and be targeted (don't take on the world)



# 7. Refine your Tests and Implement Successful Changes to Scale

- Results of PDSAs should be reviewed by the coalition and refined
- The most effective, promising strategies should be selected for scaling upward
- Not all strategies can be tested in a PDSA (e.g., policy changes)
  - Pursue the testing and implementation of evidence-based strategies and ideas concurrently with structural changes
- With scale comes larger coordination needs
  - Ensure your coalition has a strongly coordinated infrastructure with a communication strategy



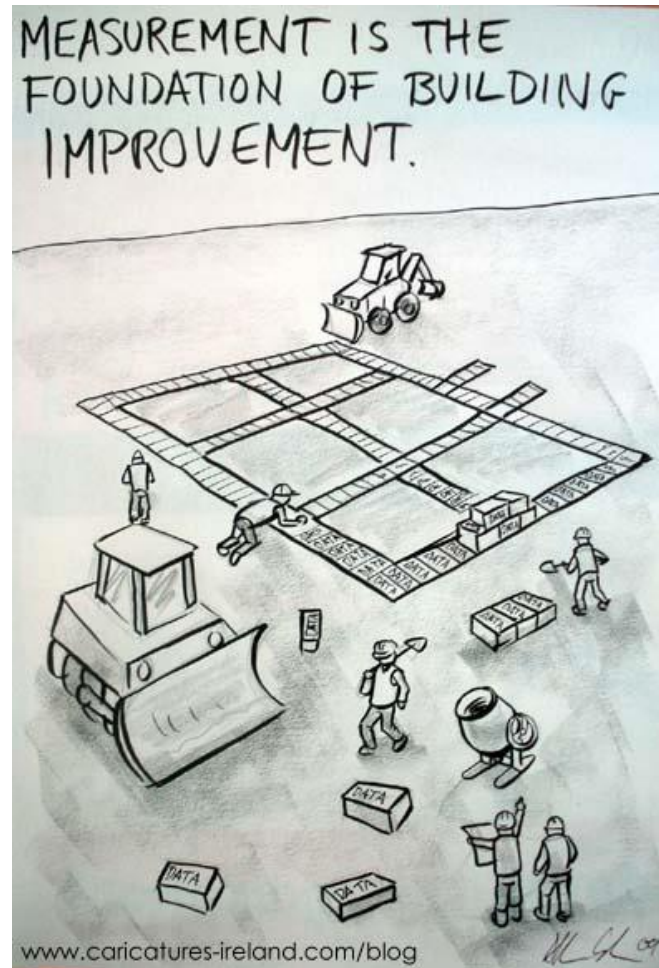
# Questions?



# Using Quality Improvement Data



# QI Data = Learning from the Ground Up



# QI Data is Different Than Research

- QI data represents the scope of what you are doing right now, not the whole system
  - QI data is NOT research data
  - Your denominator is not going to be the same across tests (it might get bigger or smaller, and the entities being tested might not be the same across intervals!)
- Start with baseline data, or collect a baseline to set a foundation; data should be part of your coalition's routine
- Qualitative data matters
  - Listen to your target population, providers, and families
  - Utilize your coalition to collect stories about your QI efforts



