


A Decade of Progress & Challenges

The Michigan Midwives Collaborative Project's Journey


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Learning Objectives



Participants will gain an in-depth understanding of the Michigan Midwives Collaborative Project's decade-long journey.



Learners will be able to identify the key factors and considerations involved in implementing UNHS programs for home-birthed babies.



Attendees will have a deeper appreciation for the impact of the Michigan Midwives Collaborative Project on identifying Deaf or Hard of Hearing babies born outside of hospitals.

Multiple Hats



EHDI representative for Michigan Coalition for Deaf and Hard of Hearing People (MCHDHHP)

MCDHHP Treasurer and MW project facilitator*

EHDI Program Consultant

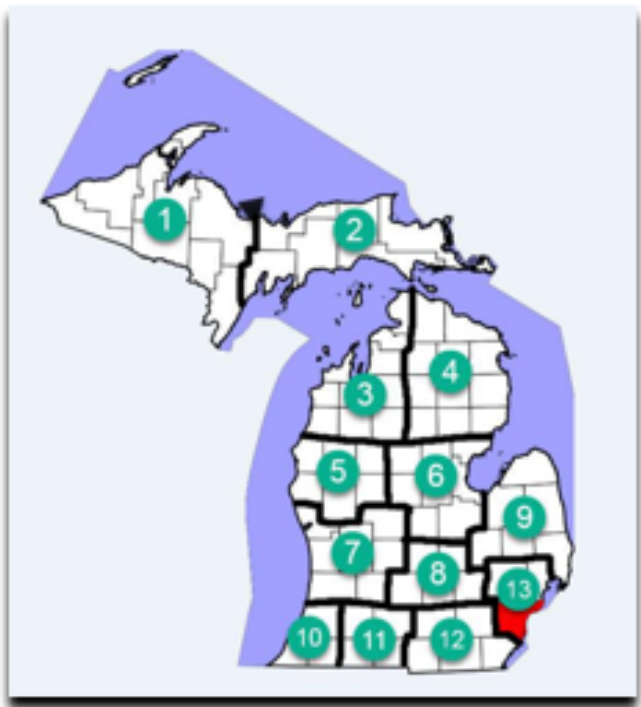
* In 2011-2013, less than 1% of the births were home births, approximately 800 per year.

Why Michigan Coalition for Deaf and Hard of Hearing People?

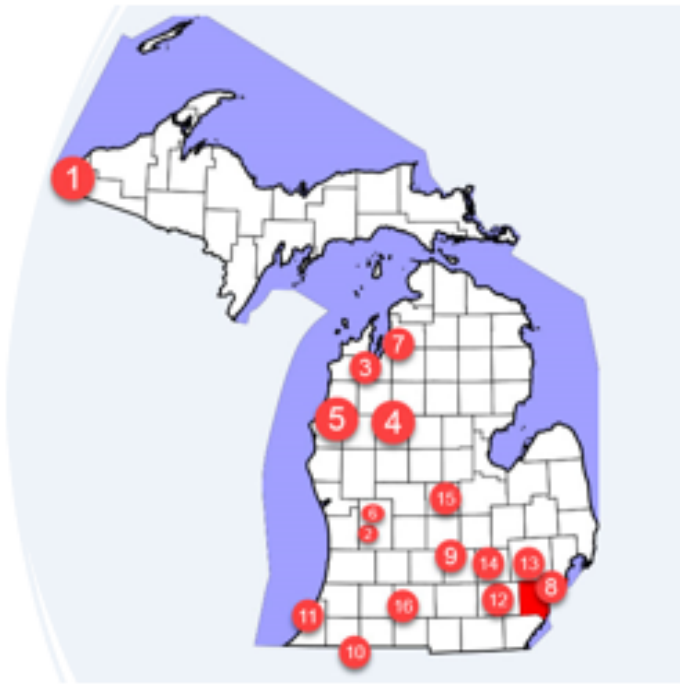
- 2013: grant written, fall 2013; awarded late in 2013.
 - Choice of Automated Auditory Brainstem Response (AABR) versus Otoacoustic Emissions (OAE): AABR chosen for lower false refer rate.
- 2014: Machines distributed in spring after online and hands-on training for initial 47 midwives and their students.
- 2016: One new machine purchased.
- 2018/19: 10 new machines purchased.
- 2023: two different new machines purchased to test.
- Total current machines = 28.

