

# Improving Device Use and Exposure to Different Listening Environments: Use of Datalogging in Pediatric Advanced Bionics Recipients

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Funded by Advanced Bionics



# Methods

## Phase 1

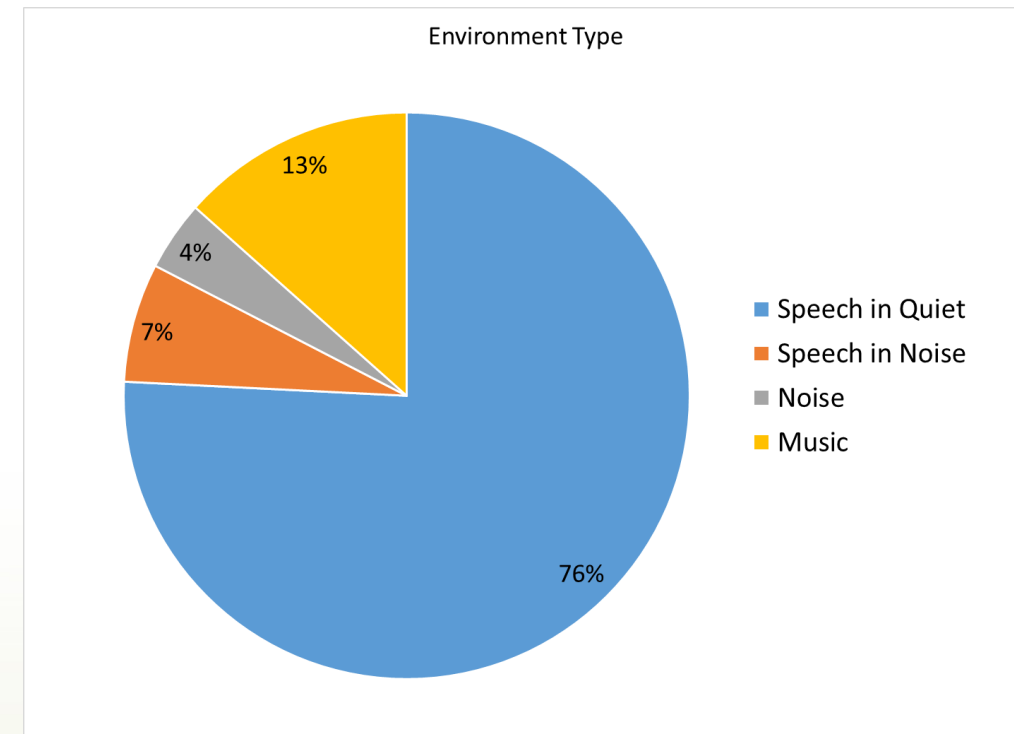
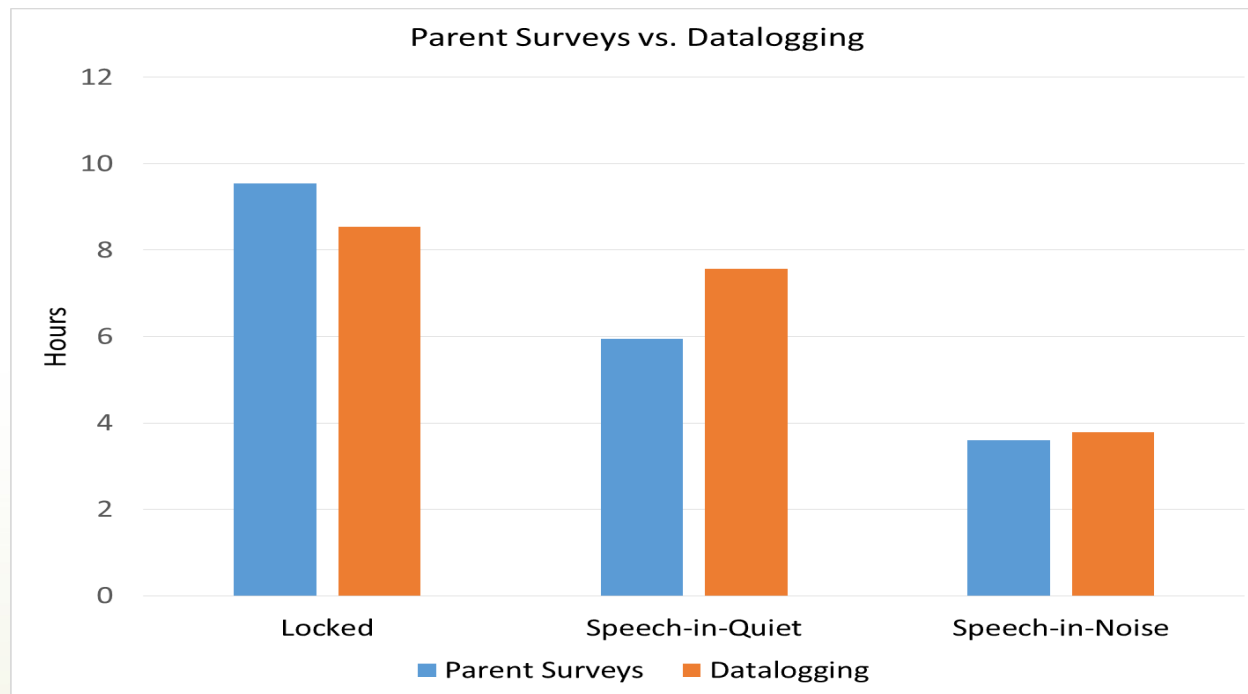
- 3 subjects
  - 1 female and 2 male
  - 18 mos-4 years old
  - >6 months of experience with Naida sound processor
  - All 3 children enrolled in weekly auditory verbal therapy
- Patients seen 5 times over a 6 week period
- Parents completed daily surveys over the initial two week period

