Potential Impact of Electronic Health Records on Birth Medical/Health Data

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EHR as Source of Vital Records Data

The mother’s and infant’s medical records are the recommended sources for more than half of all VR data items collected on the U.S. Standard Certificate of Live Birth and Death and the U.S. Standard Report of Fetal Death
Debates abound about......

• Use of EHRs as a source for VR information

• Benefits of EHR approach to VR community

• Improvements in quality and timeliness of VR data

• Reduction in the redundancy of data captured
Why the eVital Standards Initiative?

Hypothesis:
Interoperability with EHRs may improve the timeliness, accuracy and quality of the information collected for vital records purposes.
NCHS Stakeholder Engagement and Standards Development Activities

- Collaborating with the National Association for Public Health Statistics and Information Systems (NAPHSIS) and individual states/jurisdictions to support standards development activities

- Participating in standards development activities with the Standards Development Organizations (SDOs)
VR Standards that have been developed include:

- Data Models (HL7 Domain Analysis Model)
- Functional Profiles (based on HL7 EHR-S FM)
- Messaging Standards (HL7 V2.5.1)
- Document Standards (HL7 CDA)
- Content Profiles (IHE)

Details for the VR standards are available on the CDC/NCHS website at:
http://www.cdc.gov/phin/resources/standards/data_interchange.html
eVital Standards Testing and Demos

- HL7 Messages and Document standards developed as draft standards for trial use (DSTU)
  - Testing death standards by UT DOH and IHC

- IHE 2013 Connectathon testing with vendors and state partner organizations
  - Feasibility assessment using the birth standards by MN DOH

- Demonstrations at the NAPHSIS and the Healthcare Information Management and Systems Society Meetings
Potential Improvement in Timeliness and Data Quality

• More timely and complete receipt of mother’s electronic prenatal record

• Clinical information accessible from the EHR for specific VR requirements:
  – Congenital Anomalies of the Newborn: Down Syndrome (confirmed / pending);
  – Antibiotics received by the mother during labor
  – Confirmation of diabetes and fertility treatments
Wrap Up

• Data quality improvement utilizing eVitals standards is still a hypothesis

• Wider testing and evaluation is needed to assess the data quality

• Revisions to the standards will be made based on testing and evaluation

• Implementation and adoption will require resources and commitment