

A Collaborative Initiative for Community Birth Providers: Integrating EHDI and NBS Education

Gina Cooper, Au.D.

Nan Asher, M.L.S

Tori McIntosh, Ph.D.



Disclosures

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Learning Objectives

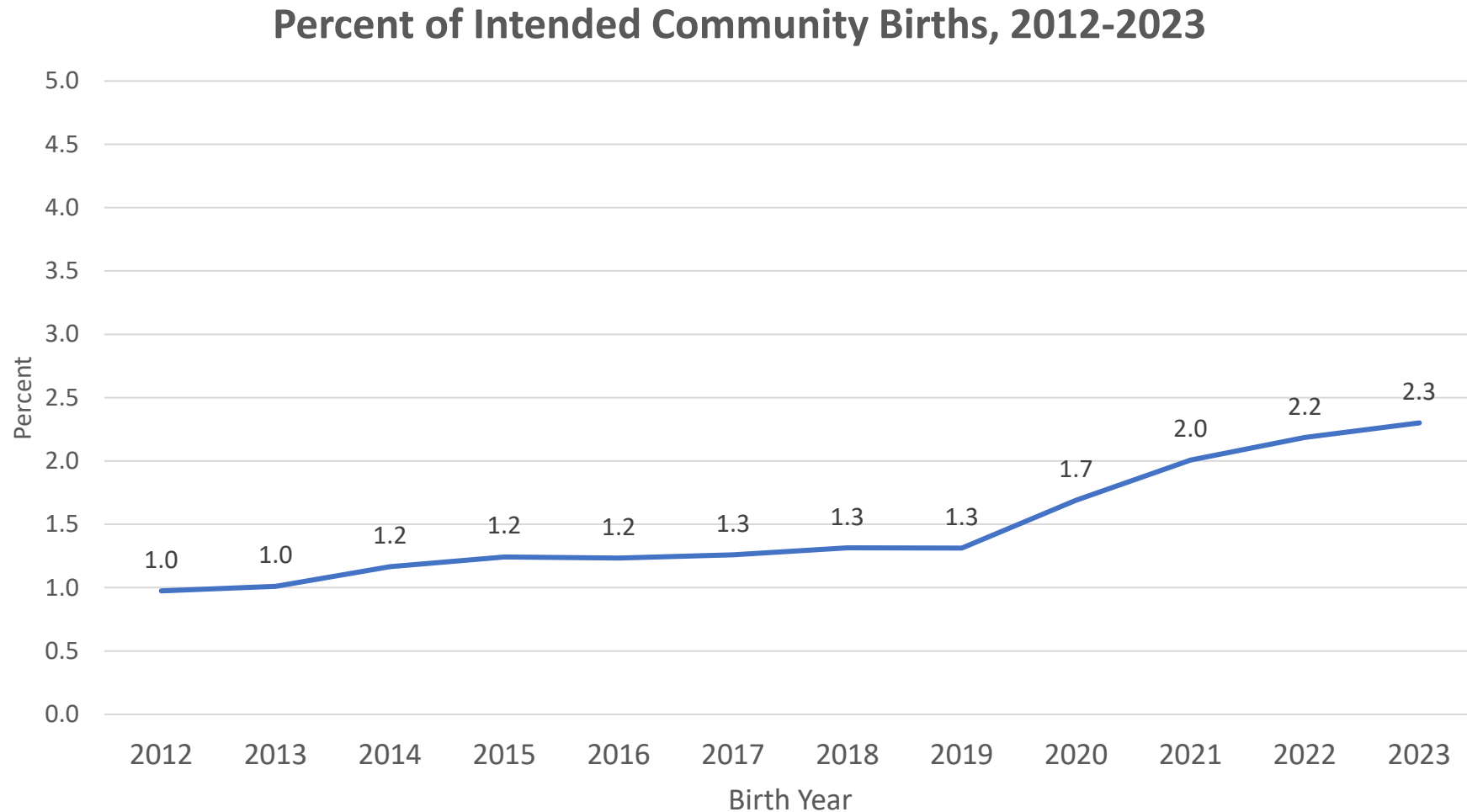
At the end of the session today, you will be able to:

1. Explain the approach used to develop a training program for community birth providers.
2. Assess the effectiveness of the training program by analyzing the training outcomes.
3. Apply best practices to implement a similar program in your own community birth settings.

