

# Factors Contributing to Late Identification of Deaf/Hard-of-Hearing Children in Louisiana

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# Problem

- ▶ *“Why are we still seeing so many deaf/hard-of-hearing children starting school with language deprivation?”*

**1**  
MONTH

## SCREENING

Hearing screening **before 1 month** of age for all infants

**3**  
MONTHS

## DIAGNOSIS

Audiological diagnosis **before 3 months of age** for children who do not pass the screening

**6**  
MONTHS

## INTERVENTION

Early intervention services **before 6 months** of age for children diagnosed as deaf or hard of hearing



# Background

- ▶ *Enrolled in Early Intervention by 6 months of age*
  - ▶ 2019 Nationwide: 45%                      2019-2020 Louisiana: 50%
  - ▶ *Why so low?* We found that many of these children were diagnosed late.
- ▶ *Diagnosed by 3 months of age*
  - ▶ 2019-2020 Louisiana: 74%
  - ▶ This includes cases of typical hearing + D/HH.
  - ▶ This number looks very different when including only D/HH children.
- ▶ *Diagnosed by 3 months* **AMONG CHILDREN IDENTIFIED AS D/HH**
  - ▶ 2019-2020 Louisiana: 55%
- ▶ To ensure children who are deaf/hard-of-hearing receive the supports they need to reach their full potential, it is imperative that they be identified as early as possible.



# Methods

- ▶ Determine number of children late-identified as deaf/hard-of-hearing from birth cohorts 2015-2020
  - ▶ After 6 months of age
- ▶ Cases removed from analysis (late-onset and unavoidable late diagnosis)
  - ▶ Passed initial screening
  - ▶ Referred initial screening, Passed follow-up testing
  - ▶ Medically fragile
  - ▶ Born out of state AND Not included in LA EHDI-IS
- ▶ Examine file to determine contributing factors to late identification
  - ▶ Family
  - ▶ Hospital
  - ▶ Provider



# Cases included in analysis with contributing factors to late diagnosis

- ▶ Family reasons
  - ▶ Missed appointments
  - ▶ Family declined completing testing
  - ▶ Family was unresponsive or could not be contacted
- ▶ Hospital reasons
  - ▶ Newborn hearing screening results were reported incorrectly
  - ▶ Risk factor was not noted on newborn hearing screening form
  - ▶ Appointment was not scheduled for the family prior to hospital discharge
- ▶ Provider reasons
  - ▶ Excessive rescreens performed before referring to diagnostic evaluation
  - ▶ Excessive scheduling gap between outpatient appointments
  - ▶ PCP would not order test

