

## Birth Certificate Accuracy Initiative (BCAI) 1-18-19 Webinar Notes

### Project Summary

- Mission/Vision of PQC (on website)
- Members/Stakeholders include ADPH; AHA; Medicaid; MOD, AL Chapter; UAB SOPH; AL ACOG; OB, Peds & Neonatal providers, nurses & administrators; Consumers; YOU
- Purpose/aim of birth certificate project
- 11 Key birth certificate Variables:
  - Birthweight
  - Obstetric estimate of gestation at delivery
  - Assisted ventilation > 6 hours
  - Admission to NICU
  - Steroids
  - Final route/Method of Delivery
  - Prepregnancy & Gestational Diabetes
  - Chronic & Gestational Hypertension, Eclampsia
  - Previous preterm birth < 37 weeks
  - Maternal transfusion
  - Main payment source for the delivery of this child
- What We're Doing:
  - Project team
  - Monthly chart audits
  - Continuous internal quality improvement
  - Every other month learning call/webinar
- Project Status:
  - Began Nov 2018
  - Currently collecting baseline data (reviewing charts for birth certificates submitted Jul, Aug & Sep 2018)
  - Will continue chart audits through 2019 (1 year)
  - Starting to focus on improving data collection for the birth certificate variables with the most room for improvement
  - Monthly reports (blinded) will be sent to each hospital team starting in Feb to show where they are in overall accuracy & how they compare to other hospitals in the state

### BCAI Preliminary Baseline Report

- Hospitals reporting as of 1/10/19:
  - 26 hospitals
  - 370 charts documented
  - 3700 entry assessments
  - 47% of baseline reported (4% reporting 3 months of data, 42% 2 months & 54% 1 month)
- High accuracy variables:
  - Maternal Transfusion – 99.0% accuracy (yes/no question)
  - Final route/Method of Delivery – 99.7% accuracy
- Low accuracy variables:
  - Previous preterm birth < 37 weeks – 82.6% accuracy
  - Birthweight – 83.8% accuracy

- Steroids (Antenatal Corticosteroids) – 88.7% accuracy
- Preliminary Baseline Accuracy:
  - 92% accurate / 8% inaccurate
  - 95% accuracy target is a “good” goal - analyzing average birth certificate accuracy by hospital, about half are <95% & half are >95%

#### Data Issues/Questions/Comments:

- Maternal Transfusion: Since rare event, will continue to monitor despite high initial accuracy (though, since we are sampling such a small percentage of charts, may take too long to tease out inaccuracies in this low-frequency variable [beyond project’s scope]). This variable refers to whole blood or packed red blood cells, not platelets. If the transfusion occurs after the birth certificate is submitted but is associated with delivery, do not attempt resubmission. Hospitals cannot edit data once submitted. Email Brenda (ADPH), who will edit information on the master file to capture the data. Consider delaying birth certificate submission. One hospital, which was performing same-day submissions, is now delaying submissions by 5 days to avoid missing information which occurs after delivery & improve accuracy.
- Previous Preterm Birth: Sometimes hard to find in chart; you have to know the nomenclature. This variable refers to *prior* preterm delivery, which is more difficult to find in the chart. One hospital commented that prior preterm delivery was available on their H&Ps but that those entering the data didn’t know to look there, so this project has helped to improve their reporting accuracy.
- Antenatal Corticosteroids: Hard to find in chart because it’s documented in a variety of places & ways. You have to know which drug names/abbreviations fit the category & you may have to look in both the mother’s and baby’s chart, and inpatient and outpatient. Heading on worksheet for Characteristics of L&D says “steroids”, not “antenatal steroids”. Also, “antenatal” can represent a broad period of time. If a patient receives steroids during an outpatient/observation admission for premature labor, that qualifies. Any exposure to steroids prior to delivery counts, so those reporting the data must potentially look at more admissions than the delivery admission. One hospital found that they had reported this inaccurately 100% of the charts audited (reporting that antenatal steroids had *not* been given when indicated when, in fact, they had been given). This is a great illustration of why a project like this can help determine where to spend limited research and public health dollars. We shouldn’t think our high infant mortality rate is due to lack of antenatal steroids because steroids *are* being given when indicated (reporting accuracy just needs to be improved).
- Birth Weight: One hospital reported having always entered pounds/ounces, thinking that that’s what parents want to see on birth certificates. Team conversations brought to light how important kilogram/gram reporting is (example: failure to thrive), so they began reporting kilograms/grams. They would like to be able to report both pounds/ounces & kilograms/grams, so that all parties get what they’d prefer, but that’s not currently available. Brenda noted that the weight is not listed on the birth certificate that parents receive. Brenda also noted that birth weight disagreement was also a concern of another hospital during an ADPH Center for Health Statistics field visit last week. What they were being sent in the abstract didn’t match what they had in their records. ADPH IT analyzed hospital samples, revealing that errors were occurring in the conversion process. When hospitals enter pounds/ounces, whether they round up or not, the system converts it to kilograms/grams because that’s how data must be reported to the CDC. Conversion errors can be avoided by eliminating conversions. Hospitals can have their systems set up in such a way that they (1) have the choice for how they enter the data (and choose to enter kilograms/grams) or (2) have only the option to enter kilograms/grams. Brenda can help every hospital get their system set up according to their preferences.

