



## BCI Webinar

# Improving Reporting Accuracy:

## *Mother's Weight*

September 27<sup>th</sup>, 2018

Partnering to Improve Health Care Quality  
for Mothers and Babies

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# Overview

- 👤 Process Mapping Check-in
- 👤 What is the data showing?
- 👤 Recommended Guidance on Reporting: Mother's Weight
- 👤 Group Problem Solving Session
- 👤 Utilizing PDSA Cycles
- 👤 Upcoming Webinar
- 👤 Adjourn

# Process Mapping Check-in



# Winnie Palmer Hospital

## Brittany Biggett

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**HIM Challenges: Initiative Expands the Prenatal Record Process**  
By Brittany Biggett, RHIA  
*For The Record*  
Vo. 30 No. 7 P. 28



Prenatal documentation is the foundation of the clinical journey of expecting mothers and unborn babies. I work in an HIM department at Winnie Palmer Hospital for Women and Babies in Orlando, Florida, where my primary responsibility is getting the prenatal record into the correct EMR account in a timely manner and supporting clinical providers in their quest to give quality care.

Inaccessibility to the prenatal record not only affects the quality of care while the patient is being treated but also creates a ripple effect outside of the treatment plan. For example, it affects the accuracy and quality of data collected for public health practices, policy measures, and maternal and infant health research.

**Birth Certificate Initiative**  
Established in 2010, the Florida Perinatal Quality Collaborative (FPQC) brings to light how inaccessibility and poor data quality impact multiple variables. FPQC's goal is to improve Florida's maternal and infant health outcomes through the delivery of high-quality and evidence-based perinatal care.

Multiple projects have been enacted by the FPQC consisting of statewide partnerships with perinatal-related organizations, health professionals, advocates, policymakers, hospitals, and payers. One of the current projects is the Birth Certificate Initiative (BCI), a statewide effort taking place at nine hospitals, including Winnie Palmer Hospital. The initiative's goal is to improve the accuracy of birth certificate reporting to promote better health care and public health efforts.

**BCI's Impact**  
The project's formal goal was to improve the accuracy of 22 key birth certificate variables to the set benchmark of 95%. Out of the 22 variables, eight are impacted by having the prenatal record as its source.



