



# Hearing Aid Fitting Rates in Deaf/Hard of Hearing Children Identified in Louisiana

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## ABSTRACT

Hearing aid fittings should occur within 1 month of identification, yet few children in Louisiana are receiving them within this recommended timeline. This gap in fitting puts deaf/hard of hearing (D/HH) children who include audition in their communication strategies at greater risk of language delay. A communication strategy utilizing any degree of audition depends on adequate auditory access. For most children, this will not be possible without a hearing device. To determine timeliness of hearing aid fittings in Louisiana, we reviewed records of children born from 2017 to 2021 and identified as D/HH. Of the 599 children identified as D/HH from these birth years, only 61% had a device fitting reported at any time point. Only 35% of children for whom hearing aids were recommended received them by 6 months of age, and only 66% received them by 1 year of age. Hearing aids were not recommended for 90 children (2/3 unilateral, 1/3 bilateral). For 63 children, hearing aids were recommended, but either the parents refused hearing aids, or the child was reported lost to follow-up for the hearing aid evaluation (44% unilateral, 56% bilateral). When considering all children identified as D/HH, less than one-quarter had a hearing aid fitting by 6 months of age reported to EHDI. Despite early identification, timeliness of hearing aid fittings for D/HH children remains challenging in Louisiana. For children whose families have chosen to include audition in their communication strategies, early auditory access is crucial. Future efforts should strive toward closing the hearing aid fitting gap by identifying barriers families face to receiving timely device fittings.

## METHODS

- A report from the Louisiana EHDI Information System (LA EHDI-IS) was generated for children born in 2017-2021 and identified as D/HH.
- Dates were reviewed for hearing aid and/or cochlear implant fitting status for each child.
- Facilities were contacted to obtain updated fitting status in cases with a recommendation for hearing aids but no fitting date.
- Time between identification and first device fitting was analyzed.
- Reasons for no device fitting were reviewed for children with no reported fitting.

