


unitron. Hearing matters

The Reconstruction of Audiology:
Decoupling Service Delivery from Product Dispensing

Brian Taylor, AuD

Who is Brian Taylor?

- 22 years experience
- Editor of *Audiology Practices*
- Author of 3 text books
- With Unitron since 2008



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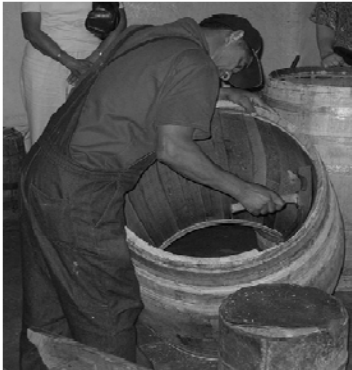
Previous AO Courses: Creative Destruction and Strategy

<http://www.audiologyonline.com/audiology-ceus/course/creative-destruction-audiology-to-survive-23280>

<http://www.audiologyonline.com/audiology-ceus/course/five-key-drivers-customer-intimacy-23735>

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Creative Destruction



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The Creative Destruction of Audiology?



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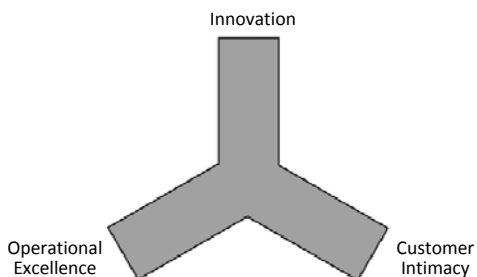


Joseph
Schumpeter
1883 -1950

“All established businesses are standing on ground that is crumbling beneath their feet.”

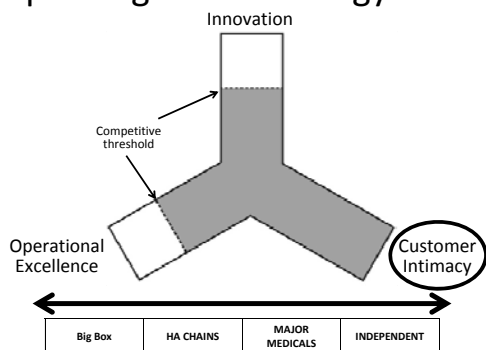
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The Discipline of Market Leaders



Wiersma and Treacy, 1997

Market Leadership in Hearing Aid Dispensing and Audiology



Three Questions

1. How has audiology and the marketplace for our services evolved over the past 40 years?
2. How does Audiology fit into the evolving healthcare system in the US?
3. What do audiologists need to do in order to create value for patients (and revenue for themselves) in this time of change?

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Q1

How has audiology and the marketplace for our services evolved over the past 40 years?

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The Analog World 1974-late 1990s

- Limited Product Options
- Limited Features
- Limited Adjustments

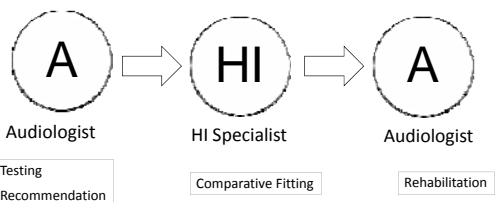


The Profession, circa 1974



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The Profession, circa 1974



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The Digital Revolution

- Upgradeable
- Wireless
- Incrementally improving
 - Faster
 - Smarter

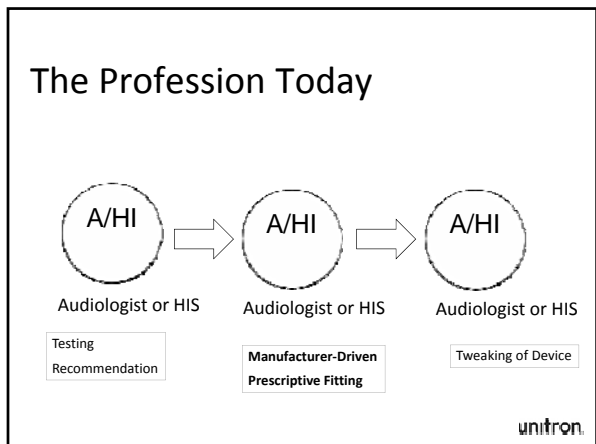


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The "Tyranny" of the Digital Unit

- Product is the focal point
- Product is becoming commoditized
- Ergo profession is becoming commoditized (many reasonable substitutes available)

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Q1 How has audiology and the marketplace for our services evolved over the past 40 years?