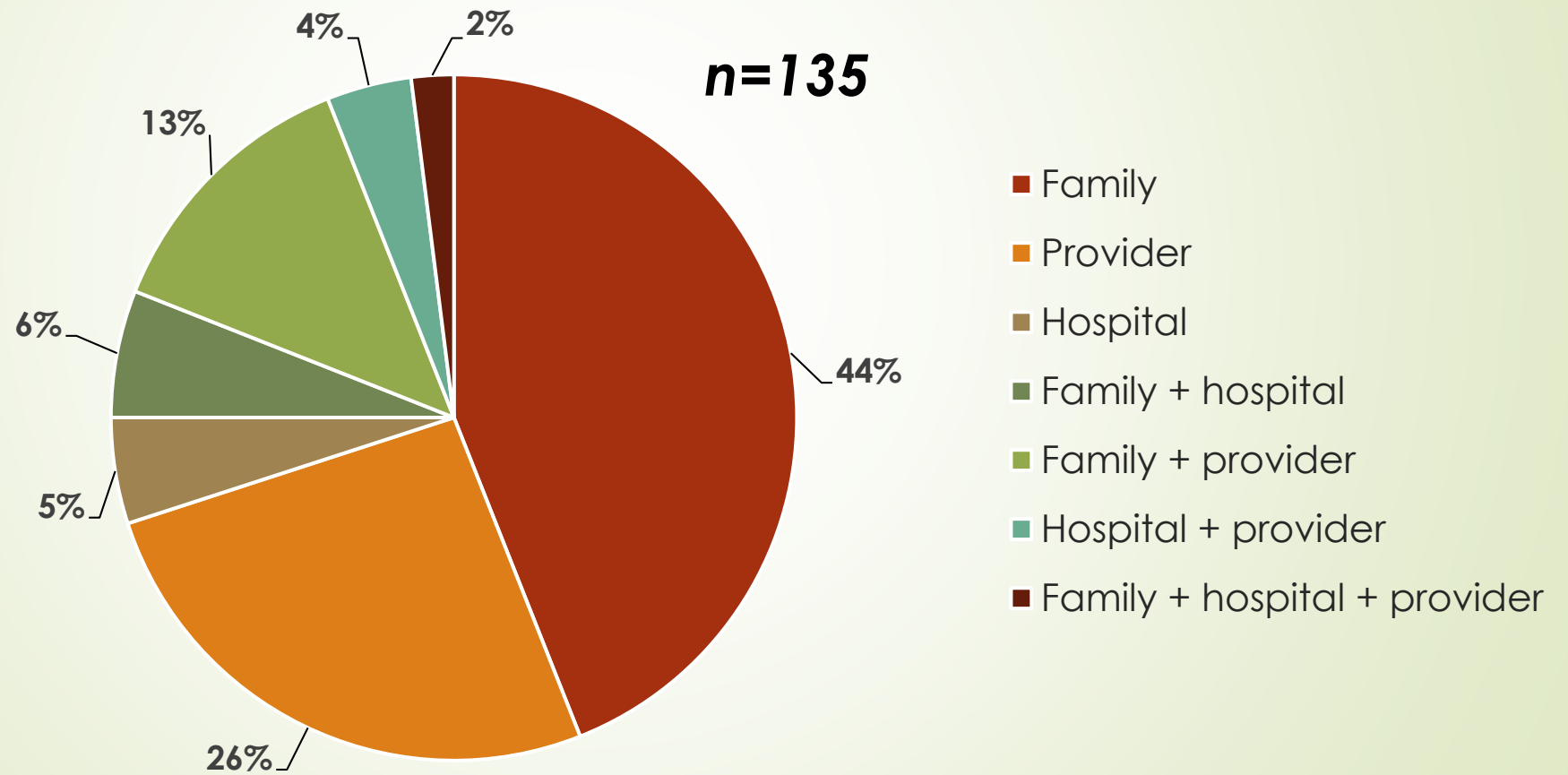


# Children born in Louisiana 2015-2020 and Identified as D/HH

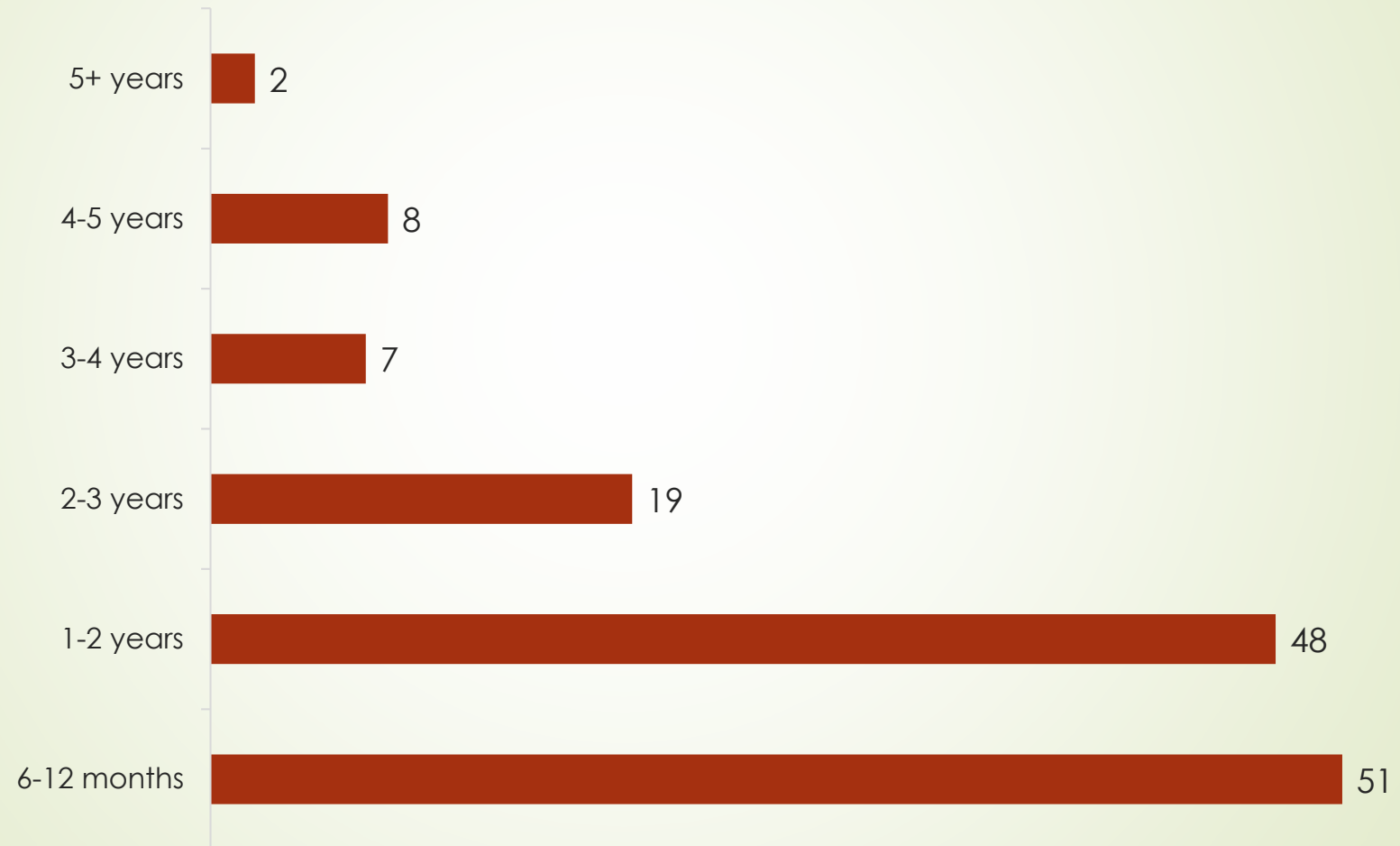
Total D/HH	753
Total late-identified D/HH	298
Cases removed from analysis	-163
<b>Cases included in analysis</b>	<b>135</b>



