Together for Hearing Health: Strengthening Newborn Screening in Community Birth Settings



Uniting midwives, audiology, external partners and public health to support early hearing and language acquisition

Michigan Midwives Association
Central Michigan University –Audiology
Michigan Dept of Health and Human Services
- Early Hearing Detection and Intervention Program
Michigan Coalition for Deaf, Hard if Hearing and DeafBlind People

Presenters

- Patrice Bobier CPM, LM – **Michigan Midwives Association** Board Member; Owner Full Circle Midwifery
- Shannon Palmer Au.D. – **Central Michigan University**, Audiology Dept
- Nan Asher, MLS (Dual roles)
  - Program Consultant for **MDHHS-EHDI**
  - & Treasurer for **Michigan Coalition for Deaf and Hard of Hearing People**.

Learning Objectives

- Describe the challenges and barriers faced by midwives and out-of-hospital birth settings in meeting Michigan's newborn hearing screening mandate and explain why collaborative solutions are necessary.
- Identify the roles, perspectives, and contributions of key partners—including midwives, the Michigan EHDI program, CMU audiology, and the Michigan Coalition for Deaf, Hard of Hearing and DeafBlind People—in building a sustainable statewide hearing screening support system.
- Apply lessons learned from the 2013–present partnership to develop strategies for creating trust, supporting implementation, and maintaining ongoing monitoring and feedback for newborn hearing screening in non-traditional birth settings.



Three tests are done to check your baby's health 24-36 hours after birth:

- Hearing screening
- Heart screening
- Blood spot screening

What is Newborn Screening?

Knowledge Check

- What do you know about homebirths and hearing loss?
- Let’s check some numbers



1st two years vs. now

2015-2016 data

2023-2024 preliminary data (most recent years)

Average Number of Births, Infants Screened and Percentage of Infants Screened per Midwife for each Midwife group

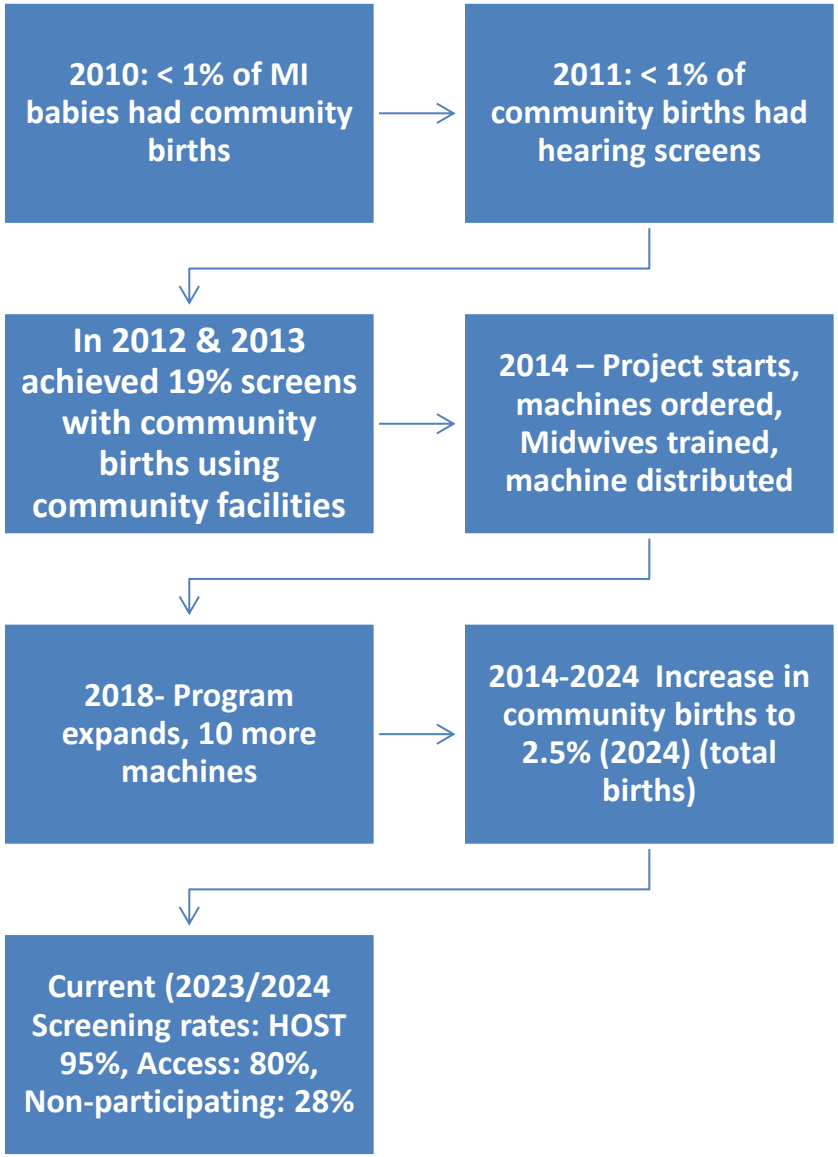
	Ave number of births		Ave # of Infants Screened		Ave % of infants Screened	Ave number of births		Ave # of Infants Screened		Ave % of infants Screened
	N	Mean (SD)	N	Mean (SD)	Mean (SD)	N	Mean (SD)	N	Mean (SD)	Mean (SD)
Host	571	38.07 (29.64)	453	30.20 (23.82)	82.08 (18.39)	1276	39.88 (32.71)	1184	37.00 (30.70)	94.72 (8.91)
Access	513	20.52 (13.66)	243	9.72 (7.57)	51.56 (29.68)	740	18.5 (28.57)	618	15.45 (25.51)	79.31 (35.10)
Education	140	35.00 (12.46)	83	20.75 (7.14)	59.86 (7.95)	140	30.81 (27.73)	100	6.25 (7.89)	25.54 (31.70)
Non-particpanting	1356	19.94 (37.03)	87	1.28 (2.53)	14.28 (27.27)	635	30.24 (64.89)	51	2.43 (5.04)	28.97 (41.83)

