# CMS Quality Improvement Workshop Series
# QI 101
## Webinar 1: Getting Started

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Medicaid/CHIP
Health Care Quality Measures

# Agenda

- Welcome and Introductions
- Purpose and Learning Objectives
- Overview of the Workshop Curriculum
- Quality Improvement
- Introduction to the Model for Improvement
- Improvement Process
- A QI Case Study
- Question and Answer
- Preview of Next QI Webinar

# Purpose and Learning Objectives

## Purpose

- Enable state Medicaid programs to apply quality improvement (QI) to improve child and adult health care quality outcomes

## Learning Objectives

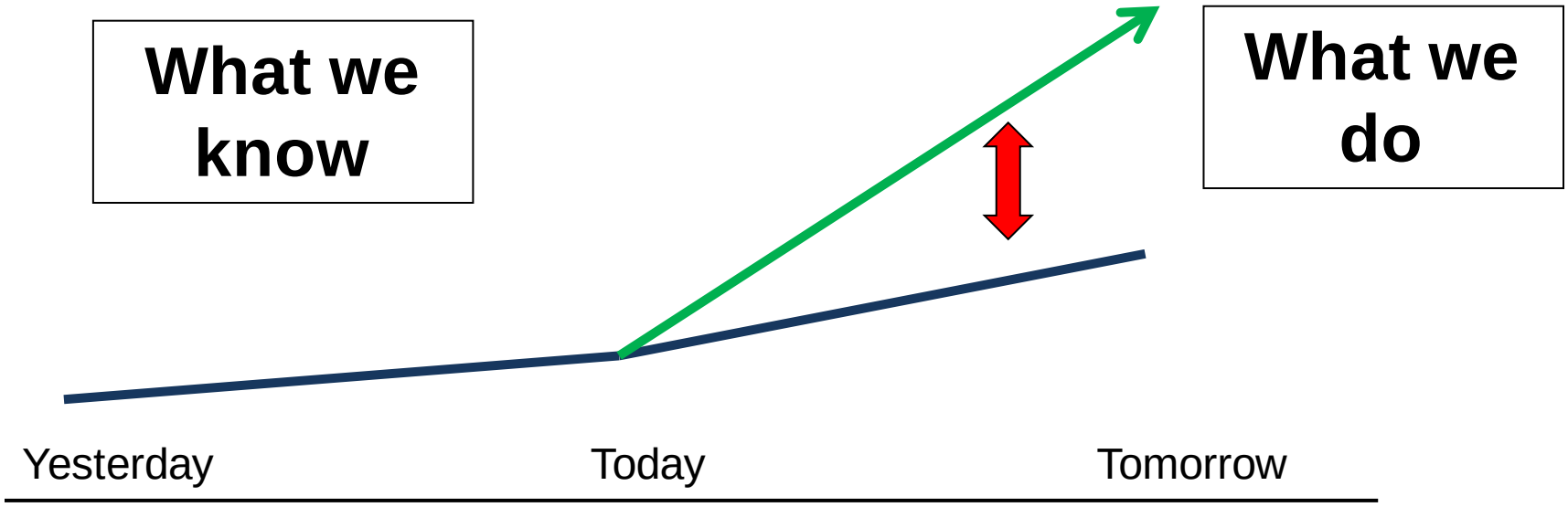
- Participants will learn the basic tasks to conduct a QI project
- Participants will learn the three questions in The Model for Improvement
- Participants will identify at least two considerations for how to pick a QI project in order to answer the first question in the Model for Improvement:
  - "What are we trying to accomplish?"

# Overview of the Workshop Curriculum

- QI 101: Establishing the QI Foundation
  - Webinar 1: Getting Started – provides a broad overview of QI fundamentals and introduction to “The Model for Improvement”
  - Webinar 2: The QI Framework – provides a structured approach for planning and monitoring the impact of QI efforts
  - Webinar 3: Preparing for and Implementing Change
- QI 201: Application of the QI Methods
  - A series of three webinars with hands-on practice
  - Enables states to undertake a QI project with support