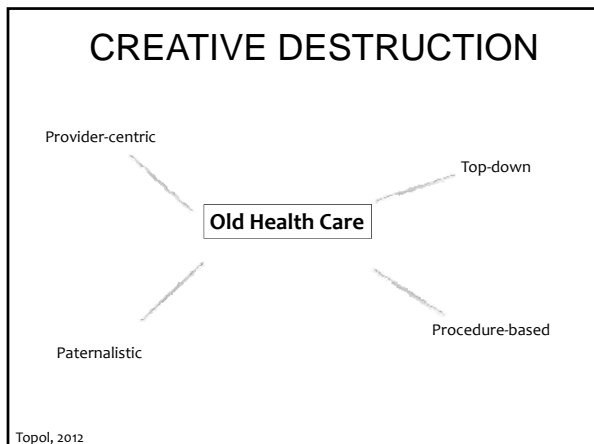
1. Audiology has become synonymous with dispensing a device
2. The value of audiologists has been substituted by other professions as well as by technology
3. Consumers have access to an abundance of information, including direct from manufacturers
4. Today, your brand or reputation can never coast on past performance

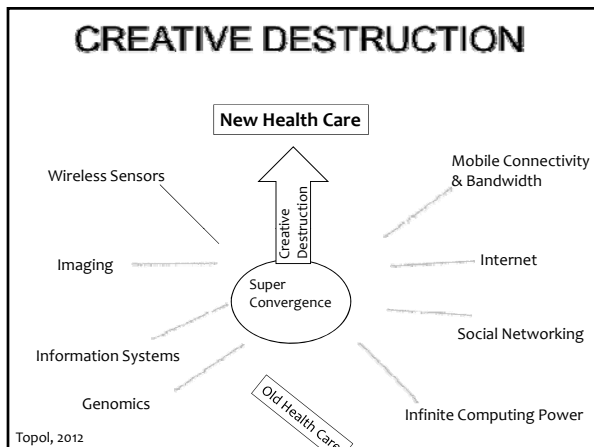
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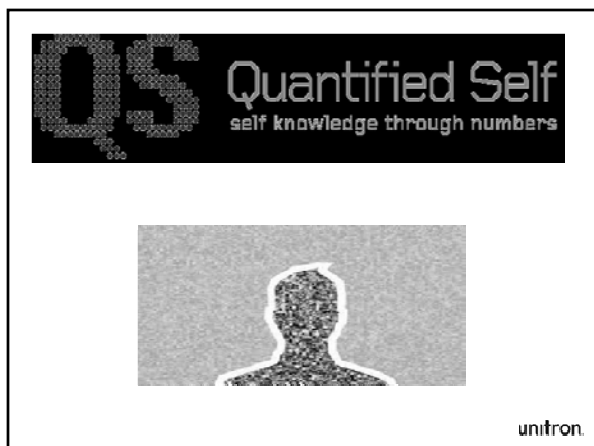
Q2

How does Audiology fit into the evolving healthcare system in the US?

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Modern Healthcare in Evolving

- Personalized
- Preventive
- Pre-emptive
- Participatory



Health Insurance Is Not Health Care

Michelle H. Frazz MD

JAMA InterMed, April 7, 2014

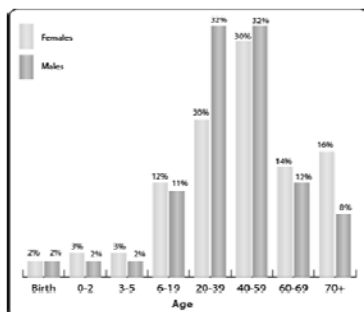
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Pit Crews, Not Cowboys



Gawande, 2013

Opportunity to Engage Younger Patients with Milder Losses



NIDCD, 2012

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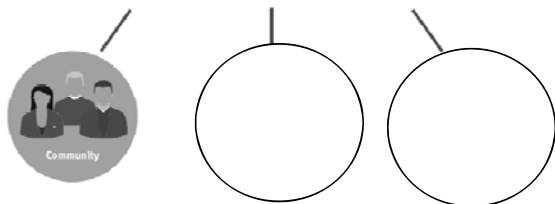
More Opportunity.....

