

# Maine's Early Hearing Detection and Intervention App: A Novel Approach to Education and Dissemination of Information to Providers in the Medical Home

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## Background

- Maine is a large, rural state with an approximate population of 1.3 million (2018) (1)
- There were 12,001 births in 2018 (2)
- There are only 7 centers in the state of Maine that provide full audiologic diagnostic evaluations for babies birth to 6 months; no centers are available in the northern half of the state (2)
- There are 2 medical centers in the state capable of doing sedated diagnostic hearing exams. These centers are located in southern and central Maine (2)
- In 2018, 199 children required diagnostic follow up testing after initial newborn hearing screen (2)
  - 114 had no hearing loss (2)
  - 23 of these children were identified with permanent hearing loss (2)
  - 63 of these children were lost to follow up (2)
- In 2018, an additional 4 children were identified with late onset hearing loss (2)

## Proposal

- To develop a point of care app to help guide primary care providers through the JCIH guidelines for hearing screening and evaluation
- To connect providers and their patients with community resources
- To provide information for families in a convenient format

## Methods

- A survey was sent via the SurveyMonkey platform to the Maine American Academy of Pediatrics, Maine Academy of Family Physicians, the Maine Nurse Practitioner Association, pediatric audiology community in Maine and parents of children who are deaf or hard of hearing

## Conclusions

- Maine has a mix of physicians, nurse practitioners, physician assistants and other non-physician providers delivering primary care to newborns in a variety of practice demographics
- Many providers have expressed that they are not completely familiar with the EHD newborn/infant hearing screening process
- Many providers are unaware of community resources for their deaf or hard of hearing patients
- Many providers are unaware of the coordination of care required in the medical home
- Most parents did not feel their providers were familiar with EHD recommendations, coordination of care necessary and community resources
- Most audiologists were very familiar with the EHD guidelines and referral processes
- Most audiologists were more familiar with community resources than providers
- Most respondents were very likely to use a point of care app to help guide them through recommendations and connect them with community resources

## Quality Improvement Project

- A quality improvement initiative to develop a point of care app to guide providers through the EHD process may help with the dissemination of information to primary care providers in Maine
- In the future, feedback regarding the usefulness of the app will be obtained via an in-app survey/feedback function

