Initial experience with first generation data logging in cochlear implants

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Introduction

• Purpose
  – Customer feedback on first generation data logging feature
  – Case Study

• Survey
  – Short multiple choice questionnaire through Survey Monkey
  – US and Canadian CI audiologists
  – 129 responses out of ≈1,000 Audiologists
Q1: How often do you use Data logging?

- 49%: Routinely (N = 63)
- 35%: Frequently (N = 45)
- 11%: Occasionally (N = 14)
- 5%: Never (N = 7)

N = 129

N = 108
Q2: What patient population do you work with?

- 30% of respondents work with adults only.
- 30% of respondents work with pediatric patients only.
- 40% of respondents work with both adults and pediatric patients.

N = 108
Q3 & 4: Do you inform Recipients that data logging is active?

- 1 = Never
- 2 = Occasionally
- 3 = Frequently
- 4 = Routinely

- Adults (N/A = 31)
- Pediatrics (N/A = 27)

- 4% 19% 17% 31% 2% 13% 24% 31% 36%
Q5 & 6: Do you Counsel on what it is and how it will be used?

- Never: 6% (Adults), 10% (Pediatrics)
- Occasionally: 21% (Adults), 13% (Pediatrics)
- Frequently: 20% (Adults), 31% (Pediatrics)
- Routinely: 22% (Adults), 29% (Pediatrics)

N = 108

NewYork-Presbyterian Hospital
Q7: Do Recipients ask to see data logs?

- 46% asked for data logs
- 42% never asked
- 8% asked occasionally
- 3% asked frequently
- 1% asked routinely
- 1% asked not applicable

N = 108
Q8: Assessing data logging

- 69% choose 'a. Every time I see a patient'.
- 26% choose 'b. Most often during the first 6 months post activation'.
- 5% choose 'c. When there is a complaint or difficult case'.

N = 108
Q12: Rank the most often used applications

- **Adults**
  - Counseling: 34%
  - Troubleshooting: 15%
  - Device use: 0%
  - Lack of progress: 0%
  - Special needs cases: 0%
  - Research: 0%
  - Accessory usage: 0%

- **Pediatrics**
  - Counseling: 13%
  - Troubleshooting: 8%
  - Device use: 0%
  - Lack of progress: 0%
  - Special needs cases: 0%
  - Research: 0%
  - Accessory usage: 6%
Case Study

- Late id of 4y/o bilateral profound SNHL
- Parents report child tolerates device & wears 8-10hrs
- Datalogging confirms worn only 1 hr/day with 89 coil offs in a 2 week period
- 3 mth visit datalogging confirms 12hrs/day, still with 84 coil-offs
- 6 mth visit datalogging confirms 12hrs/day, 2 coil-offs
Summary

• Two top applications are counseling and confirmation of device use
• Improvements based on clinician feedback
• Dialog
  – Counseling tool to help clinicians use data logging more effectively
• Educate recipients and parents on the benefit of feature