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Breaking Barriers: Empowering Social Connections in Older Adults with Hearing Loss

Brian Taylor, AuD

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- The applicability and accuracy of the course content may vary by the clinical, geographical, and cultural context; you should evaluate the course accordingly.
- As healthcare is rapidly evolving, new findings may change the validity of the information presented in this course. Providers should always consult the latest research and guidelines from professional associations.
- The interventions discussed in this course may be limited in generalizability, requiring practitioners to consider specific individual and population factors.
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- Healthcare providers should apply cultural competence and sensitivity to ensure effective and respectful care based on their patients' diverse needs.
- Providers should always evaluate the limitations of diagnostic and screening tools, considering their potential for false results as well as any ethical implications.
- It is the responsibility of course participants to critically evaluate the evidence from multiple sources to guide professional practice.

Learning Outcomes

1) After this course, participants will be able to describe the general characteristics of social connectedness.

2) After this course, participants will be able to define social and emotional well-being.

3) After this course, participants will be able to describe the harmful effects of hearing loss on social connectedness.

Disclosures

BRIAN TAYLOR, AuD

Senior Director, Audiology, Signia

Editor, Audiology Practices (ADA)

Editor-at-Large, HHTM blog

Adjunct Instructor, University of Wisconsin

Key Questions

- What is social connectedness and why does it matter?
- How does hearing loss affect social connectedness?
- How can clinicians identify and treat social connection problems?

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1834

Letters to the Deaf

Harriet Martineau 1802-1876
British “sociologist”

4 Social Challenges Related to Hearing Loss (1834)

1. **Stigma of wearing devices:**

Shopkeepers commonly say, “I dread it when deaf people visit my shop. They expect me to have something they can place in their ears that no one can see that makes their problem better!”

2. Physician’s lack of awareness:

“There is nothing I can do to help you. It’s best to simply learn to live with it.”

3**. Music appreciation:**

“I might as well give up enjoying performances because these are indulgences that are hardly worth the trouble.”

4. Social isolation:

“Why bother meeting other people. I don’t want to burden others with my problem.”

Naples and Valdez, 2020; Weinstein 2024 ADA lecture

2025

- Progress has been made.

- Several shortcomings remain:

- Stigma is still a challenge
- Physicians still devalue hearing loss
- Music remains a challenge to optimize with hearing aids
- **Social isolation and loneliness are at epidemic proportions!**

I. The Crisis of Connectedness

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The Science of Being Social

Austin Perlmutter, MD

“Humans are inherently social beings, and our connections with others play a vital role in our overall well-being. The human brain is wired to thrive in social environments. Our brains have specialized areas dedicated to processing social interactions, emotions, and empathy.”

“Social isolation and loneliness can have detrimental effects on brain health. Prolonged isolation can lead to increased risk of depression, anxiety, cognitive decline, and even higher mortality rates. It’s important to be aware of the impact of social isolation and take proactive steps to nurture relationships and build a support network.”

“Crisis of Connection”

- 1 in 5 Americans report they are socially isolated
- 2023 Surgeon General report: A consequent of chronic, long-term social disconnectedness is a significantly increased risk for early death. Similar to smoking 15 cigarettes per day.
- Social disconnection is an urgent public health problem (Na, et al 2023).

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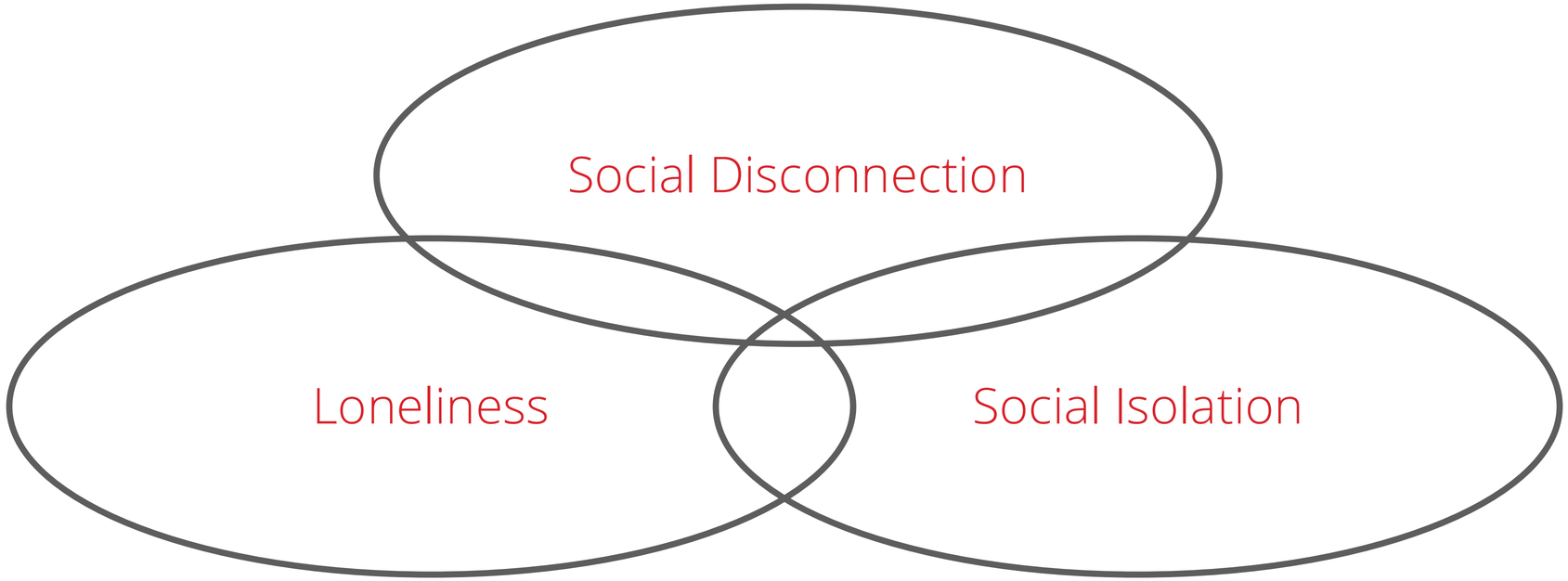
Social Disconnection



Loneliness vs. Social Isolation

- Social isolation = lack of social connections or a lack of a social network
- Loneliness = the distressing feeling of being alone or separated
- Social Disconnection or Connectedness = a combination of both

Auditory and Social Wellness

Social Wellness:

- Supportive relationships
- Enjoyment of life
- Involvement in activities

Humes et al 2024

Auditory and Social Wellness

- "Good" hearing wellness does not guarantee "good" auditory wellness
- In a typical clinic, it is estimated that one-third of adults 50 years of age and older with normal audiograms will have "poor" auditory wellness.
- Auditory wellness and its impact on social connectedness should be assessed in the clinic

Humes et al 2024

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II. Hearing Loss and Social Connectedness

A common occurrence

- Grandma smiles throughout the holiday dinner, but everyone can tell she is not following the conversation.
- She often interjects off topic comments, and when asked a question, she responds with an answer that does not relate to the conversation.
- Someone asks her, “Have you heard from Faith recently?”
- She irritably responds. “Yes, I washed my face this morning!”