## References

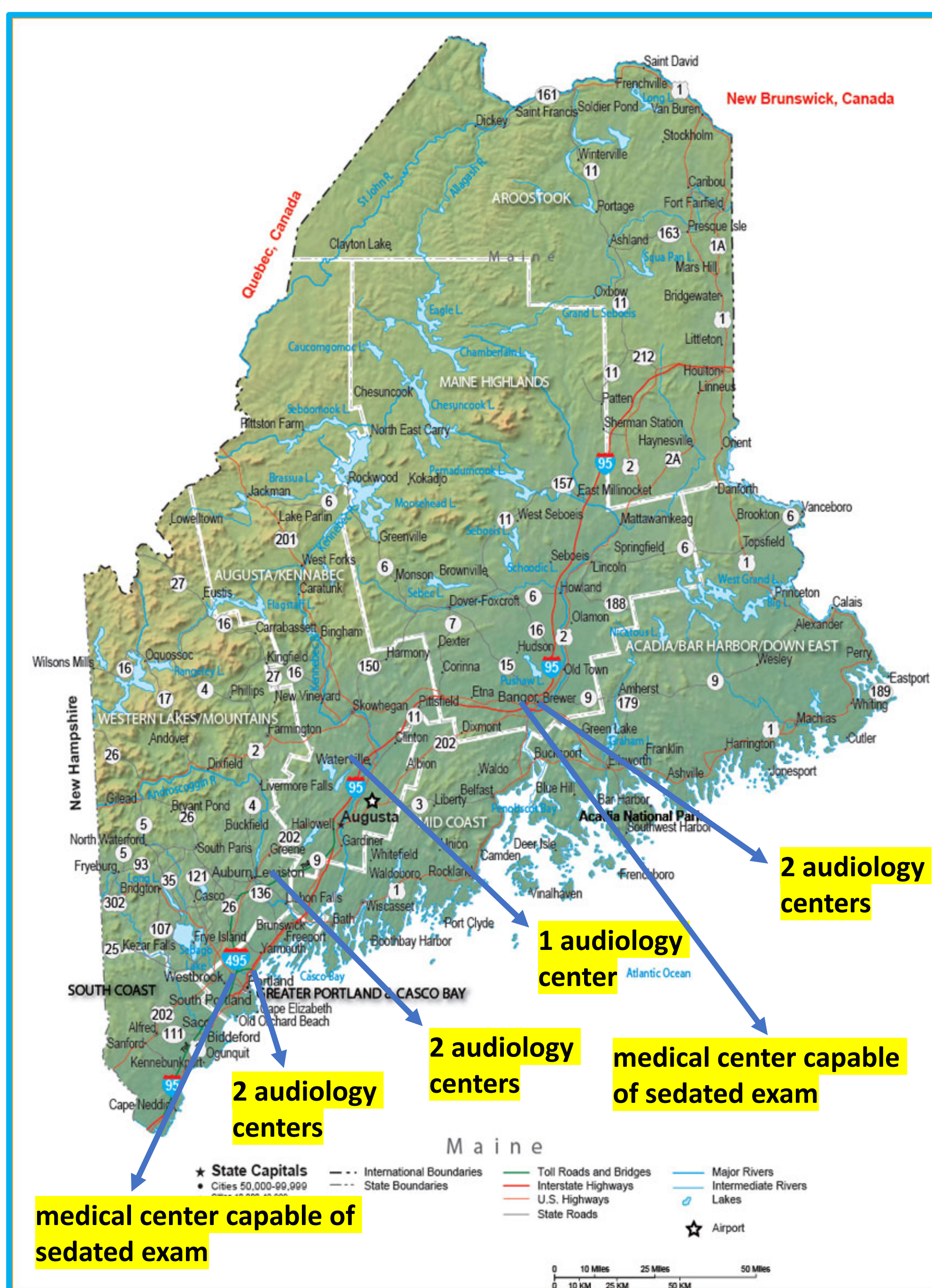
- US Census Bureau, QuickFacts: Maine, <https://www.census.gov/quickfacts/ME>
- Banger, Anne, Maine Newborn Hearing Screening Coordinator, personal communication



