Michigan EHDI Work Plan

Aim Statement #1

By March 2015, the Henry Ford Learning Collaborative Team will decrease the overall refer rate at Henry Ford Hospital to 6% from 8% in the well-baby nursery in 2012.					
Changes / Activities (sequence as needed)	Start Date	Estimated Completion Date	Lead Staff and Partner Support (where applicable)	Process Measures	Outcome Measures
1) Two Henry Ford Hospital "super screeners" members of Henry Ford will undergo full re-training and competency evaluation on hearing screening equipment for possible improvement of methodology.	4/1/2014	7/30/2014	Nancy Asher (EHDI), Adrianne Fazel, Au.D, and Henry Ford Hospital Screeners Carol Uniewski and Barbara Farley.	EHDI Screener Competency checklist completed Training date completed.	Competency checklist completed with 90% accuracy on a minimum of 10 babies by both hearing screeners.
2) Super screeners will take newly updated MI EHDI Hearing Screening Course for update of JCIH and EHDI guidelines.	4/1/2104	5/1/2014	Carol Uniewski and Barbara Farley.	Course completed	Course completed with minimum 80% score.
3) number of babies per week that refer (fail) newborn hearing screening for each screener	4/1/2104	10/1/2014	Carol Uniewski and Barbara Farley	Weekly refer rates for each screeners obtained for baseline, then weekly data after retraining for comparison	Refer rates improved for both screeners by 2% in the first 6 months of this grant.

4) Spread successful change strategies to additional hearing screeners at Henry Ford Hospital.	10/1/2014	4/1/2015	Nancy Asher (EHDI), Adrianne Fazel, Au.D, and Henry Ford Hospital Screeners Carol Uniewski and Barbara Farley.	Weekly refer rates gathered for comparison to determine change success for all screeners.	Overall number of babies referring from newborn hearing screening in the well-baby nursery reduced by at least 2% in the 1st year of this grant.
5) Spread successful change strategies to additional hearing screeners throughout Michigan.	12/1/2014	3/31/2017	EHDI Staff; Statewide Learning Collaborative Team; Region 3 Consultant;	Quarterly EHDI Newsletters published; presentations given to hearing screeners and audiologists at conferences and during hospital site visits.	75% of Michigan hospitals with refer rates of 8% or higher in well-baby nurseries reduced refer rates by 2% by 3/31/2017.

Aim Statement #2

Loss to Follow-up will decrease by 5% per year (2014-2017) in Region 1 of Michigan via work of a Wayne Children's Access Program (WCHAP)/EHDI Specialist.					
Changes / Activities (sequence as needed)	Start Date	Estimated Completion Date	Lead Staff and Partner Support (where applicable)	Process Measures	Outcome Measures
EHDI will contract with WCHAP to provide a specialist to work directly with hospitals and medical providers at the Detroit Medical Center Hospitals to reduce LTF/D.	4/1/2014	3/31/2015	Jeff Spitzley, EHDI Coordinator, Nancy Asher, EHDI Program Consultant, Jametta Lilly, WCHAP CEO.	Identification of specialist done by April, 2014, with interviews and contract to be completed before 7/1/2014.	A Region 3 Consultant began duties no later than July 1, 2014.

WCHAP/EHDI Specialist will receive training on EHDI 1-3-6 goals and LTF/D issues, Complete EHDI Online Screener Course, and “shadow” EHDI Program Consultant on 5 visits to Wayne County medical providers.	6/1/2014 or sooner	8/1/2014	Jeff Spitzley, EHDI Coordinator, Nancy Asher, EHDI Program Consultant, Jametta Lilly, WCHAP CEO, and WCHAP/EHDI Specialist.	1) Online EHDI Hearing Screener Course completed. 2) Met with EHDI staff for training on EHDI 1-3-6 goals and LTF/D issues. 3) Shadowed EHDI Program Consultant on at least 5 visits to Wayne County medical providers.	1) Course completed with minimum 80% passing score. 2) Training on goals and issues by 8/1/2014. 3) Job shadow completed with EHDI Program Consultant on 5 visits by 8/1/2014.
WCHAP/EHDI Specialist provide direct hearing follow-up and educational services to parents and providers for 100-125 identified children.	8/1/2014	3/31/2015	WCHAP/EHDI Specialist, EHDI Program Consultant, , Wayne Learning Collaborative (WLC) Team.	Weekly conference calls completed with EHDI Staff (Program Consultant and Parent Consultant) and other members of the WLC to identify and adjust change strategies.	Summary report provided monthly by WCHAP/EHDI Specialist.
Successful change strategies will be spread to the remaining parts of the Region and State.	4/1/2014	3/31/2017	WCHAP/EHDI Specialist, Jeff Spitzley (EHDI Coordinator), EHDI Staff and WLC Team	Monthly conference calls with WLC team completed, data analyzed quarterly by hospital and region,	LTF/D decreased by 5% per year (4/1/2014-3/31/2017) in Michigan Region 3.

Aim Statement 3

Reduce Loss to Follow Up for infants born in Out-of-Hospital settings by 10% per year for three years (2014 to 2017) by Midwife Project Partners.					
Changes / Activities (sequence as needed)	Start Date	Estimated Completion Date	Lead Staff and Partner Support (where applicable)	Process Measures	Outcome Measures

1) Provide midwives with hearing screening equipment for screening infants born at home.	3/1/2014	6/1/2014	Nan Asher (EHDI Program Consultant), Shannon Palmer (Audiologist), Jennifer Berrigan (MIDHHDBP) and Laurie Zoyiopoulos, Midwife.	Grant funding secured through collaboration with Michigan Coalition for Deaf, Hard of Hearing and DeafBlind People (MIDHHDBP) and Central Michigan University Audiology Clinic utilized to purchase 14 pieces of hearing screening equipment for shared use by Michigan midwives.	100% of equipment and 1st year disposables to midwives purchased and delivered by 6/1/2014.
2) Provide regional training on use of equipment at time of delivery.	3/1/2014	6/1/2014	Nan Asher (EHDI Program Consultant), Shannon Palmer (Audiologist), Jennifer Berrigan (MIDHHDBP) and Laurie Zoyiopoulos, Midwife	4 regional trainings throughout Michigan provided on newborn hearing screening and proper use of hearing screening equipment to midwives.	Regional trainings completed by 6/1/2014.
3) Monitor number of hearing screenings completed.	5/1/2014 or upon delivery of equipment & training.	Ongoing, quarterly.	Nan Asher (EHDI Program Consultant) and Erin Estrada (EHDI Data Analyst).	Reporting of initial hearing screen and (one rescreen for infants not passing the initial screen) for babies born in out of hospital settings monitored quarterly.	Newborn hearing screening increased by 10% per year (from 4% in 2011**)** for 2014-2017, as evidenced by reports received by EHDI.
4) Assistance provided for questions and troubleshooting as needed	5/1/2014 or upon delivery of equipment & training	Ongoing.	Nan Asher (EHDI Program Consultant), Shannon Palmer (Audiologist), Jennifer Berrigan (MIDHHDBP) and Laurie Zoyiopoulos, Midwife	Telephone assistance or face-to-face meetings provided as needed for resolution of problems as they occur.	90% of phone calls to EHDI staff for assistance returned within 48 hours, 100% within 72 hours.

4) Annual provision of renewal training for experienced midwives, calibration of equipment, and supply of disposables for each of three years as provided in grant from Carls Foundation.	December 2014	December, 2017	Nan Asher (EHDI Program Consultant), Shannon Palmer (Audiologist), Jennifer Berrigan (MIDHHDBP) and Laurie Zoyiopoulos, Midwife	Re-training of midwives and calibration of equipment offered at least once per calendar year during semi-annual midwives conference.	80% of Michigan midwives completed the midwife competency checklist annually with a score of 90% or better.

