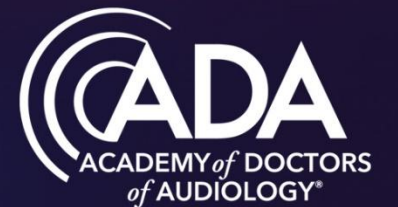
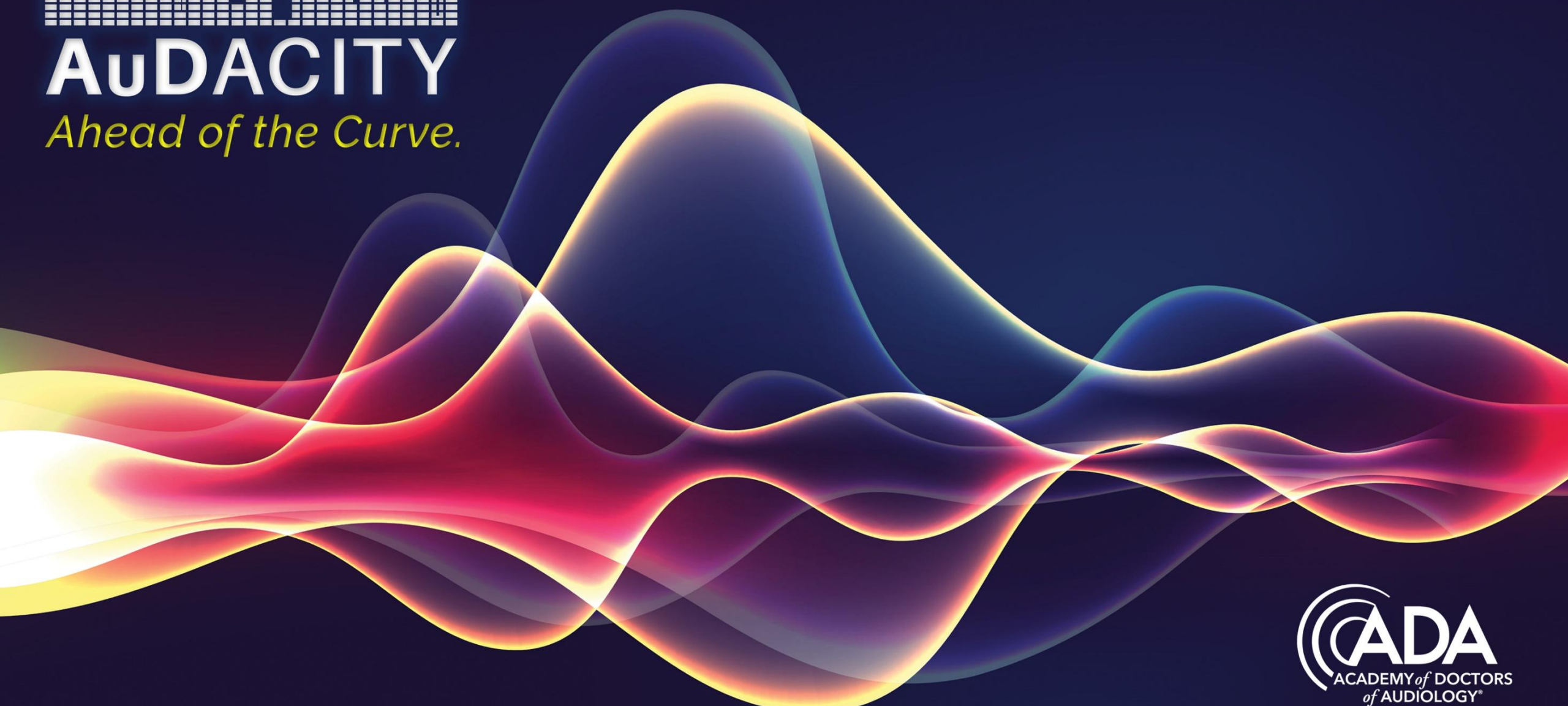




# AuDACITY

*Ahead of the Curve.*

October 20-23, 2022  
Grapevine/Dallas, Texas



# Amplification Amplified: Utilizing Cochlear Implant Services in a Private Practice Setting

*Abby Ryan, Au.D.*

# Who We Are

**We Truly Believe That Better  
Hearing Leads To A Better Life.**



**HEARING SOLUTIONS**  
Hearing & Balance Specialists

# 1 Year Stats

## INDIVIDUAL

- 21% Cochlear
  - 18% Gross Total Profit
- 30% Cochlear and additional services
  - 22% Gross Total Profit

## OFFICE

- 5% Gross Total Profit
- 7% Gross Total Profit

# Why Provide CI Services?

## AS OF LATE...

- As of September 26, 2022, Medicare/Medicaid increased their threshold for CI candidacy to  $\leq 60\%$  best-aided condition, effective immediately.

## STATS

- 430 million people
  - Over 5% of the world's population will require rehabilitation to address their 'disabling' hearing loss (432 million adults and 34 million children).
- 1 in 10 individuals
  - By 2050 over 700 million people will have disabling hearing loss.

# Benefits Of Providing CI Services

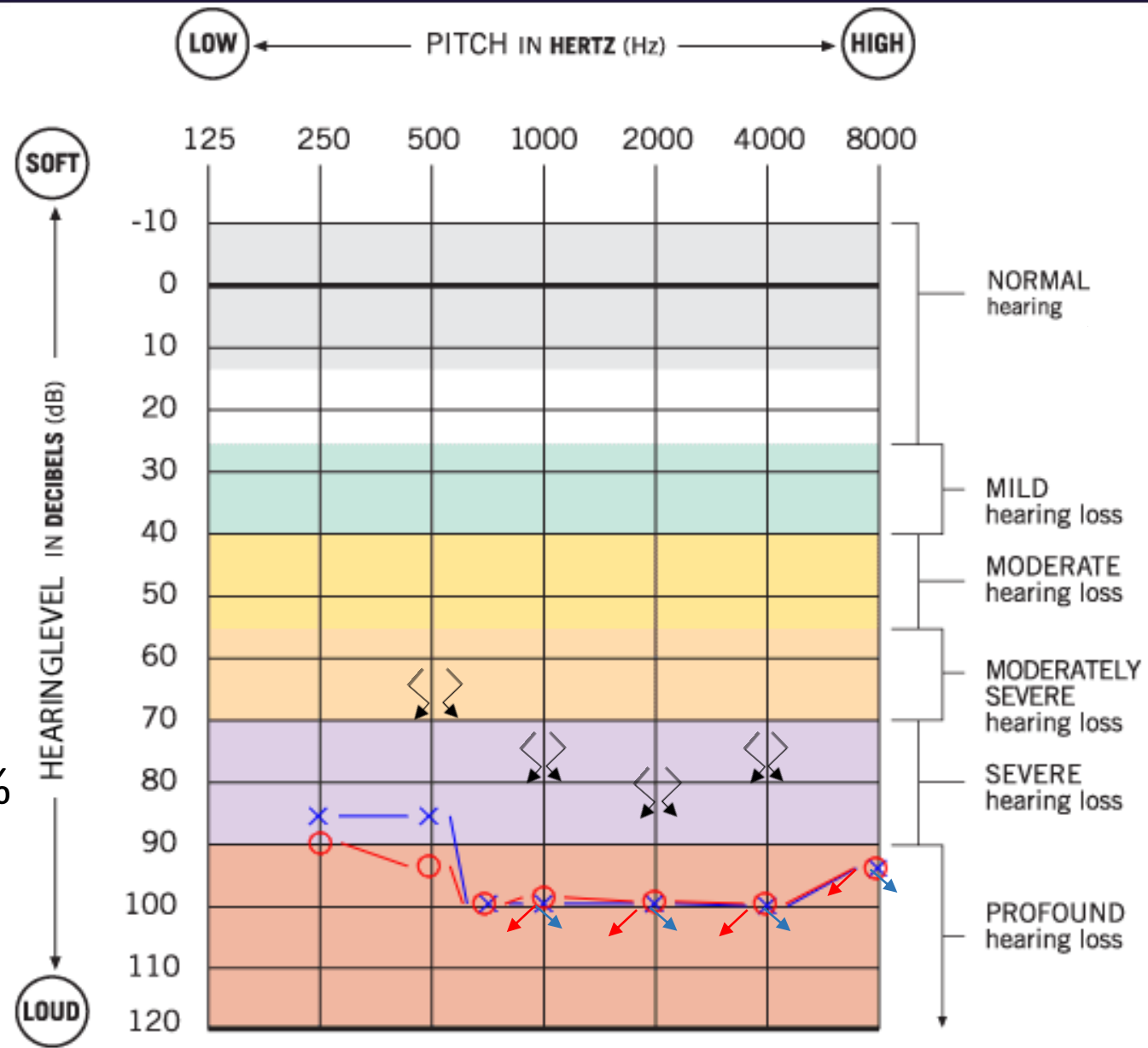
- **BROADEN**
  - Broaden Service Portfolio
- **PARTNER**
  - Partner with the Medical Community
- **MAINTAIN**
  - Maintain Existing and Attract New Patients
- **EXPAND**
  - Expand Alternate Revenue Sources
- **CAPTIVATE**
  - Captivate Patients With New Talent