The Lived Experience of Hearing Loss in Normal-Aging Adults

Gradual Hearing Loss

Negative Emotions

Maladaptive Behaviors

Conditions

Audiology

The Lived Experience of Hearing Loss in Normal-Aging Adults

Gradual Hearing Loss → **Fatigue & Frustration** → **Withdrawal & Isolation** → **Loneliness**

Physical → Psychological → Social

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Review articles

- Systemic review by Shukla et al (2020) showed that hearing loss is associated with loneliness and social isolation, with a stronger association for hearing loss and social isolation.
- Scoping review by Bott and Saunders (2021) indicated hearing loss is associated with both social isolation and loneliness. This association occurs across the lifespan and is unrelated to degree of hearing loss. When patients describe the consequences of their hearing loss, they more often use language describing social isolation rather than loneliness.

Population-based studies

- 5,888 American adults followed over 9 years. Hearing problems were associated with weaker and smaller social networks (Dobrota, et al 2022)
- 4,739 Japanese adults indicated that loneliness may accelerate the incidence of disability in older adults with hearing loss (Tomida, et al 2023).
- 7,442 Australian adults, aged 50 years and older surveyed. Those with self-reported hearing loss reported significantly smaller and less supportive social networks compared to those with normal hearing or corrected hearing loss (Hamrah, et al 2024).

Observational studies

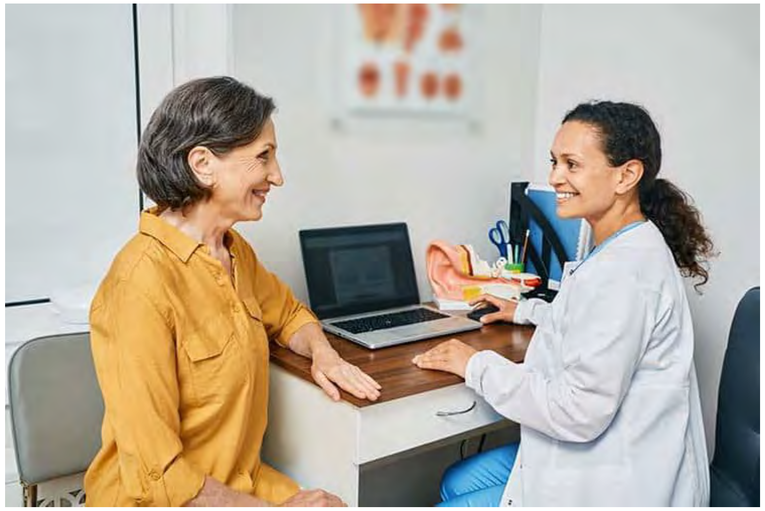
- Focus group comprised of 21 adults with hearing loss. Participants described several negative consequences: social overwhelm, fatigue, loss, exclusion, and emotional distress: frustration, grief, anxiety, loneliness, and burdensomeness (Bennett, et al, 2022)
- Semi-structured interview of 17 adults with hearing loss. Participants described several negative emotions associated with hearing loss (frustration, anger, social overwhelm) that affected the quality of their relationships (Holman, et al 2023)
- Data analyzed from 128 adults in the USC Aging Brain Cohort. Results showed that participants with poorer scores on WIN testing exhibited greater social isolation (Arjmandi et al, 2024)

General Conclusions

- Untreated hearing loss contributes to reduced social network size, and negative emotions that can lead to poorer quality relationships. Social isolation from hearing loss may indirectly contribute to cognitive decline and depression.
- It’s probably worth the time assessing an individual’s risk of being socially disconnected

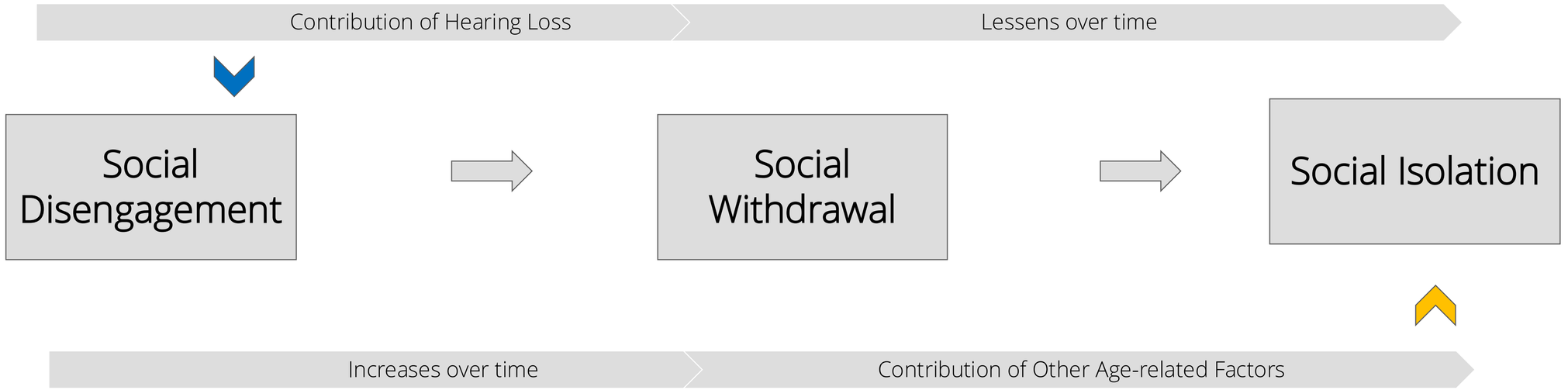
III. Identification and Treatment Considerations

- Given the prevalence and harm associated with hearing loss and its links to social isolation and loneliness, should this change the way we work with patients?
- Change our assessment process?
- How we select and fit hearing aids?



