

Perinatal Quality Collaborative SUCCESS STORY

Illinois Perinatal Quality Collaborative Improves the Accuracy of Birth Certificate Data

The birth certificate is more than just a record of a birth—it serves as an important source of information about the health of mothers and babies, a basis for research, and a reflection of hospitals' care practices. Birth certificate data can be used to measure and guide activities to improve the care of mothers and babies and document changes in population health over time.

The Illinois Perinatal Quality Collaborative (ILPQC) is a statewide network that seeks to improve the quality of care and health outcomes for Illinois women and their infants. In 2014, hospitals across the state reviewed birth certificate data as part of an ILPQC project to reduce early elective deliveries. As a result of this project, ILPQC found that the accuracy of information collected on the birth certificate could be improved. After a review of state birth certificate data, the Illinois Department of Public Health (IDPH) also found opportunities for improvement in data quality.

Steps Taken for Data Quality Improvement

ILPQC launched the Birth Certificate Accuracy Initiative in November 2014, modelling their initiative after an Ohio Perinatal Quality Collaborative project. The Ohio Perinatal Quality Collaborative project brought about collaboration among clinical and clerical staff and applied the Institute for Healthcare Improvement Model for Improvement and regular reviews of data to successfully improve birth certificate accuracy.

ILPQC worked with the IDPH Birth Certificate Workgroup, Statewide Quality Council, and Regionalized Perinatal Program on this initiative. Using input from the Ohio Perinatal Quality Collaborative, the ILPQC, IDPH, and the Illinois Hospital Association developed



10% (87% to 97%) increase in overall accuracy of birth certificate data among 107 hospitals.

95% accuracy achieved on 14 out of 17 key measures.

81 hospitals achieved 95% overall accuracy.



resources for hospital teams of physicians, nurses, and birth certificate clerks participating in this project. Resources include [A Guide to Entering 17 Key Variables in the Illinois Vital Records System](#) and [Completing the Facility Worksheet for the Certificate of Live Birth](#). These resources provide guidance on recording key variables, or pieces of data that help direct efforts to improve the care of mothers and babies, and present definitions for the more than 300 pieces of patient information included on the birth certificate.

ILPQC led this initiative with educational webinars in March and April 2015 and a full-day in-person meeting in May 2015. Participating hospital teams also participated in monthly one-hour collaborative learning calls that included a review of data, education on key variables, and a discussion of challenges and progress. Additionally, the ILPQC held 11 small group webinar workshops to focus on the application of Plan-Do-Study-Act cycles (a tool to test change) and address challenging topic areas.

Participating hospitals measured their improvement through monthly reviews of 17 key birth certificate measures, comparing the accuracy of the birth certificate data with the medical record of 10 to 12 patients. Hospitals accessed their data in real time through the ILPQC web-based data portal and compared key variable and overall accuracy rates across time and across all participating hospitals.

Accomplishments

As a result of this initiative, ILPQC improved accuracy on all birth certificate variables from 87% at baseline (October through December 2014) to 97% at completion (December 2015) among 107 participating hospitals. Overall, participating hospitals achieved an average accuracy of 95% or greater on 14 out of 17 key birth certificate variables, and at least 93% accuracy on the remaining three variables. Eighty-one hospitals achieved an overall accuracy of at least 95% on all birth registry data variables.

Lessons Learned

ILPQC and participating hospital teams learned that collaborative learning, quality improvement support, and accurate, rapidly available data that provides comparison across time and across participating hospitals is essential to identify opportunities for improvement, focus efforts, evaluate progress, and improve outcomes.

Note: This success story, including background data and outcomes, reflects information as reported by ILPQC.

Resources

- [ILPQC Website](#)
- [CDC Perinatal Quality Collaboratives Website](#)
- [A Guide to Entering 17 Key Variables in the Illinois Vital Records System](#)
- [Completing the Facility Worksheet for the Certificate of Live Birth](#)