# Process Mapping check-in

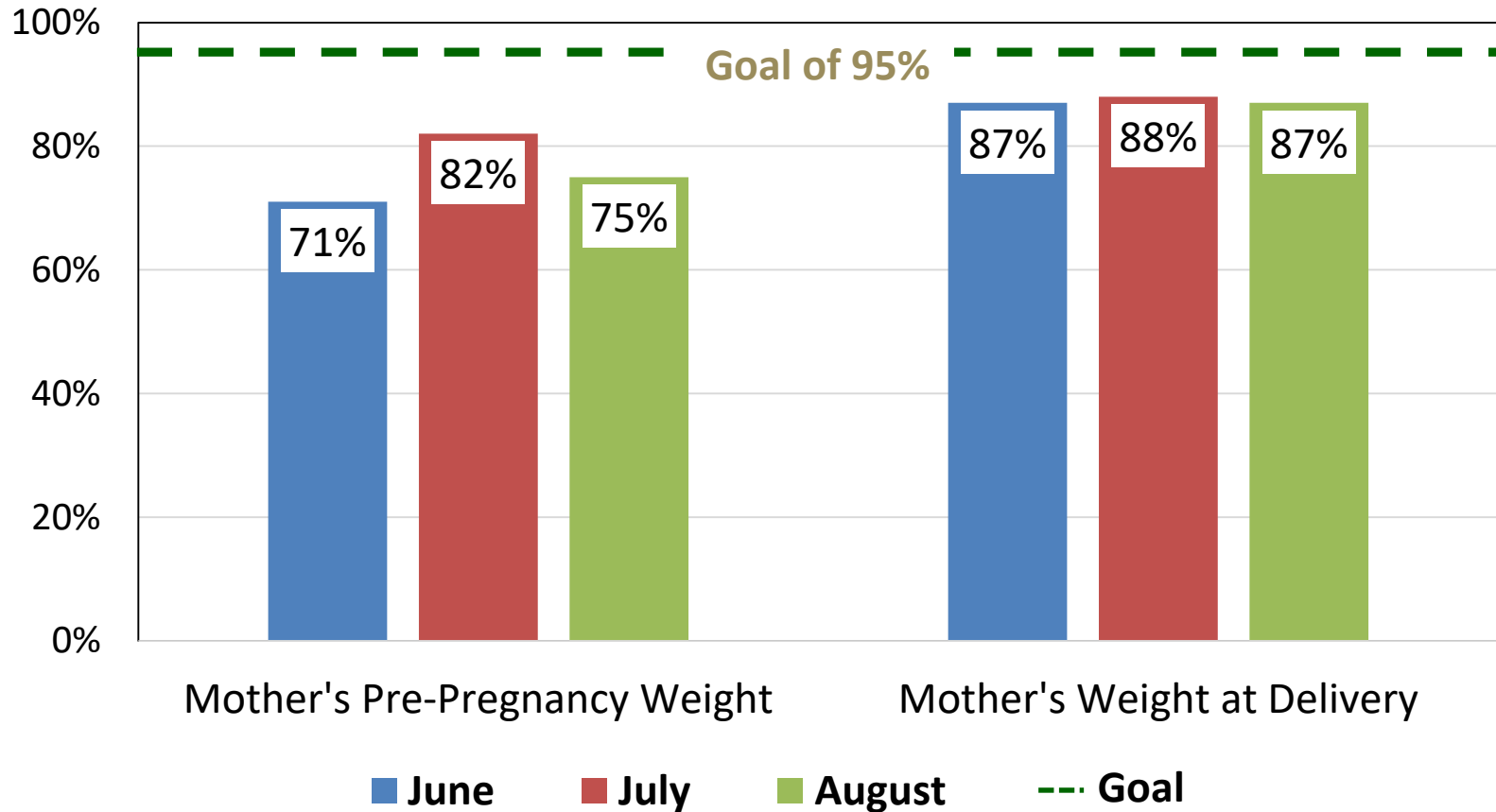
- 👤 Has your hospital tried to process map?
- 👤 How was the experience?
- 👤 Would you like to share your process map on an upcoming BCI webinar?