Objective of the Project

- **Focus:**
 - Improve screening rates in Michigan for hearing, dried blood spot (DBS), and critical congenital heart disease (CCHD).
- **Target Audience:**
 - Community birth providers.
- **Context:**
 - Approximately 2% of births in Michigan occur in community settings, a number expected to rise.

Community Births Over Time



Reference: 2023 Live Births by Place of Delivery and Type of Attendant, Michigan Resident Birth File, Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services.

Problem Statement

- **Challenge:**
 - No combined training program for community birth providers to address multiple screening types (Hearing, DBS, CCHD).
 - Lack of standardized education for midwives and other community birth providers.
- **Need for Collaboration:**
 - Improve provider knowledge, skills, access, and comfort with all screenings.
 - Address the increasing number of births outside hospital settings.

The Collaboration

- **Partnerships & Collaborations:**

- Unite Newborn Screening Learning Community.
- Key Collaborators:
 - Michigan Early Hearing Detection and Intervention (EHDI).
 - Michigan Newborn Screening (NBS).
 - Blood spot, Bio Trust for Health, CCHD.
 - Epidemiology.
 - Michigan Hands & Voices.
 - Parents of children identified through screenings.

- **Training Development:**

- A collaborative team designed a comprehensive educational program.

Unite Newborn Screening Learning Community

Michigan Team Members



Gina Cooper
EHD Program Coordinator



Amy Rakowski
CCHD/EHDI Epidemiologist



Isabel Hurden
NBS Bloodspot Epidemiologist



Kristen Thompson
NBS Program Coordinator



Nan Asher
EHD Program Consultant



Tori McIntosh
EHD Parent Rep.
Michigan Hands & Voices



Joe Hallisy
DBS Parent Rep.



Angela Aldrich
NBS Nurse Consultant

The Educational Program

- **Program Features:**
 - Didactic presentations.
 - Testimonial video.
 - Hands-on practical stations.
 - Networking opportunities.
- **Delivery:**
 - Virtual and in-person sessions offered.

The Educational Program

- **Focus Areas:**
 - Screening basics.
 - Logistics of screening.
 - Parental support.
- **Specific Topics:**
 - Blood spot screening and follow-up.
 - NBS card ordering and payment.
 - Michigan BioTrust for Health.
 - NBS parent education.
 - Hearing screening, reporting and follow-up.
 - CCHD screening and reporting of data.
 - Parent story.

Program Location and Partnerships



- **Collaborative Partnership with Birthing Centers.**
 - Each training was hosted at a birthing center that expressed interest in training.
 - This approach increased relevance and engagement for participants.
- **Benefits of Location Choice:**
 - Hands-on, real-world setting for practical learning.
 - Opportunities for networking and collaboration among community birth providers.
 - Created a more effective and context-specific training experience.



Image: Unite Newborn Screening Training (Jan. 2024), Division of Maternal & Infant Health and Lifecourse Epidemiology and Genomics Division, Michigan Department of Health and Human Services.

Parent Testimonial

Lucy and Brooke - home birth story

Lucy's Story

A family perspective
on newborn screening
and hearing loss



Image/Reference: Lucy and Brooke - Home Birth Story. Unite Newborn Screening Learning Community (2024), [Available at: [Youtu.be/Vq1aRaIghi4?si=ANNUukFvKMM3yjo1](https://youtu.be/Vq1aRaIghi4?si=ANNUukFvKMM3yjo1)].



Image: Unite Newborn Screening Training (Jan. 2024), Division of Maternal & Infant Health and Lifecourse Epidemiology and Genomics Division, Michigan Department of Health and Human Services.