A new framework

How people become socially isolated over time



Motola, et al (2024)

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New clinical approaches needed

- By understanding the different stages of social isolation, clinicians can develop tailored interventions to address specific needs of individuals experiencing social isolation or loneliness

Within-Situation Disengagement

- How might it be reported to you in the clinic?
- Zoning out
- Lapses in attention
- Mind wandering
- Boredom
- Effortful listening

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Social Withdrawal

- How might it be reported to you in the clinic?
- Leave social gatherings early
- Avoid certain listening situations
- Willing to forego opportunities to socialize and spend more time alone

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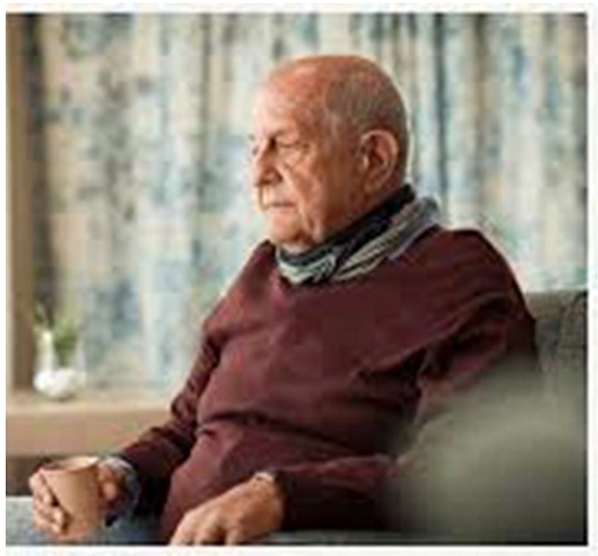
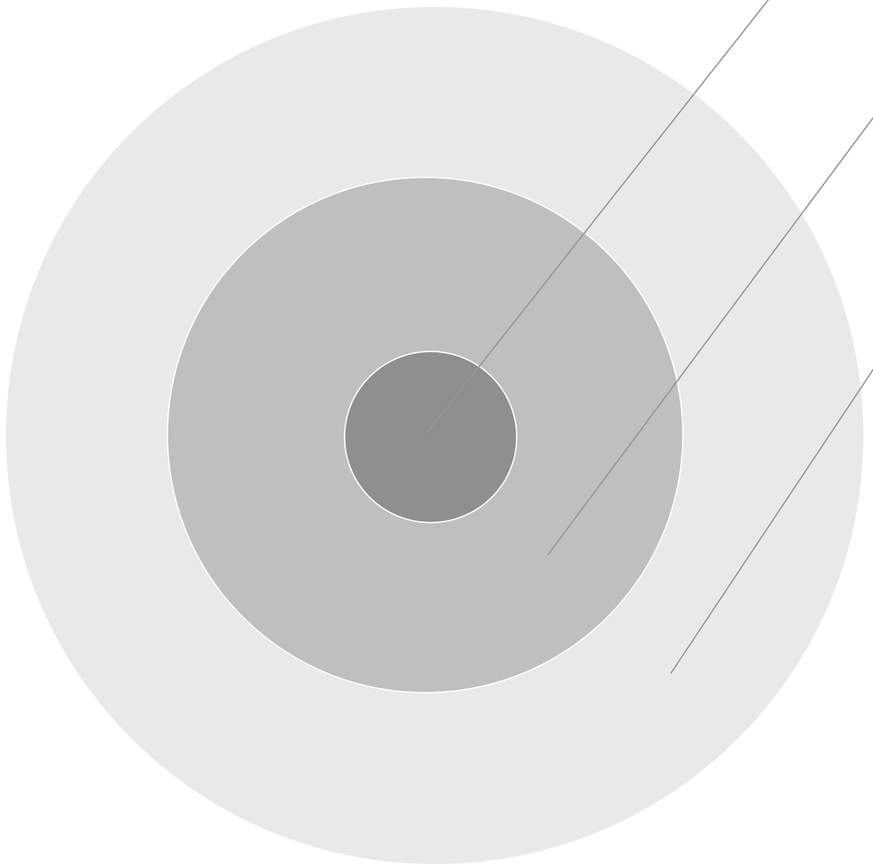
Social Isolation

- How might it be reported to you in the clinic?
- Reduced number of social connections
- Lack of companionship or support
- “House-bound”
- Quality of relationships with core network is declining



Layers of Social Relations



Core Network (family or caregivers)

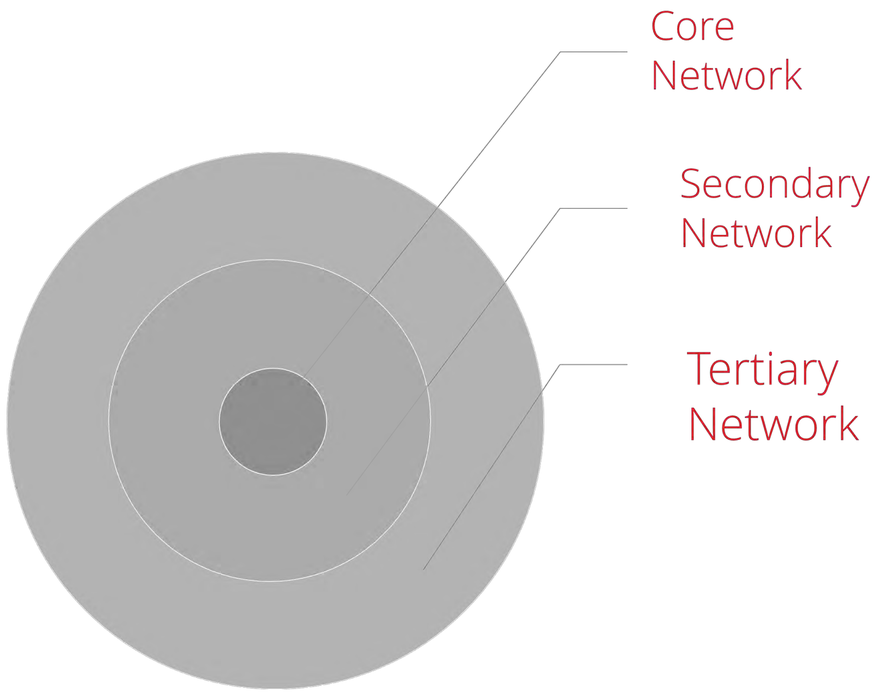
Secondary Network (colleagues and friends)

Tertiary Network (acquaintances)

Motola, et al (2024)

Layers of Social Relations

- A healthy aging person has a well-rounded social network, represented by people in all three layers
- Factors related to aging (e.g., hearing loss) cause people to focus more on the core



Motola, et al (2024)

Tailoring the Assessment

- 4 tools:
- Facilitate asking patients about their social well-being
- Identify the social and emotional impact of hearing loss
- Target intervention/treatment goals

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Tool #1

EAR SCIENCE Institute Australia

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Bennett, et al 2023

Tool #1

- “Have you experienced any of the emotions or conditions listed here?”
- “If you are comfortable sharing, tell me more about _____.”
- “Tell me how your hearing loss might be related to it?”