# What is the Data Showing?

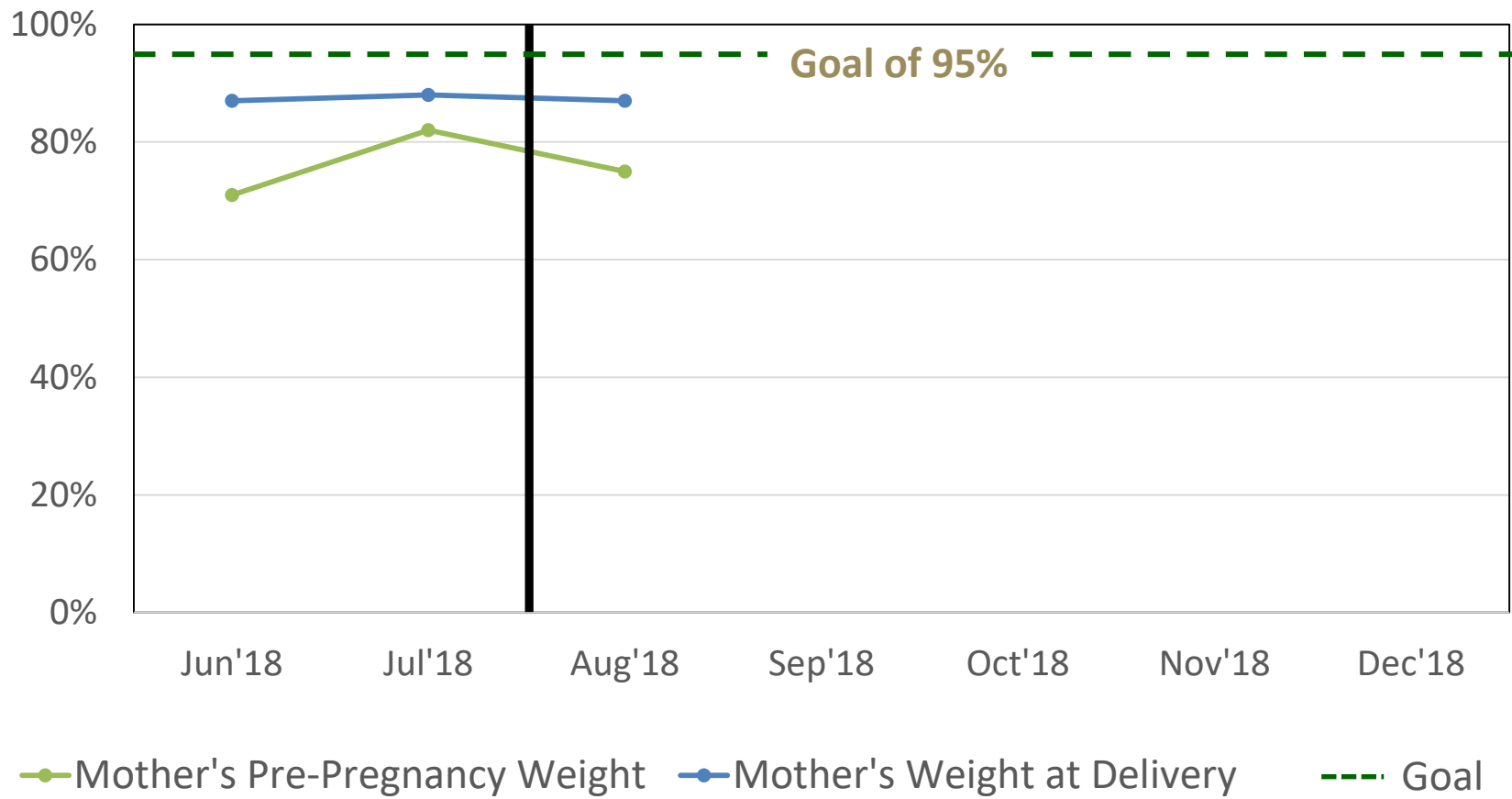


# Average Percent Accuracy for 15 BCI Hospitals

## Mother's Weight (Average)



# Average Percent Accuracy of Birth Certificate Mother's Weight Variables – 15 BCI Hospitals





# Agreement = Accuracy

- 👤 When data is captured from correct sources, then both agreement and accuracy are achieved
- 👤 Mother's **correct** weight on **prenatal record** is captured by the clerk and auditor:
  - **BC** agreement and accuracy are both **achieved**

# Agreement vs Accuracy?

Figure 1: Targeting Process Variation



## Sporadic

When clerk and/or auditor recorded the weight from different sources over time



## Reliability

When clerk asks the mother her weight and the auditor copied the written answer



## Accuracy

When clerk and auditor both captured the answer from prenatal records

# Agreement and Accuracy

- 👤 Auditors need to use best practices in order to obtain accuracy
- 👤 If data is not gathered from the same sources, we may have agreement but not accuracy
- 👤 Our aim is to help you with simple QI tools to improve the process
- 👤 Today we will focus on PDSA cycles as a QI tool for improvement in accuracy

# Recommended Guidance on Reporting: Mother's Weight



# Mother's Weight

## PREPREGNANCY WEIGHT

Mother's weight **BEFORE** current pregnancy started

1<sup>st</sup> Prenatal record

2<sup>nd</sup> Physician/nurse admission note

## WEIGHT AT DELIVERY

Mother's weight **at the time of delivery**

1<sup>st</sup> Labor and delivery (L&D) nursing admission triage

2<sup>nd</sup> Admission History and Physical (H&P)

