

Attachment 7 – Summary Progress Report

Over the 3 year project period (4/1/2014-3/31/2017) the Michigan EHDI program focused on reducing the number of infants who are lost to follow-up after referring from a hearing screen by utilizing specific interventions to achieve measurable improvement in the numbers of infants who receive appropriate and timely follow-up. Below is an overall summary of activities that were completed to accomplish the goals and objectives.

The first goal to reduce the number of infants lost to follow-up between the final hearing screen showed improvement from 2008-2013.

The objective was to reduce the percentage of lost to follow-up between the final hearing screen and audiologic diagnosis by 25% from 71.4% in 2008 to 53% in 2013. Over the project period Michigan EHDI was able to reduce the lost to follow-up to 52.8% in 2011. This is the latest year for which we have full data.

Activities and results completed to achieve these goals and objectives include:

- The EHDI program was able to complete a minimum of 10 physician education opportunities that reached at least 375 participants per grant year specifically including Wayne County to reach at least 250 per grant year. Presentations and educational activities from April 1, 2012-January 1, 2013 EHDI participated in 14 physician education opportunities that reached more than 400 participants. From April 1, 2011-January 1, 2012, more than 450 participants were reached via 15 physician education opportunities. These presentations ranged were provided to medical students, audiologists, pediatricians and medical office staff, and midwives.

Additionally, the EHDI Program Consultant, Nancy Asher, has made frequent contacts with medical homes, physicians and clinics to encourage hearing follow-up, especially in Wayne County, since starting with the EHDI program in 2011. In the first year, she visited over 500 providers, some with repeat visits when children with failed hearing screens were identified within their practices. In 2012 and 2013 so far, approximately 700 additional visits have been completed, expanding from Wayne County into neighboring Macomb County, also an area of large loss to follow-up. Some providers have had multiple visits due to a rotation of staff or extra encouragement was needed on how to modify/create follow-up protocols. Some of the larger practices with large numbers of loss to follow up babies have significantly reduced their numbers since the beginning of the project. For other providers, challenges still remain.

- The EHDI program and Follow-Up Consultants completed phone calls to primary care providers, audiologists, otolaryngologists, and parents regarding infants who did not receive an initial screen and those who were lost to follow-up after a failed initial screen as deemed necessary were completed two days per week through the project period.

EHDI educational materials for birthing hospitals to give to parents to determine efficacy and cultural appropriateness of materials were evaluated.

- EHDI staff received training to reduce racial disparities in health care. These included “Undoing Racism” (2 days/May, 2011) and “Health Equity & Social Justice” (2.5 days/October, 2011). The two EHDI brochures have been revised and translated into Arabic and Spanish to better reach our largest non-English speaking populations (2012). More will be translated into these languages as they come up for revision and/or reprint. However, despite repeated attempts to seek collaboration with the Arab American Chaldean Council and the American Indian Health Foundation, teamwork has not been established to date. Plans to reach these underserved populations through collaboration with the Wayne Children’s Healthcare Access Program (WCHAP) are part of the aims and work plan for this new grant application, and are described in greater detail there.
- Two of the largest Wayne County hospitals had data monitored on a quarterly basis. Improvement was shown over time as quarterly meetings were held and improvement initiatives were completed. All birth hospitals received quarterly statistical reports and follow-up emails from EHDI staff if there was an inconsistency or concern with the data. Hospital site visits to 27 of 85 birthing hospitals around the state have been completed from 2011–2013 to review statistics, seek quality improvement, and promote the Michigan EHDI Online Training Course and use of the Hands & Voices “Loss & Found™” DVD. Program strengths and suggestions of improvement are provided and EHDI staff provides support and continues to collaborate with the hospitals to make small steps of change to accomplish the improvements.
- The EHDI program continues to send the “Barriers Survey: A View from Michigan Families” to families of children lost to follow up after one year, starting in 2009 to present. This survey is used to determine barriers to follow-up between diagnostic evaluation and intervention services and was revised each March in the grant cycle (2011–2013). Information provided in the survey response was utilized by determining LTF activities and to encourage follow-up or obtain documentation from follow-ups completed but not yet reported. An offer of a [REDACTED] gift card was included as incentive for completing and returning the survey. With 400 responses as of October, 2013, the top reasons that parents did not return to have their baby’s hearing tested were
 - “Other reasons” (23%) with comments given such as:
 - Hearing testing is unnecessary,
 - did not know,
 - waiting for baby to get older,
 - not covered by insurance,
 - testing center far away
 - waiting to be called back.

- Responses with a high percentage included
 - No Transportation (17.8%),
 - Dr./Nurse said it was nothing to worry about (16.3%),
 - Dr. said it was just fluid. (15.3%), and
 - told to wait (13.5%).

Analysis of results indicates that continued provider education is needed statewide, especially for hospital staff, attending physicians, and primary care providers/medical homes after babies are discharged.

Additionally, EHDI surveyed families of children who are diagnosed with hearing loss to assess EHDI processes and reactions to failed screenings and diagnoses to help improve the EHDI program, with responses also indicating need for additional provider education.