Note: Host Midwives n=15; Access Midwives = 25; Education Midwives n=4; non participants = 68

Host Midwives n=32; Access Midwives = 40; Education Midwives n=16; non participants = 21

Additional Note: A large standard deviation (SD) means that the midwives in that group vary a lot from one another. In other words, Some midwives have a much higher or lower number than the group average.

Results and Impact thru the years



The Problem

- MI law (2007): Newborn Hearing Screening required.
- 50% of missing screens in the state were from community births.
- Barriers: cost, access, travel burden.

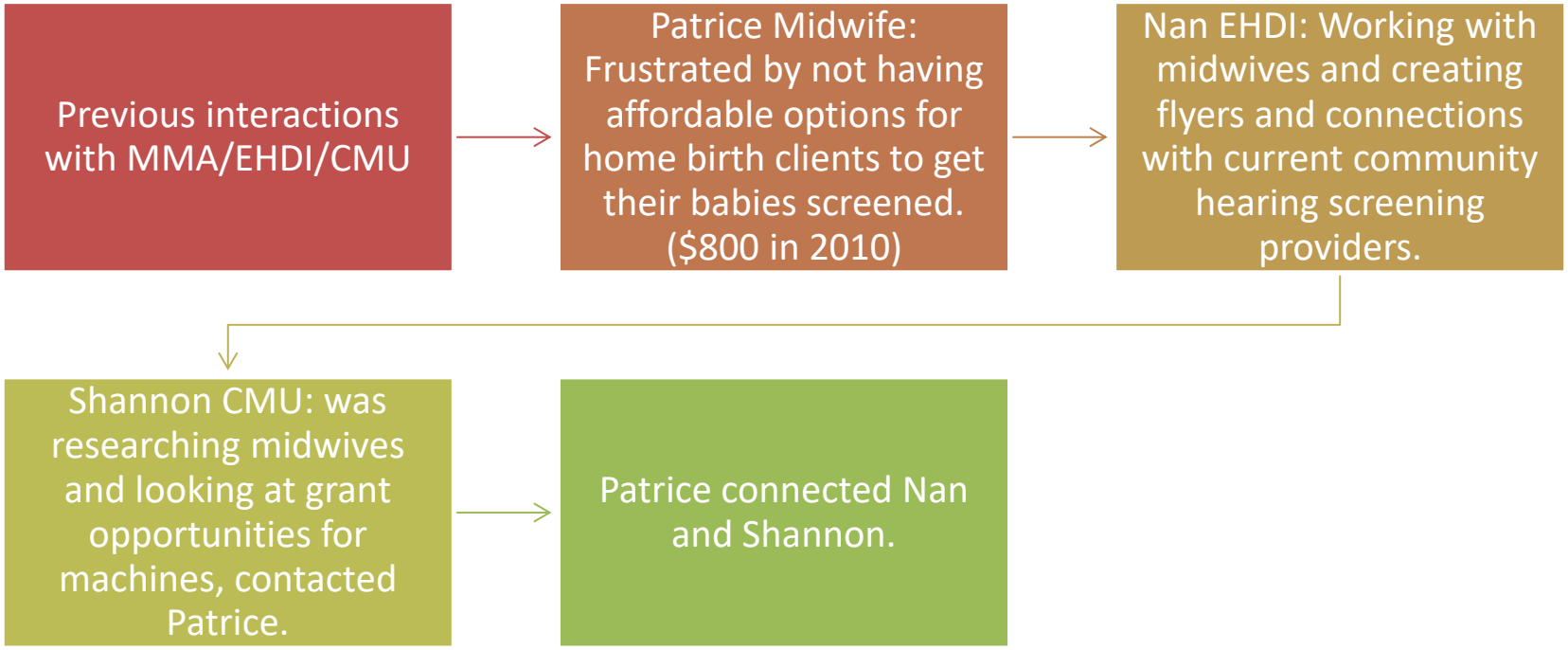




Historical Perspectives

- Shannon studied midwives' attitudes on NBHS
- Half our M/I # = homebirths.
- Patrice met Linda Hazard, (VT) providing OAE.
- Nan worked on community locations for community birthed hearing screens. (Plateaued quickly at 19%).
- EHDI previously worked with MMA for a machine.

How'd we get Here?