- Age-related hearing loss is being recognized as a public health crisis
- Rise of Accountable Care Organizations
- Rise of Population-based & Preventive Medicine
- The Quantifiable Self Movement
- PCPs/GPs outnumber Audiologists and HI Specialists 12:1

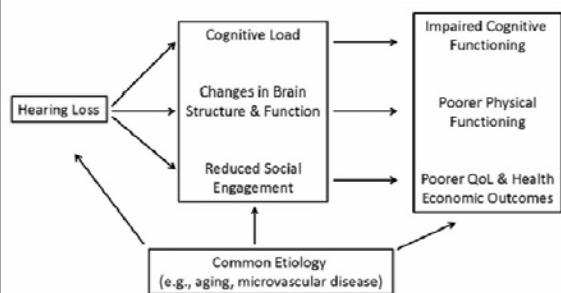
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The Discipline of Customer Intimacy

The ability to form deep, long-lasting relationships



The Common Soil Argument



5 Articles

1. Hearing Loss and Cognitive Decline in Older Adults. Lin et al (2012) *JAMA Internal Medicine*
2. Impairments in Hearing and Vision Impact on Mortality in Older People. Fisher, et al (2014). *Age and Aging*
3. The Association between Hearing Loss and Social Isolation in Older Adults. Mick et al (2013). *Otolaryngology-Head & Neck Surgery*
4. Hearing Impairment with Depression in US Adult, NHANES 2005-2010. (2014). *Otolaryngology-Head & Neck Surgery*
5. Association of hearing impairment with brain volume changes in older adults. Lin et al (2014) *Neuroimage*

Request a copy of these - brian.taylor@unitron.com

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Q2 How is the healthcare system currently evolving? Considerations for audiologists

1. Educate physicians on the consequences of untreated, age-related hearing loss and some of the chronic conditions that accelerate it.
2. Engage patients earlier in the process using self-guiding assessment apps
3. Think of hearing loss as part of the larger picture -- how we can help people "age in place" and keep their minds sharp, stay active
4. Use advertising that triggers positive engagement with hearing care professionals (see Alcock article in file share menu)

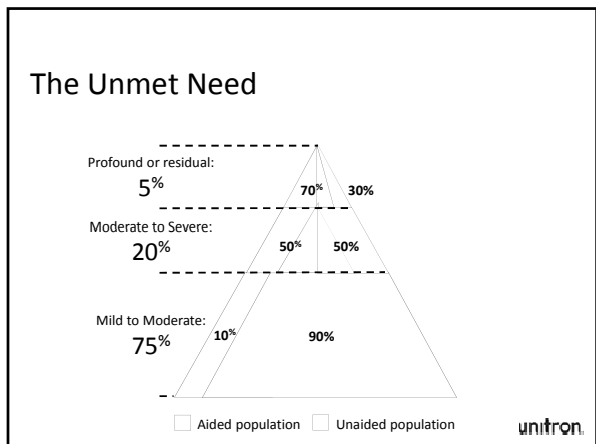
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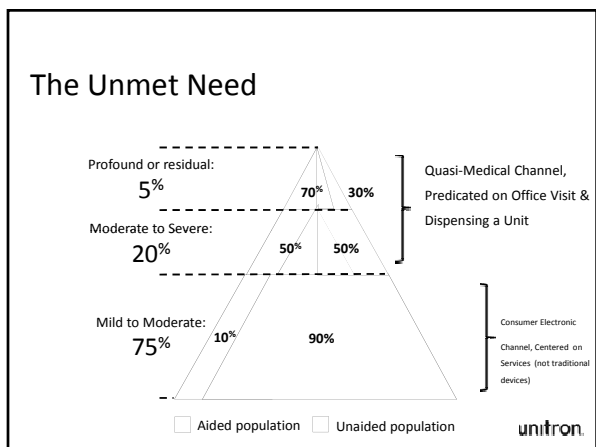
Q3