Aim Statement #4

Loss to Follow-up will decrease by 5% per year (2014-2017) in Region 3 of Michigan via work of a Regional Consultant.					
Changes / Activities (sequence as needed)	Start Date	Estimated Completion Date	Lead Staff and Partner Support (where applicable)	Process Measures	Outcome Measures
EHDI will identify and contract with a part time Regional Consultant to work directly with hospitals and medical providers in Region 3 to reduce LTF/D.	4/1/2014	7/1/2014	Jeff Spitzley, EHDI Coordinator and Michelle Garcia, EHDI Audiologist and Follow-up Consultant.	Posting of the position description done by April, 2014, with interviews and contract completed before 7/1/2014.	A Region 3 Consultant began duties no later than July 1, 2014.
Region 3 Consultant will begin visits and contacts with hospitals in the region, starting with the three hospitals with the highest LTF.	7/1/2014	3/31/2015	Region 3 Consultant, Jeff Spitzley (EHDI Coordinator), Statewide Learning Collaborative (SLC) Team.	Weekly conference calls with EHDI Staff completed (Coordinator and Follow-Up Consultant) for 5 months, Bi-weekly phone or email thereafter.	At least one visit(s)/contact(s) completed per hospital by 3/31/2015 in Region 3. Summary report provided monthly by Region 3 Consultant.

Change strategies will be identified for hospitals in Region 3 as visits and calls continue through year 3.	7/1/2014 or upon earlier contract date.	3/31/2017	Region 3 Consultant, Jeff Spitzley (EHDI Coordinator), EHDI Staff and SLC Team	Monthly conference calls with SLC team completed, data analyzed quarterly by hospital and region,	LTF/D decreased by 5% per year (4/1/2014-3/31/2017) in Michigan Region 3.

Aim Statement #5

LTF/D will be reduced 5% or more each year 2014-2017 from diagnosis of permanent hearing loss to entry to early intervention via work of EHDI staff and the Statewide Learning Collaborative Team.					
Changes / Activities (sequence as needed)	Start Date	Estimated Completion Date	Lead Staff and Partner Support (where applicable)	Process Measures	Outcome Measures
1) A data sharing agreement will be reached between MI Department of Community Health and Michigan Department of Education for enrollment into Early Intervention data of children enrolled with diagnosed hearing loss.	1/1/2014	12/1/2014	Statewide Learning Collaborative Team, Jeff Spitzley (EHDI Coordinator), MDCH Legal Department representative, MDE Legal Department representative.	EHDI staff met with MDCH legal department and drafted an agreement for sharing of data with MDE in 2014. MDCH legal department collaborated with MDE legal department for same. Members of Statewide LC will assisted with these efforts.	Agreement for data sharing will be reached by December, 2014.

2) Parent Guides in the Guide By Your Side (GBYS) program gather information on enrollment into early intervention when conducting family visits and follow-ups; report to EHDI with parental consent.	2011	Ongoing	Jeff Spitzley, EHDI Coordinator, Karen Wisinski, EHDI Parent Consultant & Guide By Your Side; GBYS Parent Guides.	Early intervention enrollment data collected by Parent Guides with parent consent to reduce LTF.	Monthly GBYS reports received and database updated.

Aim Statement # 6

The Michigan Statewide Learning Collaborative Team will develop strategies to reduce Loss to Follow-Up or Documentation by at least 5% per year from 2014-2017.					
Changes / Activities (sequence as needed)	Start Date	Estimated Completion Date	Lead Staff and Partner Support (where applicable)	Process Measures	Outcome Measures
The LC Team will meet to decide priority and work plan of aims.	4/1/2014	Ongoing through 3/31/2017	EHDI Coordinator Jeff Spitzley and Statewide Learning Collaborative (SLC) Team.	Background Information on loss to follow-up & documentation provided to all SLC Team members one week prior to meeting. Priority of aims, action steps, and responsible parties determined & timelines assigned.	Clear, measurable timeline of activities toward the highest priority aims set and responsible persons assigned. Future Meeting schedules, format and/or locations (face-to-face, conference call, etc) confirmed.

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.

Michigan Application HRSA 14-006
Narrative
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NARRATIVE

INTRODUCTION

The overall aim of the Michigan Early Hearing Detection and Intervention (EHDI) program is to sustain a statewide, community-based, comprehensive system of early detection and intervention for newborns and infants with hearing loss. This system encompasses a family-centered, culturally competent approach with seamless transitions and tracking of newborns from initial hearing screening to early intervention services.

The purpose of this grant application is to reduce the lost to follow-up of infants who have not passed a physiologic newborn hearing screening examination prior to discharge from the newborn nursery by utilizing specifically targeted and measurable interventions. As an operational component of the Michigan Department of Community Health (MDCH) the EHDI program was created as the agency's method of achieving the Maternal Child Health Block Grant and Healthy People 2020 early hearing screening and intervention objectives. Michigan EHDI has achieved 100% voluntary participation in universal newborn hearing screening programs by all birthing hospitals since 2003, and, as of April 2008, hearing screening became mandatory in Michigan (mandatory reporting effective March 2006). In 2011, the last year for which we have full data, almost 98% of infants had a complete hospital hearing screen with 98.3% of these infants having a screen no later than one month of age.

To accomplish this purpose, a Statewide Learning Collaborative (SLC) team of stakeholders has been identified to assist in quality improvement work of identifying change strategies. By implementing Plan, Do, Study, Act (PDSA) methodology to evaluate which changes lead to improvement, and spreading successful changes throughout the state, Michigan will achieve measurable improvement in the numbers of infants who receive appropriate and timely follow-up. The Michigan Statewide Learning Collaborative Team of stakeholders includes EHDI staff, a pediatric audiologist, representatives from early intervention, home visitation, community agencies and members of the Deaf community, as well as appropriate birth hospital staff members and medical providers. (A list of SLC members is provided on Page 17 of this document.) Successful strategies will be spread to other hospitals and regions for testing and implementation with the eventual aim of statewide improvement of loss to follow-up and documentation by 5% per year by the end of this grant cycle in 2017.

Reducing the loss to follow-up rate is a component of the state's plan to achieve the national EHDI goals consisting of a hearing screen completed no later than one month of age, a diagnostic evaluation no later than three months of age for children not passing the hearing screening and enrollment of all children with diagnosed hearing loss into early intervention services no later than six months of age.

Through continued links with other department programs and state agencies, such as the metabolic screening program, Vital Records, Children's Special Health Care Services (CSHCS), other Title V and Title XIX maternal child health programs, birth

defects registry, Michigan Care Improvement Registry (MCIR), and the Department of Education, Michigan EHDI will continue to employ quality improvement methods, the model of improvement and best practice techniques to reduce loss to follow-up state wide, with focused, targeted efforts in the most populated county in the state, Wayne County. Wayne County is also one of the counties with the highest rates of loss to follow-up (77.1%) overall from 2007 – 2011 for infants referring from the final hearing screen.

NEEDS ASSESSMENT

Michigan is the ninth most populous state in the United States with an estimated population of 9.9 million people in 2012. There were 114,159 live births in 2011 and 114,717 live births in 2010 in Michigan, the last two years for which we have full data. The state, made up of two peninsulas, has an area of 96,810 square miles, making it the 11th largest state in the country, and is surrounded by four of the Great Lakes. Michigan is divided into 83 counties by which census and demographic data are maintained in Michigan Vital Statistics. Most of the state is rural with most of the larger population centers located in the bottom half of the Lower Peninsula.

Michigan has 85 birthing hospitals; however, one is not located in each of the 83 counties. Birthing hospitals are located in more densely populated areas of the state and women frequently must travel to these facilities to deliver, with many crossing county lines. These 85 birthing facilities account for 99% of the total births with about 1% of births occurring in birthing clinics, homes, or physician offices. In 2011, the six counties with the highest number of births included Wayne, Oakland, Macomb, Washtenaw, Genesee, and Kent Counties, accounting for 57% of all live births in the state. Four of these six counties are located in Southeastern Michigan, including Wayne County, which alone had 21% (24,191) of all births in 2011. The city of Detroit, the country's 18th largest city and the state's largest with a 2012 estimated population of 701,475[2], is located in Wayne County.

Health care delivery usually occurs in or near population centers and not by county jurisdiction, with the exception of services provided by the local public health departments that are county government supported. Of Michigan's 85 birthing hospitals, 45 perform outpatient re-screens for babies born at their hospital, and an additional 20 identified pediatric rescreen sites and 22 audiology centers throughout the state have provided documentation which indicates compliance with the requirements set forth in the Early Hearing Detection and Intervention Best Practice Guidelines for Assessment of Infants (Birth-6 Months) for hearing screens and diagnostic evaluations on young infants.