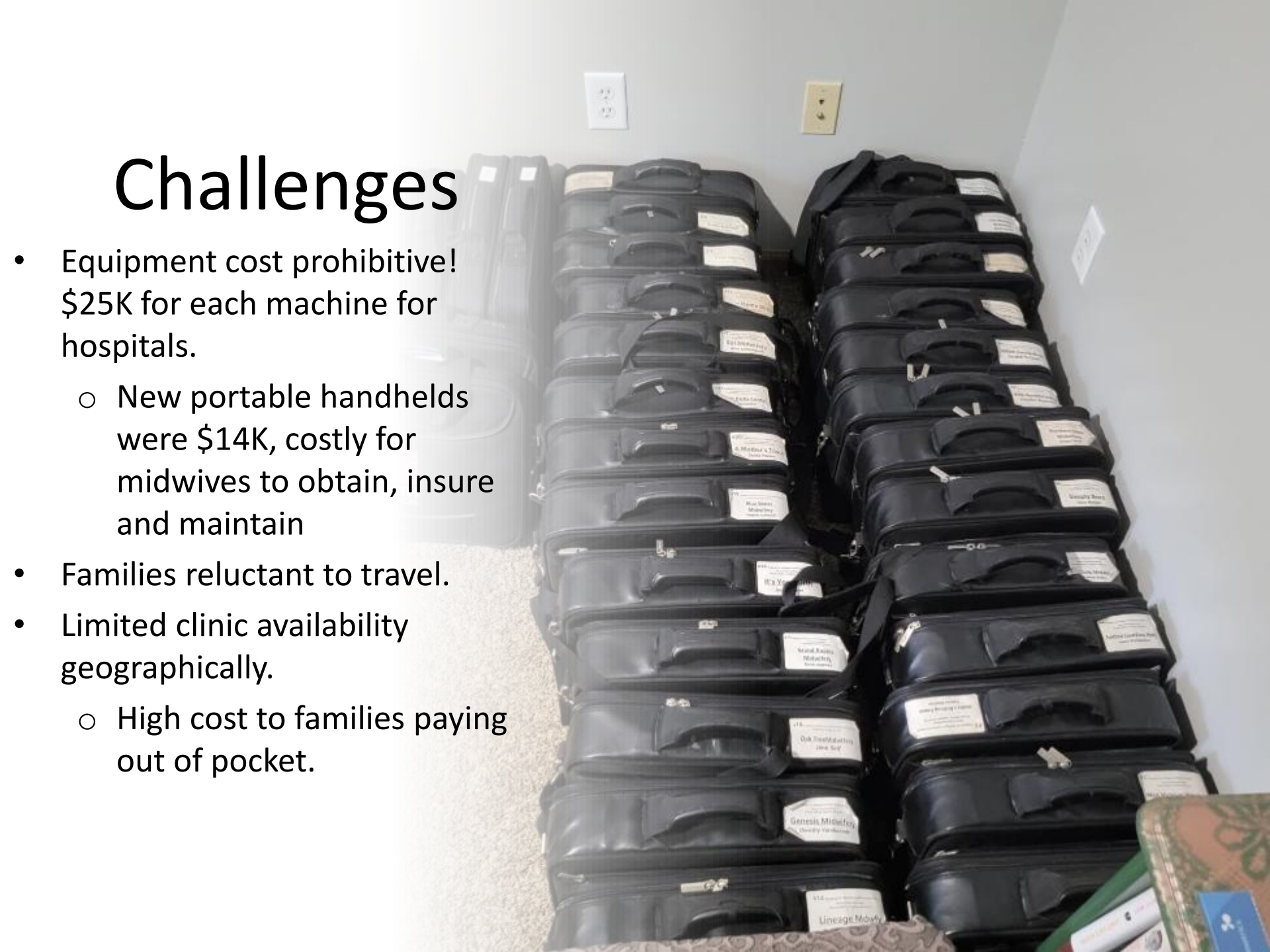
Partner Roles

- MMA: Advocated compliance
- CMU: Training & evaluation
- MI-EHDI: Data & oversight
- MCDHHP: Secured grants
  - Owner of the machines
  - Arranges calibrations
  - Sell supplies with a surcharge to fund program



Challenges

- Equipment cost prohibitive! $25K for each machine for hospitals.
  - New portable handhelds were $14K, costly for midwives to obtain, insure and maintain
- Families reluctant to travel.
- Limited clinic availability geographically.
  - High cost to families paying out of pocket.



We Needed a Grantee

MMA busy, working on Licensure.

EHDI was not a 501(c) 3 and not eligible for a grant from the grantee that hospitals used.

EHDI was a member of the Michigan Coalition for Deaf, Hard of Hearing and DeafBlind People since it's inception.

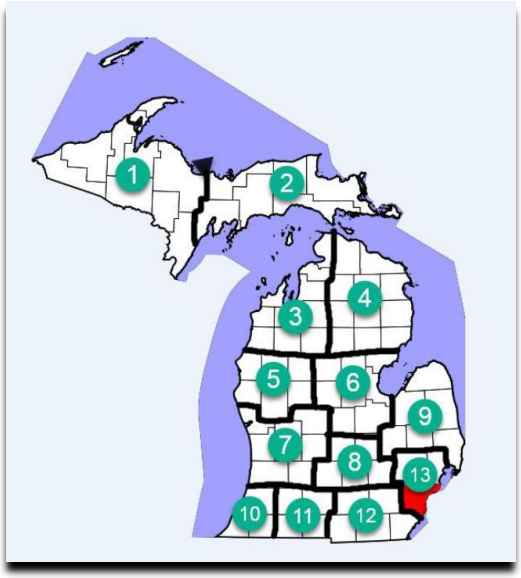
Coalition long supported Newborn Hearing Screen, since 1985 when it was formed.