# Example Measures

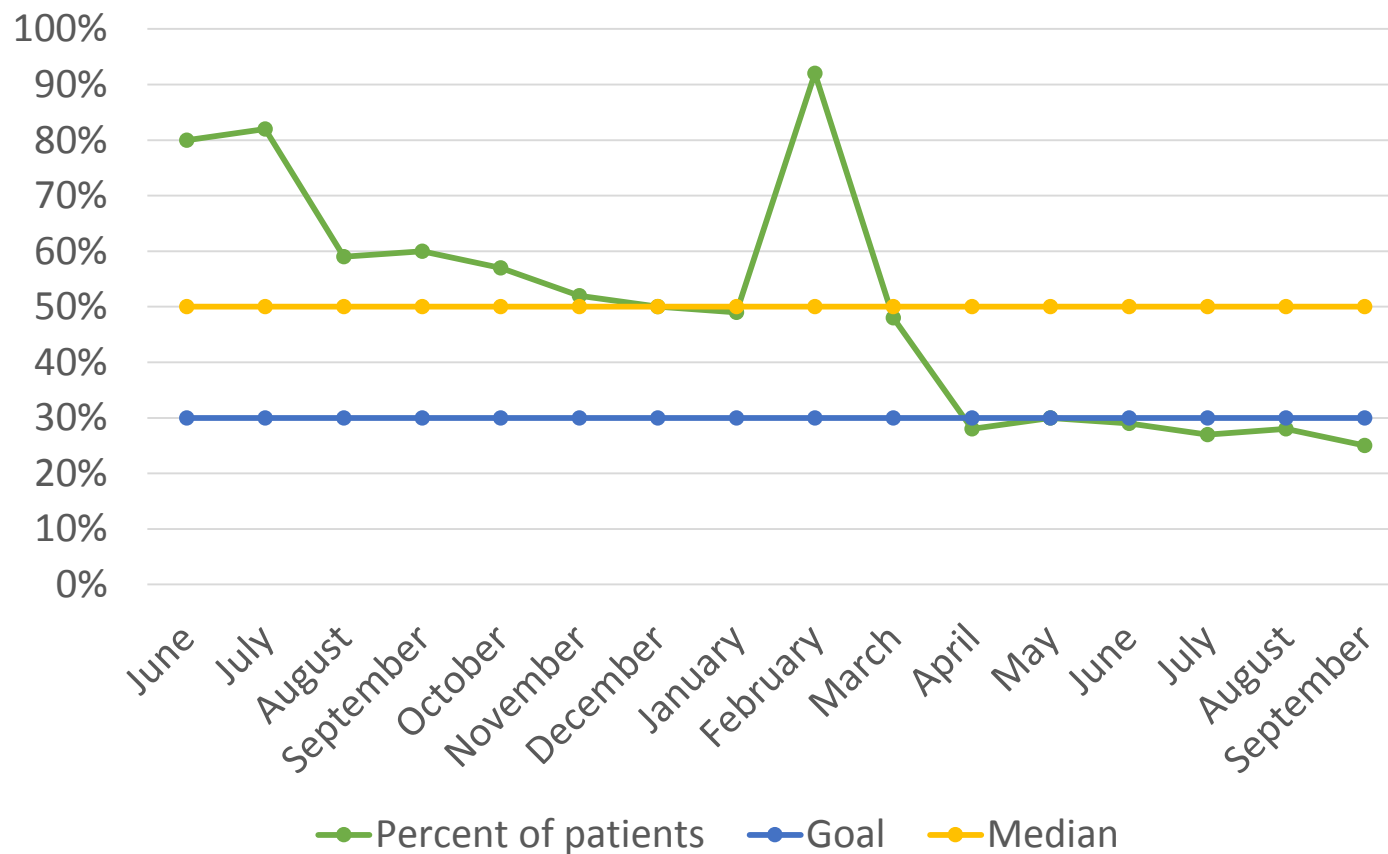
- Percentage of children who report being cyberbullied
- Number of first responders trained in overdose identification and naxalone
- Percentage of streets with a sidewalk
- Number of banks with a financial literacy class
- Number of students screened for dental problems
- Number of smoke-free businesses
- Partner attendance at coalition meetings
- Number of new partner members of the coalition





