Improving the quality of Pregnancy Care Management: What are we trying to accomplish and what tools can we use to help us get there?
Three Key Questions for Quality Improvement*

1. What are we trying to accomplish?

2. How will we know if a change is an improvement?

3. What changes can we make that will result in improvement?

*Institute for Healthcare Improvement, www.ihi.org
What are we trying to accomplish?
Pregnancy Medical Home KPIs

- Key Performance Indicators:
  - Rate of low birth weight
  - Rate of very low birth weight
  - Rate of primary c-section
Low birthweight is less than 2500 grams (5 1/2 pounds).
Preterm is less than 37 completed weeks gestation.

Rate of Low Birth Weight (<2500 grams) Babies Among Non-Emergency Medicaid Deliveries

July 2009 - June 2010: 10.96%
July 2010 - June 2011: 11.12%
July 2011 - June 2012: 10.80%
April 2012 - March 2013*: 10.53%

* Includes 3 months of data from the previous time point
Rate of Low Birth Weight (<2500 grams) Babies Among Non-Emergency Medicaid Deliveries

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Rate of Very Low Birth Weight (<1500 grams) Babies Among Non-Emergency Medicaid Deliveries

- July 2009 - June 2010: 2.13%
- July 2010 - June 2011: 2.18%
- July 2011 - June 2012: 2.04%
- April 2012 - March 2013*: 2.11%

* Includes 3 months of data from the previous time point
Primary Cesarean Section Rates among Term Patients with a Singleton, Vertex Fetus and Non-Emergency Medicaid

Primary C/S Rate

PMH program launch

July 2009 - June 2010
July 2010 - June 2011
July 2011 - June 2012
April 2012 - March 2013*

16.40% 16.16% 16.07% 15.82%

* Includes 3 months of data from the previous time point
**Contractual Structure of PMH/OBCM Model**

- **Key Performance Indicators:**
  - Rate of LBW/VLBW
  - Rate of Primary C/S

- **NC DMA contract with CCNC central office** (includes PMH and OBCM)

- **CCNC central office** contracts with:
  - 14 local CCNC networks
    - (include PMH and OBCM)

- **CCNC networks** contract with:
  - 82 LHDs and
  - with 400 PMH practices

- **Local health departments** deliver pregnancy care management services according to the scope of work in the contract with the network.

- **PMH Contract Measures:**
  - Rate of risk screening
  - Rate of 17p utilization among eligible patients
  - Rate of primary c-section
  - Avoidance of elective delivery <39 weeks

- **OBCM Contract Measures:**
  - Proportion of pregnant Medicaid patients with risk screen in CMIS
  - Proportion of priority OB patients with OBCM contact
  - Proportion of priority OB patients with pregnancy assessment
  - Rate of postpartum visits among patients in active OBCM status at time of delivery
Vaginal Delivery Rate Among All Patients

- Deliveries April - June 2012: 69.6%
- Deliveries July - September 2012: 70.5%
- Deliveries October - December 2012: 70.1%

Rate of Vaginal Delivery
Low Birth Weight Rate Among All Patients

- Deliveries April - June 2012: 10.42%
- Deliveries July - September 2012: 10.40%
- Deliveries October - December 2012: 10.08%
Unintended pregnancy is determined by patient responses of “did not want to be pregnant now or at any time in the future” or “wanted to be pregnant later” on the risk screening form.

Unintended Pregnancy Among Patients with a Risk Screening Form

Unintended pregnancy is determined by patient responses of “did not want to be pregnant now or at any time in the future” or “wanted to be pregnant later” on the risk screening form.
Rate of Late Entry to Prenatal Care Among All Patients (After 1st Trimester)

- Deliveries April - June 2012: 29.2%
- Deliveries July - September 2012: 28.8%
- Deliveries October - December 2012: 26.1%
Risk Screening Forms Among All Patients

- % of all patients with Risk Screening Form in CMIS:
  - Deliveries April - June 2012: 75.8%
  - Deliveries July - September 2012: 78.0%
  - Deliveries October - December 2012: 77.7%

- % of all patients with a Positive Risk Screen:
  - Deliveries April - June 2012: 53.5%
  - Deliveries July - September 2012: 55.5%
  - Deliveries October - December 2012: 54.7%

- % of all patients where an S0280 claim was paid:
  - Deliveries April - June 2012: 52.9%
  - Deliveries July - September 2012: 55.2%
  - Deliveries October - December 2012: 54.8%
Patient Engagement in Pregnancy Care Management Among Patients with a Positive Risk Screening Form

- Deliveries April - June 2012
- Deliveries July - September 2012
- Deliveries October - December 2012

% of patients with a Positive Risk Screen who were engaged by an OBCM

- 71.5%
- 76.1%
- 80.1%

% of patients with a Positive Risk Screen with a documented assessment

- 70.2%
- 74.2%
- 79.2%
Importance of Risk Screening Data

- Narrow window of opportunity to intervene to affect pregnancy outcome

- Risk screens are best method for identifying pregnant Medicaid patients in real time
  - There is no claims data source to tell us when a Medicaid patient is pregnant
  - Possibility of local collaboration with DSS to identify patients who come in for MPW application
  - Importance of OB ADT data

- Allows for timely provision of pregnancy care management
opportunity only ever lasts for a short while...
Importance of Pregnancy Care Management

- Pregnancy Care Management is the primary intervention of the PMH model to improve birth outcomes

- Evidence-based
  - Several published studies show improvement in birth outcome as a result of various care management models
  - “Black box” problem – it’s not clear what exactly about care management helps patients
    - Better adherence to medical care
    - Improvement in psychosocial risk factors
    - Social support
“Every system is perfectly designed to get exactly the results that it gets.”

