Addressing OTC via unbundling, counseling, remote care and remote fine-tuning

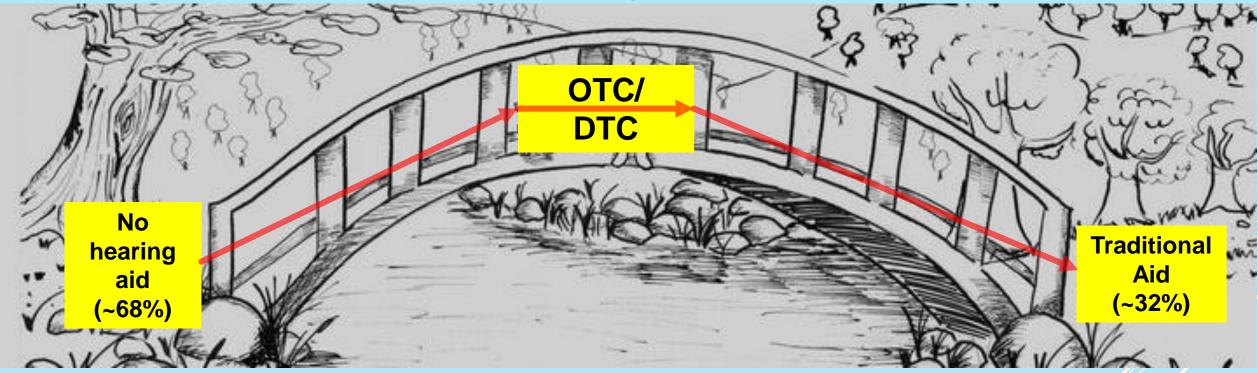
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Outline

General overview

- Discuss how OTC/DTC's evolved and why OTC/DTC's are an opportunity and not a threat
- Demonstrate how a clinic, in 2018-19, addressed the changing environment created by OTC/DTC by:
 - Adopting an <u>intelligent</u> unbundled option to address cost, but at the same time maintained a bundled option
 - Integrating a low-cost entry level aid based on research as an alternative to OTC/DTC and combine with improved counseling
 - Providing remote care and remote fine-tuning to address accessibility and convenience

As audiologists we want all patients needing hearing aids to have hearing aids



I view OTC/DTC as a bridge motivating those who haven't pursued amplification to pursue amplification.

If OTC/DTC is the path patients seek I support this <u>informed</u> decision, but I hope the path is through audiologists and not on-line, Big Box or drug stores. In time, these patients may seek better technology as hearing loss progresses or device satisfaction doesn't meet expectations. This is already happening.

Via OTC/DTC, hopefully, the 68% "box" will deflate while the 32% "box" will inflate.

As early as 2015 I felt OTCs were inevitable and began thinking about how I might need to alter our practice to accommodate it's possible impact.

My first step was to better understand what led to OTC's so I don't repeat the same mistakes.

A. <u>President's Council of Advisors on Science and Technology (PCAST) (2015)</u>: "<u>greater accessibility</u>," <u>reduced cost</u>

B. <u>National Academies of Science, Engineering and Medicine (NASEM) (2016):</u> "<u>cost</u> is the primary reason," hearing aids are not <u>accessible</u> and <u>convenient</u> to patients.

C. FTC workshop (2017): access and convenience, affordability of hearing aids, competition and consumer protection.

D. <u>Warren et al:</u> OTC Hearing Aid Act (2017)

Is <u>cost</u> really the primary reason for the low (~32%) adoption rate of hearing aids in the US?

I'd argue cost is important, but not the primary reason as I'll address in a moment.

But, I'd also argue that the **bundled** model created the impression that hearing aids, dispensed by audiologists, are excessively expensive. We failed to educate the public that our **bundled** model is the **sum** of the **cost of the product** + the **cost of the service** for the duration of the warranty (1+ years).



This is why hearing aids dispensed by audiologists are more expensive than OTC, DTC or Big Box

Note = the chicken (product + service) to right is 5x cost of chicken (product) and consumers don't balk about this. I use this as a "talking point" to counsel patients on cost + with service compared to cost of device alone

As I will demonstrate later, when our patients are **counseled** on the differences between our **alternative** to OTC's using a **unbundled model** and **traditional hearing aids** using the **bundled model**, 93% elected the bundled traditional hearing aids. I believe our new **counseling** was the key as I'll share with you later.

I strongly believe practices should offer patients both options. This is especially true if the clinic was using a bundled model.

So, is cost the primary reason consumers have not pursued hearing aids?