# Patient Example

- 50 year-old female
  - Established patient since 2020
  - 10 year-old BTE hearing aids attached to custom molds
  - Not ready to pursue CI testing, fit with ReSound BTE aids attached to custom molds April 2021 through vocational rehabilitation.
  - Returned for 9 follow-ups prior to agreeing to CI candidacy testing.
  - AZ BIO Sentence Test – Sentences of recorded male and female voices were presented through a speaker at 70dbSPL with speech noise present in the background at 40dBHL.
    - SCORE : Binaural: 1/159 = 1%; Right: 0/146 = 0%; Left: 0/137 = 0%

# Patient Example

- Pre-implant audio
- SRT:
  - Right: 100/80 dB
  - Left: 95/75 dB
- Discrim:
  - Right: 100/80 dB 40%
  - Left: 100/80 dB 40%





# Patient Example

- Right cochlear implant activated in August, 2022.
- Aided testing conducted at 2 weeks follow-up revealed essentially normal hearing thresholds from 500-4000 Hz.
  - SRT:
    - Bimodal: 30 dB
    - Right CI only: 30 dB
  - Discrim:
    - Bimodal: 45 dB 90%
    - Right CI only: 45 dB 80%
- Post-op audio revealed preserved low frequency hearing thresholds.

# Patient Example

- September AzBIO testing revealed a bimodal score of 87% and CI only score of 82%.
- HUGE IMPROVEMENT!!!

# Takeaway

Implementing cochlear services can help grow your practice and help you become part of a medical network that assists people with hearing loss, so they can achieve the best outcome possible.

# Sources Cited

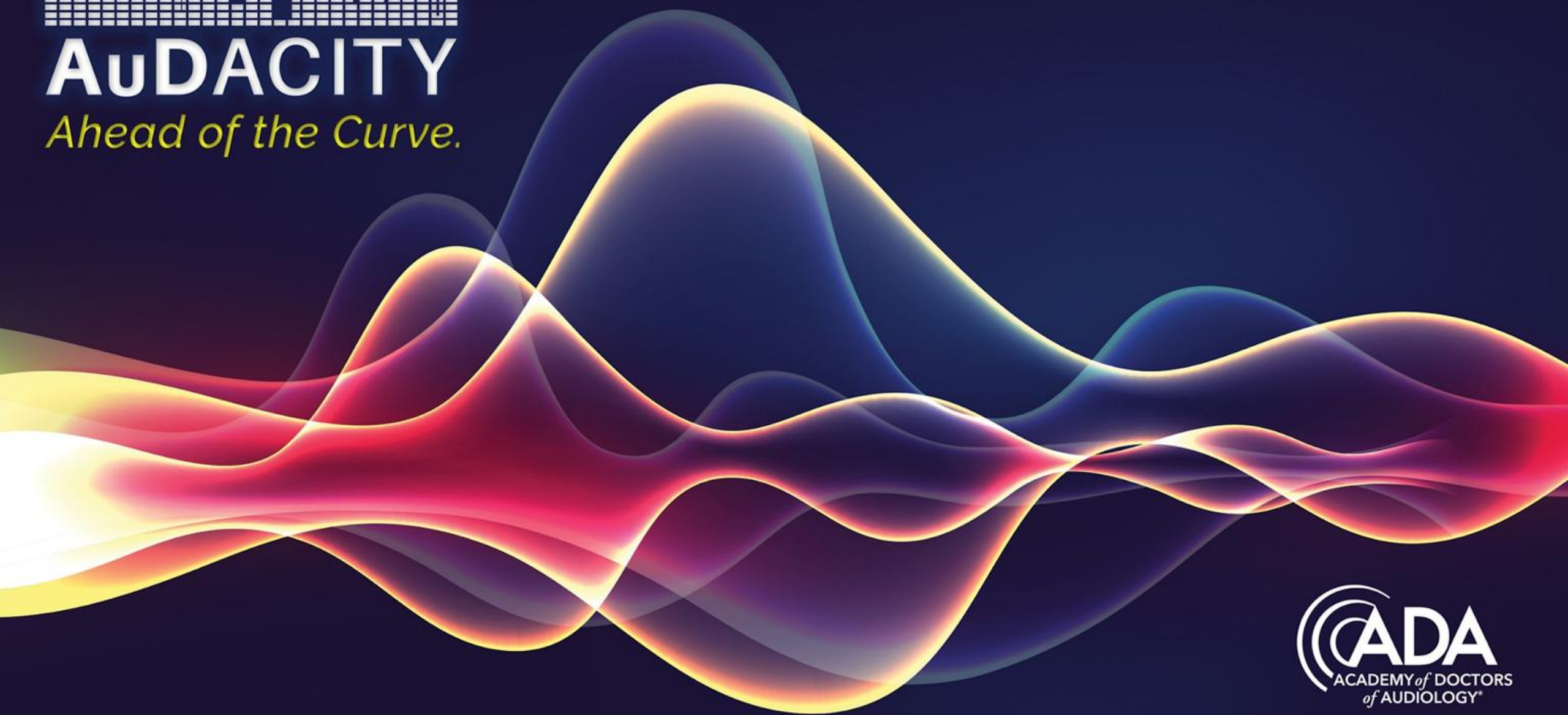
- Zwolan TA, Schwartz-Leyzac KC, Pleasant T. Development of a 60/60 Guideline for Referring Adults for a Traditional Cochlear Implant Candidacy Evaluation. Otol Neurotol. 2020 Aug;41(7):895-900. doi: 10.1097/MAO.0000000000002664. PMID: 32658396.
- [Deafness and hearing loss \(who.int\)](https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss)
- [NCA - Cochlear Implantation \(CAG-00107R\) - Decision Memo \(cms.gov\)](https://www.cms.gov/medicare/coverage/dmcs/decision-memos/nca-cochlear-implantation-cag-00107r)
- [Cochlear Provider Network | Partner Opportunities | Cochlear Americas](https://www.cochlear.com/partner-opportunities)
- [American Cochlear Implant Alliance \(acialliance.org\)](https://www.acialliance.org)



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# Amplification Amplified: Amptify DTx and more

