



Newborn Screening Systems Quality Improvement Projects: Past Funded Proposals

Develop a baseline estimate of the birth defect prevalence of critical congenital heart defects (CCHD) by performing case confirmations on reported defects to the Birth Defects Registry as well as determine the proportion of successful CCHD screening and referrals to specialty clinics.
Decrease the error rate on essential demographic information.
Improve the overall quality of newborn screening specimen collection and follow up procedures for unsatisfactory specimens.
Improve the positive predictive value (PPV) of newborn screening algorithms through the use of the CLIR post-analytic tools.
Decrease transit time of dried blood spot (DBS) samples received by the newborn screening laboratories by increasing courier options and educating hospital staff on preparing specimens for timely courier pick up.
Develop a statewide comprehensive newborn screening educational plan for reaching parents and providers during the prenatal period.
Reduce the turnaround time from sample collection to result reporting by improving specimen tracking.
Improve the newborn screening (NBS) system by expanding and aligning long-term follow-up (LTFU) data collection across blood spot testing, critical congenital heart disease (CCHD), and early hearing detection and intervention (EHDI) LTFU.
Improve the proportion of dried blood spot (DBS) specimens received within 48 hours of collection by educating hospital staff and providing performance trend reports.
Reduce the proportion of lost to follow-up cases for endocrine cases by providing education, review of follow-up protocols, quality performance reports and by de-certifying non-compliant specialty care centers.
Implement a new non-derivatized tandem mass spectrometry (MS-MS) method and validate it using a new MS-MS system to monitor metabolic conditions including Adrenoleukodystrophy (ALD).
Improve the laboratory and follow-up workflows to address timeliness for both critical and non-critical results.

Improve weekend newborn screening (NBS) specimen transit time by increasing the percentage of specimens scheduled for Friday pick up at birthing facilities that are designated for Saturday delivery to the public health laboratory (PHL), and providing courier service for Sunday evening pickup at the birthing facilities for Monday delivery to the PHL.

Increase the percentage of time critical abnormal screen results reported out by day of life (DOL) 5 and increase all other screen results reported out by DOL 7.

Increase the number of newborn screening results reported within 7 days of life and reduce the number of samples received with missing or illegible demographic data by expanding electronic messaging to more hospitals across the state.

Improve timeliness by addressing specimen collection timeframes, transit times, and accuracy of data entry.

Implement education and training programs to reduce the number of unsatisfactory second screen specimens received by the newborn screening laboratory.

Increase the percent of results reported within 2 days upon receipt to the newborn screening laboratory.

Reduce the number of specimens received greater than 4 days, from collection to receipt, by implementing Sunday courier pick-up.

Implement a long term follow up case management system.