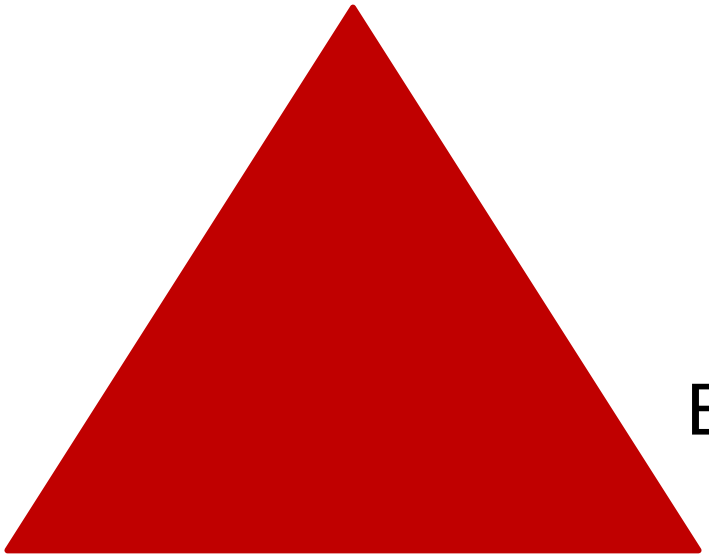
# Quality Improvement

# Quality Improvement & The Know-Do Gap



# Going From ‘What We Know’ to ‘What We Do’

Leading,
Building Will



Ideas for Systems Improvement

Driver Diagram

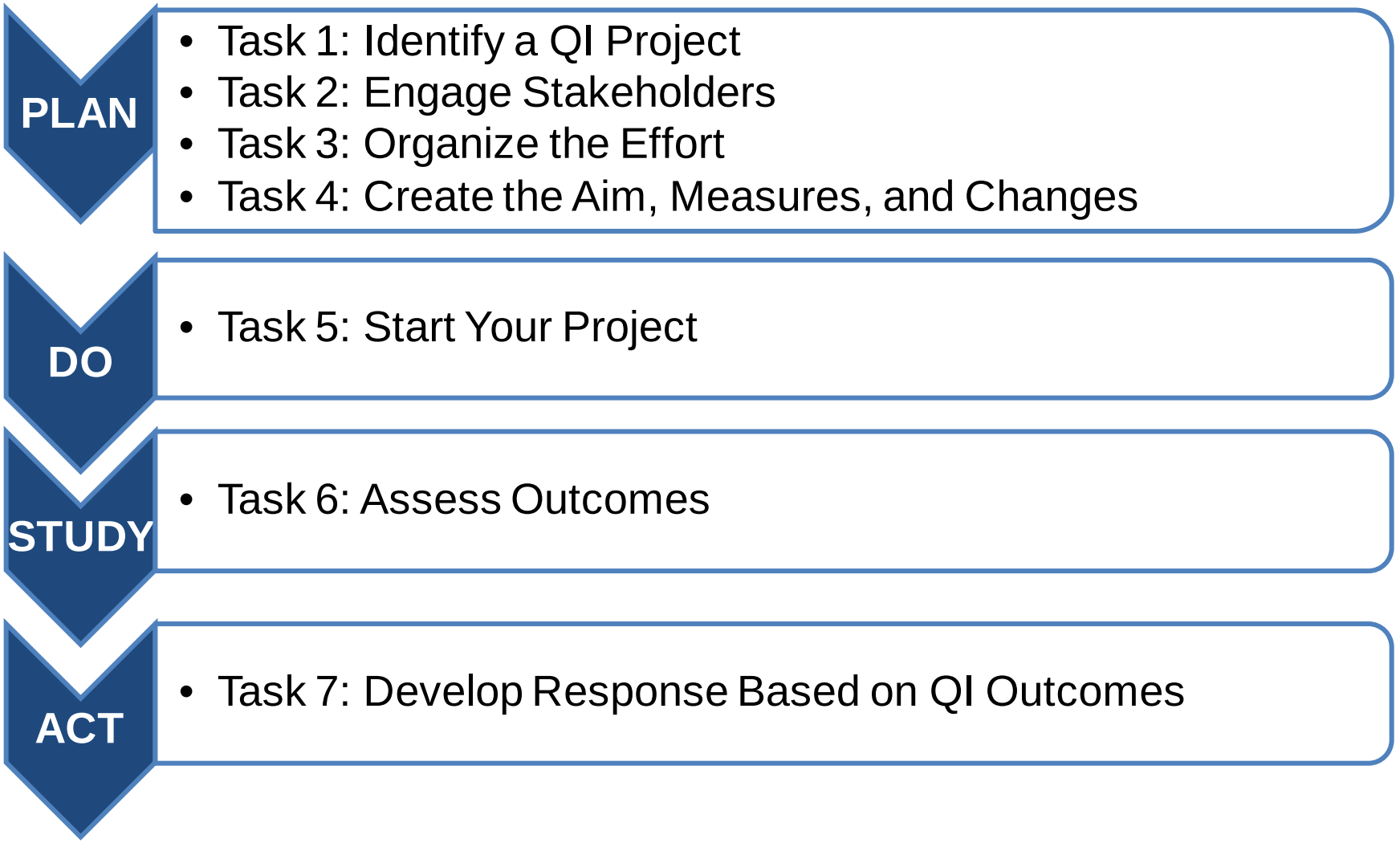
Executing and Spreading Change

Strategies, Testing and Measurement

# The Model for Improvement


*Source: Associates in Process Improvement*

# The Improvement Process



PLAN: Task 1

# Identify a QI Project

- What does data tell you?
- How do you compare to others?
- What is the gap between what is possible and where you are? How are you performing now?
- Are there glaring health disparities?
- Is this a reasonable place to save money and improve outcomes?
- Other concerns:
  - How interested or engaged are your public constituents? Your key partners?
  - How aligned is this improvement project with the strategic priorities of your agency, the governor, or the secretary? If not, how might you make the case for improvement?

PLAN: Task 1

# Useful Data in Selecting a QI Project

- Medicaid and CHIP program expenditure data (top diagnosis, utilization, cost drivers)
- Child and Adult Core Set measures (past performance)
- Claims/encounter data, health record reviews
- Pharmacy data analysis
- Referral patterns and supply driven demand

# PLAN: Task 1

# Secretary's Annual Report on the Quality of Care for Children in Medicaid and CHIP

What measures is your state reporting?

Appendix Table E.1 (continued)

| | Number of Measures Reported by State[a] | Prenatal and Postpartum Care: Timeliness of Prenatal Care (#1) | Frequency of Ongoing Prenatal Care (#2) | Percentage of Live Births Weighing Less than 2,500 Grams (#3) | Cesarean Rate for Nulliparous Singleton Vertex (Low-Risk First Birth Women) (#4) | Childhood Immunization Status (#5) | Immunizations for Adolescents (#6) | Body Mass Index Assessment for Children and Adolescents (#7) | Developmental Screening in the First Three Years of Life (#8) | Chlamydia Screening (#9) | Well-Child Visits in the First 15 Months of Life (#10) | Well Child Visits in the 3rd, 4th, 5th, and 6th Years of Life (#11) | Adolescent Well-Care Visits (#12) | Percentage of Eligibles who Received Preventive Dental Services (#13) | Child and Adolescent Access to Primary Care Practitioners (#14) | Appropriate Testing for Children with Pharyngitis (#15) | Otitis Media with Effusion – Avoidance of Inappropriate Use of Systemic Antimicrobials in Children – Ages 2-12 (#16) | Percentage of Eligibles who Received Dental Treatment Services (#17) | Ambulatory Care: Emergency Department Visits (#18) | Pediatric Central-Line Associated Blood Stream Infections – NICU and PICU (#19) | Annual Percentage of Asthma Patients (2-20 years old) with 1 or More Asthma-Related Emergency Room Visits (#20) | Follow-Up Care for Children Prescribed Attention-Deficit Hyperactivity Disorder (ADHD) Medication (#21) | Annual Pediatric Hemoglobin A1C Testing (#22) | Follow-Up After Hospitalization for Mental Illness (#23) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vermont | 7 | | | X | | | | | | | X | X | X | X | X | | | X | | | | | | |
| Virginia | 11 | X | | X | | X | | | | | X | X | X | X | X | | | X | | | | | | X |
| Washington | 8 | | | | | X | | | | | X | X | X | X | | | | X | X | | | | X | |
| West Virginia | 16 | X | | | | X | X | X | | X | X | X | X | X | X | | | X | X | | X | X | X | X |
| Wisconsin | 0 | | | | | | | | | | | | | | | | | | | | | | | |
| Wyoming | 14 | | | | | X | X | X | | X | X | X | X | X | X | X | X | X | X | | | | X | |

Appendix Table E.4. Percentage of Children Receiving Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life, as Reported by States in Their FFY 2011 CARTS Reports (n=47)

| | | | Population | | | | Data Source | | |
|---|---|---|---|---|---|---|---|---|---|
| State | Methodology | Date Range | Medicaid | CHIP | CHIP Program Type | Sample Size | Administrative | Hybrid | Percentage of Children Receiving 1+ Well-Child Visits in the 3rd, 4th, 5th, and 6th years of Life |
| Alabama | HEDIS 2011 | Jan-10 - Dec-10 | | X | Separate | 7,343 | X | | 44.9 |
| Alaska | HEDIS 2010 | Jan-10 - Dec-10 | X | X | Medicaid Expansion | 12,438 | X | | 47.6 |
| Arizona | HEDIS 2011 | Oct-09 - Sep-10 | | X | Separate | 3,603 | X | | 75.9 |
| Arkansas | HEDIS 2010 | Oct-09 - Sep-10 | X | X | Combination | 88,106 | X | | 62.5 |
| California | HEDIS 2011 | Jan-10 - Dec-10 | | X | Combination | 115,975 | X | X | 74.0 |

Where does your state fall?