Barriers to services in Michigan have been identified through several means over the past few years, including a survey entitled "Barriers to Services: A View From Michigan Families" that is sent to families of children lost to follow up and the Parent Survey, which is sent to all parents of children newly diagnosed as deaf or hard of hearing. Of the barriers to services that have been identified, transportation is one of the greatest.

With a concentrated number of pediatric diagnostic sites in the lower half of the Lower Peninsula, northern Lower Peninsula and Upper Peninsula families must travel great distances to reach highly qualified pediatric audiologists. Michigan has a long tradition of building automobiles, especially in Detroit, "the Motor City," and therefore, has little public transportation available, even in our larger cities. These surveys and identified barriers will be discussed in more detail below.

Though it may appear that there are an adequate number of audiology diagnostic centers in the communities with the highest loss to follow-up, all do not accept every insurance program available to parents in that area, which may cause longer than ideal wait times at some centers. In addition, the number of providers who accept Medicaid has decreased significantly in recent years, a very important factor in Michigan, with over 45% of women having Medicaid for the payment of infant delivery in 2011 as opposed to 53% having private insurance, and the remaining either self-paying or having some other or unknown form of payment.

Wayne County has a large percentage of all births in Michigan and a different racial distribution than that of Michigan overall, as illustrated in Table 1, below. This large population difference requires that Michigan be responsive to the need for cultural sensitivity and language when striving to meet the health care needs of Wayne County and throughout the state.

Race/Ethnicity	MICHIGAN	WAYNE COUNTY
	114,159 (100%)	23,726 (21%)
White	70%	44.5%
Black	19%	46.5%
Asian/Pacific Islander	3%	3.4%
American Indian	0.7%	12%
other	4%	2.3%
Hispanic descent	7%	7.5%
Arabic descent	3.6%	8.8%

Table 1. Live Births by Race & Ethnicity for Michigan and Wayne County, 2011.

In 2011, about 17% of women giving birth did not have a high school diploma, about 27% had a high school diploma or GED, and about 56% had some or completed college.

Data from the *2010-2012 Kids Count*[1] report reveal that 24.6% of Michigan's children 0-17 years of age were living in poverty in the past 12 months. Compared to all other counties in Michigan for this same period of time, Wayne County ranks third with 37.9% of children less than 18 years living in poverty. This high rate of poverty adds to the barriers for follow-up, as parents focus on providing the basics of food, clothing and shelter for their children.

High levels of unemployment (9%) at the third highest in the nation continue to plague

the citizens of Michigan, especially Wayne County (11.1%) with Michigan's largest city, Detroit (9.8%), which declared bankruptcy in July of 2013, owing close to [redacted] in debt.[3] This bankruptcy and financial upheaval in the city has further reduced city-provided services such as public transportation and police protection, making many parents reluctant to take their newborns to appointments via the limited public transportation system. Given the size and manufacturing influence of Detroit, this bankruptcy has had a large effect on the entire state of Michigan.

Loss to Follow-Up (LTF)

Michigan currently is focusing on monitoring loss to follow-up at all three stages in the EHDI process: 1) initial hearing screening 2) final newborn hearing screen to audiologic diagnosis and 2) audiologic diagnosis to early intervention. Infants who moved out of state, had parental refusal, or died are not included in these numbers. A summary of these stages follows, and along with Tables 1 and 2 provides justification for Michigan to target loss to follow-up in Region 1, Southeastern Michigan, which includes Wayne County and in Region 3, Southwestern Michigan. Data provided below is for 2011, as the full calendar year of 2012 data will not become available until January, 2014.

Loss to Follow-up from Initial Newborn Hearing Screen

With initial hearing screening of hospital births at a consistent level of 98% and above over the past five years, Michigan is now planning ways to provide outreach to and improve the unmet needs of the approximately 96% lost to follow-up rates in the out-of-hospital birth population in 2011 (midwife attended, home births). An additional aim is to seek change strategies that will reduce the number of babies who refer (fail) the newborn hearing screen in Michigan's hospitals with high refer rates with the logic that fewer babies falsely needing follow-up will reduce the numbers of those becoming lost to follow-up. Please refer to Table 1 below for detailed information.

Loss to Follow-up from final Newborn Hearing Screen to Audiologic Diagnosis.

In 2010, 1,531 Michigan infants referred from the final newborn hearing screen and of these infants, 833 (54.4%) were lost to follow-up. Of the 1,557 infants in 2011 that referred from the final newborn hearing screen, 822 (52.7%) did not receive any follow-up services and were considered lost to follow-up. Please refer to Table 2 below for detailed information.

Table 2: Numbers referring from final screen and Loss to follow-up rates from final Newborn Hearing Screen to Audiologic Diagnosis by region of birth in Michigan: MI EHDI Data, 2009-2011**.** Please refer to the map in Attachment 6 for counties in each Region.

Birth Region	*LTF After Refer from Final Screen **2009***			*LTF After Refer from Final Screen **2010***			*LTF After Refer from Final Screen **2011***		
	Number (No.) Referring from Final Screen	LTF		Number (No.) Referring from Final Screen	LTF		Number (No.) Referring from Final Screen	LTF	
		No.	%		No.	%		No.	%
State of Michigan	**1501**	**758**	**50.5**	**1539**	**793**	**51.5**	**1532**	**796**	**52.0**
Region 1	474	350	73.8	534	409	76.6	503	407	80.9
Region 2	126	60	47.6	143	69	48.3	152	79	52.0
Region 3	101	47	46.5	92	38	41.3	127	71	46.1
Region 4	308	103	33.4	226	95	42.0	199	63	55.9
Region 5	44	14	31.8	49	20	40.8	36	12	33.3

Loss to follow-up from Diagnosis to Early Intervention.

When a hearing loss report is sent to the EHDI program with parental consent, a referral is immediately sent to the Early On® (Part C) program as a backup to the initial referral, which should be sent from the diagnostic audiology site. The loss to follow-up rate from diagnosis to entry into early intervention was determined by dividing the number of infants with hearing loss and not verified as enrolled in Early On by the number of infants diagnosed with permanent hearing loss. In 2010, 88 of143 (62%) infants were not verified as enrolled in Early On. In 2011, 98 of 166 (59%) were lost to follow-up after being diagnosed with permanent hearing loss. The EHDI program has encountered challenges in ensuring that families were being offered early intervention services and resources, and confirming referral. Early Intervention services are provided under the jurisdiction of the Michigan Department of Education and the difficulty in receiving feedback information on early intervention services is due to the regulatory requirements under the Family Educational Rights and Privacy Act (FERPA). To assist in resolving some of these issues, EHDI has successfully collaborated with Early On staff to add EHDI to the parental consent forms used by Early On interventionists, but it is rarely used. (Please refer to Table 3 below for detailed information.)

Table 3: Loss to follow-up rates from diagnosis to enrollment in Early On by region of maternal residence in Michigan: MI EHDI Intervention Data, 2009-2011. Please refer to the map in Attachment 6 for counties in each region.

Birth Region	LTF from Diagnosis to Enrollment in Early Intervention **2009**			LTF from Diagnosis to Enrollment in Early Intervention **2010**			LTF from Diagnosis to Enrollment in Early Intervention **2011**		
	Number (No.) Dx'd with Perm. Hearing Loss	LTF		Number (No.) Dx'd with Perm. Hearing Loss	LTF		Number (No.) Dx'd with Perm. Hearing Loss	LTF	
		No.	%		No.	%		No.	%
State of Michigan	**168**	**104**	**61.9**	**173**	**112**	**64.7**	**191**	**112**	**58.6**
Region 1	24	14	58.3	24	15	62.5	21	13	61.9
Region 2	23	13	56.5	18	15	83.3	21	13	61.9
Region 3	24	8	33.3	15	8	53.3	13	3	23.1
Region 4	13	10	76.9	11	8	72.7	12	8	66.6
Region 5	*	*	*	*	*	*	*	*	*
Missing Region Infor-mation	79	57	72.2	103	65	63.1	121	72	59.5

*Data suppressed when fewer than 6 children were diagnosed with permanent hearing loss.