*Ram Nileshwar, Au.D., CCC-A, FAAA  
The Hearing Center of Lake Charles, Inc.*

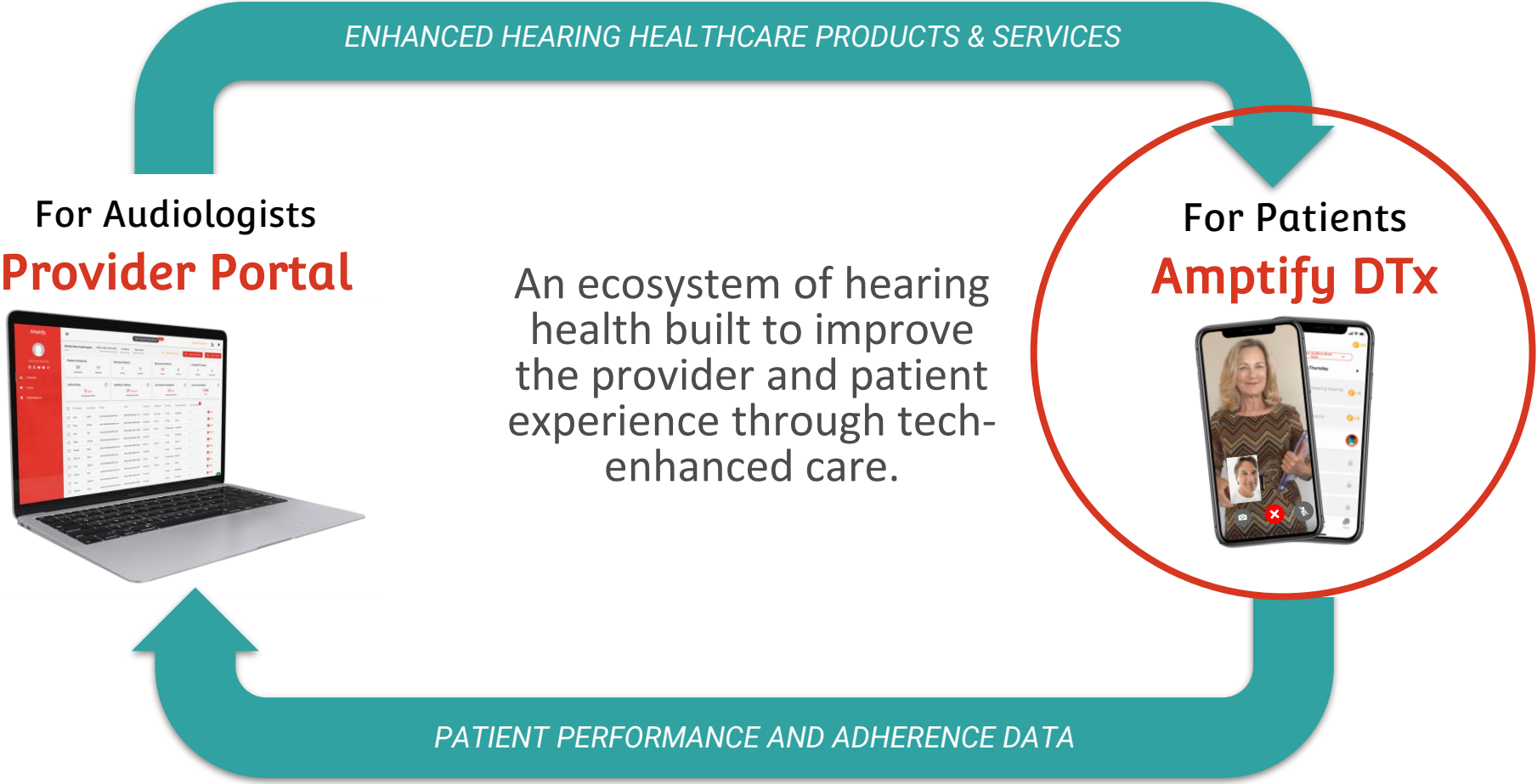
# The **Amptify** Hearing Health Platform

(Simplified Model)



# The **Amptify** Hearing Health Platform

(Simplified Model)





A Digital Therapeutic (DTx) is a software-based intervention for a disease and/or disorder that is clinically validated to drive a specific positive outcome.