PLAN: Task 2

# Engage Stakeholders

- Stakeholders help build and maintain will for improvement
- Stakeholders help with executing a QI project
- Various ways and levels at which to continually engage stakeholders
  - Town hall meetings
  - Task forces
  - Advisory committees

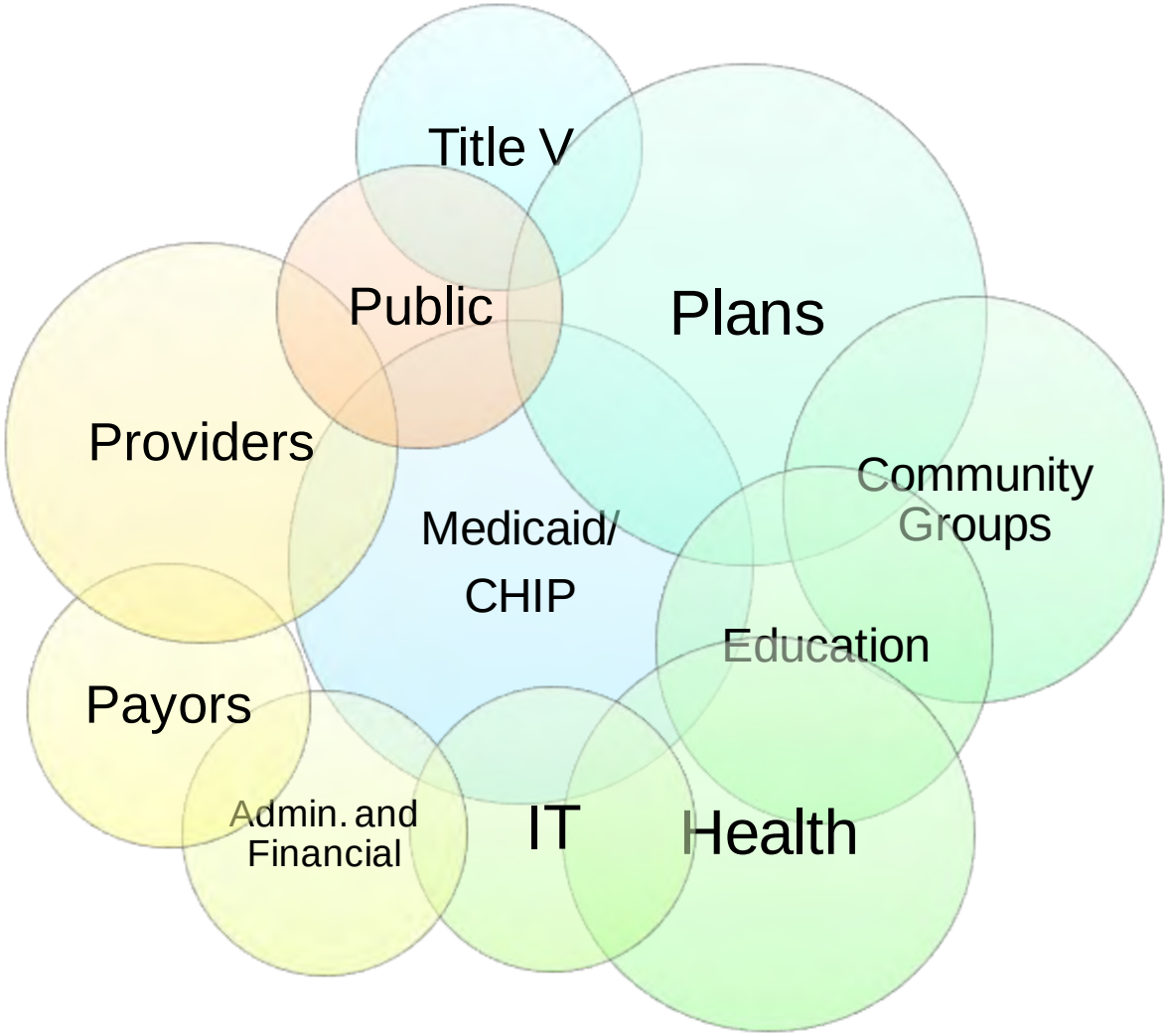
PLAN: Task 2

# Identify Key Stakeholders Using Systems Thinking

- Identify who influences the desired outcomes and bring them into the room
  - Who does the state depend on to make this improvement? (e.g., payers, providers, hospitals)
  - Who depends on the state to make this improvement? (e.g., constituents, Secretary, Governor)

PLAN: Task 2

# Potential Stakeholders

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PLAN: Task 3

# Organize the Effort: QI Project Team Composition

- State-led QI project teams should include representation from:
  - Lead agency
  - Partner agencies/other payers serving the population
  - Key providers/entities serving the population
- Teams may also include representation from:
  - Clinician community
  - Families
  - Patients
  - Community-based organizations

PLAN: Task 4

# Create the Aim, Measures, and Changes

- Set data-driven aim and goals
- Answer the 3 Questions in the Model for Improvement:
  - Aim: What are we trying to accomplish?
  - Measure: How will we know that a change is an improvement?
  - Changes: What change can we make that will result in an improvement?

PLAN: Task 4

# Example of Data-Driven Aim 1

## Aim:

- We are organizing 20 clinics in the metro area and 20 rural clinics, along with their hospital partners, to reduce obstetrical inductions for women prior to 39 weeks by 50 percent or more. We will accomplish this by February 14, 2014

## Measures:

- Outcome measures: Rate of inductions prior to 39 weeks without medical indication
- Process measures: Bundle compliance rates for elective and augmentation inductions
- Balancing measures: Family/staff satisfaction

## Changes:

- Elective induction bundle, augmentation bundle, instrument delivery bundle

# Example of Data-Driven Aim 2

Aim:

By February 2014, reduce early inductions prior to 39 weeks by 80 percent or more by adoption of related Medicaid policies and programs, aligning payment, and regulation (revising conditions of participation to include key changes).