- Use pounds in whole numbers only; Do not enter fractions or decimals
- **DO NOT** round up or down
- If weight is 125 lbs. 4 ½ oz. or 125.4 lbs. enter 125 lbs. only
- If weight is 155.75 lbs. enter 155 lbs. only

# Group Problem Solving Session





# Utilizing PDSA cycles to accelerate your QI initiatives

**Karen Fugate MSN RNC-NIC, CPHQ**  
FPQC Nurse Consultant

Partnering to Improve Health Care Quality  
for Mothers and Babies

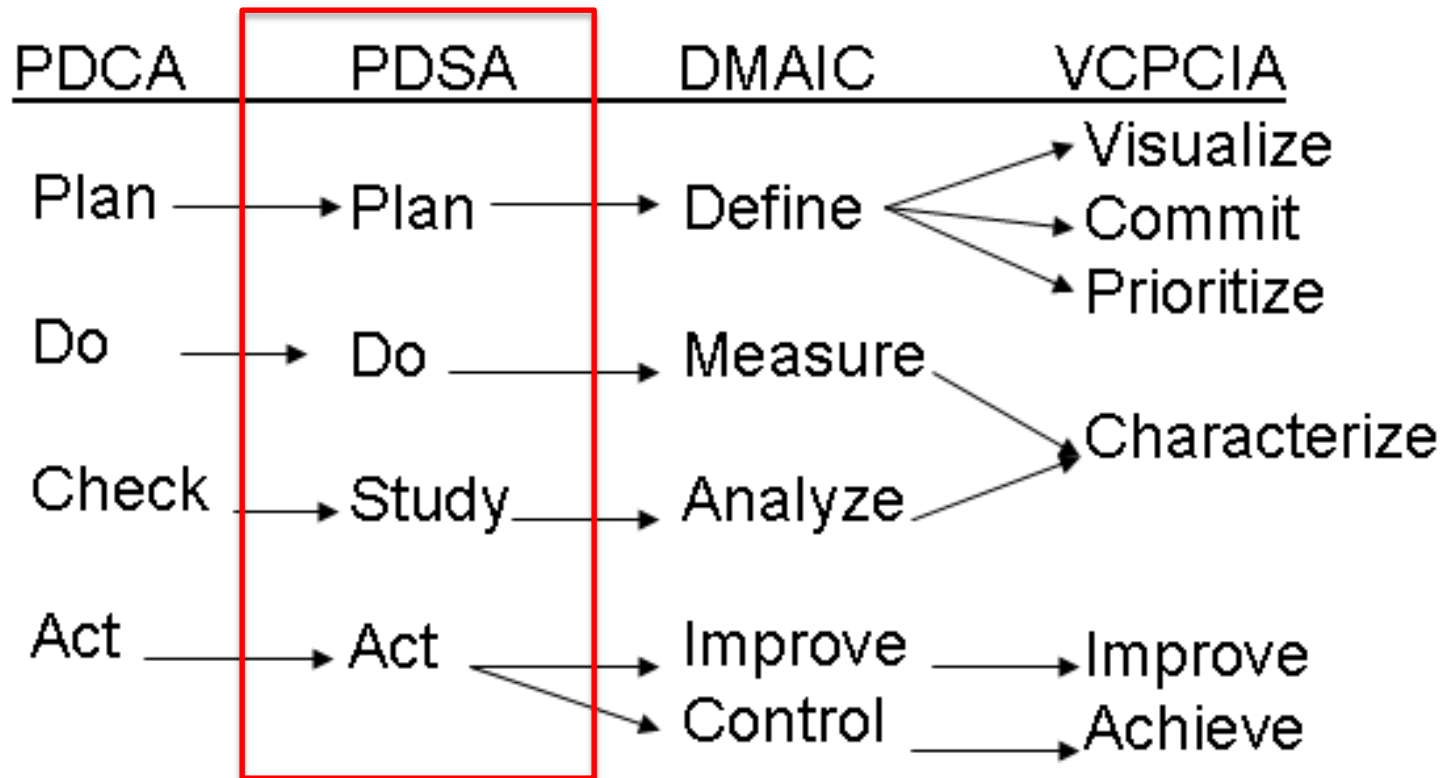
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# QI Methodology

