Highly Specialized Listening and Spoken Language Programs Promote Language Development of 3 – 5 year old Children

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Advancing excellence in listening and spoken language education by providing information and support to programs and school leaders.
Disclosures

✦ OPTION Inc is an international, non-profit organization comprised of listening and spoken language programs and schools for children who are deaf or hard of hearing in Canada, South America, and the U.S.

✦ OPTION Inc. has contracted with Vanderbilt University Medical Center to provide oversight of the Listening and Spoken Language Data Repository (LSL-DR)

✦ Funding for LSL-DR
  - Omaha Hearing Health Foundation
  - Oberkotter Foundation
  - Vanderbilt Institute for Clinical and Translational Research grant support (UL1TR000011 from NCATS/NIH)
OPTION Member Programs

✦ Mission
- Advancing excellence in listening and spoken language education by providing information and support to programs and school leaders
- Educating the public, professionals and policy makers as to what is possible for children who are deaf and hard of hearing in the 21st century

✦ Activities
- Research – All member programs enter de-identified outcomes data annually for each child in their program in the Listening and Spoken Language Data Repository.
- Advocacy – Through raising awareness and building relationships.
OPTION Members 2019

- Individual / Partner Member
- No OPTION Programs
- 1 OPTION Program
- 2 OPTION Programs
- 3 or More OPTION Programs
Categories of Engagement

✦ **Regular/Provisional Membership** - Listening and spoken language program for children who are deaf/hard of hearing.

✦ **Individual Associate Membership** – An individual not representing a program, university, hospital, non-profit clinic, or advocacy program.

✦ **Partner Membership** - Department within a university or hospital, a non-profit clinic, or an advocacy program.

All categories must support the OPTION mission of advancing excellence in listening and spoken language education for children who are deaf/hard of hearing.
Quality Standards Document

- Curriculum
- Family Engagement
- Personnel
- Progress Monitoring
- Collaboration
Listening and Spoken Language-Data Repository (LSL-DR)

- Create and maintain longitudinal educational outcome data on children enrolled in specialized listening and spoken language intervention programs
- Increase the quality and application of educational data for program improvement highlighting effective practices and maximizing child spoken language outcomes
- 1,660 variables including demographics, language, development, family involvement
- All of the data entries are de-identified
Listening and Spoken Language-Data Repository (LSL-DR)

- 2010 - Started with 49 sites in 4 countries
- 2015 - 43 active sites in 3 countries
- 2019 – 32 active sites in 2 countries
- 115 users currently
- 5,826 individual students
Vocabulary Outcomes ($n = 404$)

Longitudinal data of 404 children in OPTION programs (2010-2016)

**Measures**
- Expressive Vocabulary Test (EVT) and Peabody Picture Vocabulary Test (PPVT)
- Expressive One-Word Picture Vocabulary Test (EOWPVT) and Receptive One-Word Picture Vocabulary Test (ROWPVT)

**Gender**
- Female (49%), Male (51%)

**Hearing Technology**
- Bilateral cochlear implants (36%)
- Bilateral hearing aids (27%)
- Bimodal - HA, CI (29%)
- BAHD/Softband (8%)

**Age at Intervention in OPTION program**
- at or before 18 months (42%), 19-36 months (47%), after 36 months (11%)

Approximately 20% of children had additional factors/diagnosis that impacted learning

**Comparison of children with and without additional impacting factors, at 5 years old**

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Language Outcomes ($n = 125$)

A review of performance on connected language assessments of a subset of 125 children indicates a positive trend of growth in this domain from age three to five, with more than 50% of the sample demonstrating scores within the average range by age five years. However, the variability in outcomes indicates that development of connected language might be an area of vulnerability. Some children who are DHH might need additional support as they enter the elementary school years.
Thank you