Measures:

Outcome: Percent of births induced without indication prior to 39 weeks

Process: Proportion of births in state with hard stop policies

Balancing: Family/staff satisfaction

Changes:

New policies, pay-for-performance

# Questions?

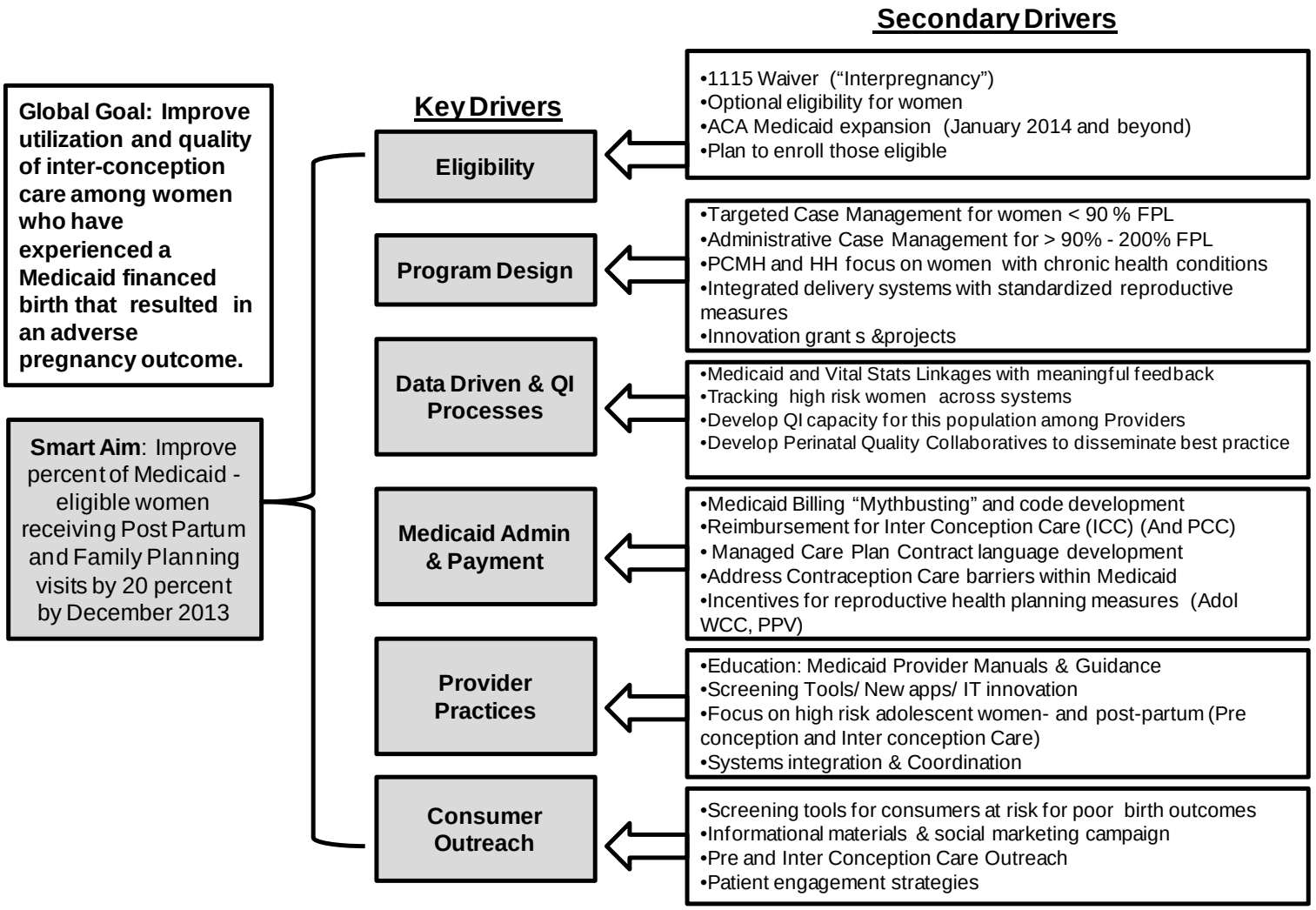
PLAN: Task 4

# Develop Change Ideas Integrated with Driver Diagram

- Data from Secretary's report - what states have outstanding performance and how did they achieve this?
- Literature
- Experts
- People on front line with experience and knowledge of processes
- Innovators who have achieved exceptional results

PLAN: Task 4

# Key Driver Diagram



DO: Task 5

# Start Your Project

- Launch your team
- Manage the process
- Conduct PDSAs
- Collect and review data
- Monitor changes

