Where do babies’ (data) come from?
Birth Data: Where does it come from?

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Financial Disclosures

- I have no financial disclosures
Learning Objectives

• Describe the timing of data entry into the health record during prenatal care
• Understand the role of the EHR in healthcare
• Determine who else wants the same data and for what purposes
Building Materials

Standard Work

• Build a Common Clinical Data Set
• Share information
Data Quality

• Provenance
  – Source
  – Timing

• Characteristics
  – Qualitative vs Quantitative
  – Data element vs Free text

• How the question is worded
Information from First prenatal visit
Source: Office Visit, Ob Provider

- LMP
- Infertility Treatment
- Previous live births & other outcomes
- Height, Weight of mother
- Cigarette Smoking
- Risk Factors
  - Past medical history
  - Previous preterm birth
  - Previous Cesarean Section
Prenatal Visits
Source: Office Visit, Ob Provider

- Determine the due date
- Infections – Lab results
- Procedures performed
  - Ultrasound, Genetics testing, cerclage,
- Risk Factors
  - Diabetes
  - Hypertension
- Date of last visit and # of prenatal visits
Delivery Data
Source: Birth Facility, Maternal Record

• Onset of Labor
• Characteristics of Labor & Delivery
• Method of Delivery
• Anesthesia
• Other Procedures
Newborn Data

Source: Birth Facility, Newborn Record

- Weight
- Apgars
- Plurality and birth order
- Abnormal Conditions
- Congenital Anomalies
- Immunizations
Post Partum
Source: Birth Facility, Maternal Record

- Maternal Morbidity
- Breastfeeding
- Discharge or Transfer
Birth Data

Sample year timeline of pregnancy from infertility treatment through 6 wk postpartum visit

- **Jan**
  - LMP
  - Date of first prenatal visit

- **Feb**
  - Height, Weight
  - Previous live term births
  - Other pregnancy outcomes
  - Cigarette smoking
  - Date of last live birth
  - Data of last pregnancy outcome

- **Apr**
  - End of first trimester
  - Risk Factors:
    - Previous pregnancy history
    - Diabetes
    - Hypertension
    - Preterm delivery
    - Infertility treatment
    - Previous c/s
    - Infections

- **May**
  - Obstetrical Procedures:
    - Cerclage
    - Genetic Testing
    - Amniocentesis
    - Ultrasound
    - Congenital Anomalies

- **Jul**
  - End of second trimester
  - More Risk Factors
  - Preterm Delivery
  - Preeclampsia
  - Gestational Diabetes
  - Infections

- **Aug**
  - Estimated date of delivery
  - Newborn info

- **Sep**
  - Delivery Data:
    - Facility Name
    - Attendant's name
    - Onset of labor
    - Characteristics of delivery
    - Intrapartum factors
    - Maternal morbidity
    - Mode of delivery

- **Oct**
  - Abnormal conditions of the newborn
  - Infant feeding
  - Congenital anomalies

- **Nov**
  - 6 Weeks Postpartum
Problems with current system

• Multiple Sources of Original data
  – Prenatal record never makes it to delivery site
• Manual data entry and duplicative processes
• Timeline of data spans 10 months
• Everyone is doing the same thing in many different ways
The EHR

“By computerizing health records, we can avoid dangerous medical mistakes, reduce costs, and improve care.”

President George W. Bush
State of the Union Address
January 20, 2004

• He set a timeline of 10 years
• Added $100 million to budget
• Created a subcabinet position in HHS
American Recovery and Reinvestment Act of 2009 (ARRA)

HITECH Act

Financial Incentives for Providers

Certification of EHR Technology

Requires the meaningful use of certified technology
State comparison of adoption compared to prior years.
HealthIT.gov April 2015
Construction on the Tappan Zee
Who wants the data?
EVERYONE WANTS YOUR DATA!
Birthing Facility
Continuity of Care

- OB providers – outpatient and inpatient
- Consultants
- Pediatricians
Performance Measures

- Establish Gestational Age
- Prenatal Care Screening
- Behavioral Health Risk Assessment
- BMI Assessment
- Elective Deliveries <39 wks
- Cesarean Deliveries for low risk nullip
- Episiotomy
- Spontaneous Labor & Birth
- Care Coordination
- Postpartum Care Follow up
Personal Health Records
Constraints and Barriers

• Resources

• Data Capture within EHR
  – Common Clinical Dataset
  – Quality and completeness

• Data Sharing
  – Messaging Standards and Technical Frameworks
  – Privacy Concerns
Integrating the Healthcare Enterprise

IHE

IHE Quality, Research and Public Health
Technical Framework Supplement

Birth and Fetal Death Reporting-Enhanced
(BFDR-E)

Draft for Public Comment
Can this be done?

• Minnesota Test Case
• Utah Test case
Overcoming Barriers

• Policies
• Pooling our resources – working with provider organizations
  – AMA, ACOG, SMFM, ACNM, AWHONN, AAP, AAFP
• Technical Guidance to vendors on both sides of the equation
  – EHR vendors & Vital Statistics vendors
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Thank You

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VITAL STATISTICS: BUILDING BRIDGES TOGETHER

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