Collaborative Solution

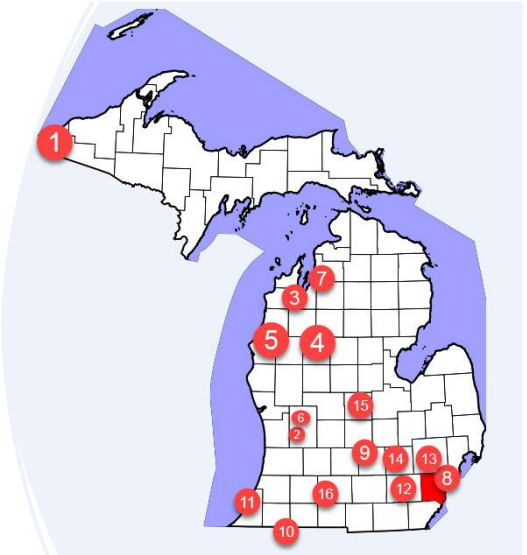
- Grants from Carls Foundation (2014, 2018, 2025)
- Equipment loan program
- CMU training & support
- Cost-sharing model ($10 per baby with required supply purchases.)
- Busier machines support less busy machines

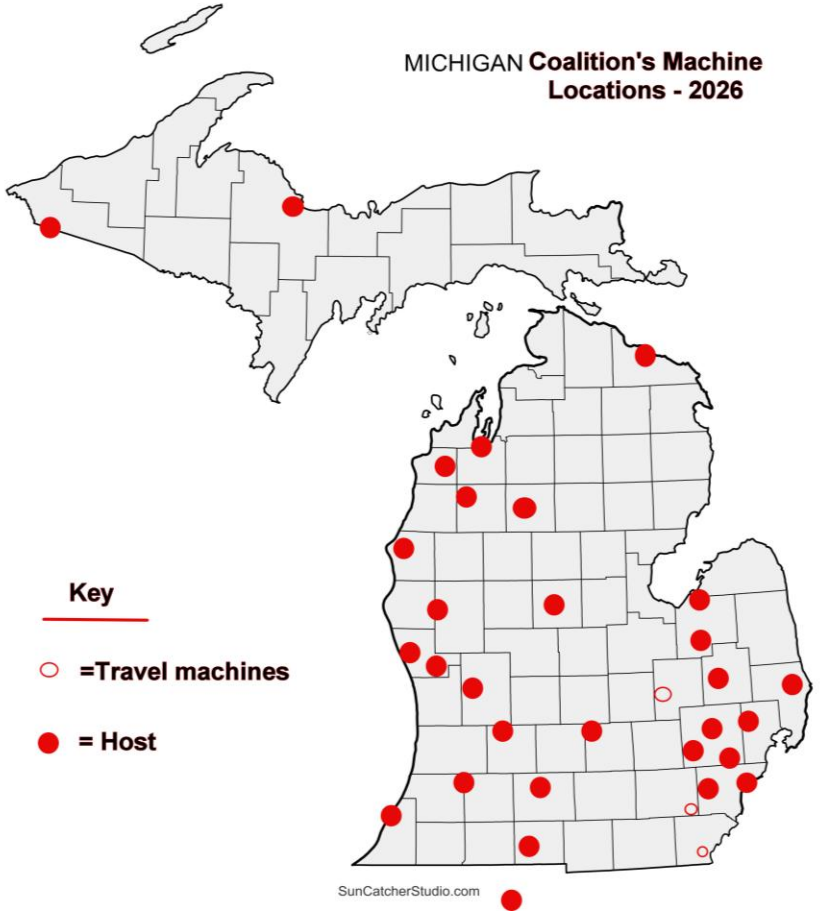
Lesson Learned: Expect adjustments in placement