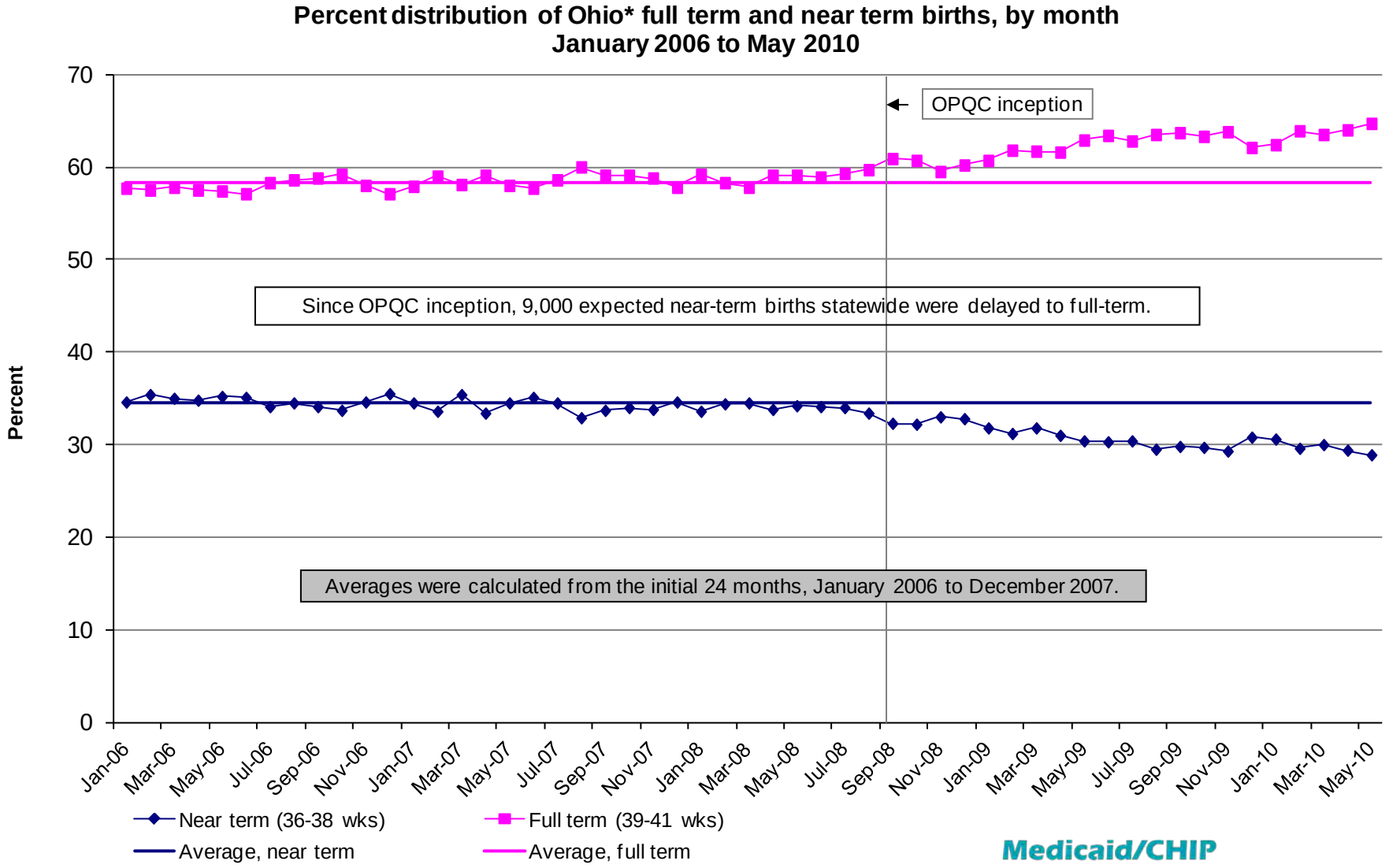
STUDY: Task 6

# Assess Outcomes

- Review documented improvement efforts
- Do the data exceed or fall short of the aim?
- Were the desired outcomes achieved?
  - For example:
    - Reduced inductions between 36 and 38 weeks
    - Reduced neonatal days
    - Decreased cost of care

STUDY: Task 6

# Data for Assessment




*Data from Ohio Perinatal Quality Collaborative, CMS Neonatal Outcomes Improvement Project

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Health Care Quality Measures

ACT: Task 7

# Develop Response Based on QI Outcomes

- Are the results generalizable to other settings, populations, locales?
- Do adaptations need to be made to ensure similar effectiveness in other settings?
  - For other populations?
  - In other locales?
- How will the QI project move from the improvement teams to all possible sites where improvement is needed?
- What additional resources might other sites need?
- What policy and payment changes can be implemented?

ACT: Task 7

# If Desired Outcomes NOT Achieved: Analysis of Barriers and Next Steps

- What were the barriers to success?
- Were the barriers within or outside of the implementation team's control?
- How might the strategy be modified to achieve desired outcomes?
- What recommendations could be made for moving forward?

# A QI Case Study

- Aims
- Organization
- Changes
- Results

# Question 1 in Model for Improvement: What are we trying to accomplish?

Aim should be “S-M-A-R-T”

- Specific
- Measureable
- Attainable
- Relevant
- Time bound

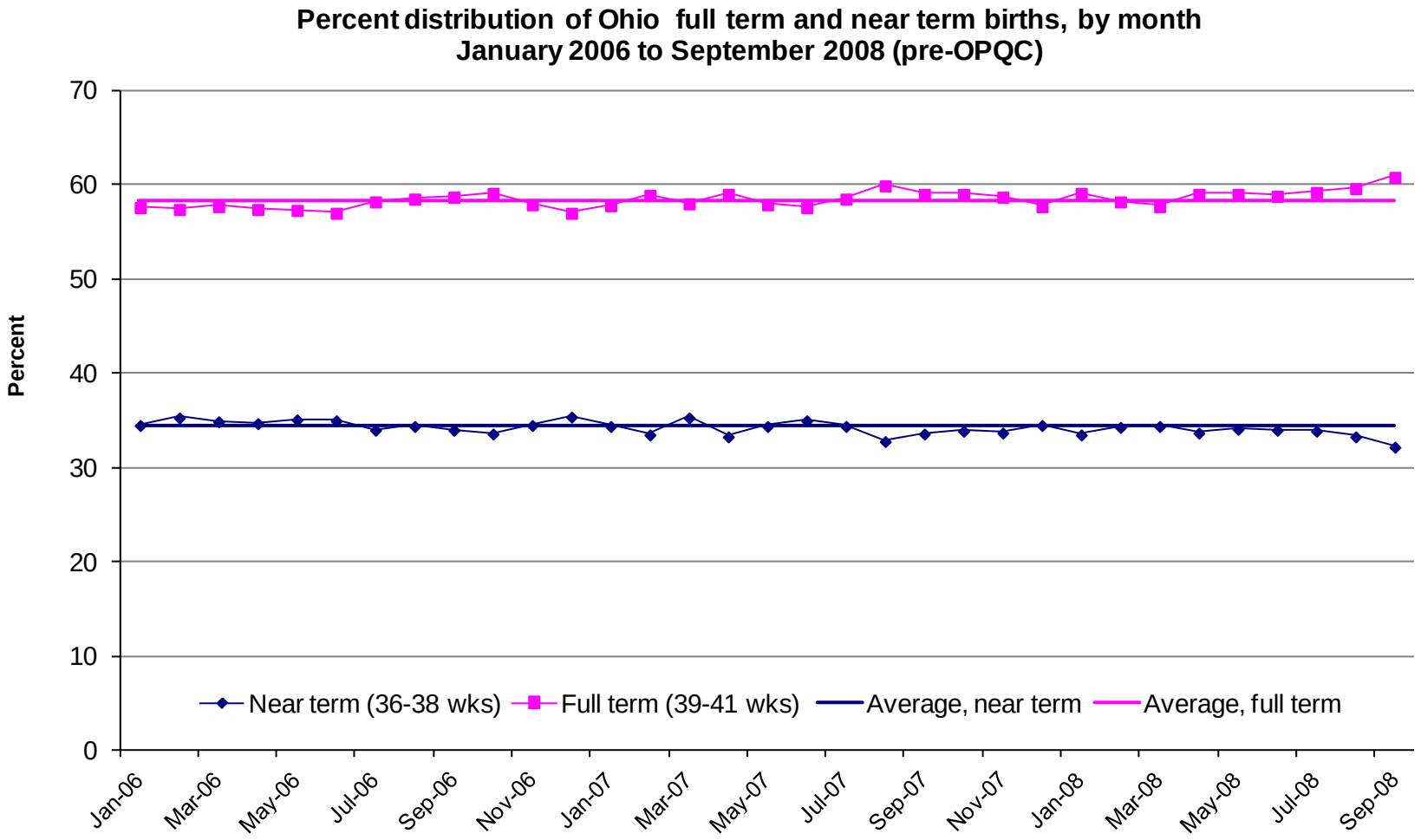
**Aim**

In one year, reduce by 60% the number of women in Ohio of 36.1 to 38.6 weeks gestation for whom initiation of labor or caesarean section is done in absence of appropriate medical or obstetric indication (scheduled delivery)

# To accomplish results who are the stakeholders?

- In order to reduce inductions between 36 and 38 weeks, who would the state need to include?
  - Medicaid plans and payers
  - Providers
  - Hospitals (obstetric and neonatal units)
  - Community partner
- Who has a shared interest in improved outcomes?
  - Women who are constituents
  - WIC
  - Title V
  - Medical societies and associations
  - Others?