Barriers Survey:

The "Barriers Survey: A View from Michigan Families" continues to be sent to families of children lost to follow up starting in 2009 to the present. An offer of a [redacted] gift card is included as incentive for completing and returning the survey. With 400 responses as of October, 2013, the top reasons given by parents for not returning to have their baby's hearing tested were:

- "Other reasons" (23%) with comments written in 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.
- No Transportation (17.8%).
- Doctor/Nurse said it was nothing to worry about (16.3%).
- Doctor said it was just fluid. (15.3%).
- Told to wait. (13.5%).

From the Parent Survey which is sent to parents whose children have been identified with permanent hearing loss at some level (unilateral or bilateral, mild to profound) with the offer of a [redacted] gift card as incentive for participation, responses were obtained from 107 families for this analysis (response rate of 46.1%). Most respondents were white, non-Hispanic and non-Arab, with more than a high school education. About 88% of respondents indicated that their child referred from the initial screen and about 50% were worried or very worried about the screen results. Respondents indicated that

having an appointment made before discharge or being clearly told how to make an appointment helped them the most in having their babies re-screened. Many respondents were told that referring from the initial screen was nothing to worry about or that they had to wait until their baby was older to be tested again. About 72% of respondents said that their child was enrolled in early intervention services, 54% said their child's eyes had also been tested, and 23% said a genetic cause for hearing loss had been identified. The survey showed that insight from families who have been through the EHDI system can help improve processes.

Analysis of results from both of these surveys, in essence opposite sides of the same problem, for quality improvement indicates that provider education is needed statewide, especially for hospital staff, attending physicians in the hospitals, and primary care providers/medical homes after babies are discharged, so that parents are receiving a consistent message about the importance of appropriate follow-up services for their children after a failed hearing screening.

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, which garnered 356 responses, and was one of 26 states to participate in the National Center for Hearing Assessment and Management (NCHAM) Physician Survey in 2012, with 85 responses from mostly pediatricians or family practice physicians. Comments and suggestions for improvement gleaned from both surveys indicate agreement with both the Barriers Survey and Parent Survey of the need for medical provider education and parent education on early hearing health care for infants and young children, including by self-report of nearly 80% of the physicians who indicated that their training had not adequately prepared them to meet the needs of infants with permanent hearing loss. There is also need for education on Michigan's newborn hearing screening law.

References

1. *KIDS COUNT Data Center from the Annie E. Casey Foundation.* The Annie E. Casey Foundation, n.d. Web, 03 Dec 2013. <http://datacenter.kidscount.org>
2. "Top 50 Cities in the U.S. by Population and Rank", *Infoplease*. Infoplease, n.d. *Web 02 Dec. 2013 <http://www.infoplease.com/ipa/A0763098.html>*

METHODOLOGY

Aim: Reduce loss to follow-up of infants after failure to pass the newborn hearing screen.

Measures:

1. To reduce number of infants referring from initial hearing screening by 2% overall from 2014 to 2017.
2. To reduce the percentage of loss to follow up between the final hearing screen and audiologic diagnosis by 5% each year from 2014 to 2017.

3. To reduce the percentage of loss to follow-up between audiologic diagnosis and entry into early intervention by 5% each year from 2014 to 2017.

Michigan EHDI will utilize a Statewide Learning Collaborative consisting of:
EHDI Coordinator Jeff Spitzley, Parents Karen Wisinski (EHDI Parent Consultant) and Julie Tackett (Community member), EHDI Data Analyst Erin Estrada, EHDI Follow-Up Consultant and Audiologist, Michelle Garcia, EHDI Program Consultant Nancy Asher, EHDI Community Consultant Dee Robertson, Michigan Department of Education Early Intervention representative Vanessa Winborne, Tiffany Kostelec, MDCH Early Intervention and Home Visiting Consultant, Pediatric Audiologist Adrianne Fazel, and Diana McKittrick and Todd Morrison, representatives from Michigan's Deaf Community, to identify change strategies for statewide implementation. Given the diverse population of Michigan from very rural, small birthing hospitals with 1-5 babies who do not pass the newborn hearing screening per quarter to a few large, population dense cities with high birth rates and up to 10 infants referring per week, all change strategies identified are not expected to be successful in all locations.

Two Michigan regions have been identified for more intense efforts, with similar birth populations, but very different population characteristics. The first is Region 1, consisting of Wayne, Macomb and St. Clair Counties, with a 2011 birth population of 27,459 and very urban, population dense cities. Region 3, consisting of 21 counties (Mason, Lake, Osceola, Oceana, Newaygo, Mecosta, Montcalm, Muskegon, Kent, Ionia, Ottawa, Allegan, Barry, Van Buren, Kalamazoo, Calhoun, Berrien, Cass, St. Joseph, Branch and Hillsdale) in Southwestern Michigan with a birth population of 26,515 and mostly rural, smaller and less population dense communities. By choosing two such diverse regions, change strategies that are successful in one can be spread to the other for quick PDSA analysis, and then implementation spread to the whole state.

The Statewide Learning Collaborative (SLC) will meet via conference call on a monthly basis to start, adjusting the schedule as needed to maintain forward momentum on these change strategies. This Statewide Learning Collaborative will also be the guiding team for smaller, regionalized change strategies in Michigan.

Due to the size and distribution of Michigan's population, the state has been broken into five regions, as discussed above in the Needs Assessment section, with Regions 1 and 3 targeted for identification and testing of change strategies.

<u>Region 1: Southeastern Michigan</u>

In Southeastern Michigan, a small Learning Collaborative has been established at Henry Ford Hospital in Detroit, consisting of two pediatric audiologists, Adrianne Fazel, Au.D, and Jessica Messer, Au.D, and two hearing "super-screeners", Carol Uniewski and Barb Farley. This collaborative will seek effective change strategies to reduce loss to follow-up starting with reducing refers from initial newborn hearing screening and working forward through the full hearing screening and diagnostic procedures for improvement.

Wayne Children's Healthcare Access Program (WCHAP)

At a second Southeastern Michigan location, the Detroit Medical Center with the state's largest birthing hospital, Michigan EHDI will contract with Wayne Children's Healthcare Access Program (WCHAP) to provide a part-time Community Health Specialist to serve on a Learning Collaborative Team for Plan-Do-Study-Act (PDSA) quality improvement methodology to improve loss to follow-up as part of WCHAP's work with primary care practices in Detroit-Wayne County. The WCHAP-EHDI specialist will also provide direct hearing follow-up and educational services to 100-125 identified children and provide appropriate linkages and reporting in the first year of this grant, while identifying change strategies that can be spread throughout the region.

Both of these Learning Collaborative Teams will meet via conference call on a weekly basis, as well as through occasional face-to-face meetings and utilizing email for communication as needed, for PDSA adaption of change strategies identified via Michigan's previous participation in the NICHQ project. Continued efforts to apply these specific change strategies include, but are not limited to:

1) Scripting the screeners' message to parents.
2) Using FAX-back forms between multiple providers.
3) Ascertaining the name of the infant's primary care provider.
4) Identifying a second point of contact for the family.
5) Assist parents to arrange rescreening and/or audiology appointments for the infant at hospital discharge, scheduled two weeks apart. The second can be canceled if not needed.6) Giving parents a reminder call prior to the diagnostic appointment that both verifies the appointment time and place, and again reinforces the importance of the visit.
7) Streamlining the Early Intervention referral process and obtaining consent for release of information.
8) Continue improvements to the data tracking system.
9) Continue efforts to reduce LTF by a dedicated follow-up consultant, with assistance from the program consultant.
10) Informing families of the parent support programs, GBYS and MI H&V, as appropriate.

Region 3 Southwestern Michigan:

Due to the largely rural area of Region 3 of Michigan, the concept of a Regional Consultant will be employed to identify and test change strategies in birth hospitals within this region. A Regional Consultant (position description in Attachment 3) will be contracted for 12-25 hours per month to work with hospital staff to improve refer rates, enhance compliance in newborn hearing screening practices, and provide educational opportunities to medical providers on the importance of follow-up.

As successful change strategies are identified and spread throughout both Regions 1 and 3, these methods will be shared and tested for implementation in the alternate Region, with the goal of spreading successful tools statewide.