Breakout Sessions

breakout sessions

complete them all to enter a prize drawing

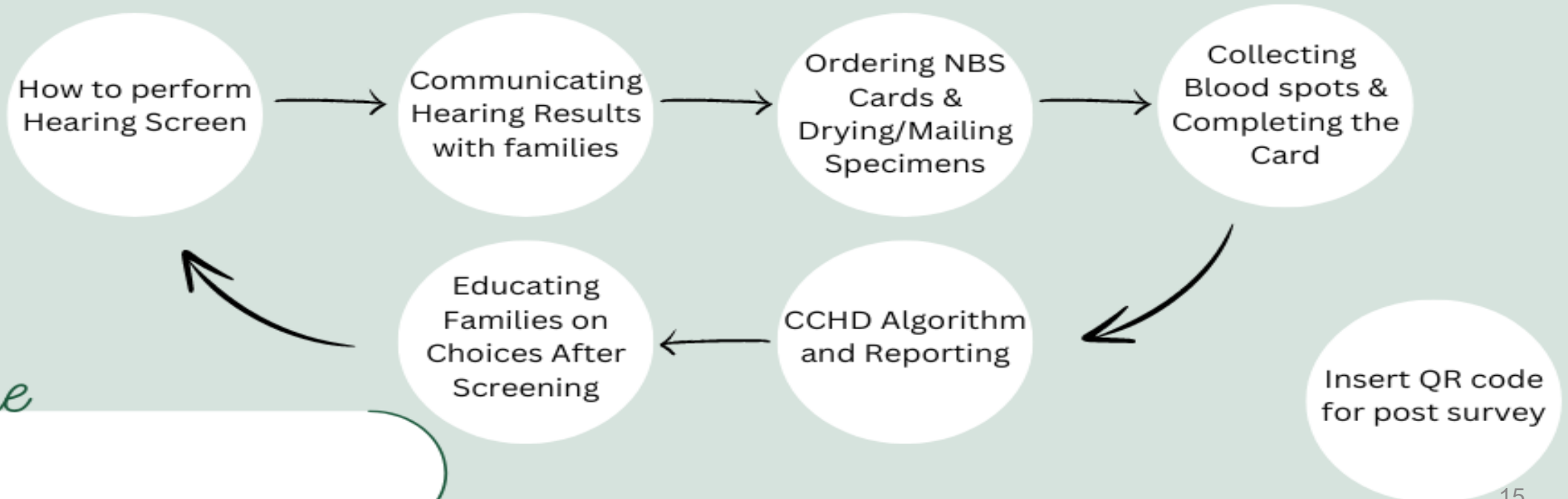




Image: Unite Newborn Screening Training (Jan. 2024), Division of Maternal & Infant Health and Lifecourse Epidemiology and Genomics Division, Michigan Department of Health and Human Services.



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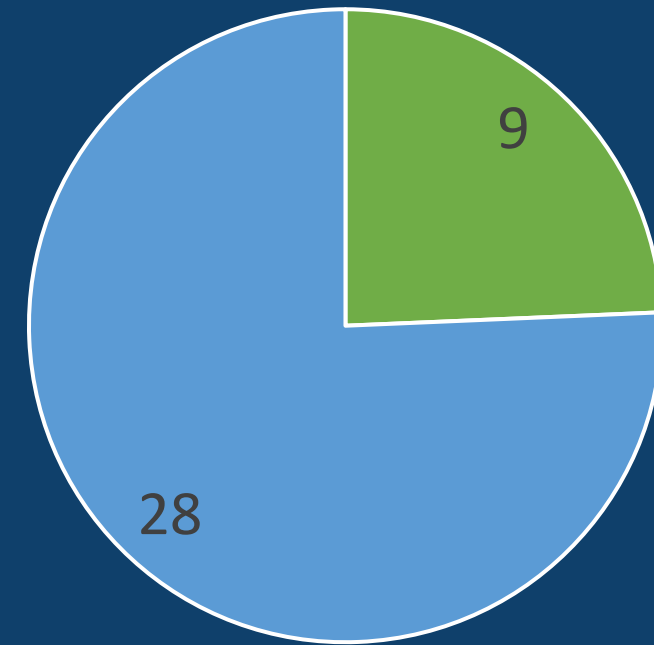
Training Outcomes

- **Participant Engagement:**
 - Midwife students.
 - Certified nurse midwives.
 - Certified professional midwives.
- **Assessment Process:**
 - Pre- and post-training self-assessments to gauge comfort levels with performing screenings.
 - Screening rates measured after training and compared to a pre-training baseline.

Participant Engagement

- **Three trainings:**
 - 1/5/24 (in-person).
 - 3/5/24 (virtual).
 - 10/4/24 (in-person).
- **37 total participants:**
 - 28 in person.
 - Nine virtual.