# Question 2: How Will We Know a Change is an Improvement? Baseline Data




*Data from Ohio Perinatal Quality Collaborative, CMS Neonatal Outcomes Improvement Project

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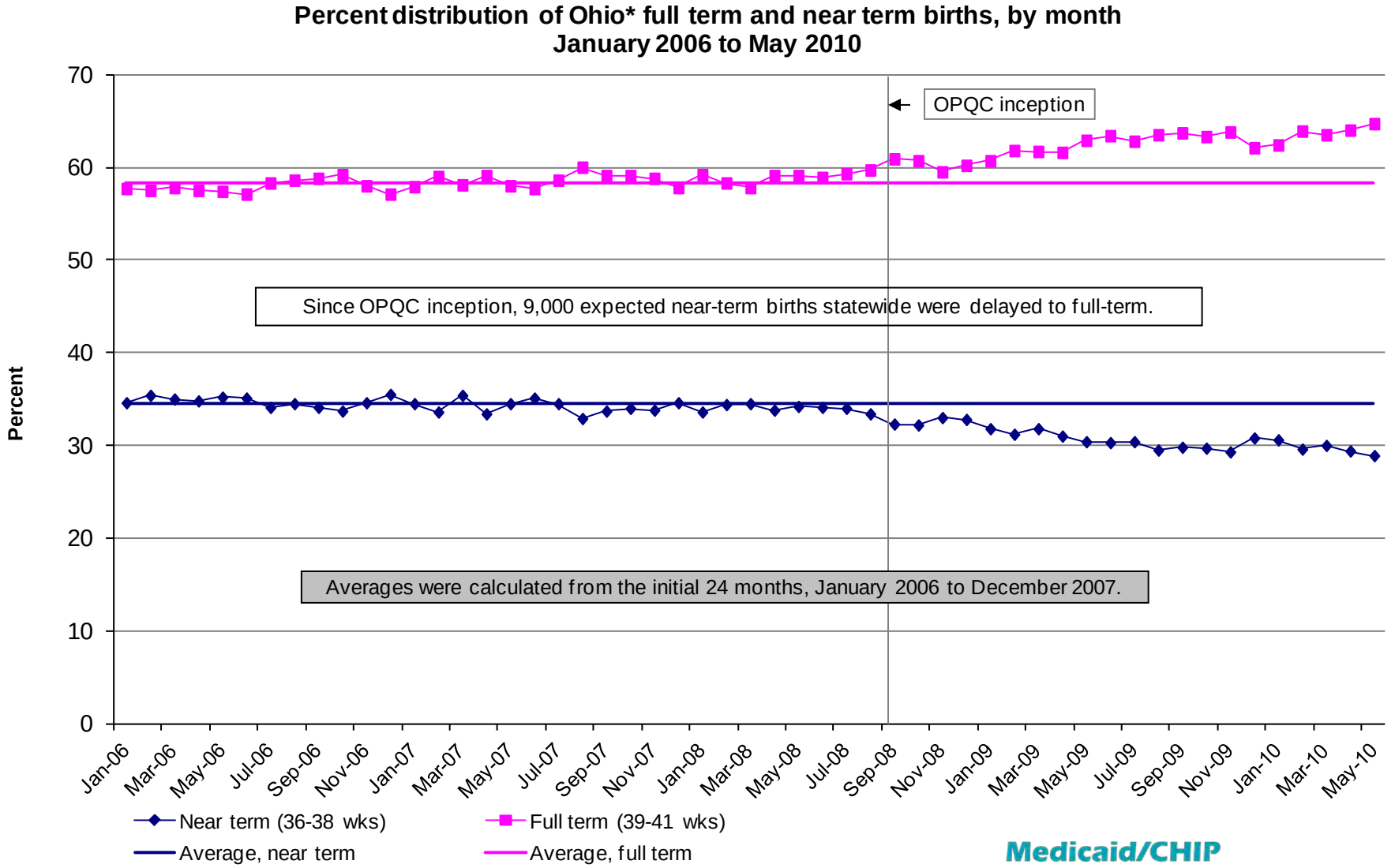
# Question 2: How will we know a change is an improvement? Results

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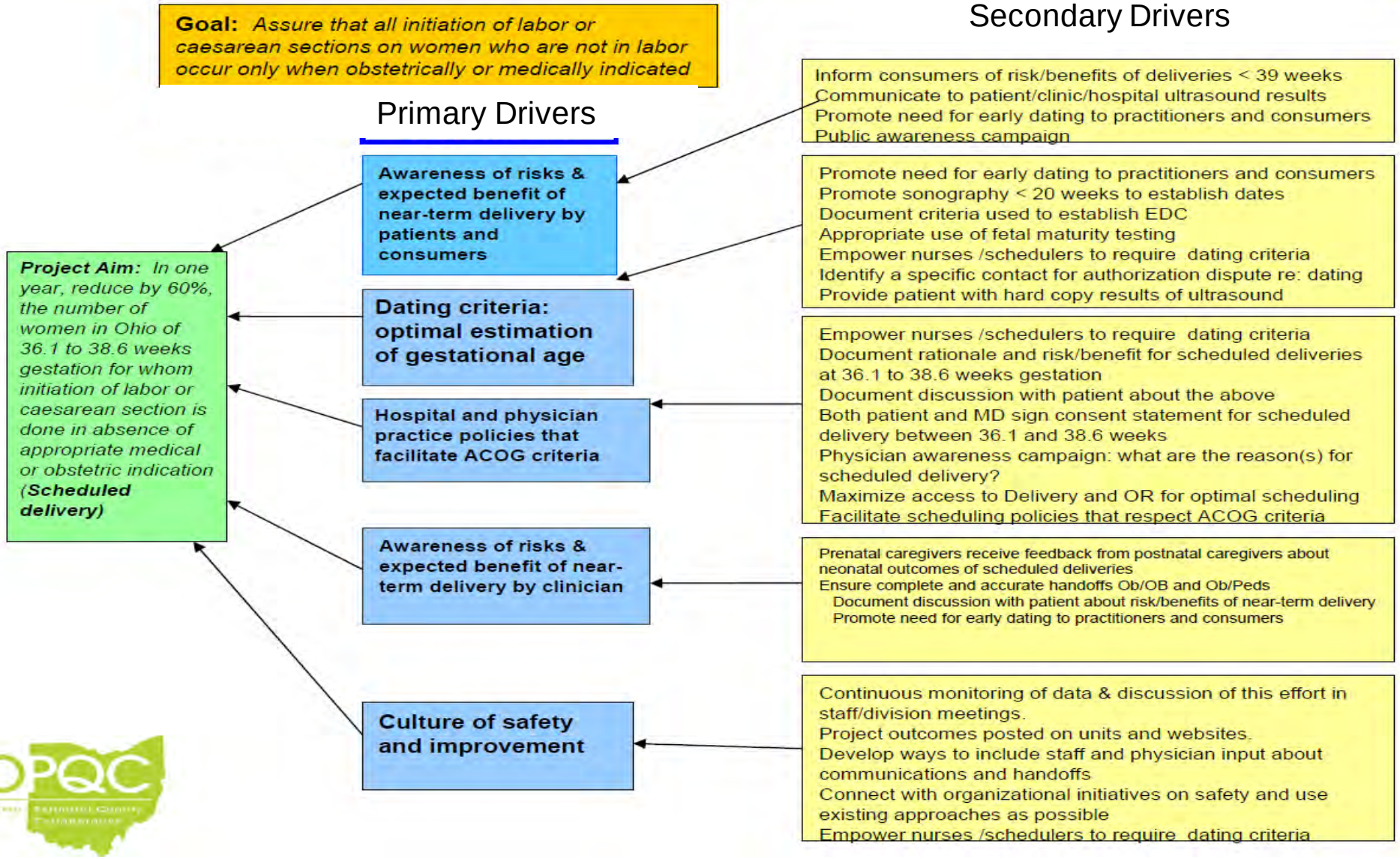
# Example: Ohio Driver Diagram