Many QI methodologies are available

**Goal is to develop tests of change to imp**





# PDSA ~ Scientific method

**Table 1** Description of the plan–do–study–act (PDSA) cycle method according to developers and commentators

	<b>Deming (1986)<sup>25</sup>Original description of the method relating to manufacturing</b>	<b>Langley (1996)<sup>30</sup>How the PDSA method may be adapted for use in healthcare contexts</b>	<b>Speroff and O'Connor (2004)<sup>33</sup>How the PDSA method is analogous to scientific methodology</b>
Plan	Plan a change or test aimed at improvement	<ul style="list-style-type: none"> <li>▶ Identify objective</li> <li>▶ Identify questions and predictions</li> <li>▶ Plan to carry out the cycle (who, when, where, when)</li> </ul>	Formation of a hypothesis for improvement
Do	Carry out the change or test (preferably on a small scale)	<ul style="list-style-type: none"> <li>▶ Execute the plan</li> <li>▶ Document problems and unexpected observations</li> <li>▶ Begin data analysis</li> </ul>	Conduct study protocol with collection of data
Study	Examine the results. What did we learn? What went wrong?	<ul style="list-style-type: none"> <li>▶ Complete the data analysis</li> <li>▶ Compare data to predictions</li> <li>▶ Summarise what was learnt</li> </ul>	Analysis and interpretation of the results
Act	Adopt the change, abandon it or run through cycle again	<ul style="list-style-type: none"> <li>▶ What changes are to be made?</li> <li>▶ What will the next cycle entail?</li> </ul>	Iteration for what to do next

Taylor MJ, et al. *BMJ Qual Saf* 2013;**0**:1–9. doi:10.1136/bmjqs-2013-001862

# What is a PDSA cycle?

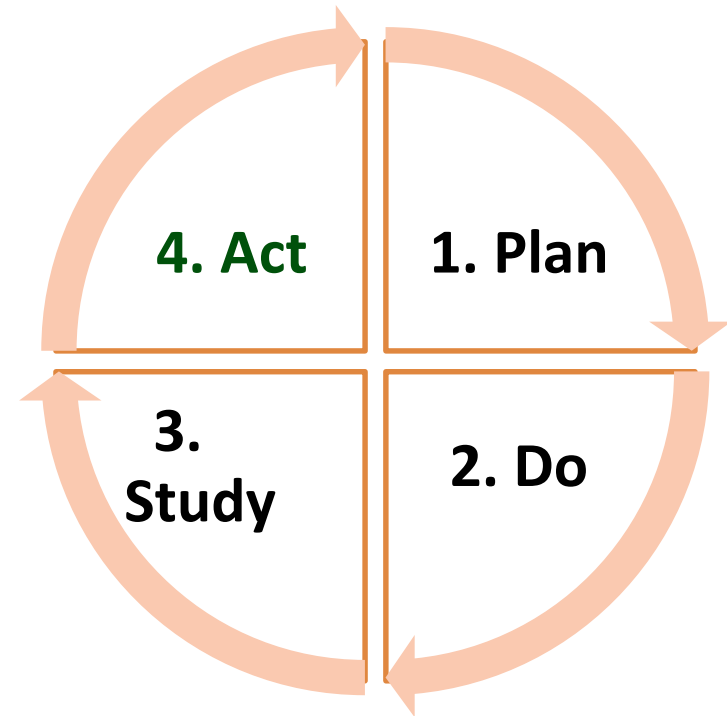
- ❑ Useful tool for developing & documenting tests of change to **improve**
- ❑ AKA PDCA, Deming Cycle, Shewart Cycle

**P** – **Plan** a test

**D** – **Do** a test

**S** – **Study** & learn  
from test results

**A** – **Act** on results



Deming WE. *The New Economics for Industry, Government, and Education*. Cambridge, MA: The MIT Press; 2000.