Lesson Learned: Expect adjustments in placement

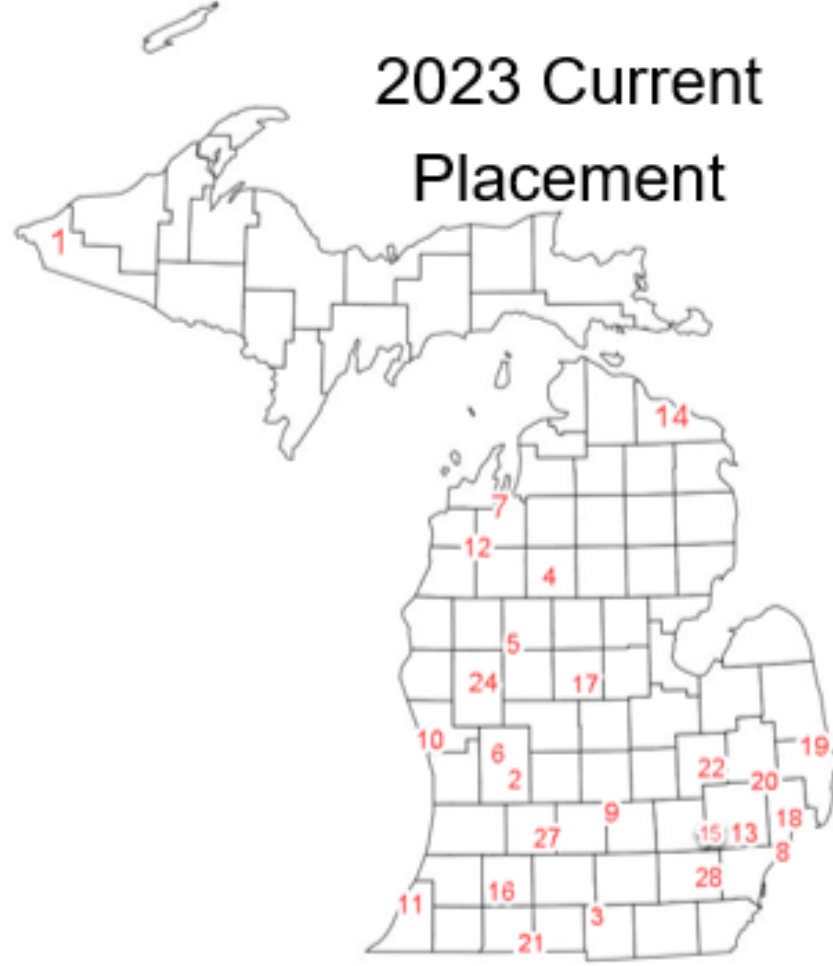
2013 Proposed Placement



2016 Actual Placement



2023 Current Placement



Importance of Machine Placement



Many midwives would love their “own” machine.

Not practical due to costs:

- Initial purchase of machine.
- Insurance.
- Calibration.
- Maintenance.
- Program is self-funded.

Machines are cost-effective and work best if EACH machine is screening around 40-50 babies a year. (Average of at least one screening per week is the goal.)

Challenges Encountered



- Midwife licensure.
- Supply costs.
- Machine glitches.
- COVID pandemic.

Impact of Licensing

- Aug 2019- The state of Michigan required licensing of Certified Professional Midwives (CPMs).
- More midwives became interested in providing hearing screens for the first time.
- CPMs were already trained and had incorporated Newborn Screening (NBS) and Newborn Hearing Screening (NBHS) into their practice.
- Midwife students who precepted under a CPM doing screens were much more likely to continue in their practices.
- Ongoing training is crucial.

Mandated Hearing Screening & Reporting

“...To require health care facilities, or health care **professionals** in attendance at a birth, to test newborns for hearing impairment, or see to it that they are tested within 30 days.”

