Quality Improvement in Early Hearing Detection (EHDI) and Intervention Programs: small changes that make a big difference

The National Center for Hearing Assessment and Management (NCHAM) provides technical assistance to all state and territory EHDI programs in their implementation of quality improvement (QI) methodology in an effort to reduce loss to follow-up for babies who fail their newborn hearing screening.

Following QI methodology, EHDI program staff and their external partners (e.g., pediatricians, audiologists, parents) review data and processes to identify needs and gaps. The teams then brainstorm change strategies to help fill those gaps. To test the strategies, the teams run small tests of change to determine if the strategies do result in improvement.

Examples of areas of improvement:
- Reducing false positive screening rates
- Increasing the number of families who state EHDI programs are able to contact
- Increasing primary care provider communication with families about screening results and diagnosis
- Increasing the number of babies who receive a diagnostic evaluation by 3 months
- Decreasing the number of days it takes a baby to move from confirmed diagnosis into enrollment in early intervention

For more information about NCHAM’s QI efforts with EHDI programs, email alyson.ward@usu.edu or go to: http://www.infanthearing.org/move-the-needle/quality-improvement/index.html
The Model for Improvement

The goal of QI is to use an iterative process to make systematic improvements. The specific QI model used by NCHAM is the Model for Improvement developed by the Associates in Process Improvement (http://www.apiweb.org). This model has been used by numerous healthcare organizations to improve healthcare processes and outcomes. The model is driven by three fundamental questions followed by tests of change.

Fundamental Questions:
- What are we trying to accomplish?
- How will we know if a change is an improvement?
- What changes can we make that will result in improvement?

Tests of change:
Plan-Do-Study-Act (PDSA) cycles are used to rapidly test the change strategy by planning the change, doing the change, observing the results of the change, and then acting on what is learned. Initially, PDSA cycles are implemented on a very small scale and once confidence in the change strategy is established, the PDSA is incrementally expanded.

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