Photo provided by Maine Hands & Voices

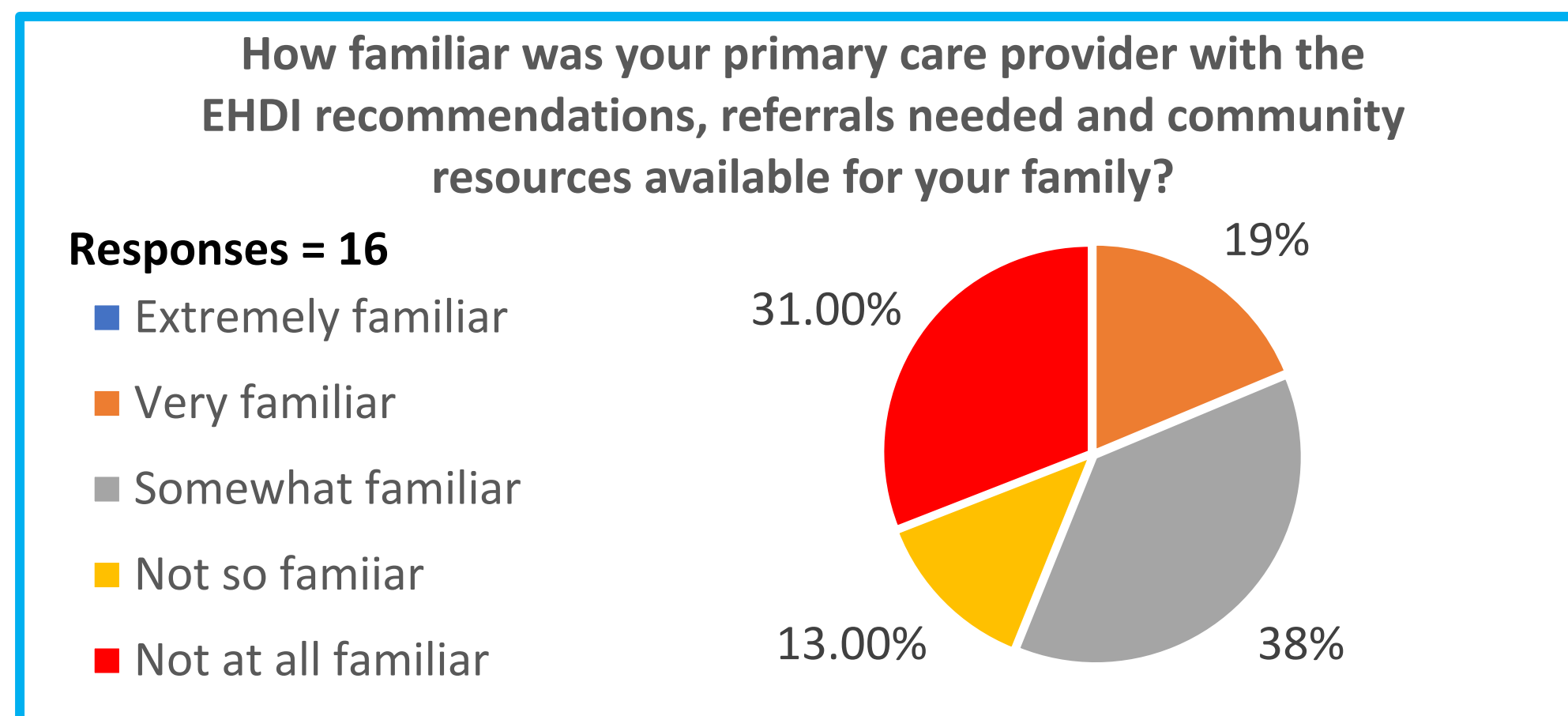