# Question 3: What changes can we make to bring about improvement?

- Use a driver diagram to organize theory and ideas for improvement:
  - Primary Drivers: Major processes, operating rules, or structures that will contribute to moving toward the aim
  - Secondary Drivers: Elements or portions of the primary drivers. The secondary drivers are system components necessary in order to impact primary drivers, and thus reach project aim
  - Specific Changes: Concrete actionable ideas to take to testing
- Measures can be indicated on the driver diagram as it becomes more mature

# Recap of Learning Objectives

- Participants will learn the basic tasks to conduct a QI project
- Participants will learn the three questions in The Model for Improvement
- Participants will identify at least two considerations for how to pick a QI project in order to answer the first question in the Model for Improvement:
  - “What are we trying to accomplish?”

# Additional Resources

- 2012 Secretary's Report:

  http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/2012-Ann-Sec-Rept.pdf

  Model for Improvement:
  http://www.apiweb.org/API_home_page.htm
- Ohio Perinatal Quality Collaborative: https://opqc.net/
- Perinatal Quality Collaborative of North Carolina:
  http://www.pqcnc.org/
- Neonatal Outcomes Improvement Project – Nine Interventions:
  http://www.nichq.org/expert_services/sample_projects/neonatal_outcomes_improvement/nine_interventions.html

# Questions?

# Jointly sponsored by Tufts University School of Medicine and National Initiative for Children's Healthcare Quality

## Accreditation

### Physicians

- This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of Tufts University School of Medicine (TUSM) and National Initiative for Children's Healthcare Quality. TUSM is accredited by the ACCME to provide continuing medical education for physicians.
- TUSM designates this enduring material for a maximum of .75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### Nurses

- Tufts University School of Medicine Office of Continuing Education is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's COA.
- This activity provides .75 Contact Hours for nurses.

## Requirements for Successful Completion

- To receive CE credit, participants must register, view the content and complete the evaluation. Certificates will be available electronically 6-8 weeks after successful completion of the activity.

## Disclosure of Relevant Financial Relationships with Commercial Interests

- All faculty course directors, planning committee members and others in a position to control the content of an educational activity are required to disclose to the audience any relevant financial relationships with commercial interests. Conflicts of interest resulting from a relevant financial relationship are resolved prior to the activity during the content review. No relevant financial relationships are held by any of the planners, presenters, or TUSM OCE staff.

# Continuing Education

- Continuing education (CE) is provided jointly through Tufts University School of Medicine Office of Continuing Education and the National Initiative for Children's Healthcare Quality
- CE credit available for this three-part webinar series includes:
  - .75 AMA PRA Category 1 Credits™
  - .75 Contact Hours for nurses
  - Certificate of participation
- Attendance at all three webinars is required to receive full credit
  - Sign in for Webinar 1: http://www.cvent.com/d/bcqfh9
- Certificates will be available electronically 6 – 8 weeks after successful completion of webinar 3

# Next Webinar in the QI Workshop Series

- QI 101, Webinar 2:  Continuing the Quality Framework Discussion
- When: April 5, 2013 at 2:00pm ET
- Purpose:
  - Build upon content in today's session
  - Orient states to a structured QI approach for planning and monitoring the impact of their QI efforts

**REMINDER: Please complete Online Session Evaluation and Expression of Interest for the QI 201 Series

# Thank You for Participating in Today's Webinar!

Please complete the evaluation as you exit the webinar.

# Appendix

- Defining QI
- Roles and Responsibilities for QI Project
- Core Set of Children's Health Care Quality Measures
- Core Set of Health Care Quality Measures for Adults Enrolled in Medicaid

# Defining Quality Improvement

# What is Quality of Care?

"The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."

— Institute of Medicine, 1990

# Six Aims for Improvement

Safe — Avoid injuries to patients from the care that is intended to help them. Safety must be at the forefront of patient care.

Effective — Match care to science; avoid overuse of ineffective care and underuse of effective care.

Patient-Centered — Honor the individual and respect choice. Each patient's culture, social context and specific needs deserve respect, and the patient should play an active role in making decisions about her own care.

Timely — Reduce waiting for both patients and those who give care. Prompt attention benefits both the patient and the caregiver.

Efficient — Reduce waste. The health care system should constantly seek to reduce the waste and the cost of supplies, equipment, space, capital, ideas, time and opportunities.