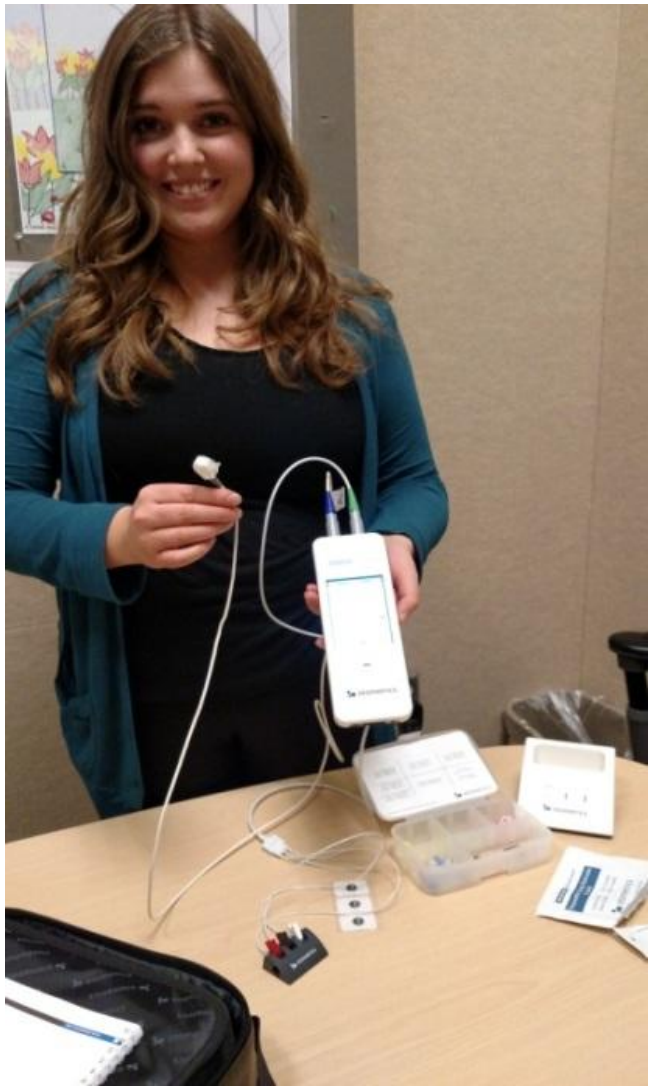
2013 Proposed Placement



2016 Actual Placement







Importance of Machine Placement

- Every Midwife 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 once per week is goal).



Training and sustainability

- Meeting midwives where they are.
- Providing online training.
- Hands-on practice.
- Refresher trainings and troubleshooting trainings.
- United Newborn Screening Trainings.
- Shared machines, patient info not inputted.
- Machine evolution, midwife friendly.

Challenges Along the Way

Initial rollout: midwives pay for machine insurance. –unsustainable:

- Costly burden: exceeded 10K limits of their homeowner business insurance.
- Approximately $600 per machine.
- Reduced sharing due to insurance concerns.
- Few machines were being insured.

Solution, Coalition could insure all 15 machines for $1200.





Legislative Milestone

- 2017: Midwives licensed under HB 5482 → recognized as healthcare professionals.
  - Went into effect Aug 1, 2019.
  - Suddenly, more midwives were interested.
  - Second grant was written to expand with additional 10 machines.

Covid Challenges

- Unable to have conference with all machines gathered for annual machine calibration.
- Supply costs quadrupled.

Solutions:

- Tech went to all midwife locations over 4 days to calibrate machines in Midwive's driveway (UP machine was shipped).
- Looked for new, lower cost vendors.





Latest Challenges

Tariffs

- Tariffs costs added $1,000 per machine after quote was given and machines ordered.
- Languished in Customs for weeks.
- Flipcause bankruptcy.

Unexpected tariff solution

- Vendor paid the tariffs as write-off donation.

Flipcause Damage

- $8K lost in midwife funds (enough for a new machine with bulk pricing).



The Guessing Game



Why Partnerships Matter

- Shared resources reduce cost.
  - Workload shared.
- Training ensures quality.
- Advocacy drives policy.
- Families benefit from access.
- Together, passion can be infectious to make others want you to succeed.



Solution

Michigan Community Birth Hearing Screening Network:

- Host model statewide.
- Regional hubs for machine sharing.
- Texting for troubleshooting.
- Sustainable funding via grants and insurance advocacy.



Call to Action

- Find collaborators & partnerships.
- Advocate for equitable access.
- Support your program with resources & training.

Q: What surprised you most?

Q&A

Contact Us

Patrice Bobier:
Patrice@fullcirclemidwifery.com

Shannon Palmer:
Palme2sb@cmich.edu

Nan Asher:
info@michdhh.org (coalition)
AsherN@michigan.gov (work)