# What are the contributing factors to late identification?

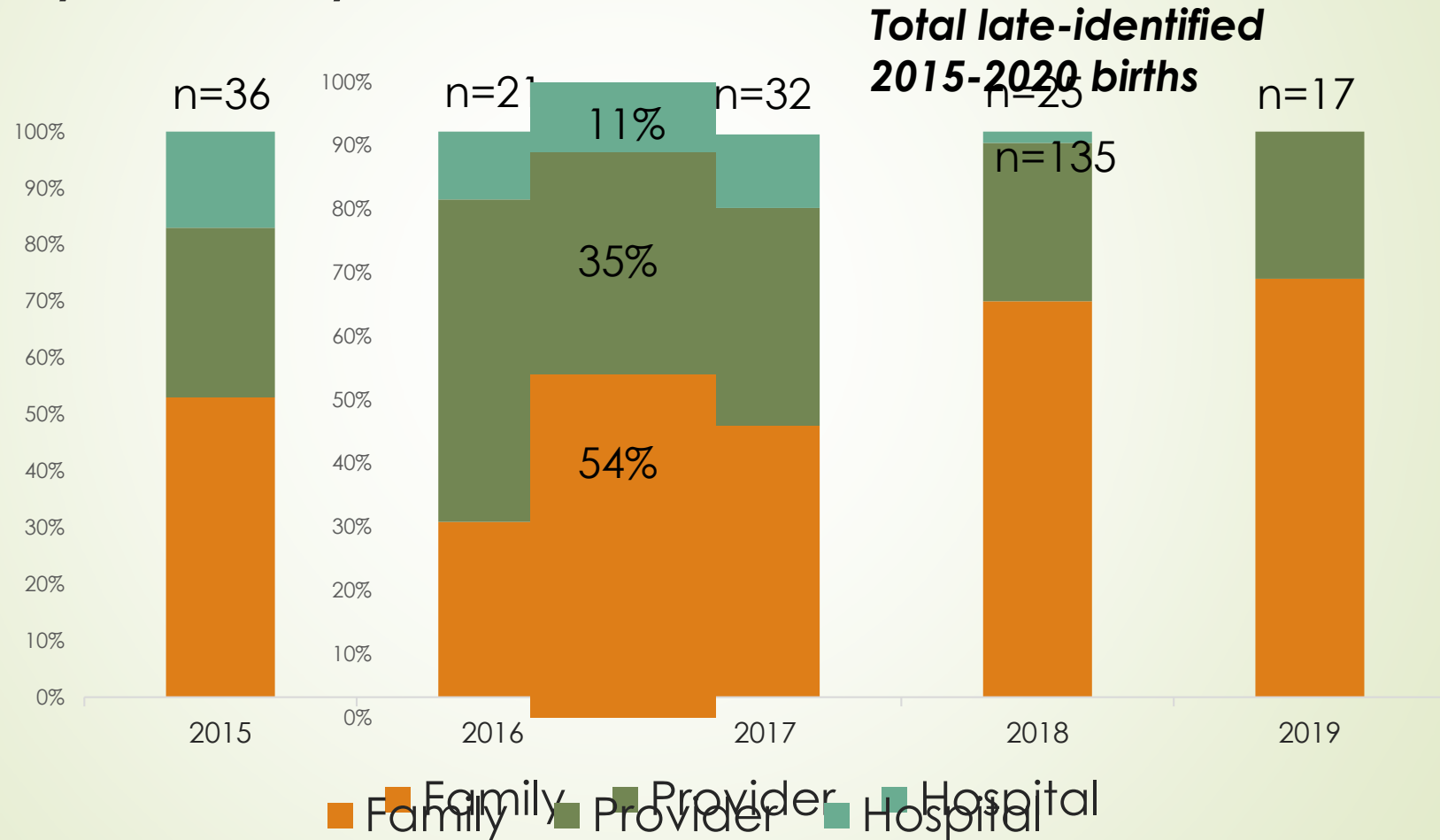


# Late-identified children by age group

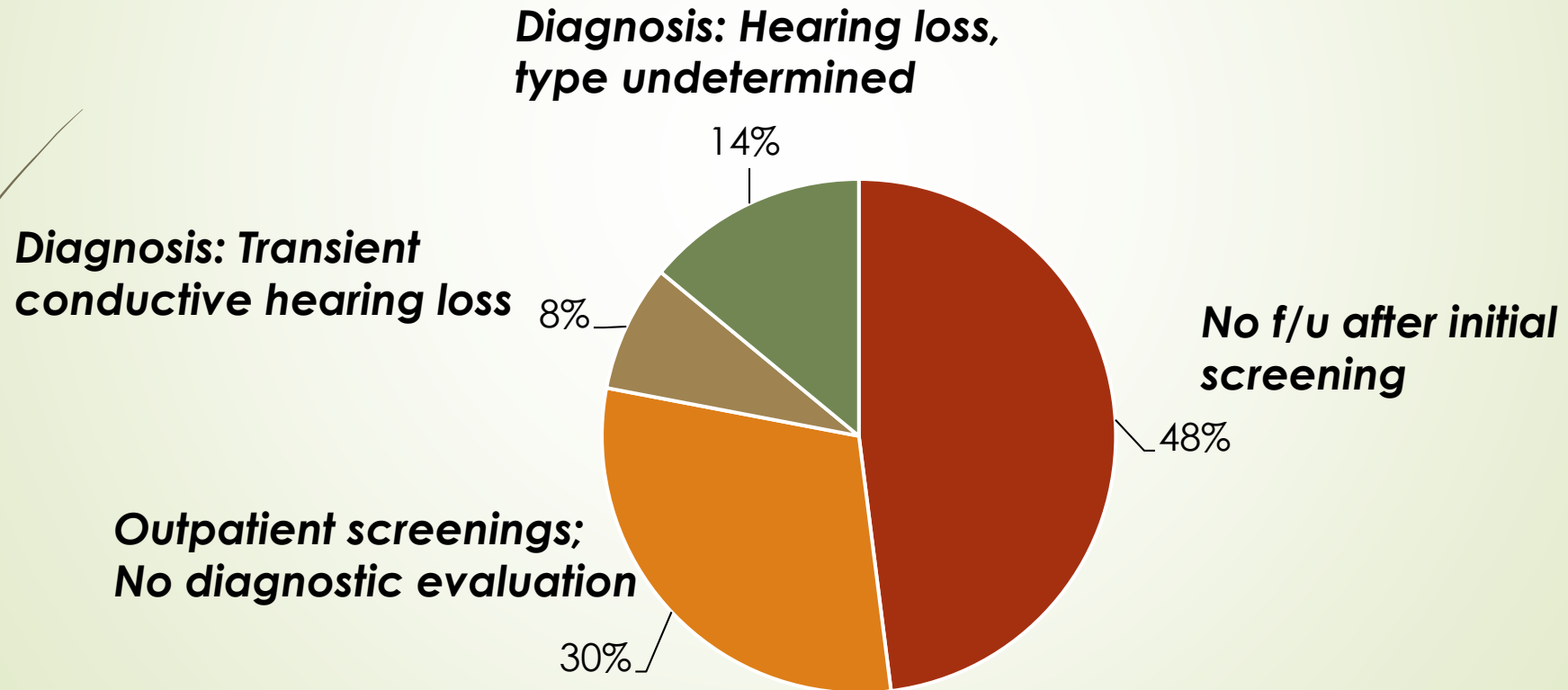




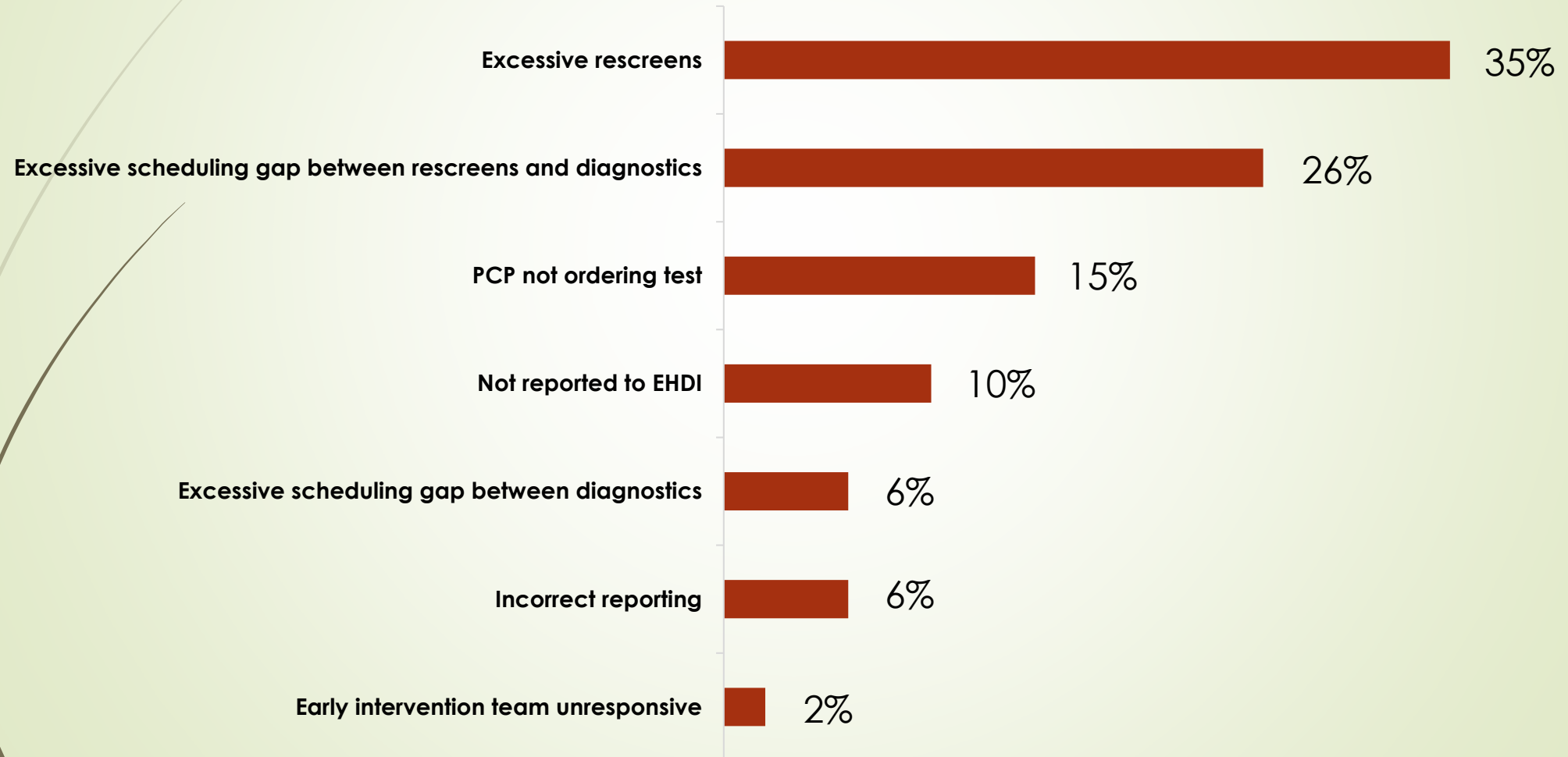
# Late identification contributing factors by birth year



# Family factors: What happened after referred newborn hearing screening?



# Provider issues in late diagnoses





# Summary of Results

- ▶ 40% of D/HH children born in Louisiana from 2015-2020 were identified after 6 months of age.
- ▶ In nearly half of these children, identification should have occurred earlier.
- ▶ Most of these late identifications were due to the family becoming lost to follow-up before completing testing.
- ▶ Year by year analysis shows the proportion of late identifications due to family factors is increasing, while the proportions due to hospital and provider errors/mismanagement are decreasing.
- ▶ Connecting with families and supporting them through timely diagnosis is key to reducing late identifications.



# LA EHDI team Acknowledgments

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Thank you!  
Questions?

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