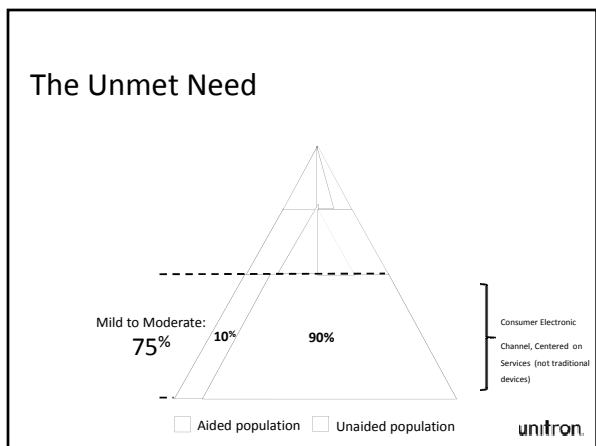
Given this constellation of circumstances, how can audiologists create value for patients (and revenue for themselves) in this time of change?

Corollary: What can we unbundle from the device?

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Goals

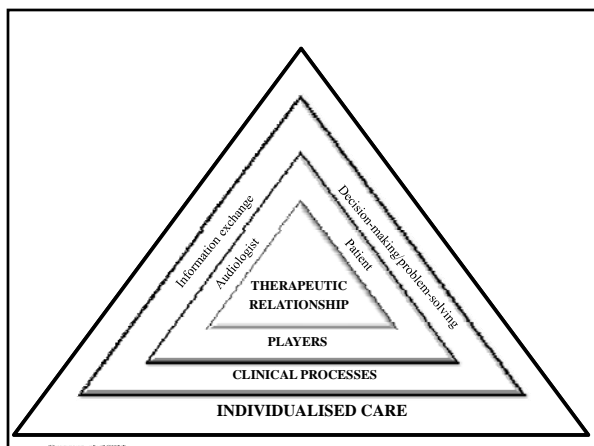
1. Attract Younger Patients
2. Attract Patients with Milder Hearing Loss
3. Provide Service Model that is Less Dependent on Dispensing Traditional Device
4. Find Unique Value Proposition that is not easily Duplicated by Other Professions

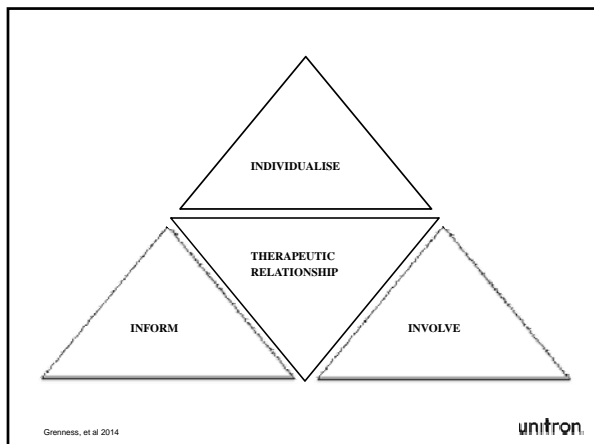
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Decoupling Service from Device

1. Engage people early
2. Let patient's perception of problem (not audiological assessment results) guide decisions
3. Complete a Functional Assessment, using Motivational Interviewing
4. Provide Goal Planning – focus on behavior change
5. Use journaling as a means to measure success
6. Charge for Service (unbundle)

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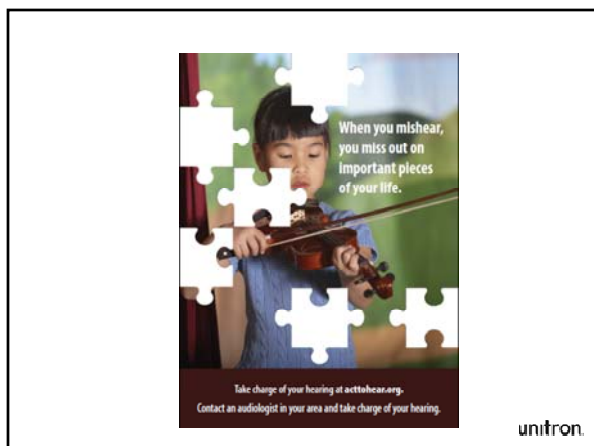




5 Steps to *Individualizing Care*

1. Engage people at an earlier age in the process of hearing screening

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Screening Kiosks and Apps

iPhone Screenshots

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Provide Readily Available Consumer Information

Link education, advocacy and review sites to your website and social media

Example: Hearing Tracker

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5 Steps

1. Engage people at an earlier age in the process of hearing screening.
2. Assess the individual's real-life communication difficulties
 - ✓ Functional Communication Assessment
 - ✓ Less Reliant of Audiogram Results