<https://www.silicon.co.uk>



<https://www.visit-maine.com/state/memap/>

## Parent Survey



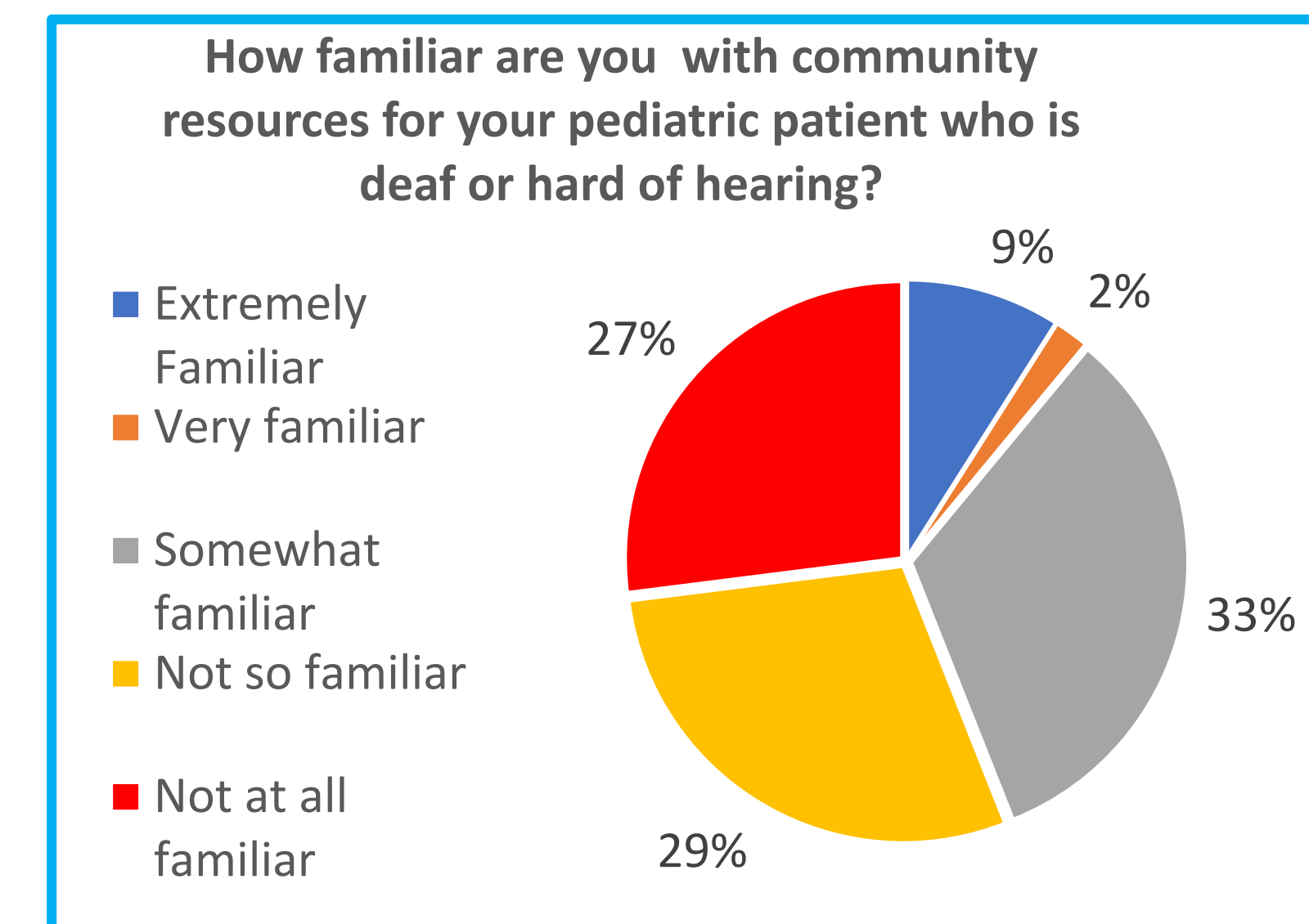
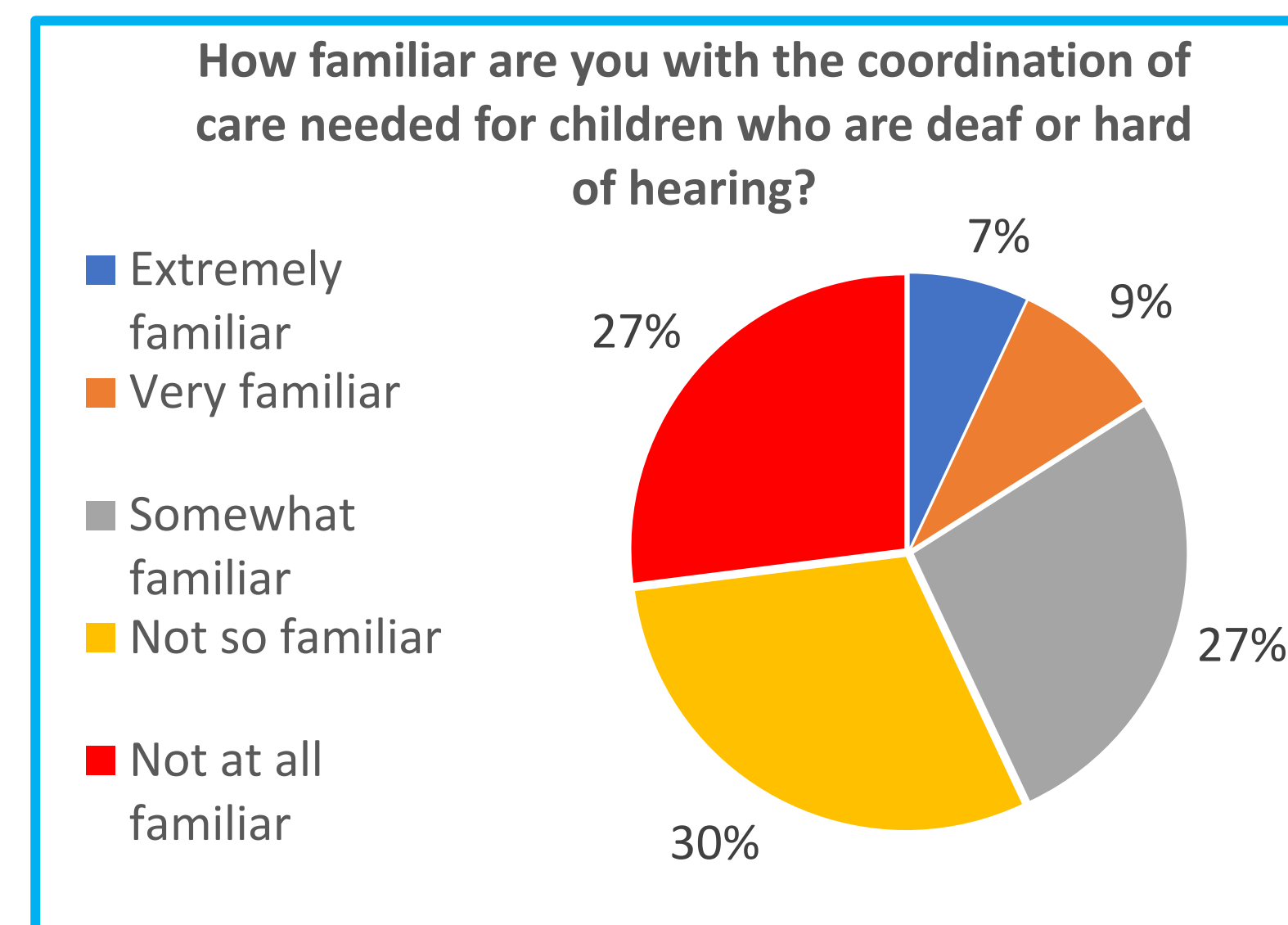