Physician Education:
As stated above, the recent surveys strongly indicated the need for physician/provider education on most aspects of hearing healthcare for infants and young children, especially including the importance of appropriate, timely follow-up services. To address these needs, Learning Collaborative members at the Detroit Medical Center (WCHAP) and Henry Ford Hospital, as well as the Region 3 Consultant will seek opportunities to build trust relationships with physicians in their catchment areas for small steps of change in addressing these educational needs.

Out of Hospital Birth Project
Michigan has approximately 1% of infants born in out of hospital settings (homes and birthing clinics), many under midwife supervision, with an approximate 5% in 2011 and 18% of these children receiving initial hearing screening in 2012. After presentations to the Michigan Midwives Association and a survey of midwives, it was determined that a majority of midwives are willing to provide hearing screening for infants born in their care if equipment were available. Michigan EHDI successfully teamed with Michigan Coalition for Deaf, Hard of Hearing and DeafBlind People, a non-profit community organization, and Central Michigan University's Audiology Department to apply for a three-year grant to purchase hearing screening equipment for shared regional use, three years' of disposables and calibration, and annual training on correct use of equipment to Michigan midwives. This grant was awarded in December, 2013 and will be managed by a Learning Collaborative consisting of EHDI Program Consultant Nancy Asher, Michigan Coalition Board Member Jennifer Berrigan, Central Michigan University Audiologist Shannon Palmer, and Midwife Laurie Zoyiopoulos.

It is expected that a minimum of 10% increase in number of babies screened for hearing loss will occur in each of the succeeding years of this grant (2014-2017) with annual renewal of training and calibration of equipment offered during the semi-annual midwives conferences.

Michigan EHDI Advisory Committee
Michigan EHDI will continue to meet with the Statewide Early Hearing Detection and Intervention Advisory Committee twice yearly. This Advisory consists of audiologists, speech-language pathologists, primary care providers, nurses, and parents of children who are deaf and hard of hearing (D/HH), individuals who are deaf and hard of hearing, and early intervention/educators for deaf and hard of hearing. The Committee members bring a diversity of experience and expertise to the table, including language and communication modes used at home and in practice and educational methodology for deaf and hard of hearing children. All meetings are open to the public with designated time on the agenda for public comment.

Data Tracking System:
Michigan Care Improvement Registry (MCIR) expansion is the lead effort of the Health Data Integration Project, which was started in response to the newborn health standards and guidelines recommended by the Center for Innovation of the National

Center for Health Statistics (NCHS). The MCIR registry contains over 6 million individuals' records. The goal of MCIR is to enable private and public providers of health services to assess a child's records for follow-up purposes. Legislation passed in the spring of 2006 to allow the expansion of the registry to include the reporting and recording of additional information. Development of EHDI's web based reporting system within the MCIR continues, with the goal of hospitals, audiologists and other medical providers being able to input hearing information directly in the near future to improve timeliness of reporting and availability of information to providers.

Barriers to Follow-up:

To learn more about factors contributing to loss to follow-up during the EHDI process, a survey of parents of infants lost to follow-up was initiated in early 2010 to assess the specific barriers to hearing screening, diagnostic evaluation and enrollment in early intervention services. As described previously, Michigan EHDI will continue to conduct this survey for children born in 2014 for the dual purpose of collecting barrier information as well as reports for children who have received follow-up services but have been lost to documentation. The barriers information enables us to develop more specific strategies as well as analyze those being implemented for reducing LTF, including the need for continued physician/provider education.

Culturally Appropriate Materials:

Michigan EHDI recognizes the necessity to ensure culturally appropriate language of EHDI educational materials. To provide this, assessment will be conducted on each as reprints or reauthorization is needed.

Home Visitation Program:

The purpose of the Michigan Maternal, Infant and Early Childhood Home Visiting Program is to deliver evidence-based early childhood home visiting services to at-risk families in communities of need. The program will implement evidence-based practices that contribute to improvements for the eligible families participating in the program in the areas of: improved maternal and newborn health; prevention of child injuries, abuse and neglect; improved school readiness and achievement; reduction in crime or domestic violence; improved family economic self-sufficiency; and coordination and referrals for other community resources and supports. A representative of the Home Visitation Program has joined the Statewide Learning Collaborative and has expressed excitement over the possibilities this new collaboration will bring to both programs

Maternal Infant Health Program (MIHP):

As described in the introductory section above, Medicaid pays for slightly less than half of all Michigan births each year (45% in 2011). To qualify for Medicaid, families must meet program criteria, including low-income level status. It has been well-established that low socioeconomic status is a major risk factor for infant mortality and morbidity. To address these issues, MDCH has the Maternal Infant Health Program, which is a Medicaid program designed to improve birth outcomes for both mothers and infants whose medical care is covered by Medicaid through the use of evidence based interventions for identified key risk factors. It uses both a case management and a home

visitation methodology that follows the infant through its first year.

If an MIHP prenatal case subsequently becomes an MIHP infant case, the Infant Risk Identifier screening tool must be completed to determine eligibility for the infant. After the parent signs the proper authorization papers, MIHP staff administers the Infant Risk Identifier to screen for potential delays in communication, gross motor, fine motor, problem solving, personal-social, and social-emotional development, and refers to Early On if screening indicates a potential delay in these domains. As a cooperative effort between EHDI and the MIHP, the Infant Risk Identifier was modified in the spring of 2011 to include questions about the infant's newborn hearing screen results and any possible follow-up that has been received or is needed. Further information to be gathered through collaboration with MIHP includes the result(s) of any follow-up completed, and barriers for needed follow-up that has not been done.

Parent/Family Support:

EHDI strongly recognizes that parents and families of children with diagnosed hearing loss are critical to the success of their children. Upon receipt of diagnostic information, EHDI sends a letter to the parents in addition to the one sent to the primary care physician as described above. This letter includes introduction of the Michigan EHDI Program, as well as the Guide By Your Side and Michigan Hands & Voices parent support programs.

Guide By Your Side (GBYS) Program:

The GBYS program is designed to increase parental access to resources and linkages to early intervention services. This voluntary participation program is designed to match families with newly diagnosed infants with Parent Guides (mentor parents). The benefits are that families with newly identified infants are contacted by an EHDI screened and trained local Parent Guide by phone within 24-48 working hours of referral and will have a home visit within ten working days, or as soon as can be agreed upon with the referring family. This early family contact provides emotional support and enables them to begin to become knowledgeable of local and national resources. The Parent Guides also distribute the parent resource/support notebook to the parents they visit, in addition to the brochure and contact information for MI H&V. The parent notebook is a comprehensive list of information and resources on which the family can make choices based on their needs at the time. The families will also be apprised of their local Early On coordinator and together with both partnerships, support the child receiving appropriate early intervention services, and with parental permission, Parent Guides report enrollment data back to the EHDI program. The Parent Guides are required to attend bi-annual trainings to improve their knowledge base. A follow-up satisfaction survey is then provided to families with a gift-card incentive to complete and return the survey. Survey results to date indicate that GBYS support expedites the families' access into the early intervention services as well as building trust in the system and parents' confidence in their ability to advocate for and support their child.

ECHO Project:

Michigan EHDI and the School-Age Hearing Screening Program collaborated with the

National Center on Hearing Assessment and Management (NCHAM) to participate in the Early Childhood Hearing Outreach (ECHO) Project. The goal of the ECHO project is to demonstrate model strategies for enhancing the capacities of Migrant, Early and American Indian Head Start grantees to conduct hearing screening for children birth to three years of age and ensure that appropriate follow-up diagnostic and intervention services are provided for children who do not pass the screening. In doing so, this project aims to expand the capacity of state EHDI programs to promote hearing health throughout the early childhood period.

The MI EHDI program began participation in the fall of 2005 with representatives from MDCH staff in the Childhood Lead Poisoning Prevention, School Age Screening, and Early and Migrant Headstart programs. Michigan EHDI will continue to collaborate with the Michigan Hearing and Vision Programs to offer trainings to Early Head Start Programs and will educate Early Head Start programs on the importance of referring to a pediatric diagnostic facility in their area.