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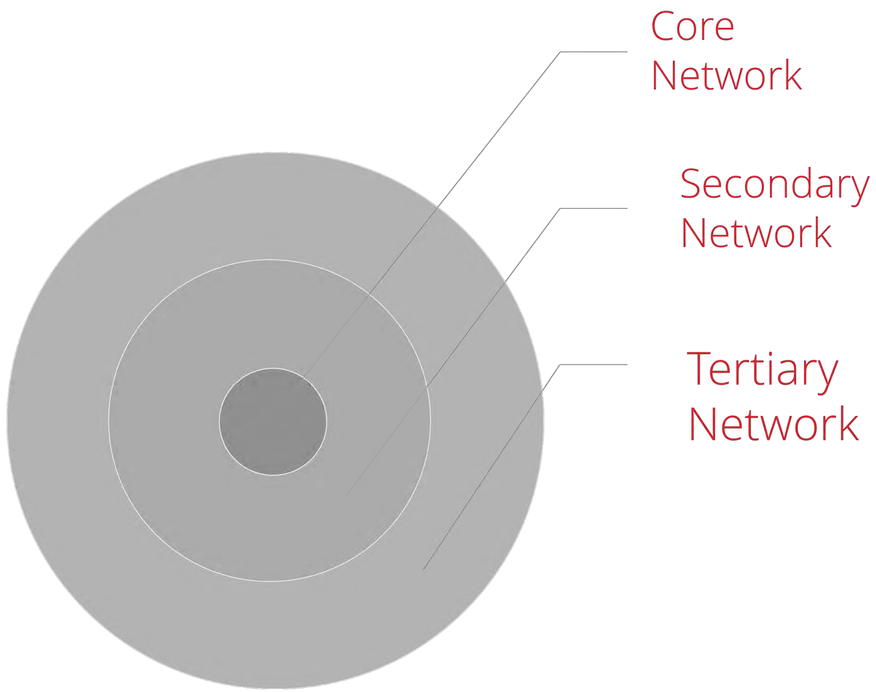
Tool #2

- Allow the patient and their companion to characterize their own social network
- Quality and quantity of each layer
- Where is it today?
- Where would you like it be after treatment?



Motola, et al (2024)

Tool #3

Revised Hearing Handicap Inventory – Screening (RHHI-S)

Instructions: The purpose of this scale is to identify the problems your hearing loss may be causing you. Answer YES, SOMETIMES, or NO for each question. Do not skip a question if you avoid a situation because of your hearing problem. If you use a hearing aid, please answer the way you hear without the aid.

		YES (4)	SOME-TIMES (2)	NO (0)
1.	Does a hearing problem cause you difficulty when listening to TV or radio?	___	___	___
2.	Does a hearing problem cause you difficulty when attending a party?	X	___	___
3.	Does a hearing problem cause you to feel frustrated when talking to members of your family?	___	___	___
4.	Does a hearing problem cause you to feel left out when you are with a group of people?	___	___	___
5.	Does a hearing problem cause you difficulty when visiting friends, relatives or neighbors?	X	___	___
6.	Do you feel handicapped by a hearing problem?	___	___	___
7.	Do you feel that any difficulty with your hearing limits or hampers your personal or social life?	X	___	___
8.	Does a hearing problem cause you to feel uncomfortable when talking to friends?	___	___	___
9.	Does a hearing problem cause you to avoid groups of people?	X	___	___
10.	Does a hearing problem cause you to visit friends, relatives or neighbors less often than you would like?	___	___	___

FOR CLINICIAN'S USE ONLY: Total score: _____

Casserly et al 2020

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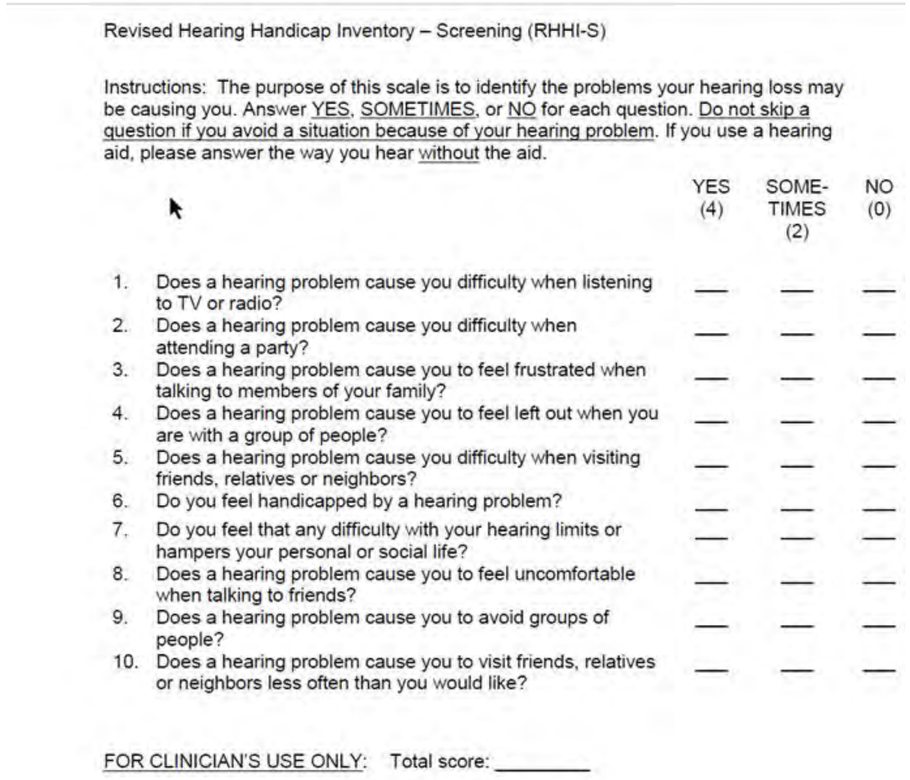
Tool #3



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	YES (4)	SOME-TIMES (2)	NO (0)
1. Does a hearing problem cause you difficulty when listening to TV or radio?	___	___	___
2. Does a hearing problem cause you difficulty when attending a party?	___	___	___
3. Does a hearing problem cause you to feel frustrated when talking to members of your family?	___	___	___
4. Does a hearing problem cause you to feel left out when you are with a group of people?	___	___	___
5. Does a hearing problem cause you difficulty when visiting friends, relatives or neighbors?	___	___	___
6. Do you feel handicapped by a hearing problem?	___	___	___
7. Do you feel that any difficulty with your hearing limits or hampers your personal or social life?	___	___	___
8. Does a hearing problem cause you to feel uncomfortable when talking to friends?	___	___	___
9. Does a hearing problem cause you to avoid groups of people?	___	___	___
10. Does a hearing problem cause you to visit friends, relatives or neighbors less often than you would like?	___	___	___

FOR CLINICIAN'S USE ONLY: Total score: _____

Score	Auditory Wellness Status	Recommended Actions
0 to 7	Good	Monitor over time
8 to 15	Fair	On the cusp of needing help
16 to 23	Poor	Interventions would be helpful
24 to 40	Very Poor	"

