

# Use of Quality Initiative to Increase CCHD Screening

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## Objective

To ensure all infants born in Kansas are screened for Critical Congenital Heart Defects (CCHDs).

## Background

Critical Congenital Heart Defect (CCHD) was added to the Recommended Uniform Screening Panel in September 2011. The Kansas Newborn Screening (NBS) Advisory Council forwarded their recommendation to add CCHD to the Kansas NBS Panel to the Secretary of Health and Environment in May 2013 who asked the NBS staff to develop and implement a Quality Initiative (QI) plan.

## Methods

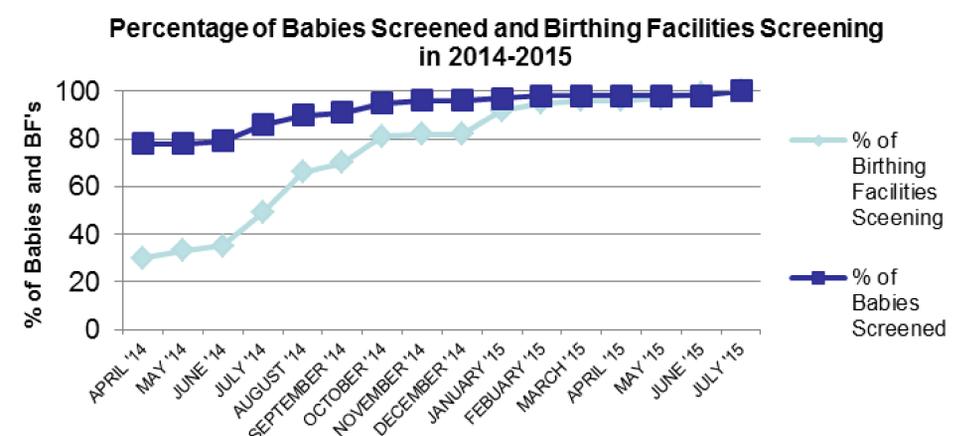
Visits to each birthing facility (n=73) in Kansas:

- Full training was performed if the facility was not screening.
- Facilities screening were visited to verify methods of screening.
- Tools were developed to assist in screening and draft protocols were shared from other facilities.
- Reporting methods were used to document screening and accuracy of screening.

## Results

From May 2014 through July 2015, Kansas made significant progress in the implementation of CCHD screening:

- The percentage of birthing facilities screening went from 30% to 100%.
- The estimation of newborns screened annually increased from 78% to 100%.
- An interim online reporting mechanism was utilized.\*



*\*The reporting mechanism was a critical component to assuring short and long-term follow up, including appropriate referrals for diagnostic evaluations and resources for families. In October 2015, the CCHD Reporting will be collected on the automated vital record system.*

## Conclusions

Quality improvement supports community partnerships and stakeholder engagement, identifies and addresses barriers, and creates opportunities to raise awareness and develop educational interventions. Through this initiative, Kansas has increased capacity for screening and reporting, while implementing an effective system to support hospital-based data collection and quality assurance of appropriate and effective screenings.



**“At Children's Mercy Hospital over the last year, we have seen a dramatic decrease in the number of newborns presenting critically ill due to their Critical Congenital Heart Defect (CCHD). The impact of pulse oximetry on early diagnosis of CCHD is clearly saving lives”. – Stephen Kaine MD**

*We wish to acknowledge the hard work of the Kansas NBS Advisory Council and the CCHD subcommittee who have helped Kansas reach our goal of screening and also reporting results of CCHD screening.*