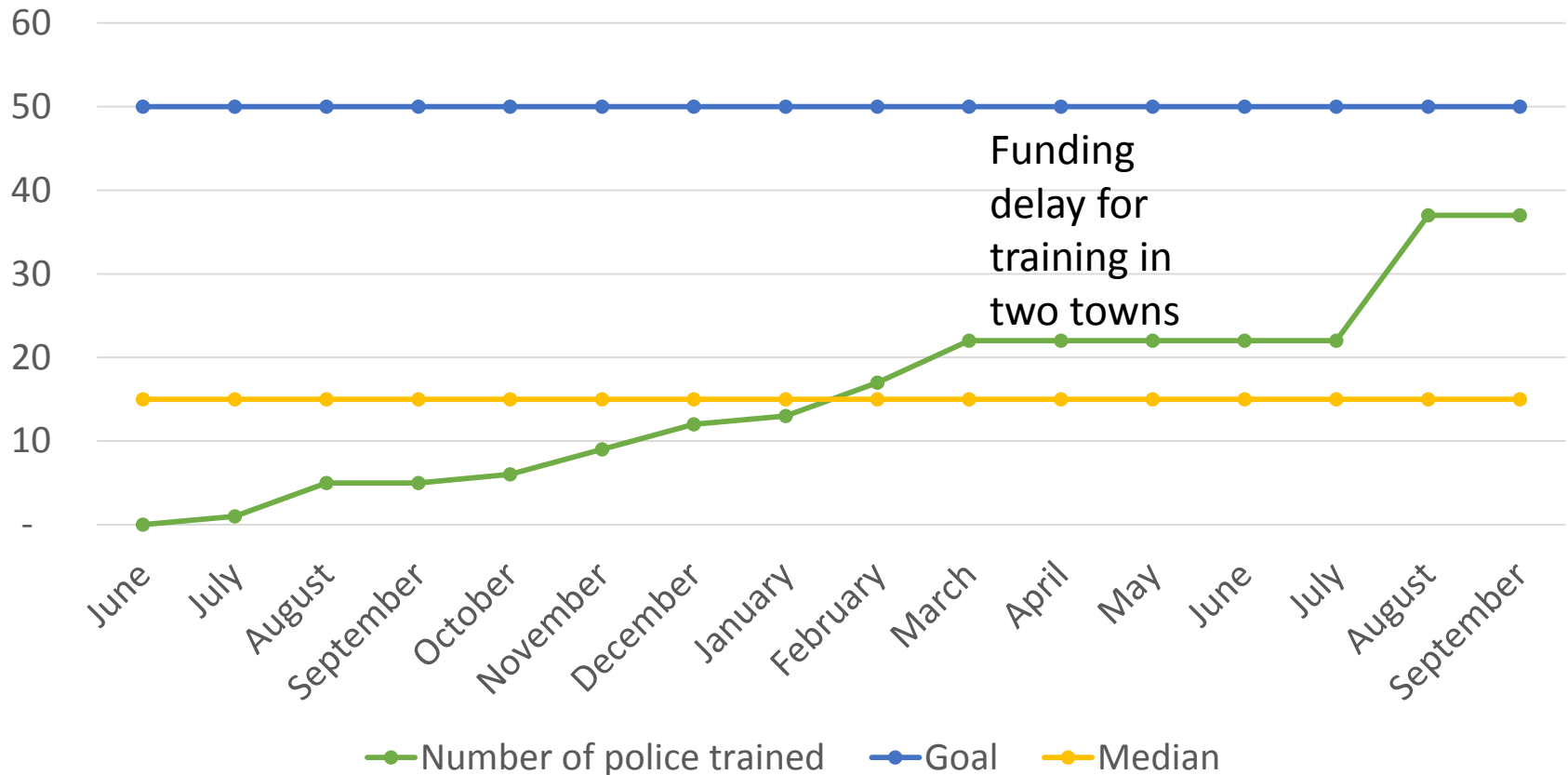
# Example Run Chart

Percent of patients who wait more than 6 months for a psychiatry appointment



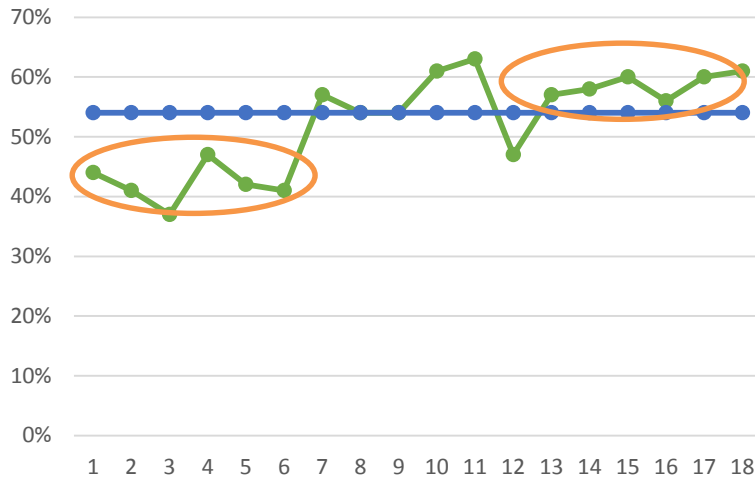
# Example Run Chart

Number of law enforcement trained in overdose prevention

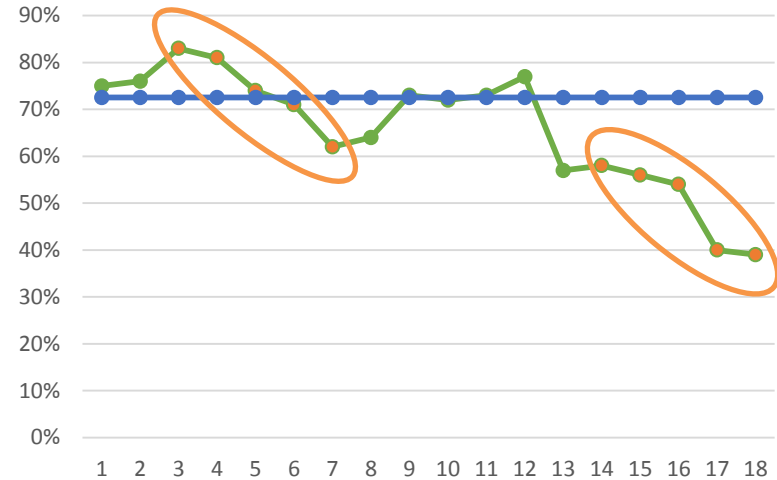


# How Do You Know You Are Improving?

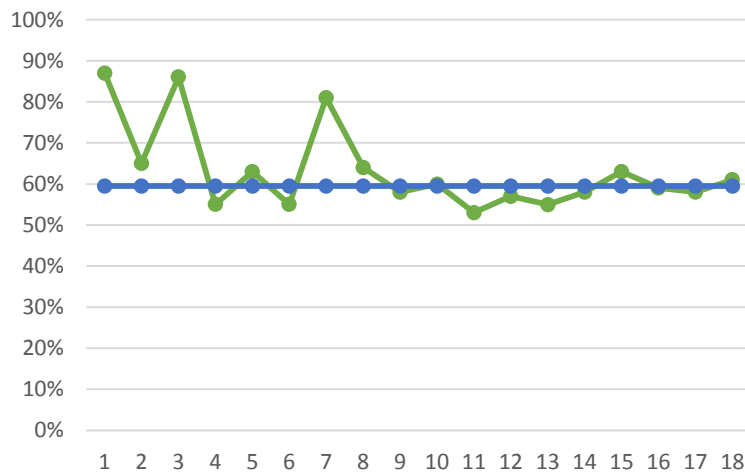
Rule 1. Shift: 6 or More



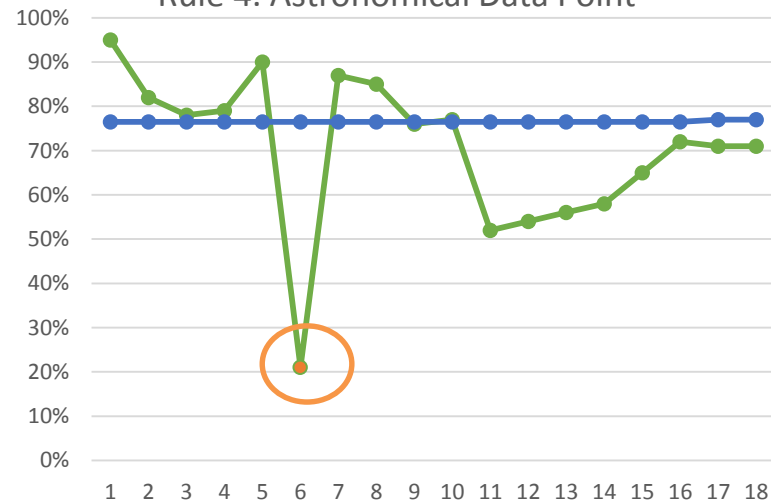
Rule 2. Trend: 5 or More



Rule 3. Too few (or many) runs



Rule 4. Astronomical Data Point



# Sustaining Quality Improvement Coalitions



# Strategies for Sustaining Improvement

- Plan for sustainability from the start
- Build a governance structure aligned with improvement processes
- Choose an accountable team to lead your coalition
- Align resources with improvement work
- Implement systems to support shared learning
- Review data continually to identify opportunities for action
  - Take immediate action when improvement starts to slip
- Develop your coalition capacity for QI
  - Teaching new members QI tools



# QI is Dynamic

- QI will only work for your coalition if it embraces learning and collaboration