“...that person or facility shall report to the department, on a form as prescribed by the department, the results of all hearing tests and screens conducted on infants who are less than 12 months of age.”

Source: House Bill 5482 of 2007 & Public Act 31 of 2006

Supply Costs Soar



- After two acquisitions, Audiology Systems and Otometrics, supplies quadrupled in costs and expiration dates shortened.
- Cost of ear tips prices with multiple color options also increased.
- Replacement cables cost doubled and cost of batteries tripled.
- Solution: find alternative suppliers and alternative electrodes, ear tips and raise prices.

Machine Glitches



2018 New Grant: 10 more machines

Half the new machines had issues.

- Two were sent back to Denmark for refurbishing.
- Three needed software updates to work correctly.

Took two years to resolve.

Traveling machines were used to facilitate transitions.

Solution: look at other machines to start replacing older ones. Currently, testing two Q Screens.

COVID Pandemic Impacts

- Increased number of home births.
- Annual calibrations coincides with MMA spring Conferences: 2020 CANCELLED.
 - Delays in missed screens from calibration time was avoided– tech visited each one, except in the Upper Peninsula.
 - Attempted Zoom online training.
- Supply chain issues:
- 2021 limited new location – Amish Birth House.
- 2022 back to MMA conferences.

Then and Now

2015-2016 data*

Average Number of Births, Infants Screened, and Percentage of Infants Screened Per Midwife for Each Midwife Group 2015–2016

	Average Number of Births		Average Number of Infants Screened		Average Percentage of Infants Screened
	N	Mean (SD)	N	Mean (SD)	Mean (SD)
Host Midwives	571	38.07 (29.64)	453	30.20 (23.82)	82.08 (18.39)
Access Midwives	513	20.52 (13.66)	243	9.72 (7.57)	51.56 (29.68)
Education Midwives	140	35.00 (12.46)	83	20.75 (7.14)	59.86 (7.95)
Non-Participants	1,356	19.94 (37.03)	87	1.28 (2.53)	14.28 (27.27)

Note. Host Midwives: n = 15; Access Midwives: n = 25; Education Midwives: n = 4; Non-Participants: n = 68.

2020-2021 preliminary data*

Average Number of Births, Infants Screened, and Percentage of Infants Screened for Each Midwife Group in 2020 and 2021

	Average Number of Births		Average Number of Screened Infants		Average Percentage of Infants Screened
	N	Mean (SD)	N	Mean (SD)	Mean (SD)
Host Midwives	1265	43.62 (34.01)	1166	40.21 (32.92)	86.28 (24.98)
Access Midwives	487	16.23 (19.51)	254	8.46 (10.11)	62.05 (40.00)
Education Midwives	383	38.30 (45.39)	82	8.20 (9.52)	29.41 (29.80)
Non-Participants	576	27.42 (42.82)	64	3.05 (8.44)	22.81 (36.87)

Note: Host Midwives: N=29; Access Midwives: N=30; Education Midwives: N=10; Non-Participants: N=21

* Data only include babies who also received a bloodspot.

Facilitating High Screening Rates Among Host Sites

- Signed agreements.
- Analyze data.
- Review of location.
- Removal of machine.
- Relocation of machine.

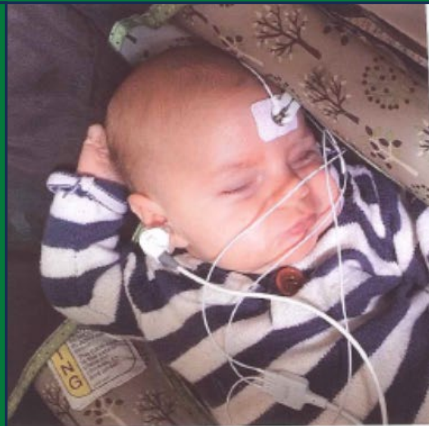


Early Hearing Detection
and Intervention (EHDI)

Lucy's Home Birth Hearing Screening Story



Upcoming Challenges:



- Replacing older machines.
- Recruiting non-participating midwives.
- Combined training with NBS, less time for hands on training.
- Locate lower cost ear tips for Qscreens.
- Streamlining reporting process.

Questions?



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