# Plan-Do-Study-Act



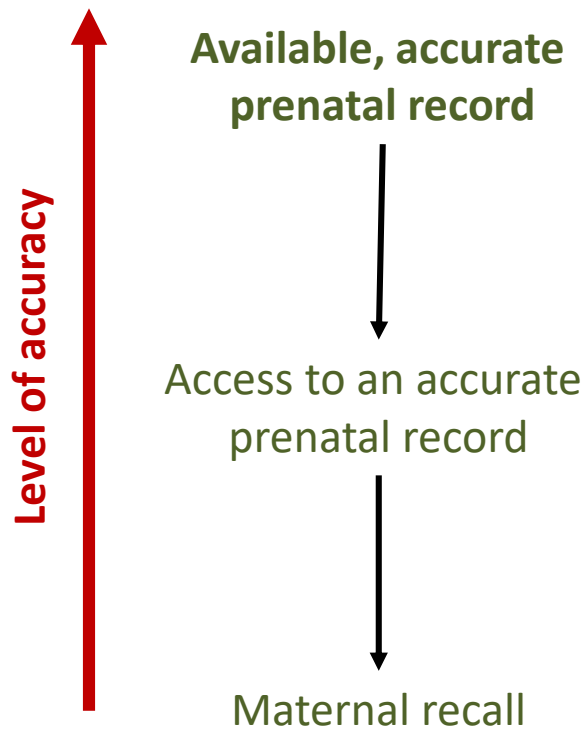
# Reasons to test changes

- **Learn** whether change will result in improvement
- **Predict** the amount of improvement possible
- Evaluate the proposed change work in a **practice environment**
- **Minimize resistance** at implementation