# Example of existing DTx use cases



**DIABETES**  
BlueStar®



**ASTHMA/COPD**  
Propeller



**DIABETES**  
Livongo



**SMOKING  
CESSATION**  
Clickotine



**ADHD**  
EndeavorRx



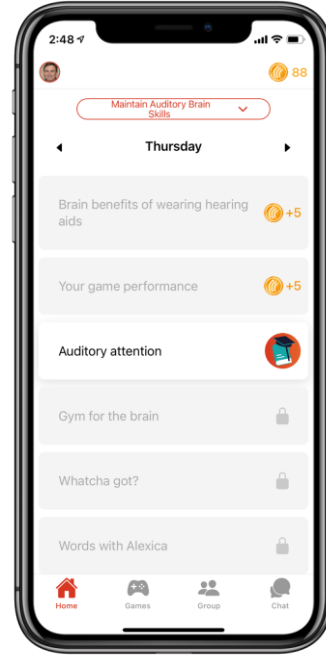
**PTSD**  
Freespira

# Amptify DTx Digital Aural Rehabilitation Program

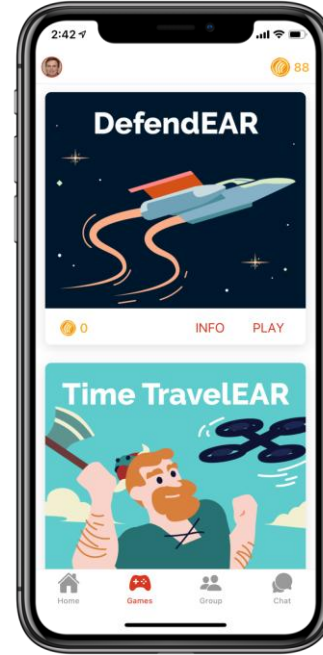
app.Amptify.com  
iOS & Android



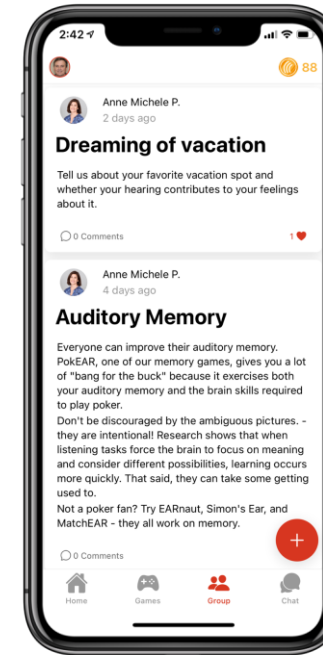
Hearing Health  
Coach



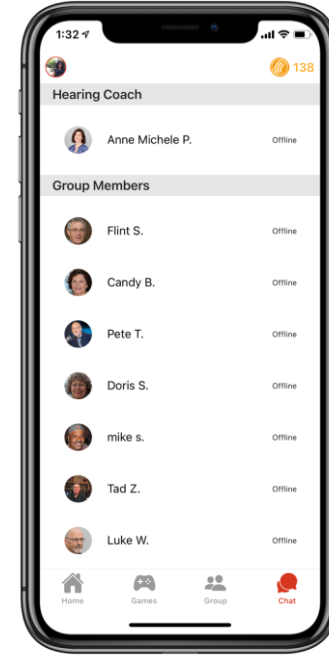
Custom Hearing  
Health Curricula



Auditory  
Training  
Video Games
















Peer Support  
Groups



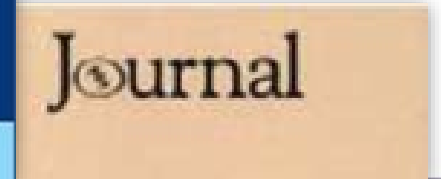
## Amptify Games

Auditory Skills Trained

	Auditory Memory	Auditory Sequencing	Discourse Comprehension	Speech Perception	Phoneme Discrimination	Word Identification	Bound Morpheme Identification	Noise Tolerance	Processing Speed
	Remember spoken words for short periods.	Remember the order of spoken words for a short amount of time.	Manipulate and interpret long sequences of speech in memory.	Identify and discriminate words.	Distinguish speech sounds from each other.	Discriminate words that sound alike.	Discriminate word endings that change the meaning.	Identify and discriminate words in background noise.	Measure reaction time to discriminate words and phrases.
DefendEAR 				✓	✓	✓		✓	
EARnaut 	✓				✓	✓		✓	
EARplane 				✓	✓	✓			✓
FarmEAR 				✓	✓	✓		✓	
HoopstEAR 				✓			✓		✓
MatchEAR 	✓			✓	✓	✓		✓	
MountainEAR 					✓	✓		✓	✓
PEARL Crunch 				✓			✓	✓	
PokEAR 	✓			✓	✓	✓			
ShakespEAR 	✓	✓	✓						
Simon's EAR 	✓	✓							
Time TravelEAR 				✓	✓	✓		✓	
TreasEAR Island 		✓		✓	✓	✓		✓	

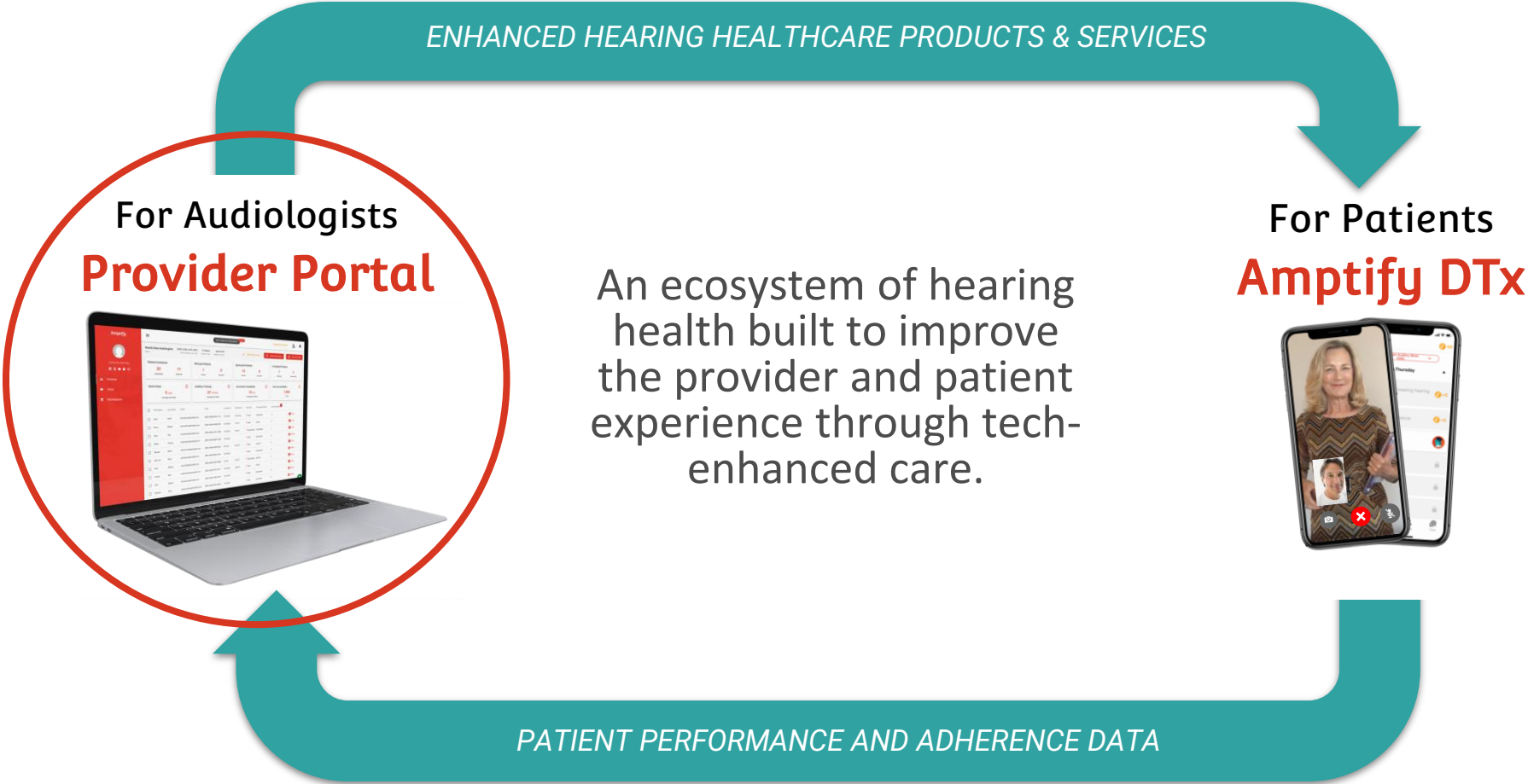
# Amptify DTx Backed by clinical research and peer-reviewed publishing

- Enhances speech discrimination <sup>1, 2</sup>
- Leads to reduced perceptual effort during listening <sup>3</sup>
- Enhances the hearing wellness experience <sup>4</sup>
- Increases listening confidence <sup>4</sup>
- Leads to improved communication and interactions between couples <sup>5</sup>
- Amptify facilitates adjustment to new hearing aids <sup>7</sup>
- Expands children's vocabulary <sup>6</sup>
- 96% of clinical trial users (N=28) responded positively to the Amptify experience <sup>7</sup>
- On a scale of 1-7, the Amptify curriculum received a satisfaction rating of 6.1 during clinical trials testing <sup>7</sup>
- Significantly enhances the ability of children to recognize the speech of both familiar and unfamiliar talkers <sup>6</sup>

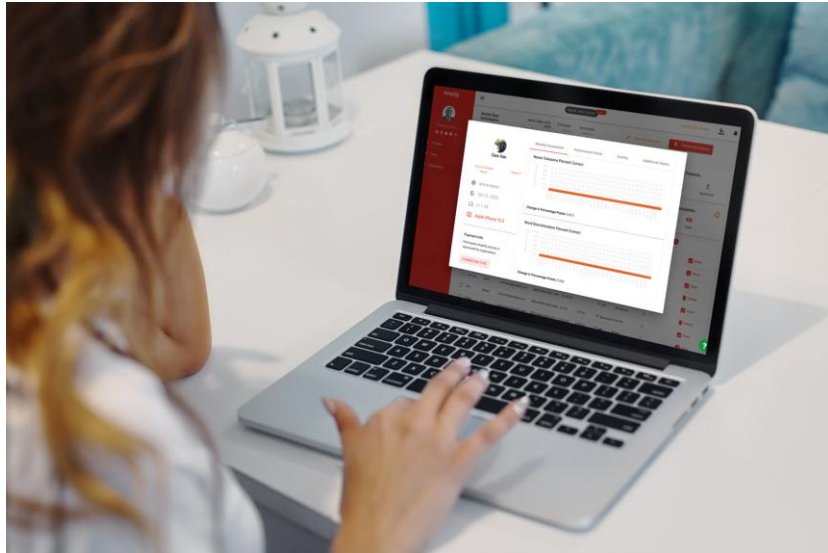


# The **Amptify** Hearing Health Platform

(Simplified Model)



# Amptify Provider Portal



<https://portal.Amptify.com>

## **Remote Patient Monitoring**

Monthly Noise Tolerance, Word Discrimination and Quality of Life assessments. Real time auditory training and adherence monitoring.

## **Teleaudiology System**

Increase patients access to care with scheduling, virtual waiting rooms, & video conferencing.