Participant Training Attendance
Type (N = 37)



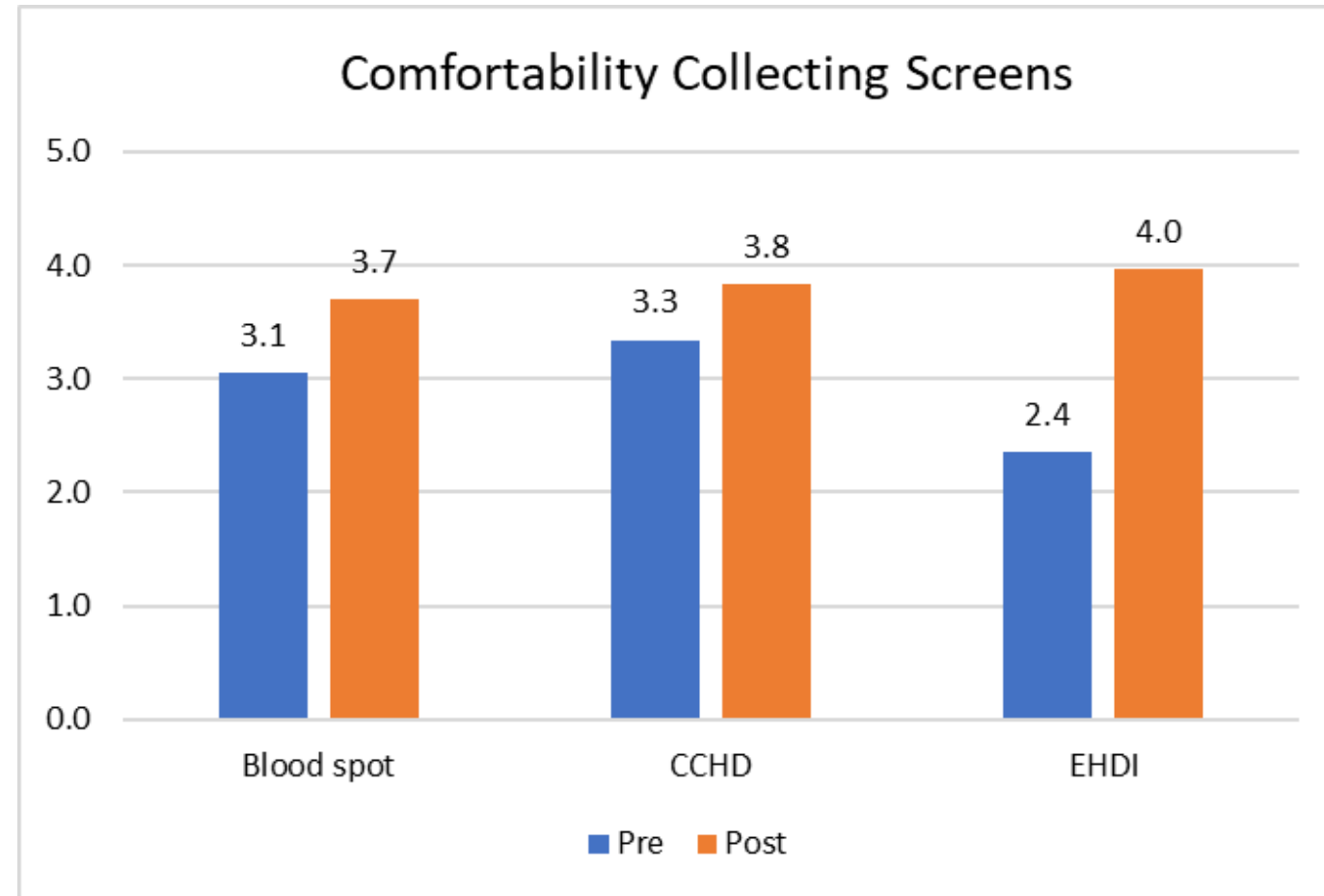
■ Virtual ■ In-Person

Results and Impact

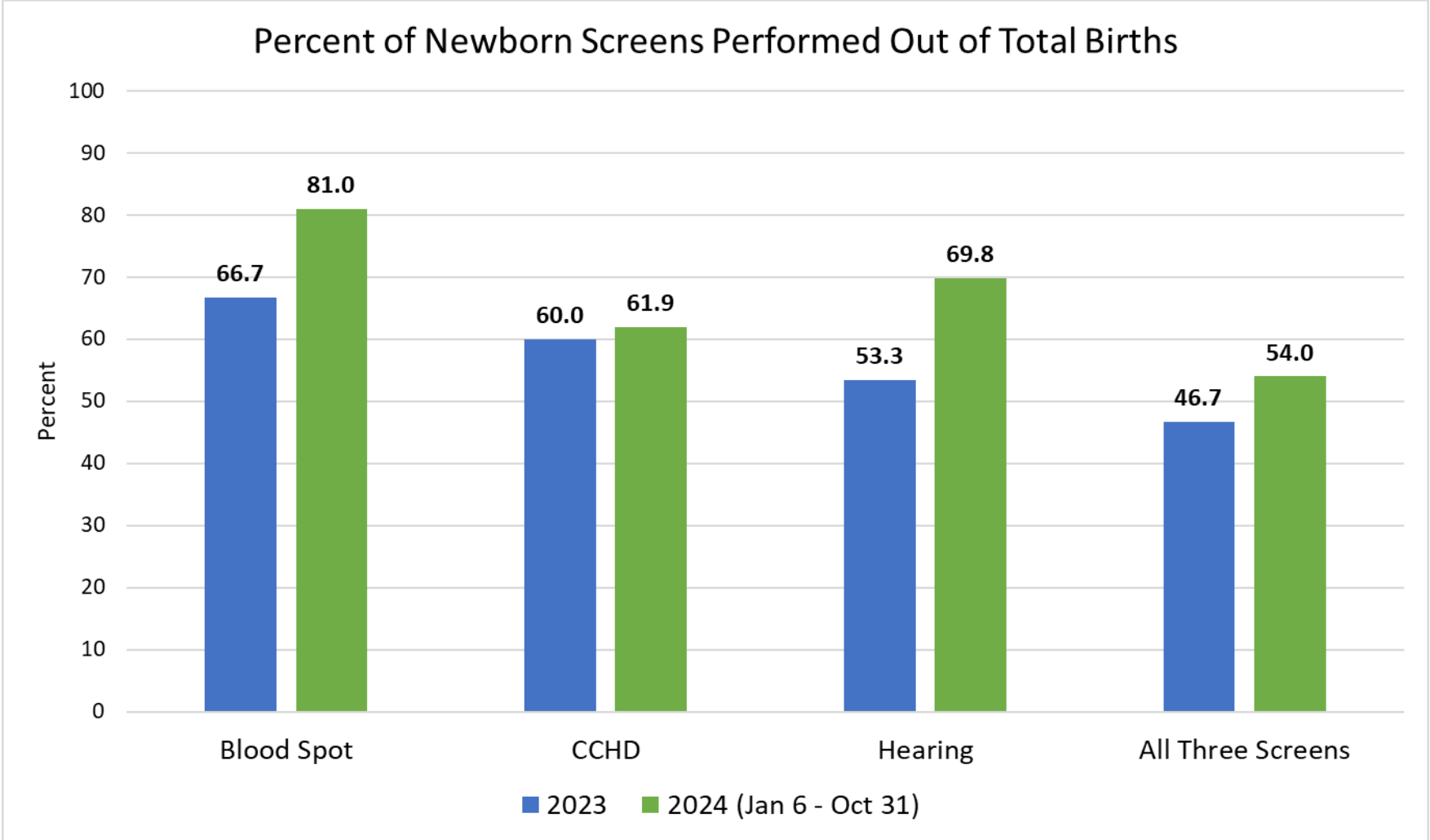
- **Increased Comfort Levels:**
 - Self-reported improvements in comfort with all three screening types (Hearing, DBS, CCHD).
- **Improved Screening Rates:**
 - Data shows increased screening rates post-training.

Comfortability Performing Screens

- Participants rated their comfort level with each screening on a scale of 0 (not comfortable) to five (very comfortable).
- Average Comfort Ratings (Pre- vs. Post-Training):
 - Blood Spot: 3.1 → 3.7
 - CCHD Screening: 3.3 → 3.8
 - Hearing Screening: 2.4 → 4.0



Screens Performed Pre and Post Training



Reference: 2023-2024 Newborn Screening Data, Division of Maternal & Infant Health and Lifecourse Epidemiology and Genomics Division, Michigan Department of Health and Human Services.

Conclusion

- **Key Takeaways:**
 - The collaborative educational program was successful in increasing provider comfort levels and screening rates.
 - Training for community birth providers is essential to support newborn screening efforts in Michigan.
 - Parent representation for the population served is a key to success.
 - Plans for statewide expansion and annual training opportunities.
 - Collaborative benefits exist beyond the scope of this project.

Acknowledgements

- **Thanks to:**
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 - The parents willing to share their lived experience.
 - Michigan EHDI and NBS programs.
 - NCHAM, APHL, and the Unite Newborn Screening Learning Community.

Questions?

[Michigan.gov/EHDI](https://michigan.gov/EHDI)

CooperG5@michigan.gov