## PDSA Cycle #1

**Identified problem:** ~20% accuracy in documenting pre-pregnancy weight

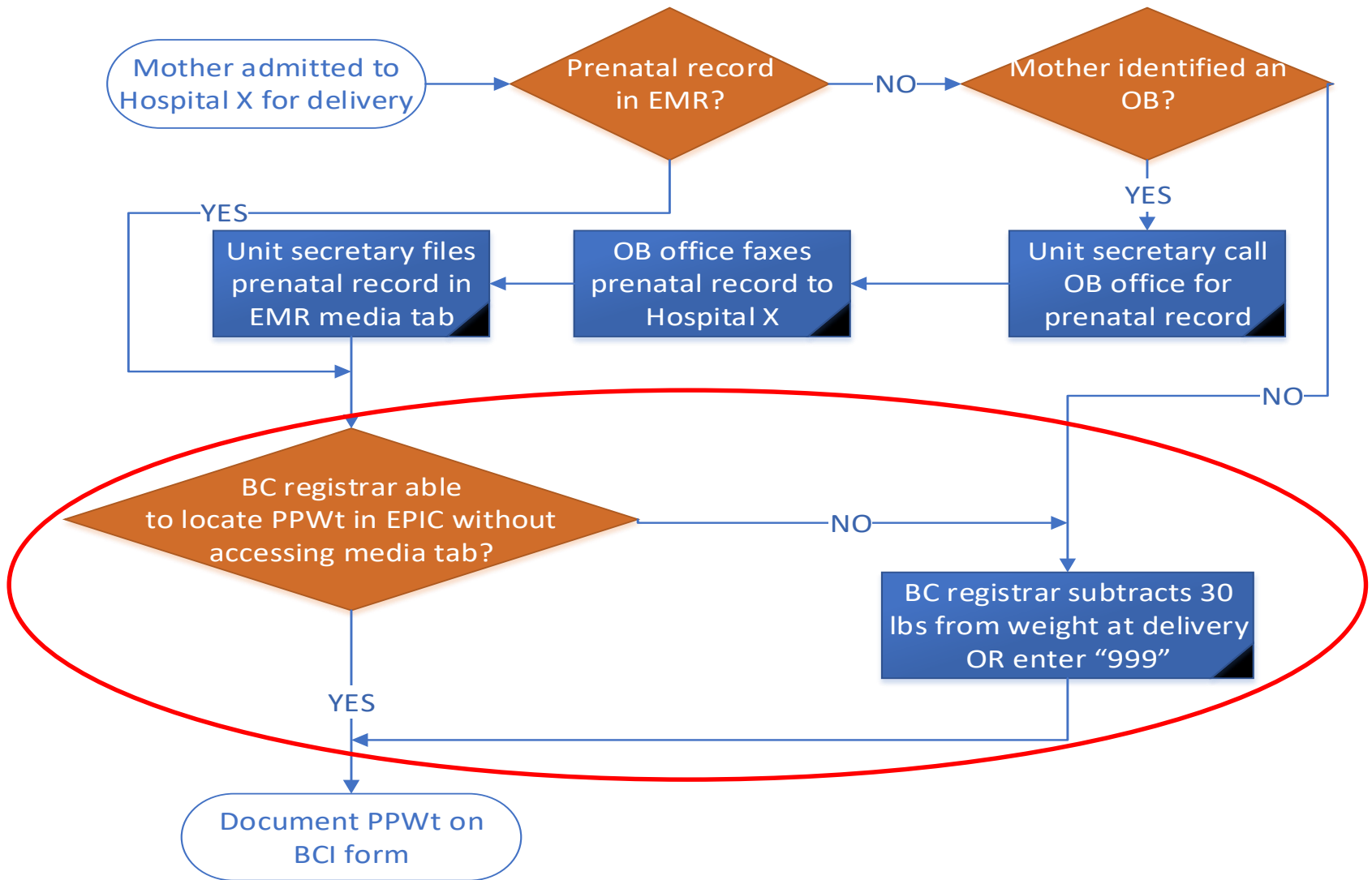
**Objective:** Improve accuracy of pre-pregnancy weight



### This process is complicated....

- Where will prenatal record be located? What if the prenatal record isn't accurate or is illegible?
- Does the registrar know where to locate information in EMR?
- When does it get sent from the OBGYN?
- Whose responsibility to find record if it's not present? What does this process look like? How much time does it take?

**Current** process to document pre-pregnancy weight (PPWt)

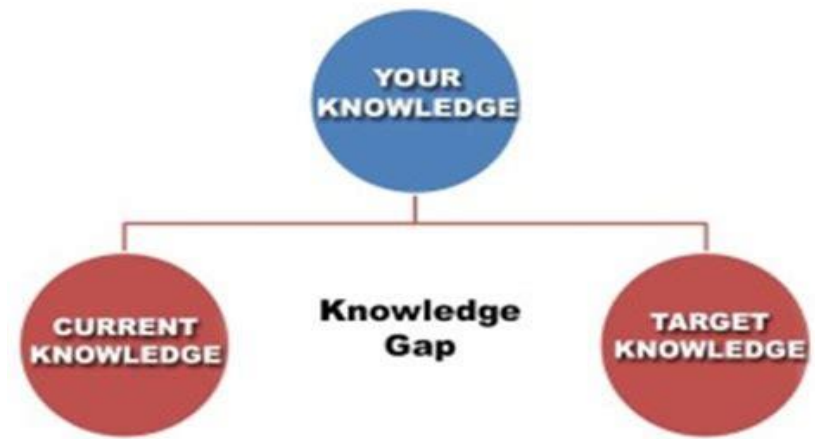


# Opportunities

- ❑ Registrars not looking in scanned prenatal records or appropriate sources
- ❑ Only as a last resort, not asking mom because they didn't know they could