## **Patient Referrals**

Streamlined new patient referrals generated by Amptify consumer network and OTC partnerships.

## **Turn-key Ecommerce Store**

Sell hearing aids, hearing protection, adaptive audio and situational listening devices from your own branded store on your websites subdomain.

# Amptify Benefits you and your patients.



## PATIENTS

- Increase satisfaction with new hearing aids
- Improve communication skills and quality of life
- Benefit from post fit training and counseling
- Practice and train on their own schedule
- Access 24/7 to a supportive community and hearing health coach

## CLINICAL OPERATIONS

- Outsource aural rehabilitation to expert providers
- Improve patient satisfaction
- Save money on patient initiated visits
- Service those who aren't yet ready for amplification
- Develop "brand loyalty" by having patients stay connected your practice
- Distinguish your practice from the big box stores and other competition
- Efficiently deliver best practice by including AR in the treatment plan



# Amptify DTx is for Clinical Care

## Improve patient satisfaction with less in-office time spent

Save on clinic costs while giving patients on-going personalized support and access to an evidence-based aural rehabilitation program.

### What the clinician does



#### SENSORY MANAGEMENT

Optimize auditory function through enhanced hearing technology to provide improved audibility while preserving comfort.

#### INSTRUCTION

Teach patients proper and effective use of hearing technology to maximize its use and effectiveness.

### What Amptify DTx does



#### COUNSELING & EDUCATION

Amptify works to increase satisfaction with hearing technology and empowers patients to manage listening challenges.

#### AUDITORY TRAINING

Auditory and cognitive training games develop speech perception skills, increase listening confidence, and enhance conversational fluency.

# Get started integrating **Amptify DTx** into your practice

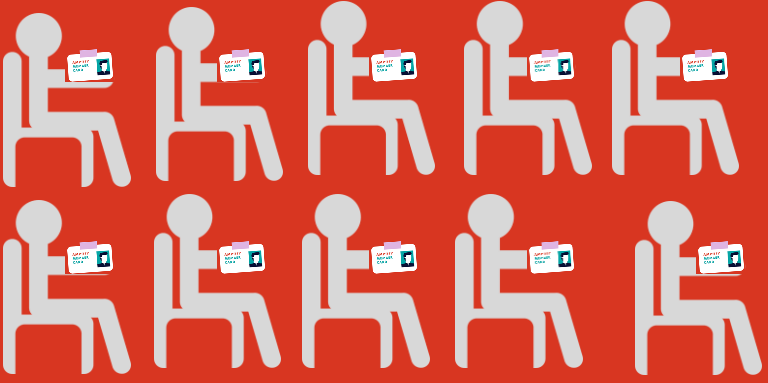


1. Go to [Amptify.com](https://Amptify.com) and click *Get Started* and register
2. Invite your patients
3. Remotely monitor your patient performance data
4. Earn income and open appointment slots by outsourcing your AR

# Amptify Billing Structure

## Amptify Professional Plan


Clinic purchases licenses and distributes to the patient.



**\$420 / 30 Days**  
**first 0-10 active patients**

## Patient Managed Payment

Patient pays directly for the licence.



**14-Day Trial**  
*and then*  
**\$49.95 / 30 Days**

Participants can cancel anytime before the trial ends and will not be charged the full program amount. No questions asked, no small(er) print.

## **Amptify** Professional Plan

\$420 per month for the first 0-10 patients – Cost to the Practice

Practice sets the price to the patient

For example if charge to patient is \$150

It would take only 3 **Amptify DTx** participants to begin being profitable

Other Amptify platform benefits like patient referrals then become free features.

# How to invite your patients into the **Amptify DTx**



1. Custom patient brochures with unique QR codes
2. Via email in the Amptify Provider Portal
3. Integrate with OMS

Programs for patients who cannot do DTx

**5 Keys Communication**

5keys.org

By Dr. Dusty Jessen AuD

**Hearing Wellness Journey**

Hearingwellnessjourney.com

By Dr. Dawn Heiman AuD

**Thank you!**

# Amplification Amplified: The Business of OTC

*Jill Davis, AuD*



# Agenda

- Identifying the OTC Candidate
- The Existing OTC User

# Identifying the OTC Candidate: The Recipe for Success

## 4 Ingredients

- HHIE/HHIA
  - Patient's motivation
- Speech in noise
  - Real-world performance
- Cognitive Screening
  - SIN score is due to ear or brain
- Audiometry
  - Degree of loss and medical management

# The Business of OTC

- Functional assessment:
  - 3 objective measures, 1 subjective
  - 1 test covered by insurance
- Patient pays for the rest

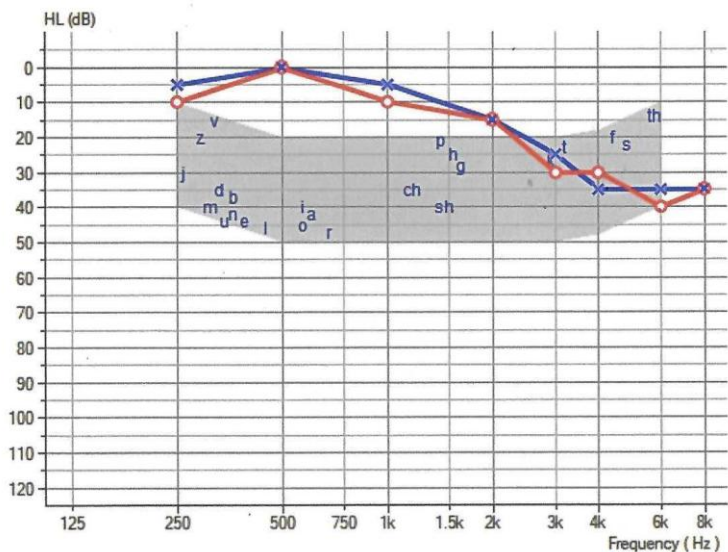
68-yr-old male

TREATMENT PLAN



Name \_\_\_\_\_ Date \_\_\_\_\_

Audiometry



Left	125	250	500	750	1k	1.5k	2k	3k	4k	6k	8k	Right	125	250	500	750	1k	1.5k	2k	3k	4k	6k	8k
AC		5	0		5		15	25	35	35	35	AC		10	0		10		15	30	30	40	35

1 ○ Air Conduction, AI=82%, PTA=8, HFA=18  
 2 × Air Conduction, AI=83%, PTA=7, HFA=18

	AC	SRT	WR	WR, Aided	MCL	UCL
Left	5dB		100% at 50dB			
Right	5dB		100% at 50dB			

Audiometry Legend	Left	Right
Air Conduction	○	○
Air Conduction, Masked	□	△
Bone Conduction	>	<
Bone Conduction, Masked	◁	▷
Sound Field	S	S
Sound Field, Aided	A	A
Comfortable Level	M	M
Uncomfortable Level	U	U

	SNR Loss Unaided	SNR Loss Aided	(LP-HFE) Unaided	(LP-HFE) Aided
Left	0.5			
Right				
Both				

0-3 dB: Normal, 3-7 dB: Mild, 7-15 dB: Moderate, >15 dB: Severe.  
 (SNR Loss HFE-LP - SNR Loss HFE) > 3.9 dB: amplification is useful

Lifestyle Assessment			Hearing Assessment		
Normal	0-8	✓	Normal	0dB-20dB	
Mild-to-moderate	10-24		Mild	25 dB-40dB	✓
Severe	26-40		Moderate	45-70dB	
			Severe	70-90dB	
			Profound	>90	
Functional Assessment			Cognitive Screening		
Normal	0dB-3.0 dB	✓	Normal		✓
Mild	3.5-7dB		Mild		
Moderate	7.5dB-15		Moderate		
Severe	>15dB		Severe		