Casserly et al 2020; Humes et al 2024

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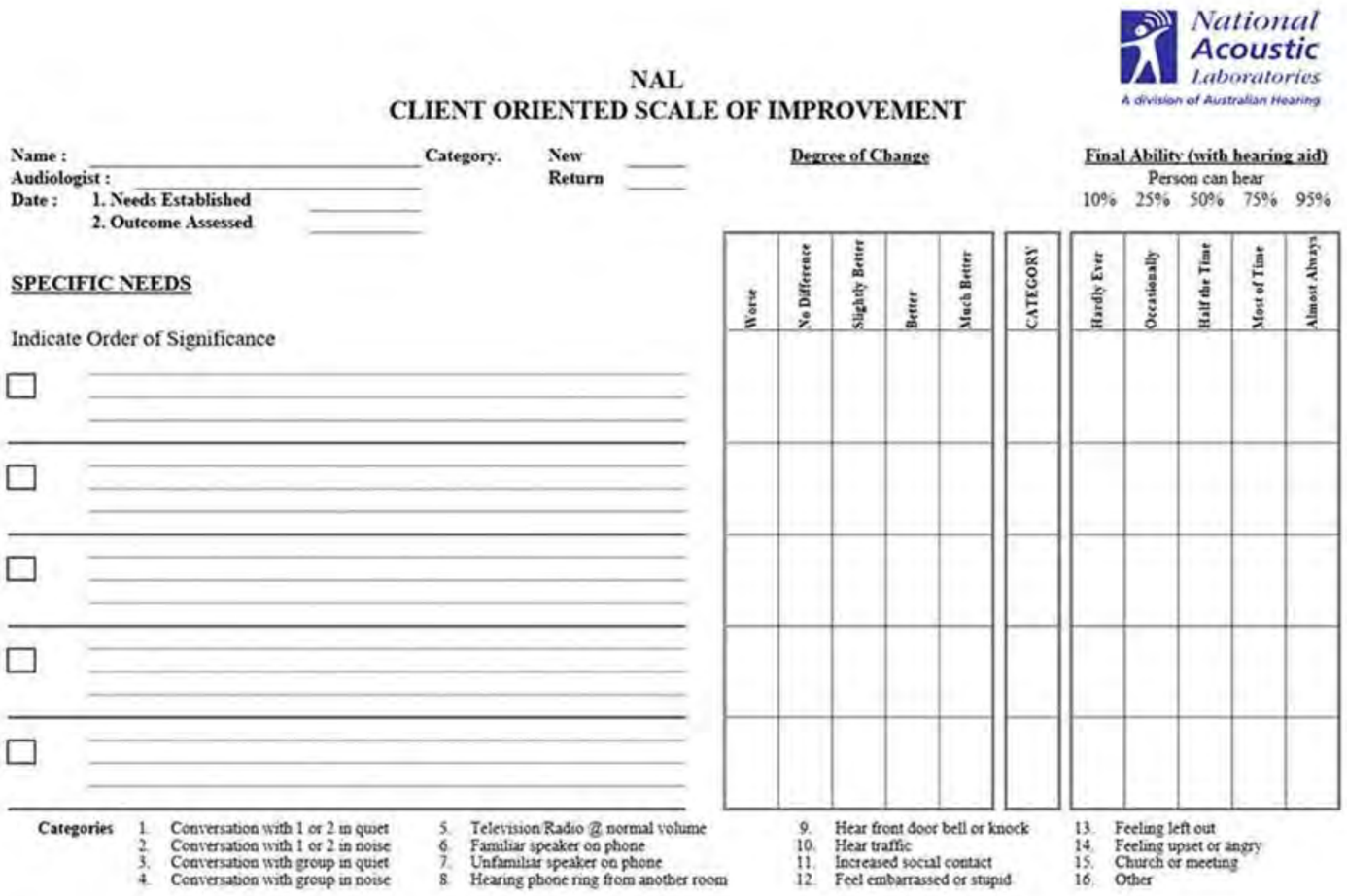
Tool #4



National Acoustic Laboratories
A division of Australian Hearing

NAL
CLIENT ORIENTED SCALE OF IMPROVEMENT

Name : _____ **Category.** **New** _____
Audiologist : _____ **Return** _____
Date : **1. Needs Established** _____
2. Outcome Assessed _____

SPECIFIC NEEDS

Indicate Order of Significance

☐ _____
☐ _____
☐ _____
☐ _____
☐ _____

Degree of Change

Worse	No Difference	Slightly Better	Better	Much Better	CATEGORY

Final Ability (with hearing aid)
Person can hear

10%	25%	50%	75%	95%
Hardly Ever	Occasionally	Half the Time	Most of Time	Almost Always

Categories
1. Conversation with 1 or 2 in quiet
2. Conversation with 1 or 2 in noise
3. Conversation with group in quiet
4. Conversation with group in noise
5. Television/Radio @ normal volume
6. Familiar speaker on phone
7. Unfamiliar speaker on phone
8. Hearing phone ring from another room
9. Hear front door bell or knock
10. Hear traffic
11. Increased social contact
12. Feel embarrassed or stupid
13. Feeling left out
14. Feeling upset or angry
15. Church or meeting
16. Other

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Tool #4

Modified COSI

Key point =
Go beyond asking about situations where they want to hear better. Explore social activities and associated emotions

My hearing loss impacts on my	How big a problem is it? Small/ med/ big	How frequent is this a problem? daily./weekly/ monthly	Strategies discussed today to address this	My situation has improved 1= not at all 2 = slightly 3 = no change 4 = somewhat 5 = a lot

Bennett, et al 2023

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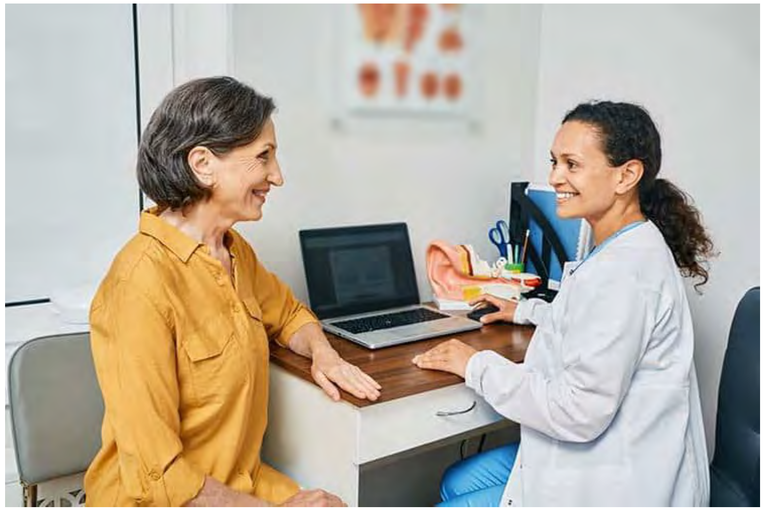
Tool #4