Sustainability

The Michigan EHDI program is currently supported by two federal grants and state funding. The CDC Data and Surveillance grant and the HRSA/MCHB Newborn Hearing Screening grant has provided the opportunity to develop a statewide infant hearing screening and follow-up program. The State of Michigan provides funding for salary and fringe benefits of the EHDI Coordinator position and Infant Health Unit secretary, a position that is shared by EHDI, the Safe Sleep, and Infant Mortality programs. In 2006, the Michigan Legislature passed Public Act 31, the Mandated Hearing Reporting Law, which also established the Newborn Screening Committee, and in 2008, this Committee recommended to the Legislature that Newborn Hearing Screening be added to the list of mandated newborn screens for Michigan infants. As part of this addition to the list of mandated screens, a fee per screen was also established, with Michigan EHDI being the benefactor of a portion of these funds.

If in the future, either of the federal grants should cease to fund the EHDI program, it is expected that this program and essential services of reporting of newborn hearing screening and follow-up through enrollment into early intervention of children diagnosed with permanent hearing loss would be sustained in a reduced form by the newborn screening fees and limited State of Michigan funding.

WORKPLAN – Please see the Workplan in Attachment 1.

The Michigan EHDI program has worked diligently to receive exceptions to the long standing hiring freeze and has successfully established nine EHDI staff positions including six full time employees, and three part time employees with a wide range of technical expertise, including a half-time epidemiologist. At the current time, plans are underway to convert the EHDI Program Consultant contractual position to a State of Michigan employee position, with expectation for this to be completed in 2014.

The activities listed in Methodology and the Workplan will be completed by EHDI staff and designated partners.

MI-EHDI Key Staff Positions

Name	Position	Staffing level
Jeff Spitzley, MA	EHDI Coordinator	1.0 FTE
Dee Robertson, MA	EHDI Community Consultant	1.0 FTE *
Michelle Garcia, Au.D.	EHDI Follow-up Consultant	1.0 FTE
Erin Estrada, BA	EHDI Data Analyst	1.0 FTE
Nancy Asher, MLS	EHDI Program Consultant	1.0 FTE*, **
Karen Wisinski, BA	EHDI Parent Consultant	.5 FTE **
Evelyn Quarshie, MPH	EHDI Epidemiologist	.5 FTE **

*MCHB Grant Funded Position
** Contractual Positions. EHDI Program Consultant position in process of conversion to a State of Michigan position, expected by year two of this grant.

The overall goal is to reduce the loss to follow-up of infants after failure to pass the newborn hearing screen. To obtain this goal, Michigan EHDI will evaluate loss to follow-up rates bi-annually for all three tiers: refer rates for newborn hearing screenings, between the final screening and audiologic diagnosis, and between the diagnosis and entry into early intervention. Determining the extent of the improvement attributed solely to this project will be difficult due to the extensive EHDI programming and other related EHDI projects that will also be improving the loss to follow-up rate. The ultimate objectives will be measurable with the data systems that are in place.

RESOLUTION OF CHALLENGES

It can be difficult to attempt change in complex institutions. Raising awareness of players, obtaining “buy in,” and establishing relationships and contacts takes time. New employees, vacations, schedules, etc. affect the process of change.

Poverty, lower level of educational attainment of parents, lack of resources, lack of insurance coverage, limited time spent in the hospital, lack of a medical home, changing addresses, no phone, and transportation issues all contribute to the challenges that we face in reducing the loss to follow-up. Parents struggling to provide the basic necessities of life for their children are often overwhelmed and either reluctant or unable to take time from work to obtain follow-up hearing care for their newborns. Staffing shortages at the hospitals, as well as funding for new equipment deemed necessary, especially with Michigan’s still high unemployment and poverty rates are also barriers.

A number of social determinants also affect follow-up throughout Michigan, including lack of awareness of hearing loss and its effects on infant development, lack of widespread public transportation, and difficulty in accessing health care providers with approximately 45% of births in Michigan covered by Medicaid. In Southeastern Michigan, these factors are compounded by the high rate of poverty. As mentioned in the Assessment of Needs section, Wayne County ranks third in the state with more than

a third (37.9%) of all children under 18 years living in poverty.

Another concern that has been reported is the need for continuous update of culturally sensitive materials and continued education of staff. As indicated in the needs assessment on page 2, Michigan EHDI recognizes the need for culturally appropriate language in outreach and educational materials, and sensitivity of staff in reaching the various populations in our state. This will be achieved in part through collaboration with the Wayne CHAP and their connections with the Arab American Chaldean Council of Dearborn, the American Indian Health Center, and the Hispanic population of Detroit to assess all EHDI printed materials. Additional brochures and materials will be evaluated for cultural sensitivity and translated into languages to reach our larger minority populations in future years.

As reported above, the Michigan Department of Education's Early On program, a predominate source of early intervention services, is under the regulatory requirements of FERPA, while MDCH is under the regulatory requirements of HIPAA. In Michigan, this causes an obstacle in sharing information on intervention between the EHDI and the Early On programs. This has been an issue for a number of years. EHDI will continue to work with Early On to seek additional ways to reduce the numbers of infants lost to follow-up/lost to documentation, including working with the MDCH Legal Department to draft a data sharing agreement between departments.

In the next three years (2014-2017), Michigan EHDI will employ the Learning Collaborative (Statewide and Region 1) and Regional Consultant (Region 3) approach to improving loss to follow-up after failed newborn hearing screening.

A Statewide Learning Collaborative has been established which will meet via conference call at least monthly to direct statewide as well as assisting with local and regional efforts. This team consists of EHDI staff and partners both inside and outside of state government, as follows:

- EHDI Coordinator Jeff Spitzley
- EHDI Community Consultant, Dee Robertson
- EHDI Program Consultant, Nancy Asher
- EHDI Data Analyst, Erin Estrada
- EHDI Parent Consultant, Karen Wisinski
- MDCH Early Intervention/Home Visiting Consultant, Tiffany Kostelec
- MI Department of Education, Early On® Representative Vanessa Winborne
- MDCH Hearing & Vision Screening Consultant, Jennifer Dakers
- Wayne CHAP Chief Executive Officer, Jametta Lilly
- Pediatric Audiologist, Adrianne Fazel, Au.D.
- Parent of Child who is Deaf or Hard of Hearing, Julie Tackett
- President, Michigan Deaf Association, Todd Morrison
- Michigan Deaf Community member, Diana McKittrick

As described in the Methodology section, Michigan will focus aims to reduce loss to

follow up in two regions of the state, Region 1 in Southeastern Michigan and Region 3 in Southwestern Michigan.

In Region 1, two smaller Learning Collaboratives have been established to identify and revise change strategies for successful implementation in large birthing hospital systems.

The first, Henry Ford Hospital, will immediately begin focus on reducing the number of babies referring (not passing) the newborn hearing screening, with the aim of having fewer babies needing follow-up. This Learning Collaborative team consists of the following personnel:

- EHDI Community Consultant, Dee Robertson
- EHDI Program Consultant, Nancy Asher
- EHDI Data Analyst Erin Estrada
- Pediatric Audiologist Adrianne Fazel
- Pediatric Audiologist Jessica Messer
- Henry Ford Hearing Screener Carol Uniewski
- Henry Ford Hearing Screener Barb Farley
- Parent of a Child who is Deaf or Hard of Hearing, Julie Tackett.

A second Learning Collaborative Team will be based in the Wayne Child Healthcare Access Program (WCHAP) and through a grant funded contract will identify a WCHAP-EHDI specialist to provide direct hearing follow-up and educational services to 100-125 identified children and provide appropriate linkages and reporting in the first year of this grant, while identifying change strategies that can be spread throughout the region. This Learning Collaborative Team will consist of the following personnel:

- EHDI Community Consultant, Dee Robertson
- EHDI Program Consultant, Nancy Asher
- EHDI Epidemiologist Evelyn Quarshie
- Parent of a Child who is Deaf or Hard of Hearing, Julie Tackett.
- WCHAP/EHDI Specialist (To Be Determined)
- Wayne County Early Intervention Specialist Julie Gerrity
- Pediatrician Latisha Carter-Blanks, M.D.
- Pediatric Audiologist, Karen Piggott
- Wayne CHAP Chief Executive Officer, Jametta Lilly

In Region 3 of Michigan, a Regional Consultant approach will be employed for identification of change strategies and building trust relationships with birth hospital staff and medical providers for improvements to the hospital hearing screening and follow-up systems currently in place. The Regional Consultant model for improvement is borrowed from Michigan's neighboring state of Indiana, where this method has shown to be highly successful in improving loss to follow up rates. As the Regional Consultant is hired (Position Description is provided in Attachment 3) and change strategies are identified and tested for success, tracking of infants referring from hearing screening and loss to follow-up data will be gathered and

followed carefully for indications of improvement or need to further adjust strategies utilizing PDSA methodologies.