Recommendations:

Hearing Aids Make: \_\_\_\_\_ Model: \_\_\_\_\_

Cochlear Implant Evaluation Date: \_\_\_\_\_ Time: \_\_\_\_\_

Auditory Processing Evaluation Date: \_\_\_\_\_ Time: \_\_\_\_\_

Noise Protection  Music  Hunting  Motorcycle  Other: \_\_\_\_\_

Auditory Training  Music  Amptify  APDSupport

Referral:

Vestibular Evaluation ENT: \_\_\_\_\_

Comorbidities PCP: \_\_\_\_\_

Cognitive Screen PCP: \_\_\_\_\_ Neurology: \_\_\_\_\_

Tinnitus  Psychology  Dentist  ENT  PCP

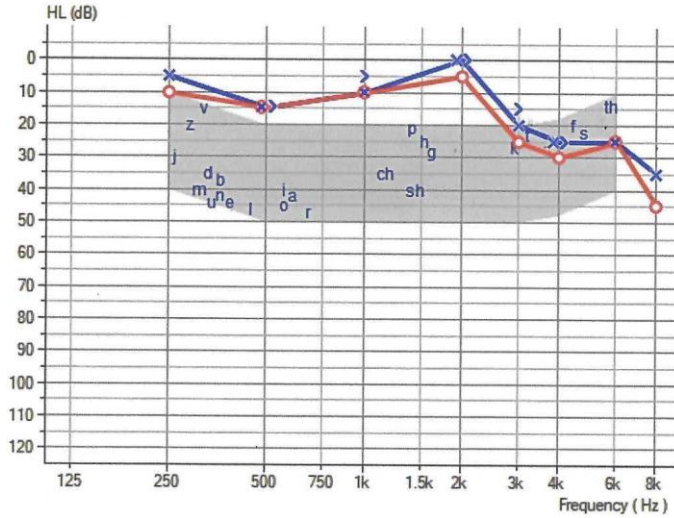
# 71-yr-old female

## TREATMENT PLAN



Name \_\_\_\_\_ Date \_\_\_\_\_

### Audiometry



Left	125	250	500	750	1k	1.5k	2k	3k	4k	6k	8k
AC		5	15		10		0	20	25	25	35
BC			15		5		0	15	25		

Right	125	250	500	750	1k	1.5k	2k	3k	4k	6k	8k
AC		10	15		10		5	25	30	25	45
BC											

1 ○ Air Conduction, AI=87%, PTA=10, HFA=15  
 2 × Air Conduction, AI=91%, PTA=8, HFA=12  
 3 × Bone Conduction, PTA=7, HFA=10

AC	SRT	WR	WR, Aided	MCL	UCL
Left	10dB	100% at 60dB		65dB	
Right	10dB	100% at 60dB		65dB	

### QuickSIN

	SNR Loss Unaided	SNR Loss Aided	(LP-HFE) Unaided	(LP-HFE) Aided
Left	0.5			
Right				
Both				

0-3 dB: Normal, 3-7 dB: Mild, 7-15 dB: Moderate, >15 dB: Severe.  
 (SNR Loss HFE-LP - SNR Loss HFE) > 3.9 dB: amplification is useful

Audiometry Legend	Left	Right
Air Conduction	×	○
Air Conduction, Masked	□	△
Bone Conduction	>	<
Bone Conduction, Masked	□	△
Sound Field	S	S
Sound Field, Aided	A	A
Comfortable Level	M	M
Uncomfortable Level	U	U

Lifestyle Assessment		Hearing Assessment	
Normal	0-8	Normal	0dB-20dB
Mild-to-moderate	10-24	Mild	25 dB-40dB ✓
Severe	26-40	Moderate	45-70dB
		Severe	70-90dB
		Profound	>90
Functional Assessment		Cognitive Screening	
Normal	0dB-3.0 dB ✓	Normal	✓
Mild	3.5-7dB	Mild	
Moderate	7.5dB-15	Moderate	
Severe	>15dB	Severe	

### Recommendations:

Hearing Aids Make: \_\_\_\_\_ Model: \_\_\_\_\_

Cochlear Implant Evaluation Date: \_\_\_\_\_ Time: \_\_\_\_\_

Auditory Processing Evaluation Date: \_\_\_\_\_ Time: \_\_\_\_\_

Noise Protection  Music  Hunting  Motorcycle  Other: \_\_\_\_\_

Auditory Training  Music  Amplify  APDSupport

### Referral:

Vestibular Evaluation ENT: \_\_\_\_\_

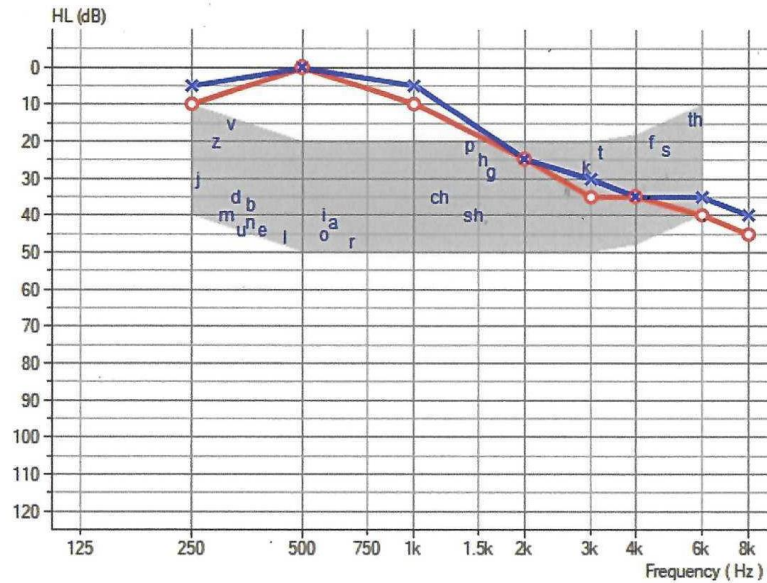
Comorbidities PCP: \_\_\_\_\_

Cognitive Screen PCP: \_\_\_\_\_ Neurology: \_\_\_\_\_

Tinnitus  Psychology  Dentist  ENT  PCP

# 72-yr-old male

## Audiometry



Left	125	250	500	750	1k	1.5k	2k	3k	4k	6k	8k	Right	125	250	500	750	1k	1.5k	2k	3k	4k	6k	8k
AC		5	0		5		25	30	35	35	40	AC		10	0		10		25	35	35	40	45

1 X Air Conduction, AI=77%, PTA=10, HFA=22  
 2 O Air Conduction, AI=75%, PTA=12, HFA=23

AC	SRT	WR	WR, Aided	MCL	UCL
Left	5dB	100% at 50dB			
Right	5dB	100% at 50dB			

Audiometry Legend	Left	Right
Air Conduction	X	O
Air Conduction, Masked	□	△
Bone Conduction	>	<
Bone Conduction, Masked	⊢	⊣
Sound Field	S	S
Sound Field, Aided	A	A
Comfortable Level	M	M
Uncomfortable Level	U	U

### QuickSIN

	SNR Loss Unaided	SNR Loss Aided	(LP-HFE) Unaided	(LP-HFE) Aided
Left				
Right				
Both	3.5			

0-3 dB: Normal, 3-7 dB: Mild, 7-15 dB: Moderate, >15 dB: Severe.  
 (SNR Loss HFE-LP - SNR Loss HFE) > 3.9 dB: amplification is useful

## TREATMENT PLAN



Name \_\_\_\_\_ Date \_\_\_\_\_

Lifestyle Assessment		Hearing Assessment	
Normal	0-8	Normal	0dB-20dB
Mild-to-moderate	10-24	Mild	25 dB-40dB
Severe	26-40	Moderate	45-70dB
		Severe	70-90dB
		Profound	>90
Functional Assessment		Cognitive Screening	
Normal	0dB-3.0 dB	Normal	
Mild	3.5-7dB	Mild	
Moderate	7.5dB-15	Moderate	
Severe	>15dB	Severe	