## Phase 2

- 3 subjects
  - 1 female and 2 males
  - 2-4 years old
  - >6 months of experience with Naida sound processor
  - 2 patients enrolled in weekly auditory verbal therapy; 1 patient enrolled in monthly auditory verbal therapy
- Patients seen 6 times over a 7 week period
- Parents completed daily surveys over the initial two week period

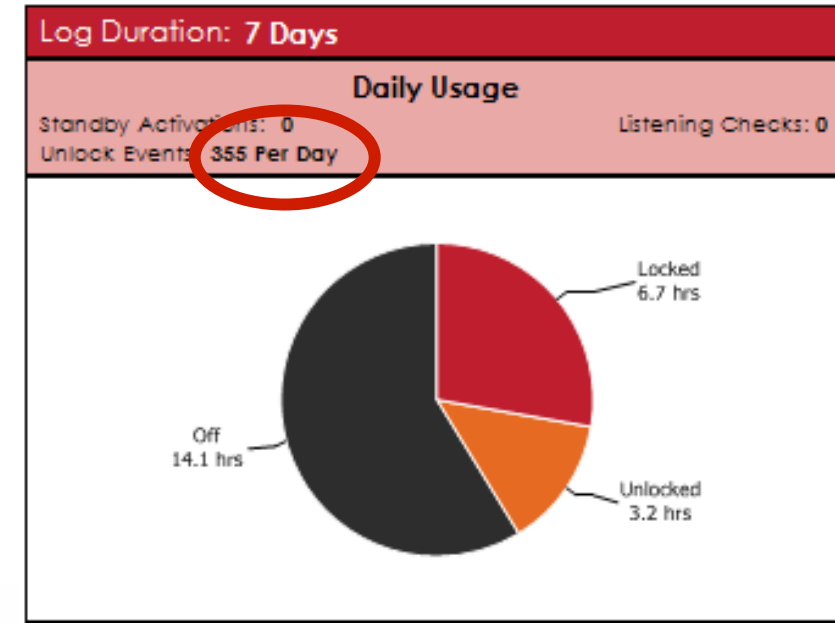
# Results

- Parents underestimated the amount of time in speech in quiet
- Slight difference between parents' estimated use time and datalogging
- Mean= 8.54 hours of locked time
- Mean = 61 unlock events



# Clinician Insights

- Unlock events can be very useful in equipment troubleshooting
- Streaming time can be useful in empowering patient's families to use accessories such as ComPilot
- Discussions with parents regarding datalogging increased both parent and patient engagement
- Families reported that they found the number of unlocked events and percentage of time in different listening environments the most useful





# Conclusions

- Advanced Bionics datalogging feature is a helpful tool that can be used to increase daily use and exposure to different listening environments
- Datalogging information provided parents with valuable objective information
- Counseling discussions were enhanced by datalogging information that allowed for comparisons of parents' subjective perceptions to objective data
- **Future directions**
  - Collect normative data for wear time, unlocked events, and environmental settings for different age groups
  - Collect data for a larger number of children
  - Examine the relationships between datalogging information and speech, language, and audiological outcomes