Modified COSI

My hearing loss impacts on my ……	How big a problem is it? Small/ med/ big	How frequent is this a problem? daily./weekly/ monthly	Strategies discussed today to address this	My situation has improved 1= not at all 2 = slightly 3 = no change 4 = somewhat 5 = a lot
Frustration at dinner table with family	big	daily		
Go back to playing bingo with friends at VFW	big	weekly		

III. Identification and Treatment Considerations

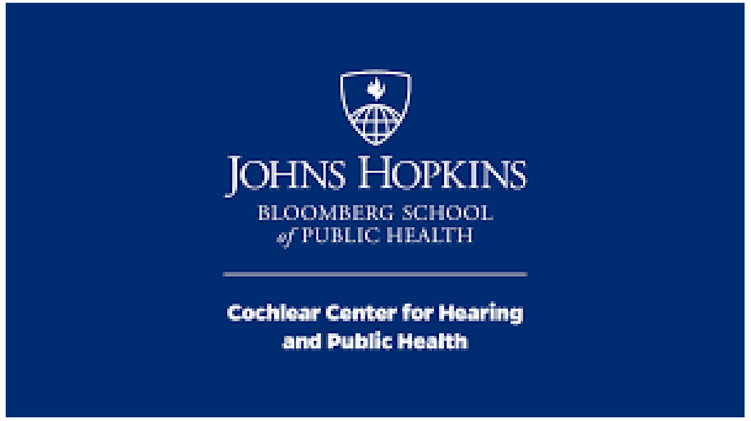
- How we select and fit hearing aids to optimize social engagement?



Evidence suggesting interventions can promote social engagement is mixed

- Systematic review from UK found limited evidence that hearing aid use has a lasting positive impact on loneliness and social isolation (Ellis et al 2021).
- Using a proxy measure of social engagement (the average number of hours per week spent in solitary activities using a computer, watching TV, or reading) with 650 adults, Dawes et al (2015) found no significant differences between hearing aid users and non-users in social engagement. Hearing aid use did not change the amount of time involved in these more solitary activities.
- Holman et al (2021) divided 106 adults with hearing loss into two groups. The intervention group was fitted with their first pair of hearing aids and the control group were not fitted. They found that social activity level increased for the intervention group. The control group did not experience these benefits to social engagement.
- On two separate patient groups (n1=173, n2=161), Singh et al (2015) found that “strong” social connections (as measured on the DUFFS questionnaire) predict hearing aid satisfaction. If we can improve the quality of social connection, perhaps we can improve hearing aid satisfaction

Recent Evidence



- ACHIEVE study
- Randomized controlled trial, 3-year period
- Primary report (2023) indicated hearing intervention did not reduce cognitive decline in the total cohort.
- Two other publications in 2024:
- Sanchez et al. *Effect of hearing intervention on communicative function: A secondary analysis of the ACHIEVE randomized controlled trial.*
- Bessen, et al. *Effect of Hearing Intervention Versus Health Education Control on Fatigue: A Secondary Analysis of the ACHIEVE Study.*

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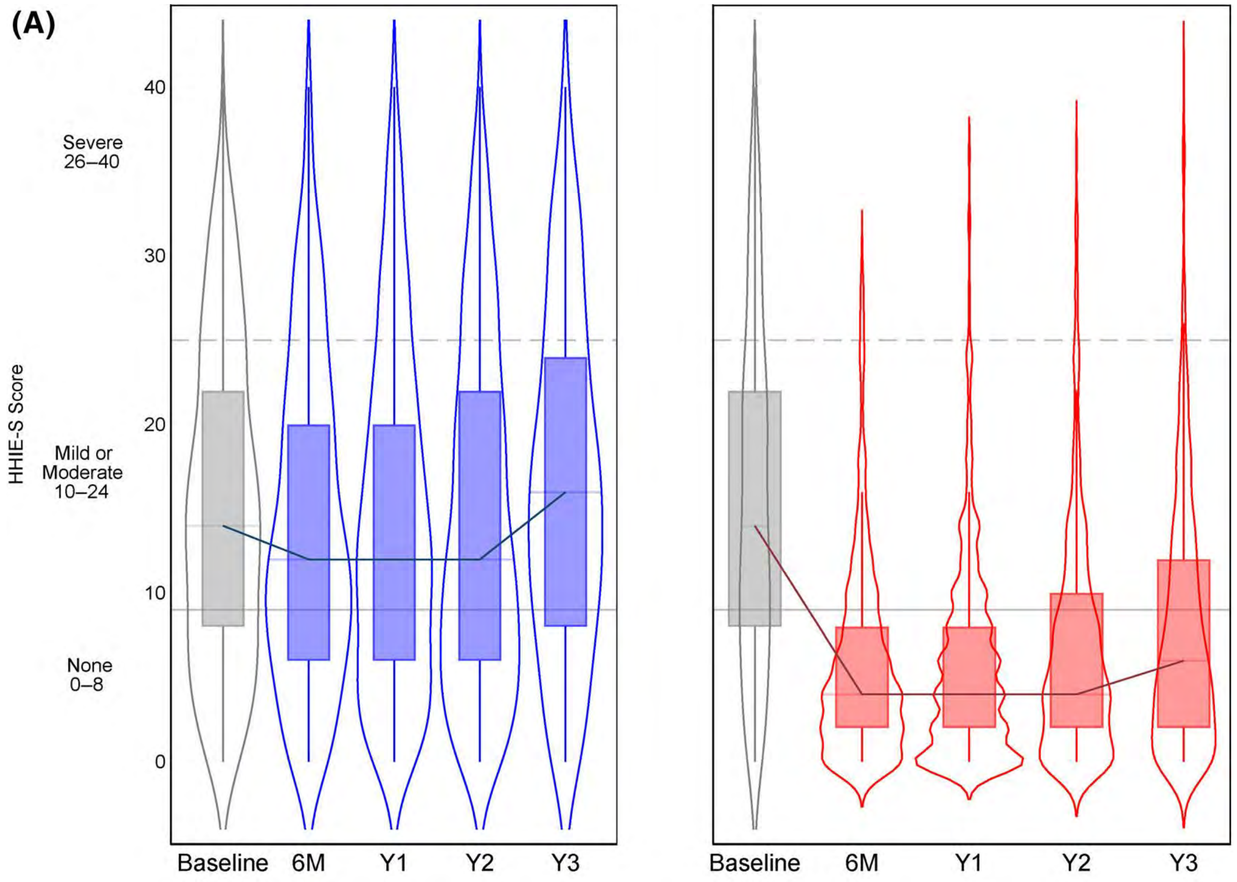
HHIE-S results over time