### Recommendations:

Hearing Aids Make: \_\_\_\_\_ Model: \_\_\_\_\_  
 Cochlear Implant Evaluation Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Auditory Processing Evaluation Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Noise Protection  Music  Hunting  Motorcycle  Other: \_\_\_\_\_  
 Auditory Training  Music  Amptify  APDSupport

### Referral:

Vestibular Evaluation ENT: \_\_\_\_\_  
 Comorbidities PCP: \_\_\_\_\_  
 Cognitive Screen PCP: \_\_\_\_\_ Neurology: \_\_\_\_\_  
 Tinnitus  Psychology  Dentist  ENT  PCP

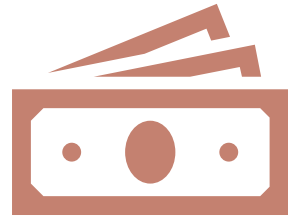
# Recommendations

- OTC:
  - Tunedcare.com
  - Soundly.com
  - Carry devices in the office/online
    - Airpod pro instructions
    - Manufacturer devices
- Prescription
  - Pricing breakdown and comparison
  - Service plan offer
  - Show value for the cost

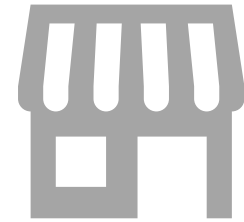
# Offer OTC in office?



Cost?



Service fee?

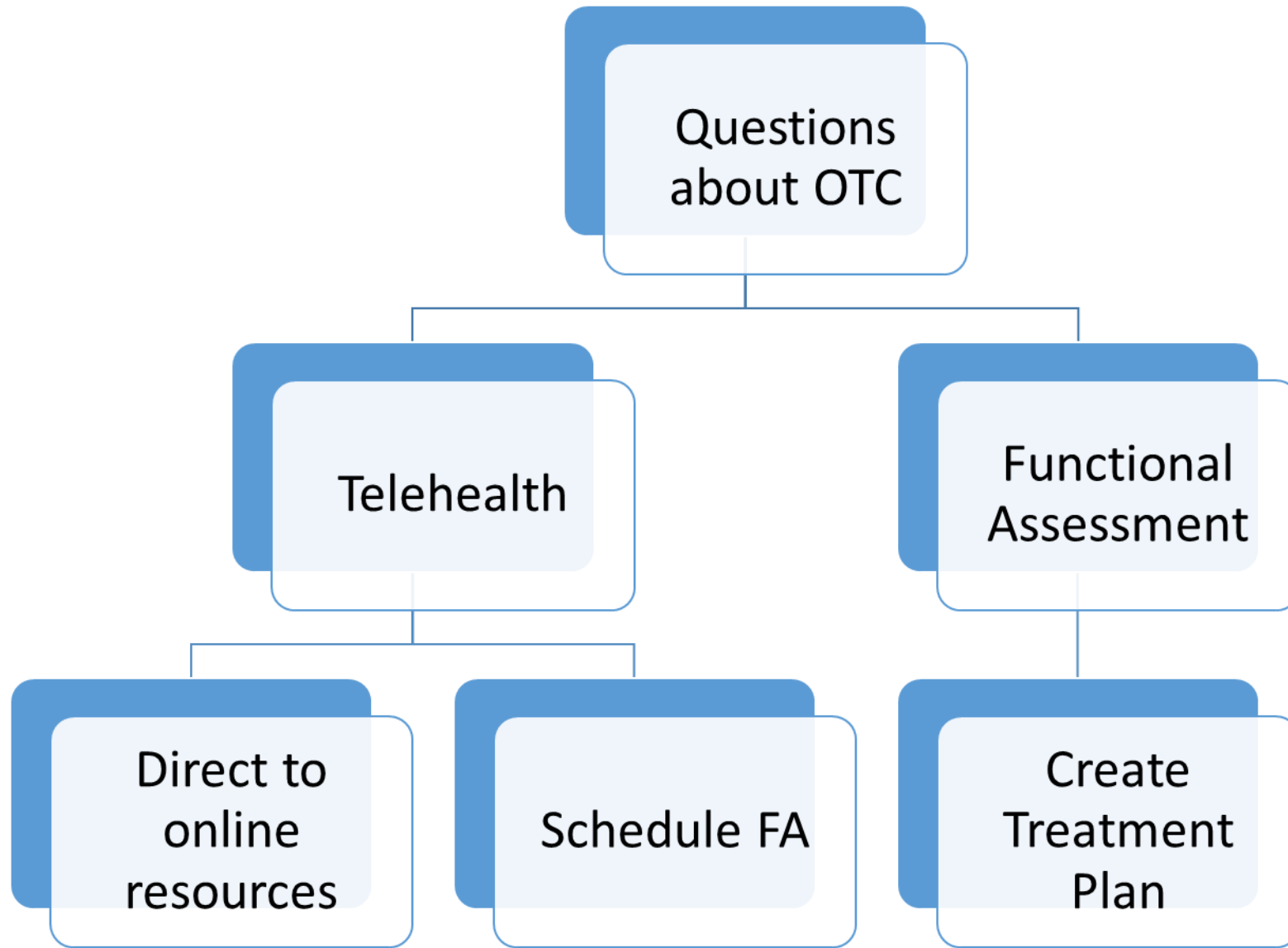


Online store?



# The Business of OTC: Existing OTC customers

- Front desk/PCC has an important role
  - Make sure everyone is on the same page and understands the protocol
    - Will we accept these patients?
  - Walk-in with problems/questions
    - Schedule appropriately
    - Capture patient information for future touch points
    - Fee for service
  - Calling to inquire or have devices already



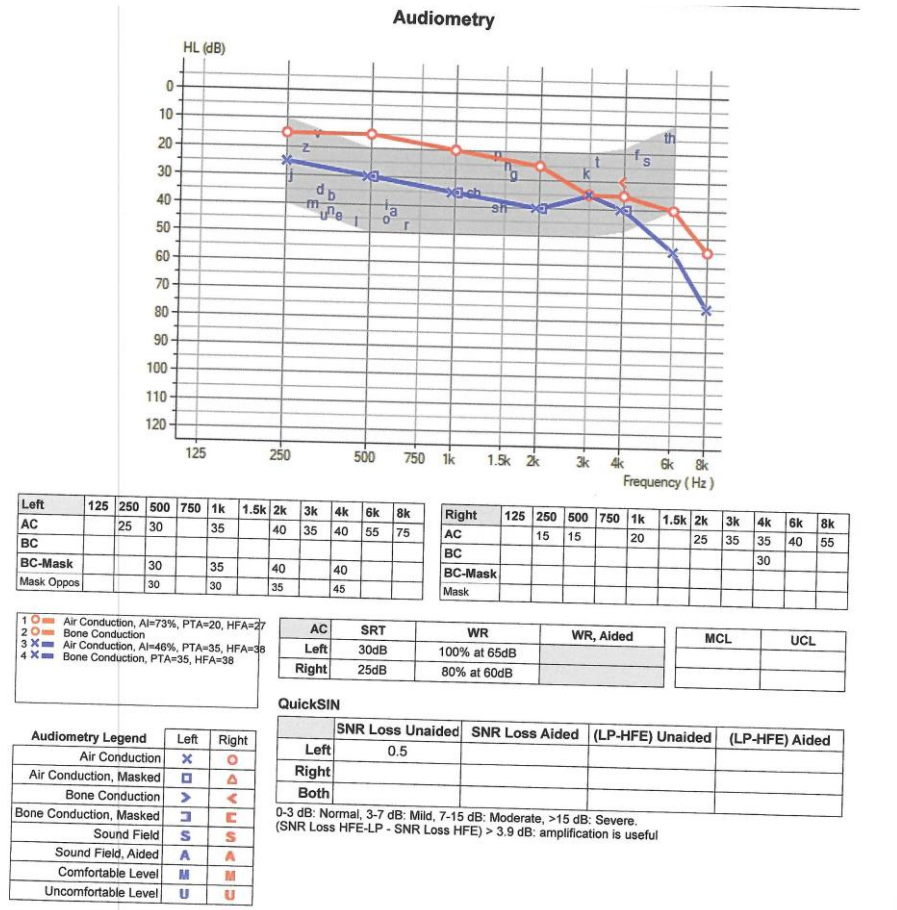
# Create a Treatment Plan

- Verification of OTC
- Counsel, counsel, counsel
- Compare to prescription devices?
- Sign up for aural rehabilitation
- Monitor hearing loss
- Cerumen management
- Clean and check