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Skills/Tools Needed

- Motivational Interviewing
- Scaling Questions
- Goal Planning and Assessment

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Basic Principles of MI

- Collaborative: Active collaboration in identifying specific areas where behavior change is needed
- Evocative: Connecting behavior change to what the patient values or cares about.
- Honor patient autonomy: Patient is responsible for course of action

Sources:

1. Motivational Interviewing in Healthcare, Rollnick, Miller & Butler
2. 1001 Solution-focused Questions, Bannick
3. Basic Counseling Technique, Perry
4. Motivational Interviewing & Amplification, Beck et al (see attachment)

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Two Tasks of MI

- Self-Perception of Handicapping Condition (how bad is it?)
- Willingness to Receive Help (How ready are you to change?)

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Perception of Handicap – Scaling Question

“On a scale of 1 to 10 , 1 being the worst and 10 being the best, how would you rate your overall hearing ability?”

Palmer, et al JAAA, 2009

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Bucket 1: 8-10 rating

Provide educational information

- 15% of patient population
- Add them to a patient recall list
- Direct them to your website
- Trial with a PSAP or “app”

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Bucket 3: 1-5 Rating

- 50% of patient population
- Move more quickly into the hearing aid selection process

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Bucket 2: 6-7 rating

- ~33% of patient population
- Need more information prior to making a decision
- Offer for them to test drive hearing aids (Flex:trial)

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Readiness to Receive Help

1. Precontemplation (denial of problem, disengaged)
2. Contemplation (aware of problem, ambivalent)
3. Action (ready to acquire healthy behavior)
4. Maintenance (sustained healthy behavior)

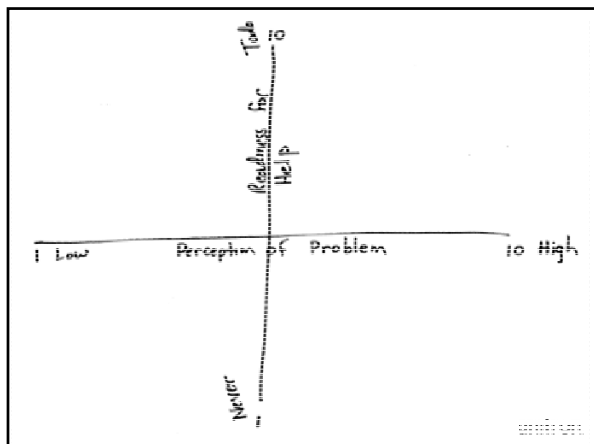
Laplante-Levesque, et al, 2012

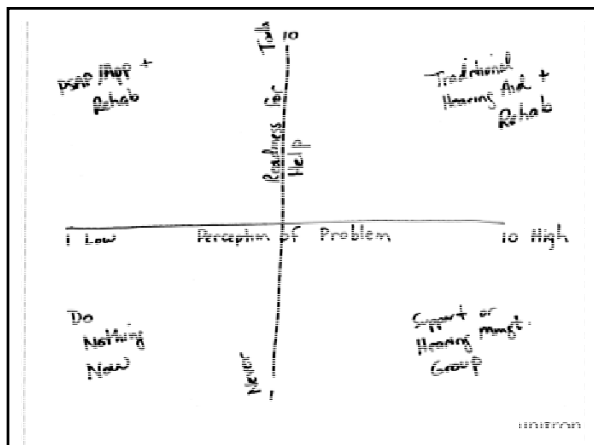
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Readiness to Receive Help— Scaling Question

“On a scale of 1 to 10 , 1 being the not at all ready and 10 being ready today, how ready are you to move ahead with an agreeable treatment option?”

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5 Steps

1. Engage people at an earlier age in the process of hearing screening.
2. Assess the individual's real-life communication difficulties
3. **Provide full assortment of treatment options**

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My Hearing Treatment Options						
What is it?	Hearing Aids	Hearing Management Group	Hearing Skills Training	Hearing Assistive Technology	Cochlear implant	No treatment
What is involved?	<ul style="list-style-type: none"> Buying hearing aids. Professional adjustment of the hearing aids. Wearing hearing aids to help with my hearing problems. 	<ul style="list-style-type: none"> Meeting with a group of people. Learning ways to cope with my hearing problems. Using the information to help me in daily life. 	<ul style="list-style-type: none"> Using a DVD for training at home. Improving my ability to be successful in listening. 	<ul style="list-style-type: none"> Buying 1 or more items that can help me hear better in certain situations. Using those items in my daily life. 	<ul style="list-style-type: none"> Being evaluated to see if an implant might help me. Undergoing surgery. Professional adjustment of the implant. Wearing the cochlear implant to help with my hearing problems. 	Continue my daily life without making any changes.