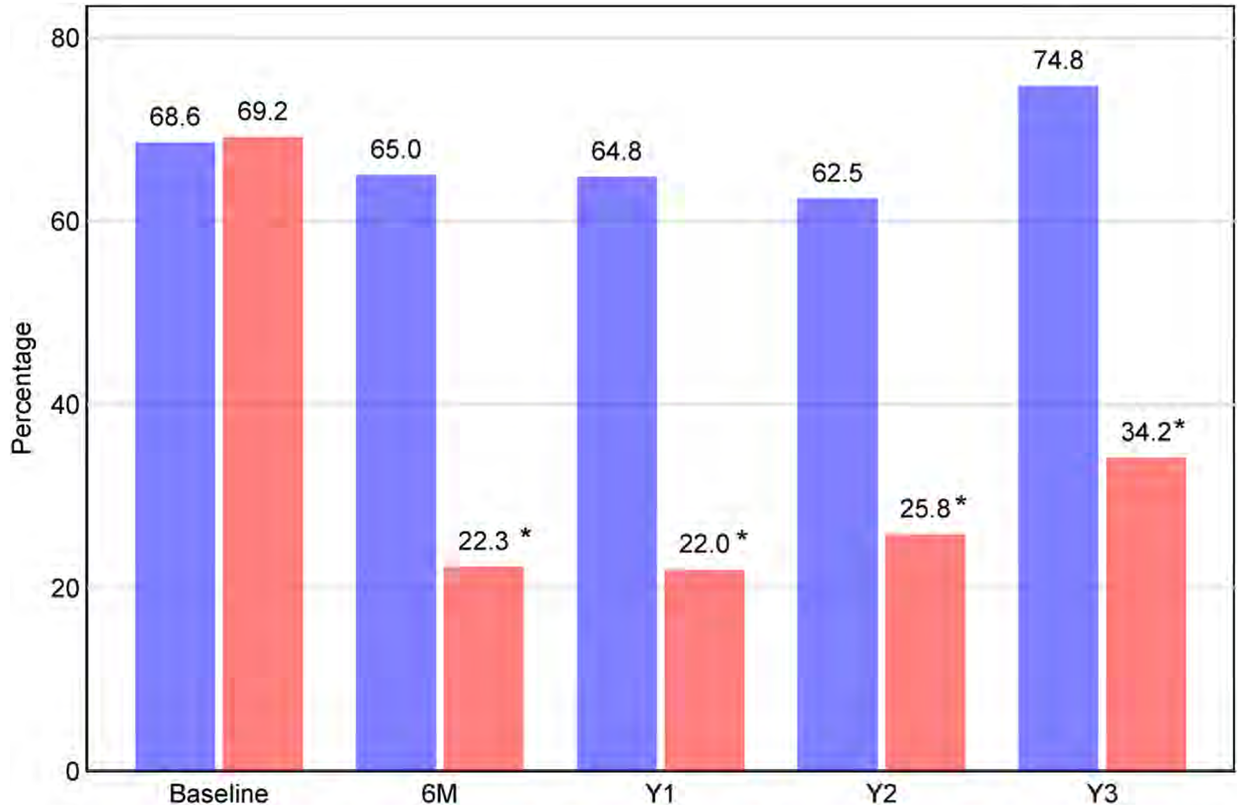
Blue: Control group
Red: Intervention group



Sanchez, et al (2024)

% with >10 on HHIE-S

Blue: Control group
Red: Intervention group



1/4 of wearers experience auditory wellness problems at 6 mos. to 2 yrs

Sanchez, et al (2024)

Interventions that Promote Better Social Engagement

1. Properly fitted hearing aid technology
2. Empowering the individual to “take charge” of their treatment
3. Social coaching and activity scheduling

Properly fitted hearing aids

- Engineered to optimize performance in group social situations (see Folkeard, et al 2024)
- Proprietary implementation of 4-mic array, NFMI “e2e” technology
- Detects, tracks, and enhances talkers – even as they move

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Empowerment

EmpAQ-5 - Brief Empowerment Questionnaire for people with hearing loss

Instructions

This questionnaire asks about empowerment in the everyday lives of hearing aid wearers/users.

For each statement, please check the box that corresponds to how much you agree or disagree with that statement. There are no right or wrong answers, we are interested in your personal experiences.

	Strongly disagree (1)	Disagree (2)	Agree (3)	Strongly agree (4)	Not applicable
1. I know how to get help if I have any problems with my hearing	☐	☐	☐	☐	☐
2. I use tactics to help me communicate in challenging situations (e.g. move to a quieter location)	☒	☐	☐	☐	☐
3. My hearing loss doesn't stop me from taking part in social activities	☒	☐	☐	☐	☐
4. I can control how I respond to the challenges I experience resulting from my hearing loss	☐	☐	☐	☐	☐
5. I am confident about my ability to manage problems caused by my hearing loss	☐	☐	☐	☐	☐

Role of the HCP:

- Provide skills and knowledge, targeted to specific area

Gotowiec, et al 2023; Bennett, et al (2024)

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Social Coaching

Activity Scheduling

Hearing loss impacts how we socialise. It can be hard to hear in crowds, or understand accents and people who are softly spoken. Socialising can become less rewarding and/or embarrassing.

Withdrawal can become easier and habitual. However, **staying away from difficult social situations can rob us of the experiences we need to adapt and develop new skills.**

Working with your audiologist/s to problem solve difficulties you may be experiencing in social situations can help get your social life back on track.

Activity scheduling aims to increase the number of social activities you attend, and change the way you participate within these activities. When we put ourselves in difficult situations, we learn new skills and adapt.

Step 1. Identify activities that you have stopped that you used to enjoy and/or activities that you would like to try, but haven't tried recently. Rate these activities from 1 to 10, with 10 being highly important/ a high level of confidence for pursuing this activity. Select activities that are rated 7 or higher.
Step 2. Schedule a time into your diary for a few of these activities. Describe how you will arrange these activities.
Step 3. Describe how you will engage within these activities.
Step 4. Consider what might go wrong, and how you will overcome these obstacles if they arise.
Step 5. At the next appointment: Talk about what went well and what did not; What helped you to complete these scheduled activities and what blocked your success; and Brainstorm together how to overcome these barriers in the next instance.

My activity schedule

Step 1. Identify social goals for the week/month.

-
-
-

Step 2. Describe how you will arrange these activities.

-
-
-

Step 3. Describe how you will engage while at these activities.

-
-
-

Step 4. Consider what might go wrong, and how you will overcome these obstacles should they arise.