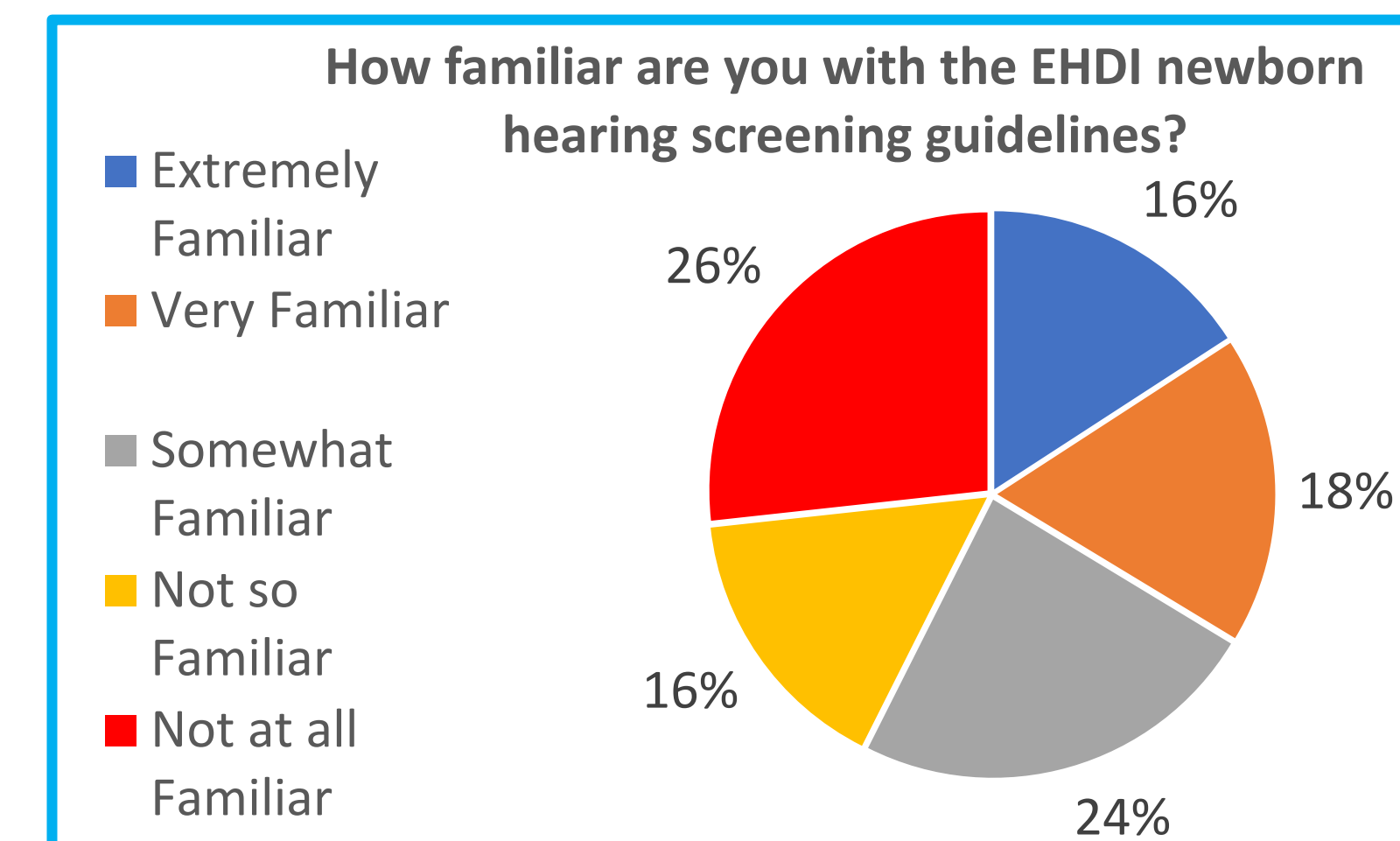
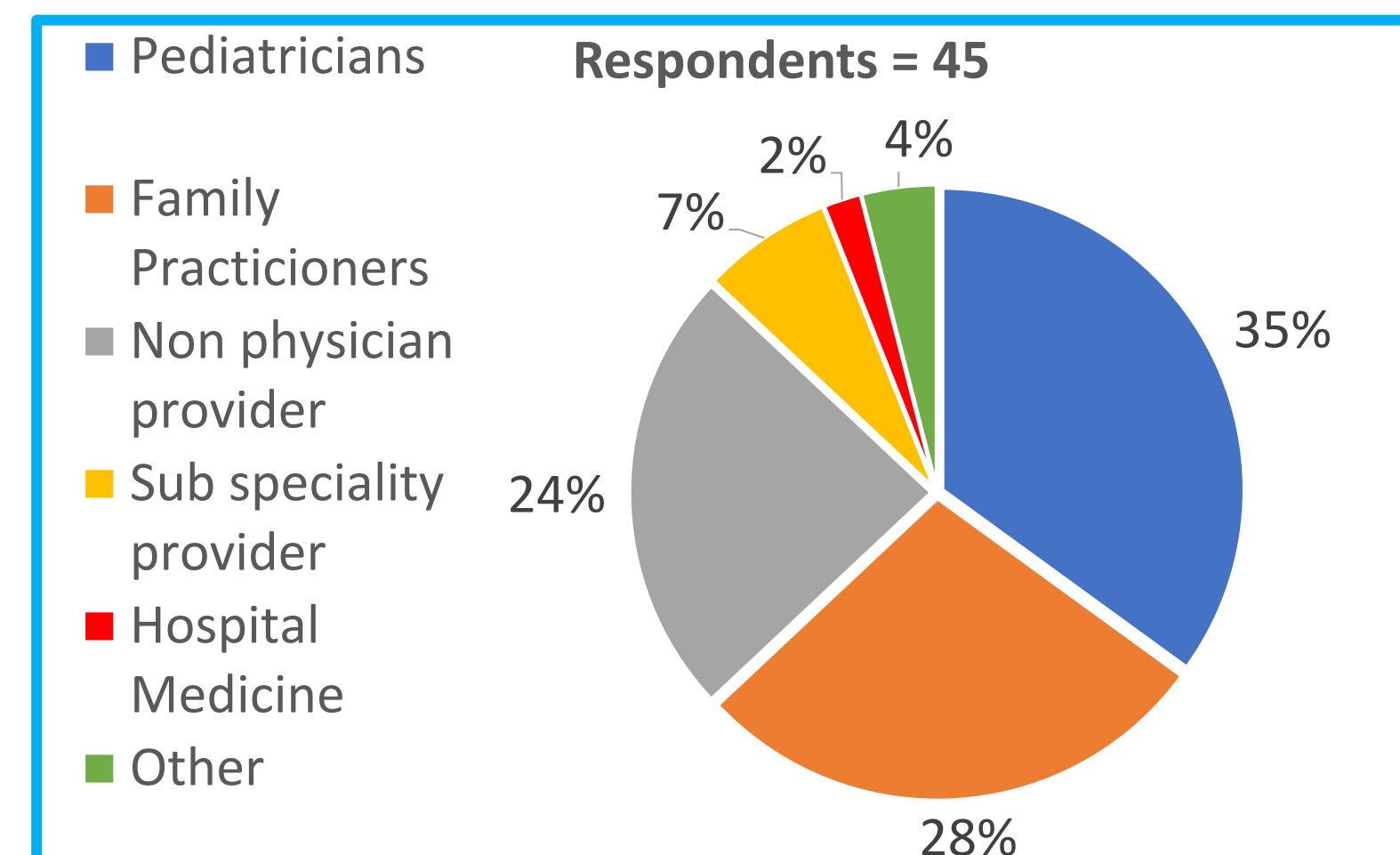
## Acknowledgements