Cox, 2014

Active Communication Education (ACE) Program

- Support group (6 to 12 participants)
- 2 hour per week over 5 weeks
- Interactive, programmed instruction lead by facilitator (audiologist)
- Focus on behavioral and attitude change
- Randomized controlled trial using blinding suggests ACE is alternative or supplement to traditional hearing aid use (Hickson, et al, 2007)

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5 Steps

1. Engage people at an earlier age in the process of hearing screening.
2. Assess the individual's real-life communication difficulties
3. Provide full assortment of treatment options
4. **Facilitate decision-making process and mgmt plan**

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My Hearing Treatment Options						
What is it?	Hearing Aids	Hearing Management Group	Hearing Skills Training	Hearing Assistive Technology	Cochlear implant	No treatment
What is involved?	<ul style="list-style-type: none"> Buying hearing aids. Professional adjustment of the hearing aids. Wearing hearing aids to help with my hearing problems. 	<ul style="list-style-type: none"> Meeting with a group of people. Learning ways to cope with my hearing problems. Using the information to help me in daily life. 	<ul style="list-style-type: none"> Using a DVD for training at home. Improving my ability to be successful in listening. 	<ul style="list-style-type: none"> Buying 1 or more items that can help me hear better in certain situations. Using those items in my daily life. 	<ul style="list-style-type: none"> Being evaluated to see if an implant might help me. Undergoing surgery. Professional adjustment of the implant. Wearing the cochlear implant to help with my hearing problems. 	Continue my daily life without making any changes.

Cox, 2014

Provide pros and cons and ask:

- Which one of these options would be a good place to start?
- Let's set some goals.....

Goal Planning for Hearing Rehabilitation	
Name:	Thompson, Adam
Age:	70 yrs
Goal #1:	
Strengths:	None
Goal #2:	
Strengths:	None
Goal #3:	
Strengths:	None

McKenna, 1987

Flex:trial Patient Journal

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Day 1

1. How many hours did you wear the instruments today? 8

2. Describe the situations where the instruments were effective (improved your hearing ability)?
Worked wonderful when I went out to lunch with my family. Could hear my wife better when eating dinner in the kitchen.

3. Describe the listening situations where the instruments fell short of expectations?
Still have some issues with hearing the TV from the other side of the room.
 Some of the louder sounds are very uncomfortable.

4. Based on your listening experiences with the device today, how would you rate your overall ability to hear?

No	1	2	3	4	5	6	7	8	9	10	All of problems
								X			

Other comments:
Not sure if the remote is making changes when I press the buttons, what do some of the beeps mean?
 They are very comfortable to wear.

Patient Journaling

- Leads to higher level of engagement during the follow-up appointments according to patient (unpublished data)
- Measures some of the more subtle benefits of hearing aid use

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SSQ12 Instructions

The following questions inquire about aspects of your ability and experience hearing and listening in different situations.

For each question, put a mark, such as a cross (x), anywhere on the scale shown against each question that runs from 0 through to 10. Putting a mark at 10 means that you would be perfectly able to do or experience what is described in the question. Putting a mark at 0 means you would be quite unable to do or experience what is described.

As an example, question 1 asks about having a conversation with someone while the TV is on at the same time. If you are well able to do this then put a mark up toward the right-hand end of the scale. If you could follow about half the conversation in this situation put the mark around the mid-point, and so on.

We expect that all the questions are relevant to your everyday experience, but if a question describes a situation that does not apply to you, put a cross in the "not applicable" box. Please also write a note next to that question explaining why it does not apply in your case.