- Do not be afraid to change your aims based on your data
- Tackle new issues as you get more experience
- Diversify your coalition partners as you take on new challenges



# QI is Meant to Accelerate Change!



# Example of Successful QI Coalition

## ➤ Health Improvement Partnership of Santa Cruz County

- Participating partner in IHI's Triple Aim Improvement Community from 2009 to 2014
- Goals included building systems of care, strengthening the safety net, and promoting collaboration to improve health and health care in the community
- Established nonprofit to support their work with diverse funding streams
- Visit: <http://www.hipsc.org/>





# Key Takeaways

- Build coalition infrastructure around the QI concept of shared learning and teams
- Develop an aim statement: for whom, how much, and by when?
- Develop PDSA cycles from your driver diagram and start small
- Select a few, specific measures that are tied to your drivers and report on them to the entire coalition
- Use run charts to assess improvement
- Revise your aims when you are sustaining successes



# Questions? Please contact me!



**Karen Errichetti, DrPH**  
Senior Research Scientist,  
Research and Evaluation  
P: 617.279.2260  
[kerrichetti@hria.org](mailto:kerrichetti@hria.org)

Check your email for our  
post-webinar survey!



Please take a moment to answer this poll question.

# Upcoming Free Trainings and Webinars



- Nov. 19<sup>th</sup> ***Building Coalition Capacity and Infrastructure*** (Central MA)
- Nov. 19<sup>th</sup> ***Sustainability and Resource Planning*** (Central MA)
- Dec. 3<sup>rd</sup> ***Improving Community Health Through Local Policy Change*** (webinar)

For more information, sign up for our email updates  
or visit our training calendar at [\*\*hriainstitute.org\*\*](https://hriainstitute.org)



Health Resources in Action  
*Advancing Public Health and Medical Research*



Community Health  
Training Institute

# Thank you!

It's easy to join our email  
updates list!

Just send your email address  
by text message:

Text

**TRAININGINST**

to **22828** to get started.



Message and data rates may apply.

**Karen Errichetti**

kerrichetti@hria.org

**Training Calendar:**

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

**Twitter:** @HRiAInstitute

**LinkedIn Group:**

Community Health  
Training Institute