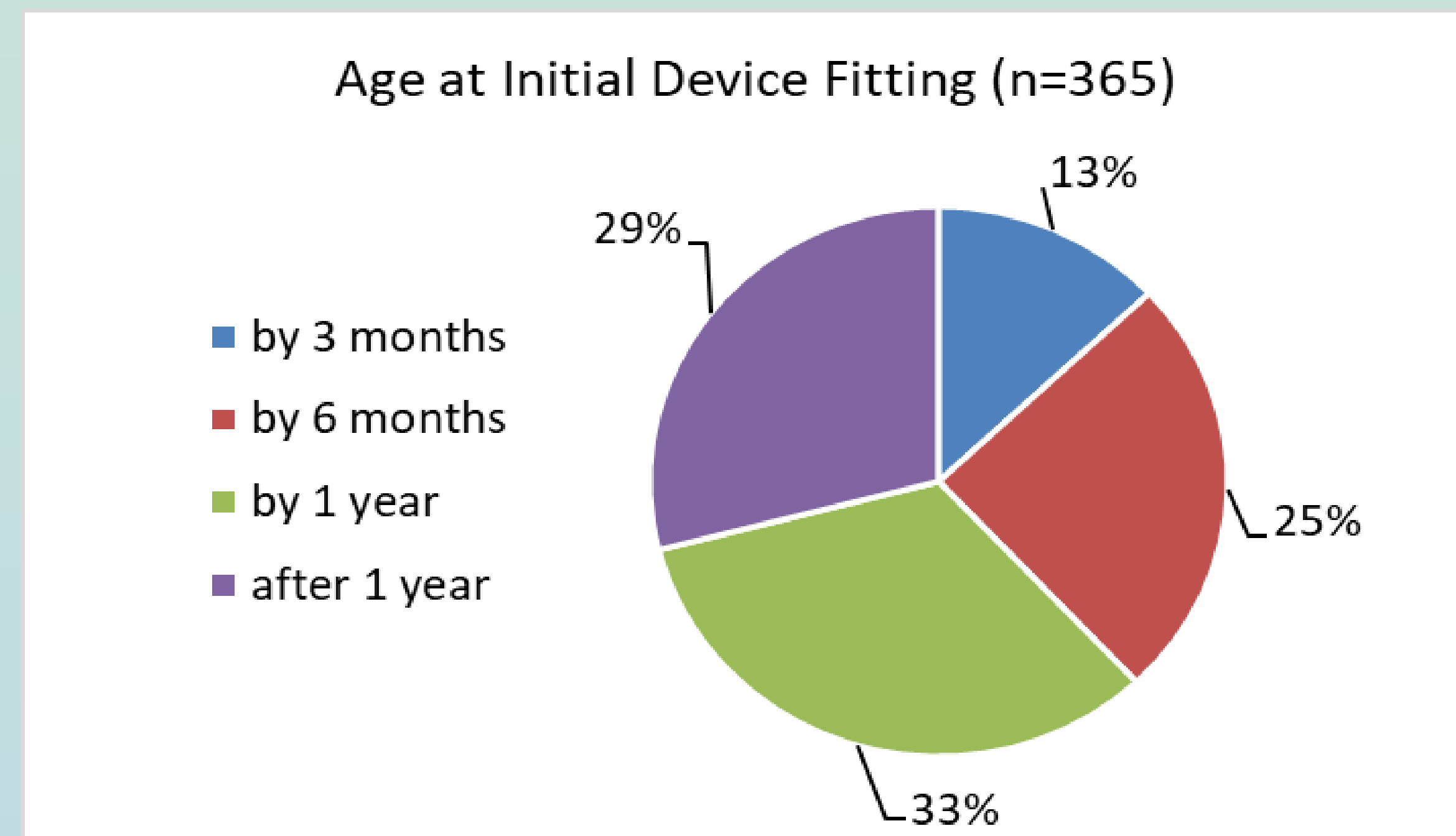
## STUDY SAMPLE

<b>Total Identified as D/HH</b>	<b>599</b>
Device fittings reported	365
Hearing aids only	307
Cochlear implants only	11
Both hearing aids and cochlear implants	47
<b>NO fitting reported</b>	<b>234</b>