Your name:	Today's date	Your age
<p style="font-size: small; margin: 0;">Please check one of these options:</p> <p style="font-size: small; margin: 5px 0;">I have no hearing aid/s <input type="checkbox"/></p> <p style="font-size: small; margin: 5px 0;">I use one hearing aid (left ear) <input type="checkbox"/></p> <p style="font-size: small; margin: 5px 0;">I use one hearing aid (right ear) <input type="checkbox"/></p> <p style="font-size: small; margin: 5px 0;">I use two hearing aids (both ears) <input type="checkbox"/></p>		

<p style="font-size: small; margin: 0;">If you have been using hearing aid/s, for how long?</p> <p style="font-size: small; margin: 5px 0;">Left ear _____ years Right ear _____ years</p> <p style="font-size: small; margin: 5px 0;">_____ months _____ months</p> <p style="font-size: small; margin: 5px 0;">or _____ weeks or _____ weeks</p>	
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1. You are talking with one other person and there is a TV on in the same room. Without turning the TV down, can you follow what the person you're talking to says?

Not at all 0 1 2 3 4 5 6 7 8 9 10 Perfectly

Not applicable

2. You are listening to someone talking to you, while at the same time trying to follow the news on TV. Can you follow what both people are saying?

Not at all 0 1 2 3 4 5 6 7 8 9 10 Perfectly

Not applicable

3. You are in conversation with one person in a room where there are many other people talking. Can you follow what the person you are talking to is saying?

Not at all 0 1 2 3 4 5 6 7 8 9 10 Perfectly

Not applicable

4. You are in a group of about five people in a busy restaurant. You can see everyone else in the group. Can you follow the conversation?

Not at all 0 1 2 3 4 5 6 7 8 9 10 Perfectly

Not applicable

5. You are with a group and the conversation switches from one person to another. Can you easily follow the conversation without missing the start of what each new speaker is saying?

Not at all 0 1 2 3 4 5 6 7 8 9 10 Perfectly

Not applicable

6. You are outside. A dog barks loudly. Can you tell immediately where it is, without having to look?

Not at all 0 1 2 3 4 5 6 7 8 9 10 Perfectly

Not applicable

7. Can you tell how far away a bus or a truck is, from the sound?

Not at all 0 1 2 3 4 5 6 7 8 9 10 Perfectly

Not applicable

8. Can you tell from the sound whether a bus or truck is coming towards you or going away?

Not at all 0 1 2 3 4 5 6 7 8 9 10 Perfectly

Not applicable

9. When you hear more than one sound at a time, do you have the impression that it seems like a single jumbled sound?

Jumbled 0 1 2 3 4 5 6 7 8 9 10 Not jumbled

Not applicable

10. When you listen to music, can you make out which instruments are playing?

Not at all 0 1 2 3 4 5 6 7 8 9 10 Perfectly

Not applicable

11. Do everyday sounds that you can hear easily seem clear to you (not blurred)?

Not at all 0 1 2 3 4 5 6 7 8 9 10 Perfectly

Not applicable

12. Do you have to concentrate very much when listening to someone or something?

Concentrate hard 0 1 2 3 4 5 6 7 8 9 10 No need to concentrate

Not applicable

More on the SSQ

Noble W, Jensen NS, Naylor G, Bhullar N, Akeroyd MA (2013). A short form of the Speech, Spatial and Qualities of Hearing scale suitable for clinical use: The SSQ12. International Journal of Audiology, 52(6), 409-12

<http://www.ihf.mrc.ac.uk/products/display/ssq>

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The Reconstruction of Audiology: Final Thoughts

1. Offer different service packages for different market segments
2. Find new approaches to managing hearing health of younger individuals with milder loss
3. Strive to become a Pillar of Your Community
4. Unbundle Specific Services (See Windmill for example)
5. Broaden scope of practice (See Premeringer)
6. Hearing aids are means to an end. The end is positive behavior changes and formation of favorable outlook