- In addition to the two surveys mentioned above, Michigan EHDI was selected for a special Departmental grant to conduct a Customer Satisfaction Survey in the fall of 2012, and was one of 26 states to participate in the National Center for Hearing Assessment and Management (NCHAM) Physician Survey in 2012. Again, need for medical provider education and parent education on early hearing health care for infants and young children was strongly indicated.
- The collaboration with the Arab American Chaldean Council and the Cristo Rey Community Center to assess current EHDI birthing hospital materials for culturally appropriate language for working with the Hispanic and Arabic populations Southeastern Michigan by March, 2012 was not completed despite repeated attempts. Plans to reach these underserved populations through collaboration with the Wayne Children's Healthcare Access Program (WCHAP) are part of the aims and work plan for this grant application, and are described in greater detail there.
- EHDI provided mini-grant funding for newborn hearing screen equipment for birth hospitals annually. Funding opportunities were announced and hospitals were chosen based on either a Southeast Michigan area with high numbers of births, older equipment, and high refer rates, or the 19 hospitals in Michigan location with under 1,000 births per year, older equipment and high refer rates. Provision of mini-grants to thirteen hospitals was completed to replace aging, broken or recalled screening equipment. Twelve of the hospitals are utilizing A-ABR screening for all babies with the remaining hospital now completing A-ABR on most of the NICU babies. The refer rates for almost all hospital have decreased resulting in fewer babies needing follow-up testing.
- The Michigan EHDI Advisory is an important component of EHDI projects and has provided input on EHDI program changes to implement MCHB grant objectives and activities, specifically those focused in the Wayne county area. With four meetings per year conducted for most of the project period, the

Committee consists of audiologists, primary care providers, otolaryngologists, birthing hospitals EHDI liaisons, parents of children who are deaf or hard of hearing, representatives from early intervention programs and the Deaf and Hard of Hearing communities, Children's Special Health Care Services (CSHCS), and others. The EHDI Advisory members may participate in the Diagnostic, Early Intervention, or Provider Education Subcommittees. The Advisory meetings schedule was decreased in 2013 from four meetings per year to two due to demanding professional schedules.

- The EHDI program conducted two pediatric audiology training sessions with at least one during the Michigan Audiology Coalition (MAC) annual conference during each year of the project period. EHDI supported speakers during the MAC include Dr. Donna Smiley (2013), Dr. Jane Madell (2012), and Dr. Marc Thorne (2011). Additionally, the annual EHDI conference has been held for three years and geared towards professional development for pediatric audiologists and early intervention providers and parents. With an overall attendance of 586, some topic presentations have focused on improving diagnostic testing to help reduce the numbers of babies that are lost to follow-up, including presentations from Dr. Pat Rousch (2011), Dr. Alison Grimes (2012) and Dr. Brad Stach (2013), among others. A particular highlight of each conference is provided by motivational speeches from Michigan's high school or young college-age students who are Deaf or Hard of Hearing what has contributed to their successes.
- Addition of EHDI screens to the Michigan Care Improvement Registry (formerly the Immunization registry) database, with the ability for physicians and medical homes to pull batch reports giving hearing follow-up status and other important information for patients coming in on any given day. The EHDI tab also provides a link to next steps for follow-up for the medical provider to access if needed. EHDI staff exhibited at the annual regional MCIR conferences annually to discuss newborn hearing screen follow-up to pediatricians, nurses, and other medical staff and to promote the availability of EHDI data on MCIR.
- Collaboration with other MDCH programs, including the Maternal Infant Health Program (MIHP), and Michigan Medicaid staff to reduce loss to follow-up was completed or is in process. Medicaid Health Plans were given access to the MCIR/EHDI results in 2012. This allows case coordinators to see that babies need follow-up and work with parents to schedule appropriate follow-up testing. The MIHP program has a question on the intake survey related to newborn hearing screening.
- Unfortunately, the Home Visitation Program is in the infancy stages and has not been ready to move forward with full collaboration with newborn hearing screen follow-up during the current grant cycle, but program staff has met with EHDI program and understands the need to collaborate in the future.

The second goal was to reduce the percentage of loss to follow-up between audiologic diagnosis and entry into early intervention by 25% from 63% in 2008 to 47% in 2013. This goal has been much more challenging due to the restrictions of sharing documentation caused by the Family Educational Rights and Privacy Act (FERPA) which does not allow the Department of Education to report enrollment of infants with hearing loss into Part C programs to the EHDI program without expressed parental permission. As of 2011, the loss to follow-up in this category was only slightly reduced to 62.2%.

Program activities that were conducted during the project period with results of each activity are described below. (Please note that multiple activities for this goal were also completed for goal 1 so there was a duplication of impact.)

- The EHDI program collaborated with the School-Age Hearing Program audiologist to conduct annual training for the ECHO project. Completion of 10 trainings per year for 3 years for Early Head Start/Head Start staff, which included approximately 100 people per year attending the trainings.
- The following describes initiatives to collaborate with the Michigan Department of Education to resolve issues of shared documentation.
 - Early On® (Michigan's Part C Provider) modified the release of information forms to include a section for parental permission for EHDI to receive information in 2010, but has yielded less data than anticipated.
 - During the project period, EHDI concentrated efforts by the Guide By Your Side (GBYS) program's Parent Guides to gather enrollment and report to EHDI with parent permission. With this parent support program increasing visits from only 11 visits in 2011 and 15 in 2012 to 64 so far in 2013 (the highest number in the history of the program), future reports on this data are expected to show yield more usable data.
 - Additionally, the Parent Survey, which is sent to all parents of newly diagnosed infants with hearing loss, includes a question about enrollment into early intervention services and this information is entered into the EHDI data tracking system upon receipt.
 - Finally, efforts continue to seek a data sharing agreement between EHDI and Part C, with the MDCH legal department currently drafting a new agreement and working with the Department of Education for approval.

Michigan Early Hearing Detection and Intervention (EHDI) program continues to strive for quality improvement via identification and implementation of small steps of change and innovative methods to reduce loss to follow-up at all levels for infants and young children after failed newborn hearing screen. Through changes already put in place but which have not yet had time to yield data proving their merit, to the continued efforts of learning collaborative teamwork with both internal State of Michigan and external organization, agency and community stakeholders, greater reduction in loss to follow-up and documentation will be achieved in the near future.