**61%**

**39%**

## FITTING DATA

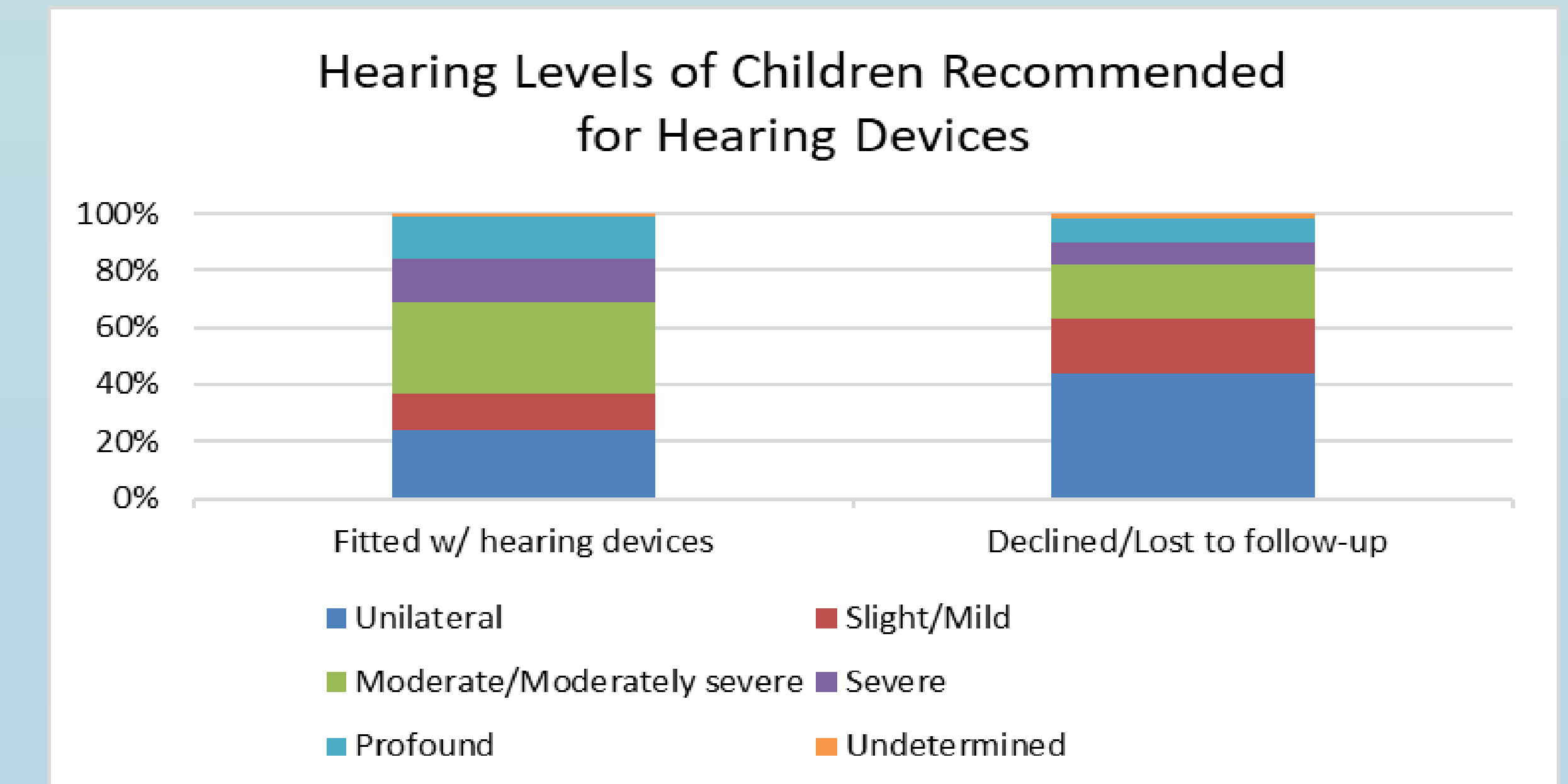
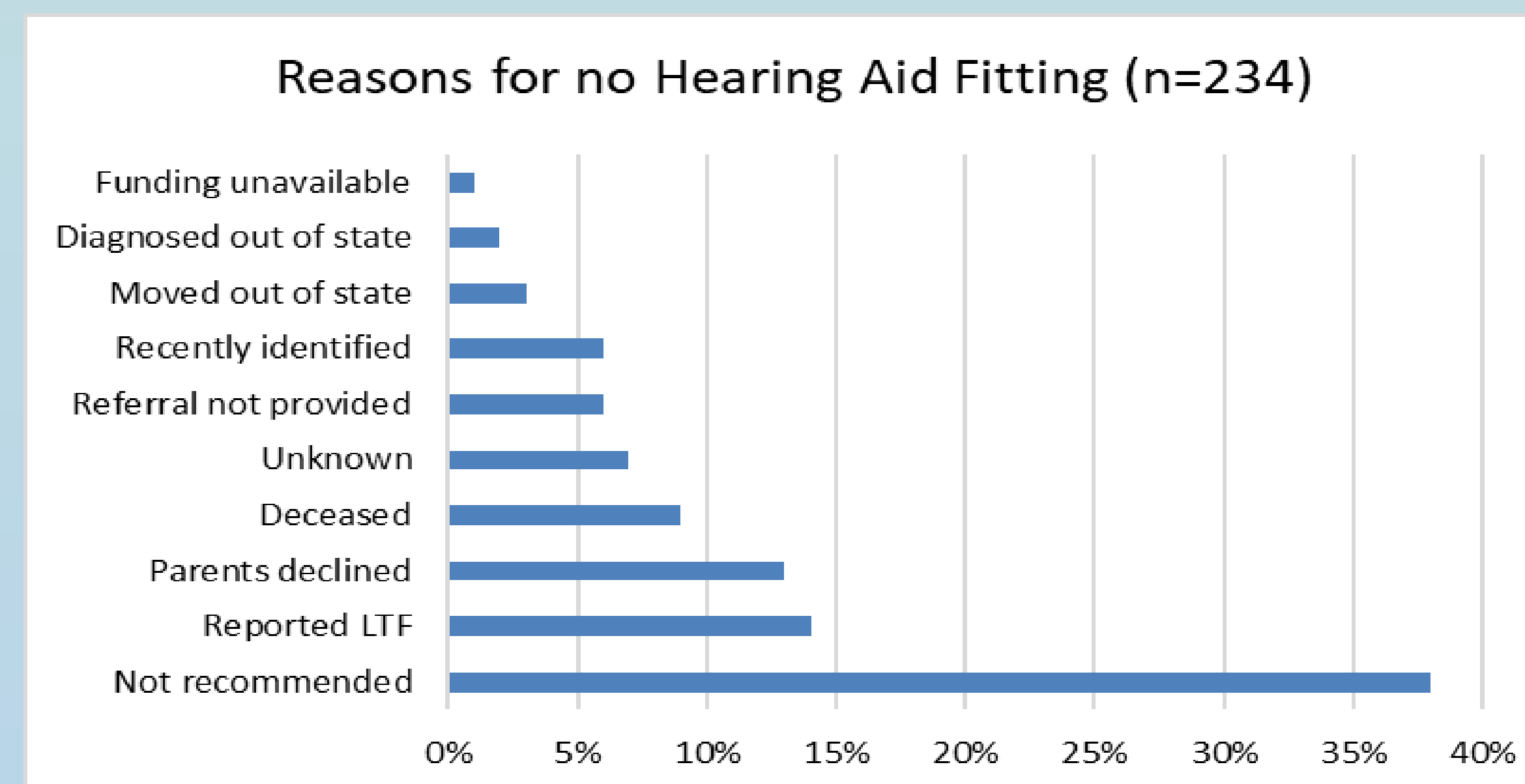