- What can we do to make the Pregnancy Care Management system get more of the results we want?
- What are we already doing in the Pregnancy Care Management system that is helping us to achieve the results we’re already getting?
- Is there a culture in Pregnancy Care Management of being open to new approaches to get the results we want?
How will we know a change is an improvement?
Continuous quality improvement means always looking for opportunities to change for the better

- Blameless culture – everyone must feel comfortable in identifying problems with the system: “stop the line”
- Find areas where the system could work better and test changes, with permission to make mistakes – look for how to improve the system, not whom to blame
- Shared commitment to improvement culture
- Make it easy to do the thing you want more of

Quality improvement uses small tests of change to see what works

- PDSA cycles (Plan-Do-Study-Act)
QA vs. QI

- Quality assurance (QA) looks at whether we are doing what we are supposed to do.
- Quality improvement (QI) focuses on how we can do better at what we are doing.
- QI implies change.
  
  “While all changes do not lead to improvement, all improvement requires change.”

- The focus should always remain on the patient – are we improving the quality of care and the birth outcomes of our patients?
Use of data to drive quality

- “Data” is anything we measure
- These are some of the tools that we have to help us do our job more effectively
- The goal is to use numbers to help us learn more about how to improve our work, rather than to work to improve the numbers
- Who doesn’t want to know if your work is making a difference?

“Measurement is a critical part of testing and implementing changes; measures tell a team whether the changes they are making actually lead to improvement.”
Types of measures

Three types of measures:

- **Outcome**: how does the system impact the patient’s health?
  - Birth outcome
  - Multifactorial – dig into the processes that evidence suggests are associated with the desired outcome

- **Process**: is the system working as planned?
  - Priority patients engaged in care management
  - Ensure the processes that are associated with the desired outcome are occurring

- **Balancing**: are changes in one part of the system affecting other parts of the system?
  - Deferrals for unable to contact within 30 days
  - Ensure changes to processes aren’t having negative impact on other processes associated with the outcome
Types of measures/new OBCM contract measures

- KPIs in master contract with DMA and CCNC contract with local networks are **outcome** measures
- **OBCM contract measures are process** measures:
  - Proportion of pregnant Medicaid patients with risk screen in CMIS
  - Proportion of priority OB patients with timely OBCM contact
  - Proportion of priority OB patients with timely assessment
  - Postpartum visit* rate for patients receiving pregnancy care management at time of delivery
    - *Documentation reminder – use the “postpartum visit date” in Pregnancy Assessment only to document postpartum visits with the provider that have actually taken place
Dashboard currently includes process measures:

- Timely patient contact
- Timely patient assessment
- Deferrals
- Proportion of pregnant Medicaid population engaged in pregnancy care management

These are indicators of basic elements of program implementation – are the patients being served?

Next phase: dashboard measures to assess specific aspects of services

- Adherence to OBCM tobacco cessation pathway
- Adherence to specific elements of OBCM Common Pathway
Current dashboard rates

State-level for 6-month period ending March 2013:

- **Timely patient contact**: 67% of all priority OB patients
  - Improvement from 63% in previous 6 months
- **Timely patient assessment**: 52% of all priority OB patients
  - Improvement from 47% in previous 6 months
- **Deferral** within 60 days of screening: 19% of priority patients
  - Improvement from 20% in previous 6 months
- **Engagement** of pregnant Medicaid population: 55%
  - Improvement from 52% in previous 6 months
Role of contract/dashboard measures

- What does it mean if you are an outlier on these measures?
  - Something is working really well
  - Something is not happening that should be

- What does it mean for your program if you are underperforming?
  - Lots of opportunities for improvement!
  - Importance of testing changes to see what will allow you to improve

- Areas of concern are not the underperformers but those not trying to find changes that might lead to improvement
  - Consider ways to use available data to test changes
Seize opportunities for improvement and embrace a culture of change!

"I was seldom able to see an opportunity until it had ceased to be one."
-Mark Twain
What changes can we make that will result in an improvement?

“What can we do next Tuesday?”
Getting started

- OBCM measures describe overall performance on various process measures but do not answer the questions “why” or “how”
  - Patient contact measure shows the proportion of patients with timely OBCM contact but does not explain why that number is what it is or how to change it

- All solutions are local
  - Why is the rate of patient contact what it is in your county? How can you improve it? How did you improve it?

- What can you learn about your local processes from data
  - CMIS reports
Getting started

- Who needs to be involved in any change discussions?
- What processes do you need to observe – a “gemba walk”?
- How can you look for the root causes of why something is happening a certain way?
  - “5 Why’s” approach
- What tools are available locally to help guide improvement efforts?
- What tools can you create locally to assess whether your changes are resulting in improvement?
Hands-on QI for busy people

- OBCM use of CMIS reports for quality improvement
- OBCM supervisor use of CMIS reports for quality improvement
- Case study
- Sample tool