# Existing OTC customers: Service options

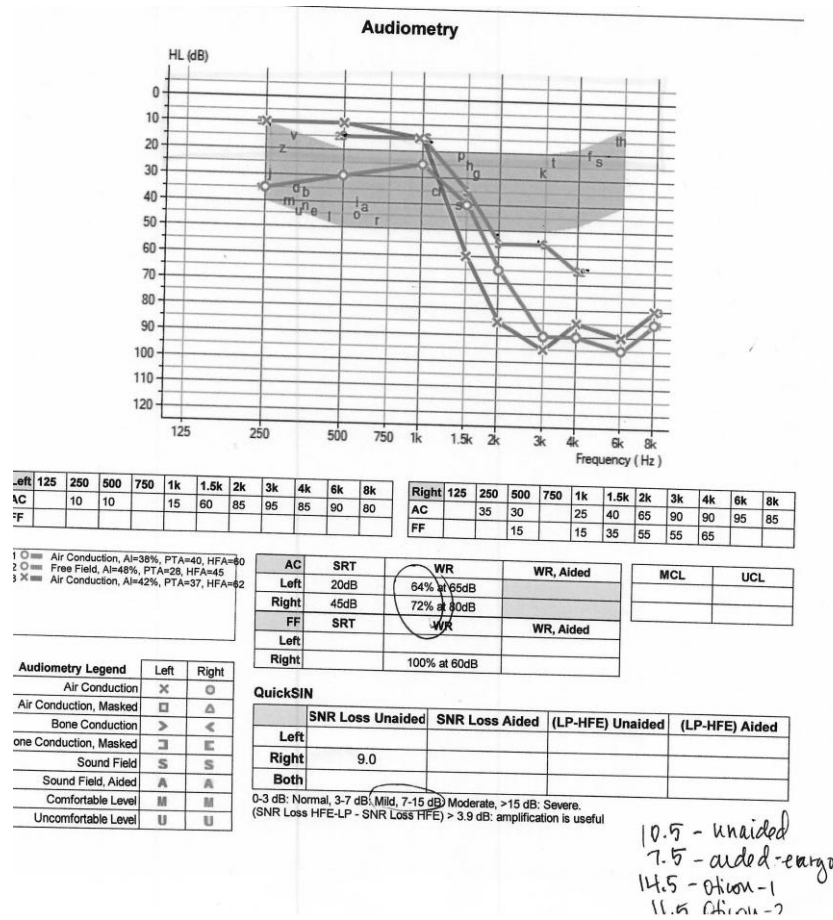
- Services to offer: *a la carte*
  - V5011: fitting, orientation, and checking a hearing aid
  - V5090: dispensing fee
  - V5020: conformity/ verification and validation
  - 92595: electroacoustic evaluation
  - 92592/3: Clean and check
  - V5014: Repair
  - V5266: Battery
  - Redux
  - Cerumen management
- Service Package:
  - One time fee
  - Covers all services and troubleshooting in-between
  - Biannual visits

# 65-year-old, 26 HHIE, Normal Cognitive score



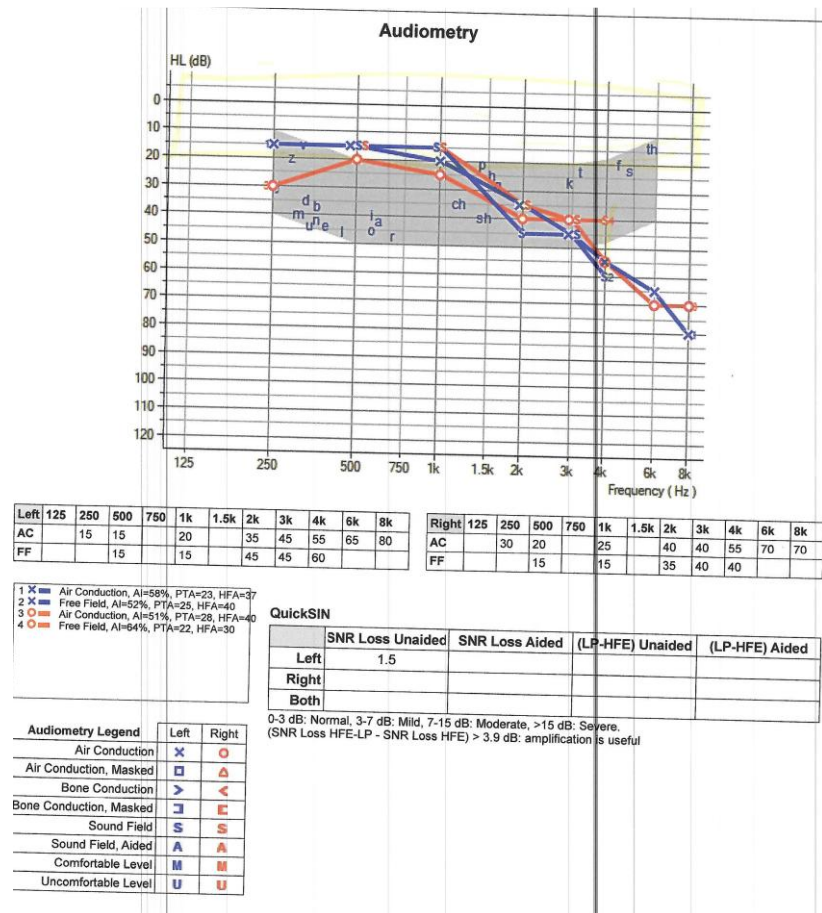
- Purchased Bose after functional assessment: cost
- Returned for fitting/dispensing/LSM
- Pay as you go

# 58-year-old, 28 HHIA, Normal Cognitive score



- Purchased Eargo after trying RICs somewhere else
- Not hearing well and wanted an evaluation
- Returned for LSM and purchased RICs
- Service plan

# 79-year-old, 4 HHIE, Normal Cognitive score



- Functional Assessment: cost is a concern, purchased low level IICs
- Returned due to fit issues and sound quality
- Rec: Eargo
- Returned for LSM, fitting/dispensing
- Service plan

# Summary: Clinic Protocol

- Initial evaluation:
  - Functional Assessment
  - Determine need for verification
- Verification appointment:
  - REM
  - Redux
  - C/C
  - Fitting/dispensing
- Troubleshooting
  - Non-audiologist staff member
  - Pricing set



# Conclusion

- The device is a small component of a comprehensive treatment plan
- Create a formula for treatment plan recommendations based on your existing protocol and share with patients
- Consider how you will educate patients or offer OTC devices in your office
  - Make sure products have been vetted before offering to patient
- Educate PCPs on the importance of the audiologist in the OTC process and share formula with them
- Determine if you will treat OTC patients who purchased outside your clinic
- Develop a service plan package to highlight your value or fee for service pricing