EVALUATION & TECHNICAL SUPPORT

Effective Tracking of Performance Outcomes:
Currently, the EHDI data system can generate quarterly reports that are provided to each birthing hospital in Michigan with statistics on hearing screens performed, numbers passed and referred, and use of which screening equipment, as well as numbers and percentages of infants receiving follow up services after failure to pass the newborn hearing screening.

With the integration of the new EHDI web-based data reporting system during the three years of this grant, there is some concern that data reporting may be difficult to achieve with true accuracy during the transition from old system to new. EHDI staff and system programmers are working diligently to build the system to make this transition as seamless as possible while fully recognizing the importance of data accuracy.

For the hospitals chosen to launch the PDSA methodology for quality improvement in Michigan, Learning Collaborative personnel will track data for infants screened using the change strategies identified and adjusted as needed.

Hearing screenings for Out of Hospital births are currently reported at about 4% for 2011. Numbers for 2012 will be available in early 2014, but are expected to be only slightly better. With concentrated efforts during 2013 and moving forward into the new Midwife Project detailed above, hearing screening and data collection for this population is expected to increase greatly.

As Michigan's Midwife Project gets underway with equipment and training provided, screenings for this population are expected to increase dramatically over the next three years. The number of hearing screens will be tracked for 2014-2017 through the EHDI data systems and analyzed for possible changes to decrease loss to follow-up even more.

Annual analysis of Barriers Survey will continue, with the dual aims of identifying additional barriers to follow-up that can be targeted for change to reduce loss to follow-up as well as receiving actual follow up information to remove young children from the lost to follow up and documentation lists.

As successful change strategies are identified, these strategies will be spread to other hospitals in the Learning Collaboratives that are underway for testing in the other hospitals and Regions being utilized for improvement methodology via conference calls and emails describing the change strategies in specific detail.

As multiple hospitals identify similar success with specific strategies, these will be written as more formal aims for all hospitals in Michigan and the information disseminated as special announcements in the Quarterly Birth Hospital Newsletter that goes to all 85 birthing hospitals for improvement in service delivery.

The 2013 Michigan EHDI Annual Update is currently under production for a five year (2007-2011) analysis of the Michigan EHDI program and is expected to be published in early January, 2014. This document will provide an overview of the EHDI program, data over several years, family support programs, and future initiatives.

Evaluation of all grant related activities is ongoing, as each activity is completed or on an annual basis, whichever comes first. Specific EHDI staff members are assigned to take the lead on each activity and are responsible to the EHDI Coordinator for continued progress, which will be reported as required by HRSA/MCHB.

ORGANIZATIONAL INFORMATION

The mission of the EHDI program is the national EHDI goals of screening all newborns for hearing loss no later than one month of age, a diagnostic evaluation no later than three months of age for all infants who do not pass the hearing screen, and that all infants identified with a hearing loss receive appropriate early intervention services no later than six months of age. The EHDI program is located within the Michigan Department of Community Health (MDCH), the state community health agency with public health, mental health, and the Medicaid agency. The EHDI Program is organizationally placed within the Infant Health Unit of the Women, Infant and Family Health Section; Division of Family and Community Health; Bureau of Family, Maternal Child Health; Public Health Administration. An organization chart is located in Attachment 5 to identify work areas within the department the program works with to successfully meet its goal and objectives.

With placement in this Division and the focus on healthcare throughout the life cycle for all of Michigan’s citizens, the EHDI program is extremely well positioned for access to programs for laying a great foundation for the youngest members. Access to cultural, ethnic and racial equity training through the PRIME (Practices to Reduce Infant Mortality Through Equity) Program, in home follow-up for children lost to follow-up and documentation through the newly established Home Visitation Program and the Medicaid-eligible Maternal-Infant Health Program (MIHP), and collaboration with the School Age Hearing and Vision Screening programs, all will assist in efforts to provide the best services possible to children who are Deaf and Hard of Hearing in Michigan.

Michigan EHDI Work Plan

Aim Statement #1

By March 2015, the Henry Ford Learning Collaborative Team will decrease the overall refer rate at Henry Ford Hospital to 6% from 8% in the well-baby nursery in 2012.					
Changes / Activities (sequence as needed)	Start Date	Estimated Completion Date	Lead Staff and Partner Support (where applicable)	Process Measures	Outcome Measures
1) Two Henry Ford Hospital "super screeners" members of Henry Ford will undergo full re-training and competency evaluation on hearing screening equipment for possible improvement of methodology.	4/1/2014	7/30/2014	Nancy Asher (EHDI), Adrianne Fazel, Au.D, and Henry Ford Hospital Screeners Carol Uniewski and Barbara Farley.	EHDI Screener Competency checklist completed Training date completed.	Competency checklist completed with 90% accuracy on a minimum of 10 babies by both hearing screeners.
2) Super screeners will take newly updated MI EHDI Hearing Screening Course for update of JCIH and EHDI guidelines.	4/1/2104	5/1/2014	Carol Uniewski and Barbara Farley.	Course completed	Course completed with minimum 80% score.
3) number of babies per week that refer (fail) newborn hearing screening for each screener	4/1/2104	10/1/2014	Carol Uniewski and Barbara Farley	Weekly refer rates for each screeners obtained for baseline, then weekly data after retraining for comparison	Refer rates improved for both screeners by 2% in the first 6 months of this grant.
4) Spread successful change strategies to additional hearing screeners at Henry Ford Hospital.	10/1/2014	4/1/2015	Nancy Asher (EHDI), Adrianne Fazel, Au.D, and Henry Ford Hospital Screeners Carol Uniewski and Barbara Farley.	Weekly refer rates gathered for comparison to determine change success for all screeners.	Overall number of babies referring from newborn hearing screening in the well-baby nursery reduced by at least 2% in the 1st year of this grant.

5) Spread successful change strategies to additional hearing screeners throughout Michigan.	12/1/2014	3/31/2017	EHDI Staff; Statewide Learning Collaborative Team; Region 3 Consultant;	Quarterly EHDI Newsletters published; presentations given to hearing screeners and audiologists at conferences and during hospital site visits.	75% of Michigan hospitals with refer rates of 8% or higher in well-baby nurseries reduced refer rates by 2% by 3/31/2017.

Aim Statement #2

Loss to Follow-up will decrease by 5% per year (2014-2017) in Region 1 of Michigan via work of a Wayne Children's Access Program (WCHAP)/EHDI Specialist.					
Changes / Activities (sequence as needed)	Start Date	Estimated Completion Date	Lead Staff and Partner Support (where applicable)	Process Measures	Outcome Measures
EHDI will contract with WCHAP to provide a specialist to work directly with hospitals and medical providers at the Detroit Medical Center Hospitals to reduce LTF/D.	4/1/2014	3/31/2015	Jeff Spitzley, EHDI Coordinator, Nancy Asher, EHDI Program Consultant, Jametta Lilly, WCHAP CEO.	Identification of specialist done by April, 2014, with interviews and contract to be completed before 7/1/2014.	A Region 3 Consultant began duties no later than July 1, 2014.
WCHAP/EHDI Specialist will receive training on EHDI 1-3-6 goals and LTF/D issues, Complete EHDI Online Screener Course, and "shadow" EHDI Program Consultant on 5 visits to Wayne County medical providers.	6/1/2014 or sooner	8/1/2014	Jeff Spitzley, EHDI Coordinator, Nancy Asher, EHDI Program Consultant, Jametta Lilly, WCHAP CEO, and WCHAP/EHDI Specialist.	1) Online EHDI Hearing Screener Course completed. 2) Met with EHDI staff for training on EHDI 1-3-6 goals and LTF/D issues. 3) Shadowed EHDI Program Consultant on at least 5 visits to Wayne County medical providers.	1) Course completed with minimum 80% passing score. 2) Training on goals and issues by 8/1/2014. 3) Job shadow completed with EHDI Program Consultant on 5 visits by 8/1/2014.
WCHAP/EHDI Specialist provide direct hearing follow-up and educational services to parents and providers for 100-125 identified children.	8/1/2014	3/31/2015	WCHAP/EHDI Specialist, EHDI Program Consultant, , Wayne Learning Collaborative (WLC) Team.	Weekly conference calls completed with EHDI Staff (Program Consultant and Parent Consultant) and other members of the WLC to identify and adjust change strategies.	Summary report provided monthly by WCHAP/EHDI Specialist.