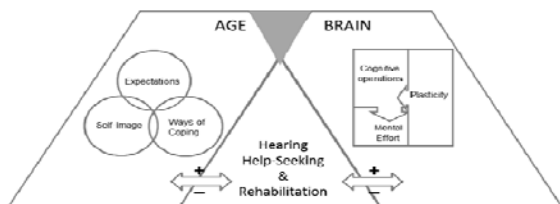
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LEARN TO WORKSHEET		
ASSESSMENT OF HEARING STATUS AND HEARING PLAN/REPLY <i>Diagnosing hearing diagnosis</i>	ASSESSING THE CUSTOMER'S ABILITY <i>(audiologist only)</i> <i>Identifying difficulty</i>	TREATMENT AND COUNSELING <i>(audiologist and patient)</i> <i>Assessing, Instructing, Counseling</i>
<p>Diagnosis/assess</p> <ul style="list-style-type: none"> • Assess chief complaint and history of chief complaint (onset, quality, severity, duration, etc.) • Review of primary audiologic test results • Assess with patient the psychological, educational, emotional, social, and/or vocational impact of chief complaint, using sensitive measures of hearing handicap and impact on lifestyle. • <i>Established patients:</i> Assessment of baseline account of original complaint; change in complaint. • <i>Established patients:</i> Review of hearing (audiologic) test results. • <i>Established patients:</i> Assess with patient for any changed psychological, educational, emotional, social, and/or vocational aspect of original complaint; change in complaint. <p>Goals</p> <ul style="list-style-type: none"> • Assess required history with review of other systems, drug and medication (system, surgical, medical history), etc. • Review primary audiologic test results and/or evaluate with standard procedures to measure the extent of hearing impairment or additional impairment, such as basic hearing evaluation, speech in noise testing, ultrahigh frequency, etc. • Evaluation using objective measures to assess hearing handicap and lifestyle impact. • <i>Established patients:</i> Assessment of effective account of new complaint; change in complaint. • <i>Established patients:</i> Review hearing services test results, and/or evaluate with necessary procedures to measure extent of new complaint; change in complaint, such as basic hearing evaluation, speech in noise testing, ultrahigh frequency, etc. • <i>Established patients:</i> Evaluation using objective measures to assess change in hearing handicap and lifestyle complaints. 	<p>Diagnosis/assess</p> <ul style="list-style-type: none"> • Interpretation and review of limited number of problems (on hearing loss only) and limited data sets (i.e. primary) audiologic procedures, uncalibrated central hearing, review of report of other systems. • Decision for single product or straightforward measure (traditional hearing aids). <p><i>Including applicable (patient) straightforward decision-making procedures with the possible addition of the following:</i></p> <ul style="list-style-type: none"> • <i>Established patients:</i> Perform basic reprogramming of hearing aids. • <i>Established patients:</i> Perform hearing check. • <i>Established patients:</i> Perform routine and troubleshooting procedures such as re-banding, replacing microphone covers, cleaning, etc. <p>Goals</p> <ul style="list-style-type: none"> • Interpretation and review of multiple tests (psychologic (i.e. hearing and speech) and multiple sets of data (audiologic cause related), case file and medical history). • Review of multiple hearing therapy resources. • Decision for multiple treatment options. <p><i>Including applicable (patient) complex decision-making procedures with the possible addition of the following:</i></p> <ul style="list-style-type: none"> • <i>Established patients:</i> Perform patient response hearing of (low, high, and/or) • <i>Established patients:</i> Perform hearing instrument test loss measure and/or assessment. • <i>Established patients:</i> Add additional assistive devices, such as streamers, remote products, etc. 	<p>Diagnosis/assess</p> <ul style="list-style-type: none"> • Counseling on review of test results, hearing measures, and presentation of conclusions. • Presentation of treatment options. • Basic instruction or education, demonstration, and counseling regarding limited number of psychological, educational, emotional, social, and/or vocational aspects. <p><i>Including applicable (patient) straightforward decision-making procedures with the possible addition of the following:</i></p> <ul style="list-style-type: none"> • <i>Established patients:</i> Basic counseling/instructing on adjustments made to hearing aids. <p>Goals</p> <ul style="list-style-type: none"> • Counseling on review of multiple test results, hearing measures, and presentation of conclusions. • Presentation of multiple treatment options. • Advice on realistic expectations of education, demonstration, and counseling regarding multiple aspects of psychological, educational, emotional, social, and/or vocational impact. <p><i>Including applicable (patient) complex decision-making procedures with the possible addition of the following:</i></p> <ul style="list-style-type: none"> • <i>Established patients:</i> Enhance counseling/instructing on adjustments made to hearing aids and/or additional assistive devices.

Established patients only changed service line outside of 90-day trial period.

Windmill, 2014

What's your Unique Value Proposition



Preminger, 2014

“The people who think they are crazy enough to change the world are the ones who do so.”



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Thanks!

Brian.Taylor@unitron.com

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