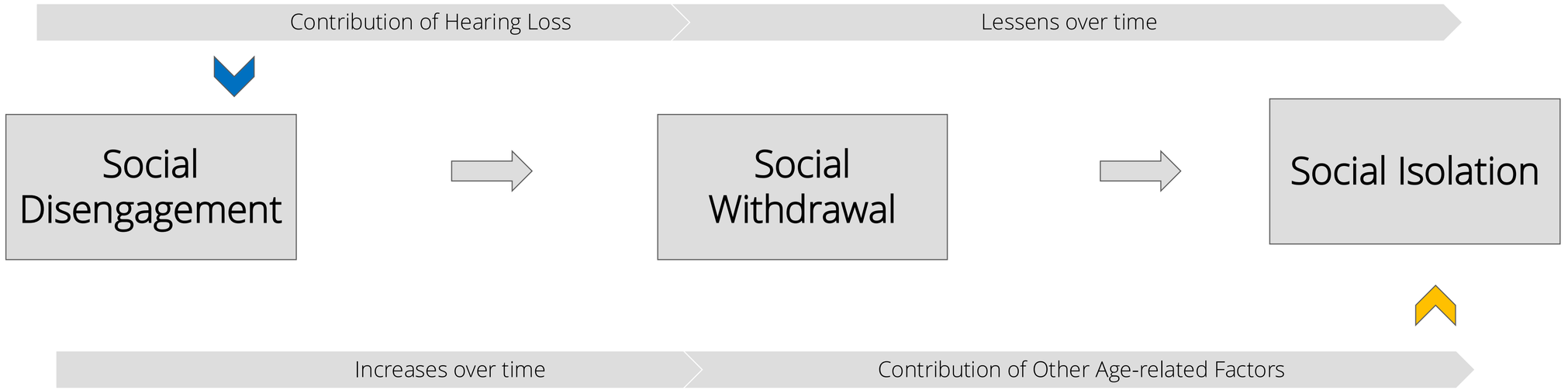
-
-
-

Follow your plan and go for it!

Bennett et al (2023)

A new framework

Individualized interventions to boost social connections



Motola, et al (2024)

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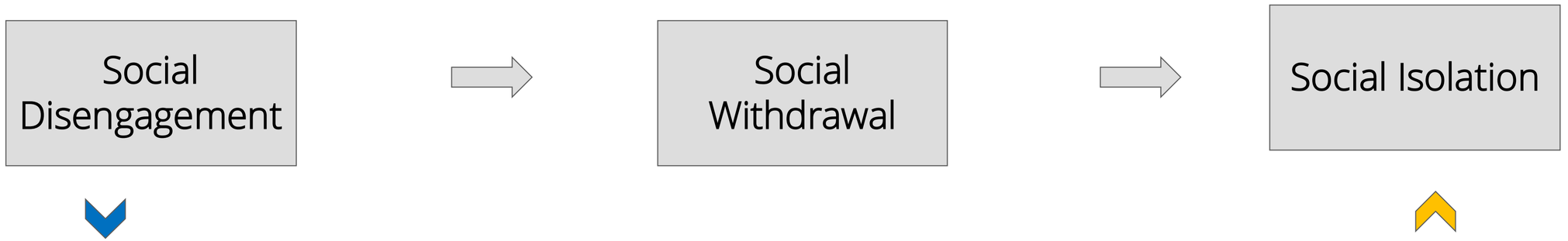
A new framework

Individualized interventions to boost social connections



Properly fitted hearing aids

Motola, et al (2024)

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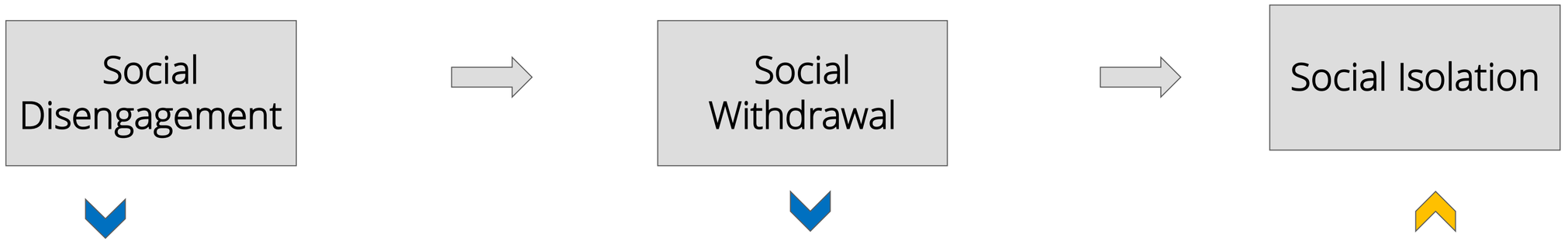
A new framework

Individualized interventions to boost social connections



Properly fitted hearing aids

+ Empowerment training

Motola, et al (2024)

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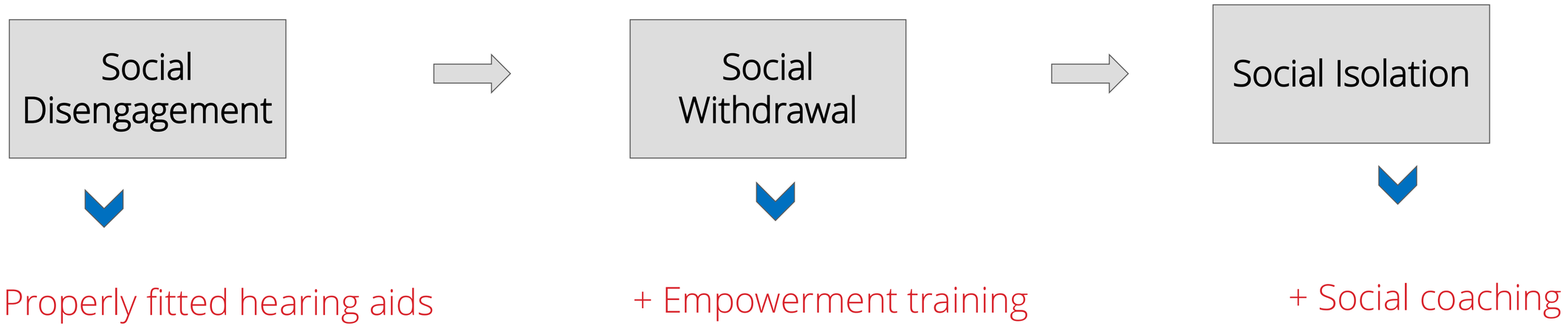
A new framework

Individualized interventions to boost social connections



Motola, et al (2024)

Final Thoughts

- See Timmer et al's (2024) 5-step plan to optimize social-emotional well-being
- Go beyond the audiogram and hearing aid technology to provide individualized care that improves social connectedness and well-being
- "We can't add years to your life, but we can add more life to your years!"

Questions?

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