Successful change strategies will be spread to the remaining parts of the Region and State.	4/1/2014	3/31/2017	WCHAP/EHDI Specialist, Jeff Spitzley (EHDI Coordinator), EHDI Staff and WLC Team	Monthly conference calls with WLC team completed, data analyzed quarterly by hospital and region,	LTF/D decreased by 5% per year (4/1/2014-3/31/2017) in Michigan Region 3.

Aim Statement 3

Reduce Loss to Follow Up for infants born in Out-of-Hospital settings by 10% per year for three years (2014 to 2017) by Midwife Project Partners.					
Changes / Activities (sequence as needed)	Start Date	Estimated Completion Date	Lead Staff and Partner Support (where applicable)	Process Measures	Outcome Measures
1) Provide midwives with hearing screening equipment for screening infants born at home.	3/1/2014	6/1/2014	Nan Asher (EHDI Program Consultant), Shannon Palmer (Audiologist), Jennifer Berrigan (MIDHHDBP) and Laurie Zoyiopoulos, Midwife.	Grant funding secured through collaboration with Michigan Coalition for Deaf, Hard of Hearing and DeafBlind People (MIDHHDBP) and Central Michigan University Audiology Clinic utilized to purchase 14 pieces of hearing screening equipment for shared use by Michigan midwives.	100% of equipment and 1st year disposables to midwives purchased and delivered by 6/1/2014.
2) Provide regional training on use of equipment at time of delivery.	3/1/2014	6/1/2014	Nan Asher (EHDI Program Consultant), Shannon Palmer (Audiologist), Jennifer Berrigan (MIDHHDBP) and Laurie Zoyiopoulos, Midwife	4 regional trainings throughout Michigan provided on newborn hearing screening and proper use of hearing screening equipment to midwives.	Regional trainings completed by 6/1/2014.

3) Monitor number of hearing screenings completed.	5/1/2014 or upon delivery of equipment & training.	Ongoing, quarterly.	Nan Asher (EHDI Program Consultant) and Erin Estrada (EHDI Data Analyst).	Reporting of initial hearing screen and (one rescreen for infants not passing the initial screen) for babies born in out of hospital settings monitored quarterly.	Newborn hearing screening increased by 10% per year (from 4% in 2011**)** for 2014-2017, as evidenced by reports received by EHDI.
4) Assistance provided for questions and troubleshooting as needed	5/1/2014 or upon delivery of equipment & training	Ongoing.	Nan Asher (EHDI Program Consultant), Shannon Palmer (Audiologist), Jennifer Berrigan (MIDHHDBP) and Laurie Zoyiopoulos, Midwife	Telephone assistance or face-to-face meetings provided as needed for resolution of problems as they occur.	90% of phone calls to EHDI staff for assistance returned within 48 hours, 100% within 72 hours.
4) Annual provision of renewal training for experienced midwives, calibration of equipment, and supply of disposables for each of three years as provided in grant from Carls Foundation.	December 2014	December, 2017	Nan Asher (EHDI Program Consultant), Shannon Palmer (Audiologist), Jennifer Berrigan (MIDHHDBP) and Laurie Zoyiopoulos, Midwife	Re-training of midwives and calibration of equipment offered at least once per calendar year during semi-annual midwives conference.	80% of Michigan midwives completed the midwife competency checklist annually with a score of 90% or better.

Aim Statement #4

Loss to Follow-up will decrease by 5% per year (2014-2017) in Region 3 of Michigan via work of a Regional Consultant.					
Changes / Activities (sequence as needed)	Start Date	Estimated Completion Date	Lead Staff and Partner Support (where applicable)	Process Measures	Outcome Measures
EHDI will identify and contract with a part time Regional Consultant to work directly with hospitals and medical providers in Region 3 to reduce LTF/D.	4/1/2014	7/1/2014	Jeff Spitzley, EHDI Coordinator and Michelle Garcia, EHDI Audiologist and Follow-up Consultant.	Posting of the position description done by April, 2014, with interviews and contract completed before 7/1/2014.	A Region 3 Consultant began duties no later than July 1, 2014.

Region 3 Consultant will begin visits and contacts with hospitals in the region, starting with the three hospitals with the highest LTF.	7/1/2014	3/31/2015	Region 3 Consultant, Jeff Spitzley (EHDI Coordinator), Statewide Learning Collaborative (SLC) Team.	Weekly conference calls with EHDI Staff completed (Coordinator and Follow-Up Consultant) for 5 months, Bi-weekly phone or email thereafter.	At least one visit(s)/contact(s) completed per hospital by 3/31/2015 in Region 3. Summary report provided monthly by Region 3 Consultant.
Change strategies will be identified for hospitals in Region 3 as visits and calls continue through year 3.	7/1/2014 or upon earlier contract date.	3/31/2017	Region 3 Consultant, Jeff Spitzley (EHDI Coordinator), EHDI Staff and SLC Team	Monthly conference calls with SLC team completed, data analyzed quarterly by hospital and region,	LTF/D decreased by 5% per year (4/1/2014-3/31/2017) in Michigan Region 3.

Aim Statement #5

LTF/D will be reduced 5% or more each year 2014-2017 from diagnosis of permanent hearing loss to entry to early intervention via work of EHDI staff and the Statewide Learning Collaborative Team.					
Changes / Activities (sequence as needed)	Start Date	Estimated Completion Date	Lead Staff and Partner Support (where applicable)	Process Measures	Outcome Measures
1) A data sharing agreement will be reached between MI Department of Community Health and Michigan Department of Education for enrollment into Early Intervention data of children enrolled with diagnosed hearing loss.	1/1/2014	12/1/2014	Statewide Learning Collaborative Team, Jeff Spitzley (EHDI Coordinator), MDCH Legal Department representative, MDE Legal Department representative.	EHDI staff met with MDCH legal department and drafted an agreement for sharing of data with MDE in 2014. MDCH legal department collaborated with MDE legal department for same. Members of Statewide LC will assisted with these efforts.	Agreement for data sharing will be reached by December, 2014.

2) Parent Guides in the Guide By Your Side (GBYS) program gather information on enrollment into early intervention when conducting family visits and follow-ups; report to EHDI with parental consent.	2011	Ongoing	Jeff Spitzley, EHDI Coordinator, Karen Wisinski, EHDI Parent Consultant & Guide By Your Side; GBYS Parent Guides.	Early intervention enrollment data collected by Parent Guides with parent consent to reduce LTF.	Monthly GBYS reports received and database updated.

Aim Statement # 6

The Michigan Statewide Learning Collaborative Team will develop strategies to reduce Loss to Follow-Up or Documentation by at least 5% per year from 2014-2017.					
Changes / Activities (sequence as needed)	Start Date	Estimated Completion Date	Lead Staff and Partner Support (where applicable)	Process Measures	Outcome Measures
The LC Team will meet to decide priority and work plan of aims.	4/1/2014	Ongoing through 3/31/2017	EHDI Coordinator Jeff Spitzley and Statewide Learning Collaborative (SLC) Team.	Background Information on loss to follow-up & documentation provided to all SLC Team members one week prior to meeting. Priority of aims, action steps, and responsible parties determined & timelines assigned.	Clear, measurable timeline of activities toward the highest priority aims set and responsible persons assigned. Future Meeting schedules, format and/or locations (face-to-face, conference call, etc) confirmed.