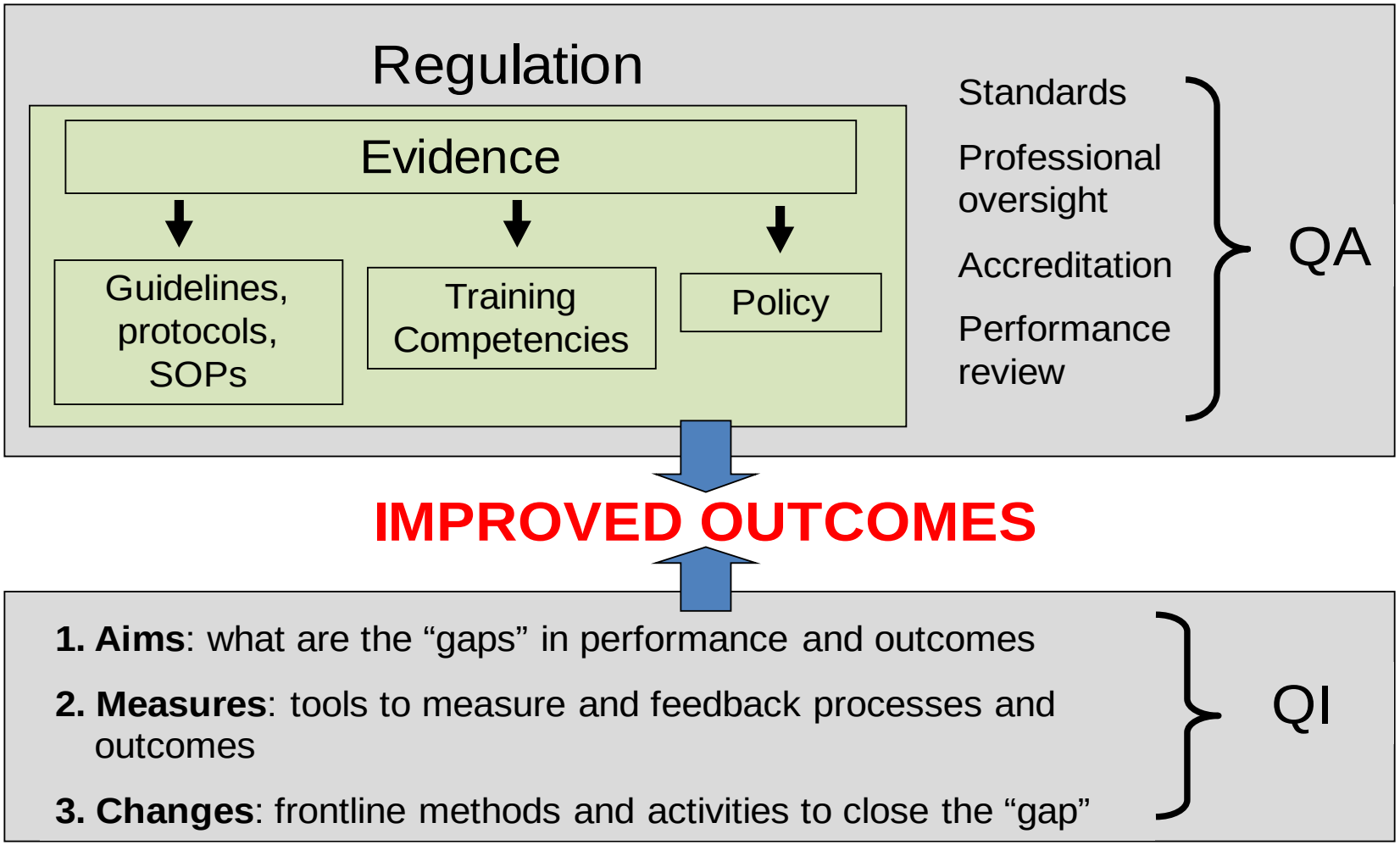
Equitable — Close racial and ethnic gaps in health status. Race, ethnicity, gender and income should not prevent anyone from receiving high-quality care.

Source: Crossing the Quality Chasm: a New Health System for the 21st Century, IOM, 2001.

# Quality Assurance and Quality Improvement

- Quality Assurance – Purpose is to assess when we have achieved the intended quality of service or product
- Quality Improvement – Purpose is to move the system from current state of performance to a new state of performance

# QA and QI are complementary



# Roles and Responsibilities for QI Project

- Oversight team based in lead agency
  - Establishes the charge
- Implementation leader
  - Responsible for the overall QI project
- Implementation teams
  - Informs planning and execution of the QI project
- Topical experts
  - Identifies evidence-based changes and helps to determine feasibility
- Improvement teams
  - Deploys the improvement efforts in the field
- Analytic support
  - Collects and reports on data
- QI experts, as needed

# 2013 Core Set of Children's Health Care Quality Measures

| Prevention and Health Promotion |
|---|
| Timeliness of Prenatal Care |
| Frequency of Ongoing Prenatal Care |
| Behavioral Health Risk Assessment (for Pregnant Women) – ***NEW IN 2013*** |
| Percentage of Live Births Weighing less than 2,500 Grams |
| Cesarean Rate for Nulliparous Singleton Vertex |
| Childhood Immunization Status |
| Adolescent Immunization Status |
| Human Papillomavirus (HPV) Vaccine for Female Adolescents – ***NEW IN 2013*** |
| Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents: Body Mass Index Assessment |
| Developmental Screening in the First Three Years of Life |
| Chlamydia Screening in Women |
| Well-Child Visits in First 15 Months of Life |
| Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life |
| Adolescent Well-Care Visit |
| Percentage of Eligibles Who Received Preventive Dental Services |
| Availability |
| Child and Adolescent Access to Primary Care Practitioners |
| Management of Acute Conditions |
| Appropriate Testing for Children with Pharyngitis |
| Percentage of Eligibles who Received Dental Treatment Services |
| Ambulatory Care: Emergency Department Visits |
| Pediatric Central-line Associated Bloodstream Infections – Neonatal Intensive Care Unit and Pediatric Intensive Care Unit |
| Management of Chronic Conditions |
| Annual Percentage of Asthma Patients with One or More Asthma-related Emergency Room Visits |
| Medication Management for People with Asthma – ***NEW IN 2013*** |
| Follow-Up Care for Children Prescribed Attention Deficit-Hyperactivity Disorder (ADHD) Medication |
| Annual Pediatric Hemoglobin A1C Testing |
| Follow-up After Hospitalization for Mental Illness |
| Family Experiences of Care |
| Consumer Assessment of Healthcare Providers and Systems 5.0H (child version including children with chronic conditions supplemental items) |

# Initial Core Set of Health Care Quality Measures for Adults Enrolled in Medicaid

| |
|---|
| Prevention and Health Promotion |
| Flu Shots for Adults Ages 50-64 |
| Adult BMI Assessment |
| Breast Cancer Screening |
| Cervical Cancer Screening |
| Medical Assistance With Smoking and Tobacco Use Cessation |
| Screening for Clinical Depression and Follow-Up Plan |
| Plan All-Cause Readmission |
| Diabetes, Short-term Complications Admission Rate |
| Chronic Obstructive Pulmonary Disease (COPD) Admission Rate |
| Congestive Heart Failure Admission Rate |
| Adult Asthma Admission Rate |
| Chlamydia Screening in Women age 21-24 |
| Availability |
| Initiation and Engagement of Alcohol and Other Drug Dependence Treatment |
| Prenatal and Postpartum Care: Postpartum Care Rate |
| Management of Acute Conditions |
| Follow-Up After Hospitalization for Mental Illness |
| Elective Delivery |
| Antenatal Steroids |
| Management of Chronic Conditions |
| Annual HIV/AIDS Medical Visit |
| Controlling High Blood Pressure |
| Comprehensive Diabetes Care: LDL-C Screening |
| Comprehensive Diabetes Care: Hemoglobin A1c Testing |
| Antidepressant Medication Management |
| Adherence to Antipsychotics for Individuals with Schizophrenia |
| Annual Monitoring for Patients on Persistent Medications |
| Family Experiences of Care |
| CAHPS Health Plan Survey – Adult Questionnaire *with* CAHPS Health Plan Survey v. 5.0H |
| Care Coordination |
| Care Transition – Transition Record Transmitted to Health care Professional |