

California Uses CDC Tool to Assess Maternity Facilities' Levels of Care and Evaluate Regional Cooperation Agreement Use

To further enhance its perinatal regionalization, a team of perinatal partners in California implemented CDC's Level of Care Assessment Tool to fill in knowledge gaps about birthing hospitals' levels of care and their use of regional cooperation agreements.

In September 2015, the California team in HRSA's [Collaborative Improvement and Innovation Network to Reduce Infant Mortality \(CoIIN\)](#) decided to combine its CoIIN work with the CDC Level of Care Assessment Tool (LOCATe) to assess the maternal levels of care available at the state's birthing hospitals and understand how the hospitals were using regional cooperation agreements (RCAs). California boasts a robust [regional perinatal programs system](#) in which six programs cover nine geographic regions. The state has 269 birthing hospitals and about 550,000 live births annually.

The team already understood the state's neonatal levels of care, but California does not currently have state designations for maternal levels of care. As a result, the team decided to use LOCATe as a starting point to understanding hospitals' maternal levels of care, how hospitals' services impacted those levels, which hospitals had RCAs, and how RCAs relate to perinatal outcomes. The key partners on the team that implemented the tool were the California Department of Public Health (CDPH), California Department of Health Care Services, California Children's Services, American Congress of Obstetricians and Gynecologists, March of Dimes, and California Perinatal Transport System.

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CDC LOCATe is a tool that assesses the neonatal and maternal levels of care at birth facilities using guidelines from the American Academy of Pediatrics and American College of Obstetricians and Gynecologists/Society for Maternal-Fetal Medicine. To avoid burdening healthcare providers, it is designed to require the minimum amount of information necessary to create standardized assessments. The Maternal and Child Health Epidemiology Program in CDC's Division of Reproductive Health supports jurisdictions using LOCATe by providing technical assistance and data analyses, such as level assessments. Jurisdictions can use their LOCATe findings to strengthen their [risk appropriate care](#) programs. Matching maternal and neonatal risk with facilities that have the appropriate specialists and technologies is linked to better health outcomes for infants and mothers.

Steps Taken:

- According to Lisa Bollman, executive director of the Community Perinatal Network in California, the state team decided to focus on maternal levels of care when it realized that it couldn't improve neonatal outcomes further without addressing the health of their mothers.
- Drawing on the state's strong regionalized perinatal system, a state advisory committee tapped the regional programs to implement LOCATe.

- During the planning process, the California team identified that it wanted to use LOCATe information to create groups of hospitals by levels of care, examine their outcomes, and determine differences that occurred based on the available services.
- Additionally, although California requires hospitals to have cooperation and transport agreements, RCA utilization is segmented within the state. Traditionally, hospitals in Northern California have been more likely to use RCAs than those in Southern California. Including an RCA component in its LOCATe project gave the team the opportunity to address gaps in RCA utilization and increase survey participation by leveraging California's RCA mandate.
- The team created the California LOCATe survey in SurveyMonkey, adding RCA questions to the tool. A diverse set of stakeholders, such as administrators in prenatal care, neonatal care, or obstetrics and hospital medical directors, provided input on the additional questions.
- California's [final, modified LOCATe tool](#) includes 96 questions. About half are from LOCATe and the other half are RCA and quality improvement questions.
- Three other states tested LOCATe prior to California's implementation, so they provided California with insights into possible barriers. They noted that it could be challenging to obtain the requested data from hospitals.
- To prevent hospital data collection from becoming a barrier to LOCATe in California, the team asked the CDPH epidemiology department to produce about 80 percent of the necessary statistics for the tool and make them hospital-specific. The team then asked the hospitals to fill in the data gaps where CDPH didn't have the requested information. This approach reduced data inconsistency and eased the data collection burden for hospitals.
- The California regional perinatal programs conduct annual site visits with every hospital in the state to guide quality improvement efforts, facilitate regional networking, and execute strategies to address new concerns. With a successful site visit system already in place, the California team decided to use the same format to collect the information for LOCATe. The regional perinatal program directors already had relationships with every hospital in the state due to their annual site visits, so they were able to personally arrange site visits to implement LoCATe. During these visits, the directors fill in the LOCATe data and hold interviews with four to six staff experts.
- The team created a comprehensive notebook with tools for completing the survey, which the regional directors used to answer hospital staffers' questions and encourage their participation. The team also developed a website that includes tools for improvement for hospitals.
- Bollman says CDPH has helped drive the LOCATe tool project from the beginning and provides essential support, including connecting partners for collaboration, funding to the perinatal programs, and holding bimonthly meetings to discuss project concerns. Moreover, CDPH and the California Department of Health Care Services sent letters of introduction and encouragement to the hospitals to help secure their participation in the survey.

Results:

- Although the project is ongoing, the response rate to California's modified LOCATe survey has been good. Within two months of the survey going live, it received 126 responses from the hospitals. The team aims to have a 100 percent participation rate to ensure it has a complete, consistent picture of perinatal services in the state. The team is also currently working with CDC to conduct preliminary runs on the first round of responses.

- Once the LOCATe data collection and analysis is complete, the California team plans to marry it with birth and hospital discharge data to better understand the value of risk appropriate maternal care, identify each hospital's maternal level of care, and offer tools to help hospitals improve their services.

Lessons Learned:

- Approach hospitals with solutions. Bollman says that hospitals have generally been willing to participate in the project because the team offers them resources to help them enhance their perinatal services and reach their goals. If a hospital doesn't have an RCA, the LOCATe team has a toolkit to help them create one and then walks the hospital through the process. Many of the resources the team offers come from other facilities that have implemented successful RCAs, so they're relevant to the hospital.
- Think creatively about how to collect consistent data. After learning from other states that they were having difficulty collecting data for LOCATe, the California team took several steps to prevent the issue. First, it requested hospital data from the state health department. Second, it had the state's regional perinatal directors use their relationships and site visit format to survey and interview hospital representatives.
- Consider using site visits to collect the data. Traditionally, surveys and scans like California's LOCATe tool would be sent and collected by mail, but Bollman says that using site visits has made a big difference in the quality of data. "It's resulted in huge amounts of information that allow us to bring in quality improvement efforts after the site visits," she says. "LOCATe has been our jumping off point, but it's given us more information than we ever imagined on how to support our hospitals."

For more information:

Ellen Pliska, MHS, CPH
Director, Family and Child Health
ASTHO
Email: epliksa@astho.org

Lisa Bollman
Executive Director
Community Perinatal Network
Email: lisa@perinatalnetwork.org