- ❑ Inaccurate PPWt



# Plan-Do-Study-Act

## **Have an objective**

- Concisely state what you plan to do
- **I plan to...** Test a process to educate the birth certificate registrars on:
  - 1) How to locate and navigate scanned prenatal records
  - 2) Only as a last resort, ask mom to recall her PPWt if unable to locate in prenatal record or other appropriate sources

## **Make a prediction**

## **Execute the plan**



# Plan-Do-Study-Act

**Have an objective**

**Make a prediction** of what will happen

- **I hope this produces...** registrars will be able to locate PPVt in scanned prenatal records with 90% accuracy.

**Develop the plan**

# Plan-Do-Study-Act

❑ **Have an objective**

❑ **Make a prediction**

❑ **Develop the plan**



## ***Who? What? When? Where? How data to be collected?***

1. Sally will educate registrars on how to navigate scanned prenatal records – use actual record and
2. Sally will educate one registrar. Registrar will navigate scanned records for one day.
3. Registrar will provide feedback. Sally will calculate accuracy by record review.

# Plan-Do-Study-Act

## **Do the test**

## **Take notes** on problems & observations

- Was registrar able to locate PPWt? Was it accurate?
- What questions did registrar have? Feedback?
- Could registrar return demo? Why not?

## **Know when to stop the test**

- Can terminate before designated time frame if the test clearly doesn't work



# Plan-Do-Study-Act

## Analyze your results

- 5 of 5 (100%) PPVts accurate when searching scanned prenatal records
- Process was slow and cumbersome. Had hard time remembering how to do it.

### Do results support your prediction?

- Yes

### What did we learn (good and bad) ?

- Able to find PPVt with 100% accuracy
- Need to streamline and provide tip sheets

# Plan-Do-Study-Act

**Refine next cycle** based on what was learned



**ABANDON:** Discard change idea testing. Describe what you will change.



**ADAPT:** Improve the change & continue a larger scale. Develop an implementation plan for sustainability.



**ADOPT:** Select changes to implement on & try a new one

## What modifications should be made?

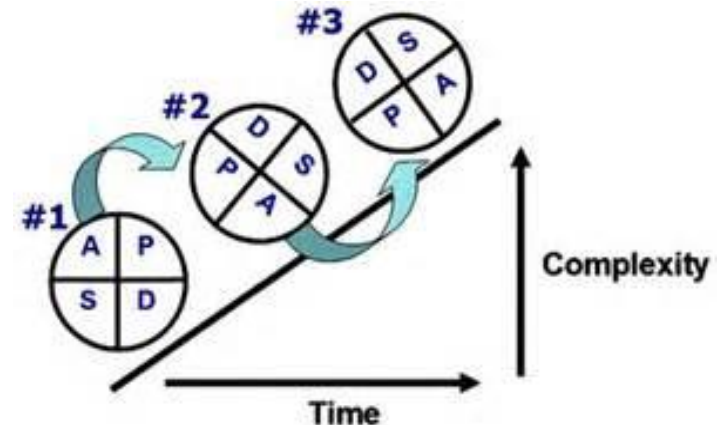
- Create a tip sheet. Look for short cuts to streamline process

## Can we expand our test?

- No

## What will our next test be?

- Create a tip sheet with streamlined process and use same registrar for one day



## Some suggestions...

- ❑ Pick willing volunteers (“cheerleaders”)
- ❑ Tests of change:
  - Don’t reinvent the wheel (Steal shamelessly)
  - Start with a small scope, but with good yield
  - Initially opt for change that doesn’t require a lengthy approval process
  - Avoid technical slow downs
- ❑ Reflect on results of EVERY change – even failures
- ❑ Don’t be afraid to end a test if there isn’t improvement

# Comments? Questions?



# Upcoming Webinar

**October 25<sup>th</sup> , 2018**

*Improving Reporting Accuracy: ‘Antibiotics during Labor’*

- What issues have you been finding with this variable?



# Thank you!

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