- Brenda noted that, although birth certificate questions cannot be changed (since they are used nationally by the CDC), the accompanying instruction sheets can be altered. Hospital feedback on the BCAI variable reporting will be used to revised instruction sheets so as to clarify confusing questions.
- When webinar participants were polled about whether their hospitals had uncovered any issues with inaccurate data as a result of baseline data reporting, 7% answered “Yes, plenty of opportunity”, 73% “Yes, a few things” & 20% “Nothing so far”.

#### One Hospital’s Story (Voluntarily Shared):

- EMR & Data Collection Challenges: Have an EMR that is Cerner but OB & newborn documentation are in Centricity. The systems are not interfaced. Staff entering birth certificate data had limited access to Centricity so were using what they could access in Cerner, the delivery log, the physical paper record on the unit, conversations with the nursing staff & conversations with the parents.
- Baseline Audit Results: Surprised by initial inaccuracies in birth weight, mothers’ risk factors (such as previous preterm birth), maternal morbidity info (such as transfusion), characteristics of L&D (such as steroids & antibiotics given) & Hepatitis B vaccination recording (correct time & date).
- Solution: The team met to discuss their EMR/data collection challenges & baseline audit results. They determined a need for real-time access to Centricity, which they received, along with training. They still use the paper chart because it contains a prenatal record from the offices, but they’re looking into getting that record scanned into Cerner at registration (rather than on the back-end) so that, when reporting birth certificate data, that record is available in the EMR.
- Participating in the BCAI allowed them to identify areas for improvement & prompted needed dialogue & process improvements. They are looking forward to their next audit, which should show the results of their QI efforts.
- Registrars report that there are a few additions they’d like to see in the EVERS system. Example #1: They have C-Sections & they have C-Sections with vacuum or forceps, but the latter is not an option (only the former). All options are available with a vaginal delivery. Example #2: The system worksheet doesn’t say “parents” yet; it still says “mother & father”. They’d like that updated. Brenda noted that the electronic registration system will be updated by the end of 2019/beginning of 2020 to say “mother/parent” & “father/parent”.

#### Miscellaneous

- Webinar participants agreed that the 1st Friday of every other month is a good time for webinars. Rosemary said she would send an email with a webinar link for the next webinar. In addition, she will include the hospital-specific data report. Hospitals are encouraged to get caught up on all baseline data submission by Feb 15<sup>th</sup>, when ADPH will begin sending out current data (for Jan 2019).
- If you make corrections to the abstracts that ADPH sends out (relating to chart audits), email or fax those corrections to Brenda, who will change that data in the master file as well.

#### ALPQC BCAI Team Members present on the call:

Julie McDougal (UAB School of Public Health)

Rosemary Blackman (ALAHA)

Sam Gentle (Neonatology lead, data lead)

Sara Mazzoni (OB lead)

Brenda Burgh (ADPH vital statistics)

Melanie Gaston (birth registrar)