- This poster was made possible by federal grant funds from the U.S. Department of Health and Human Services, Health Resources and Services Administration, Maine Educational Center for the Deaf and Hard of Hearing, Grant #H61MC030766
- This project was undertaken as a quality initiative; as such it was not formally submitted to or supervised, reviewed, or approved by the Northern Light Eastern Maine Medical Center Institutional Review Board
- App development by: <http://lifeiscode.com/>

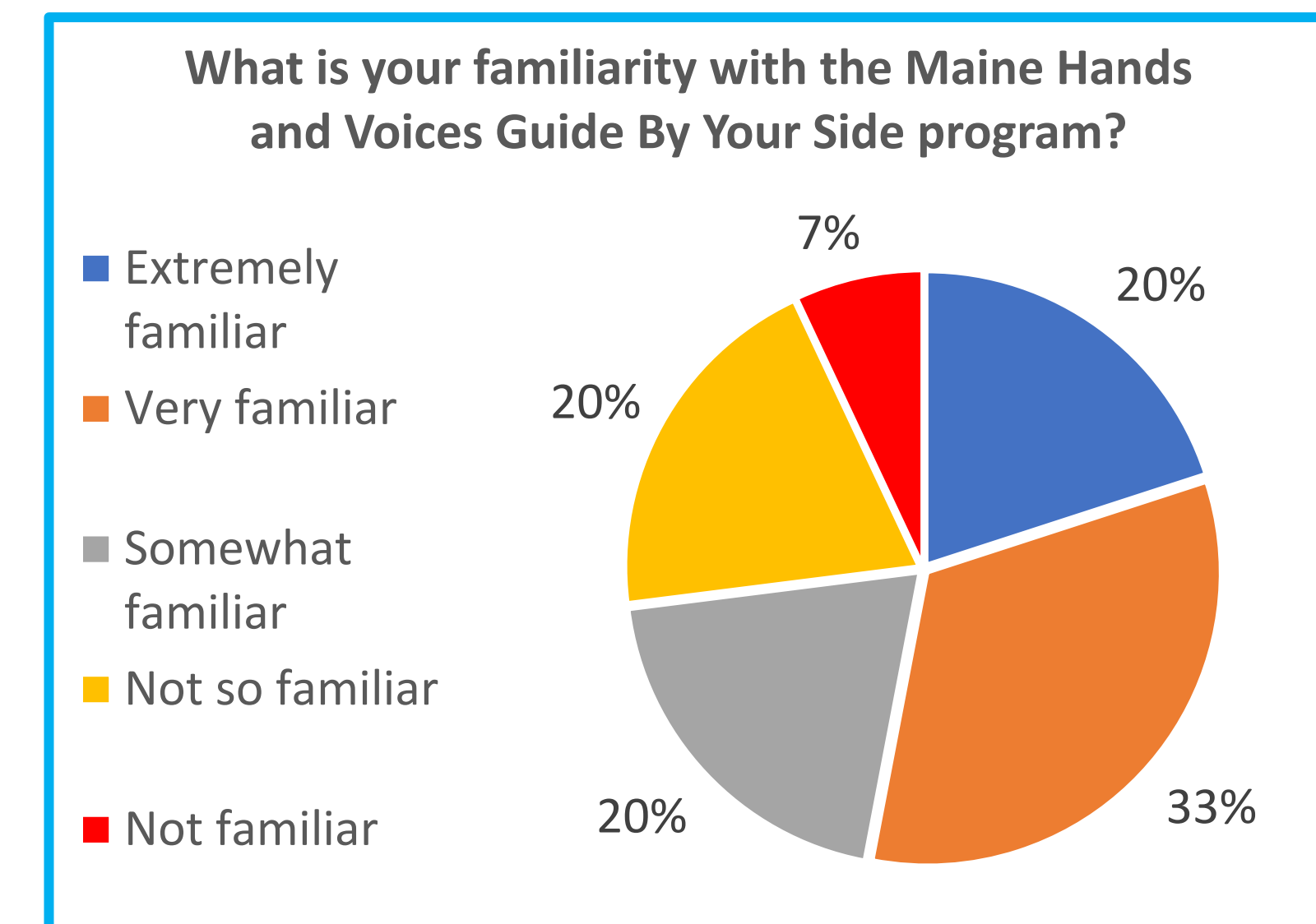
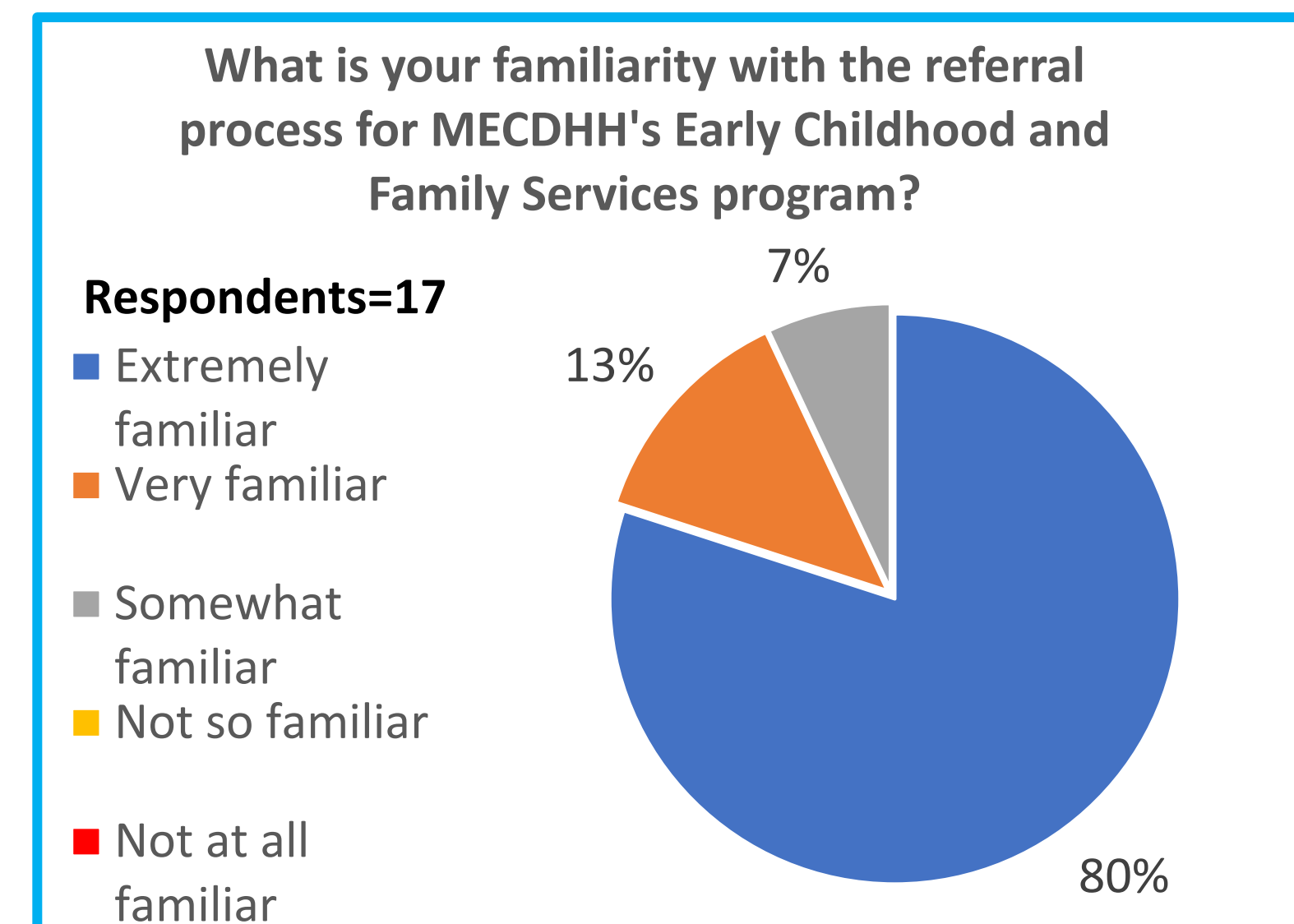


<https://www.maine.gov/dhhs/mecdc/population-health/mch/cshn/hearing-screening/>

## Provider Survey



## Audiologist Survey



## How likely are you to use a smartphone app to help guide you through the EHD recommendations and connect you with community support?