**FITTING WITHIN 1 MONTH OF IDENTIFICATION:**

**11.5%**

**AVERAGE TIME FROM IDENTIFICATION TO FITTING:**

**4.3 months MEAN**  
**2.6 months MEDIAN**



## SUMMARY OF RESULTS

- Of all children born 2017-2021 in Louisiana and identified as D/HH, only 61% were reported to have received a hearing device at any time point.
- For children whom hearing aids were recommended, 16% declined them or were reported lost to follow-up at the fitting appointment.
- Only 11.5% of children with reported hearing aid fittings received them within 1 month of identification.
- Hearing devices were not recommended for 15% of children, 2/3 of whom had unilateral hearing loss.
- Children whose families declined or were lost to follow-up for hearing aids were more likely to have unilateral hearing loss or bilateral mild hearing levels.
- Of note, 29% of children with reported hearing aid fittings received them after turning 1 year of age.

## DISCUSSION

In this study, we investigated hearing aid fitting rates of children identified as D/HH in Louisiana. Of children in whom hearing aids were recommended, only 35% received them by 6 months of age, and only 66% received them by 1 year of age. Louisiana law mandates insurance coverage of hearing aids in children, so direct costs of devices should not have been a barrier for many families. A limitation to this study is that hearing aid fittings may not all be reported to LA EHDI. Facilities where children were referred for hearing aid evaluations were contacted, but some children may have been fitted at a different facility. Additional fittings were obtained through matches with Medicaid billing. Approximately 2/3 of children born in Louisiana are Medicaid recipients. Another limitation is that we do not collect datalogging information, so a child fitted with hearing aids may not be wearing them a sufficient amount of time to gain benefit. For many D/HH children who include audition in their communication strategies, fitting of hearing devices will be needed to provide adequate auditory access. In our study sample, only 11.5% of children with reported hearing aid fittings received them within 1 month of identification. Future efforts should be geared toward connecting with families to convey the importance of timely hearing aid fittings, as well as identifying barriers families face to achieving this goal. Timely diagnosis and enrollment into early intervention are imperative to support opportunities for language development and academic outcomes for children who are D/HH to be similar to their peers.