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Valente and Amlani (2017) in response to **Grundfast and Liu (2017)**

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denial of hearing loss, and reduced self-efficacy.⁸ Grundfast and Liu¹ provided recent policy recommendations by the President's Council of Advisors on Science and Technology (PCAST) and the National Academies of Sciences, Engineering, and Medicine (NASEM). Two recommendations-personal sound amplification order several hearing aids at a cost equal or less than

is not a consideration during the purchasing process, it

is just not a primary factor. Other factors impeding

hearing aid adoption include heightened social stigma,

Grundfast and LIu¹ recently provided otolaryngoloproducts (PSAPs) and increased access-deserve a brief gists with an overview of the hearing aid market. While comment. First, the authors¹ note the US Food and Drug their viewpoint addressed valid points, some points Administration (FDA) classifies PSAPs as augmentative did not accurately reflect the hearing aid market. In this Viewpoint, we hope to provide otolaryngologists with a more accurate representation of hearing aids as part Grundfast and Liu¹ correctly state that the hearing aid adoption rate is approximately 33%. The authors attribute this "poor" adoption rate primarily to cost. which can exceed \$2000 per unit. We believe that cost is not the primary barrier to adoption and provide the reader with data to support this belief. First, data reveal that the number of hearing aids dispensed in the United States from 2007 to 2016 has steadily increased.² Second, the Figure, adapted from MarkeTrak 9, a hearing-aid industry marketing survey, illustrates global demand for hearing aids.³ In the Figure, countries with the highest adoption rate are Norway (42.5%), the United Kingdom (41.1%), and Switzerland (38.8%).³ The highest adoption rate in these countries is not surprising because hearing aids are fully (in Norway and Switzerland) or primarily (ie, in the United Kingdom) government subsidized. Looking at Norway, 42.5% of citizens needing hearing aids take advantage of the subsidy by adopting this technology. However, these data also reveal that 57.5% are unwilling to adopt hearing aids despite the fact that no cost is expected from the patient. In the unlikely event the United States subsidized hearing aids, market penetration is estimated to increase by no more than 10%, or that the United States would have an adoption rate similar to that of Norway.⁴ Finally, a recent study⁵ reported on 651 veterans screened to have hearing loss. Of those, only 28% complied with the recommendation to seek heartion against a faulty product. ing aids. Furthermore, only 42% of the 28% actually adopted hearing aids, despite the fact that hearing aids are provided at no cost. Likewise. Australian researchers revealed that 39% of adults 50 years or older with hearing loss did not seek assistance for hearing loss⁶ and 58% failed to adopt hearing aids.⁷ Hearing health care in these latter examples is provided at minimal or no cost, yet noncompliance and nonintervention remains high. Simply stated, price-private and subsidized-is not the primary requirement to increase dinician compliance and adoption of hearing aids. This is not to suggest that price

Cost as a Barrier for Hearing Aid Adoption

amplifying products for listeners exhibiting normal hearing, whereas hearing aids are classified as an amplifying product for listeners exhibiting impaired hearing. Recently, PCAST recommended (and NASEM concurred) that PSAP manufacturers be permitted to advertise products to listeners with impaired hearing. While we advocate PSAPs as entry-level devices, emerging research suggests that some consumer-based devices can optimally reduce (1) the effect of reduced audibility caused by hearing loss, (2) cognitive decline because hearing sensitization is restored, and (3) social isolation. As such, it is essential that PSAPs meet a minimum standard for sound quality, functionality, and benefit. Grundfast and Liu¹ do not mention that hearing aid manufacturers must be registered with the FDA and hearing aids must be appropriately labeled (ie, model, serial number) and provide a User Instructional Brochure.9 In addition, hearing aids must meet strict specifications (ie, tolerances) based on American National Standards Institute protocol 5.33-2009. That performance using a hearing aid analyzer. On the one hand, if the hearing aids do not match the hearing aid tolerances, they are returned for replacement. On the other hand, PSAPs are exempt from FDA requirements. That is, tolerances for PSAPs are absent. In addition, hearing aids undergo strenuous in-house and third-party testing related to electroacoustic and behavioral performance to ensure consumer protec-Second, when PSAPs are purchased, no guaranteed audiologic service is included; it is simply "out of the box" and "into the ear." With hearing aids, audiological follow-up is necessary to ensure the device provides maximum performance to the patient. Examples include (1) measuring the hearing aids in an analyzer to verify adherence to manufacturer specification, (2) programming by using real ear measures (REM) to a

is, minimal differences are present between the same model produced by a hearing aid manufacturer. When hearing aids arrive, the audiologist measures its prescriptive target assuring maximum speech understanding, (3) providing a 4- to 6-week trial to determine if the patient wants to retain the hearing aids. (4) scheduling appointments during the trial period to fine-tune the hearing aids, and (5) scheduling service appointments (repairs, reprogramming, counseling) for maintenance and performance. All these services, and others, represent a considerable difference between the cost of the hearing aids dispensed via an audiologist vs purchasing a PSAP, where no such follow-up care exists. Thus, if cost were the only factor, audiologists could

Other barriers:

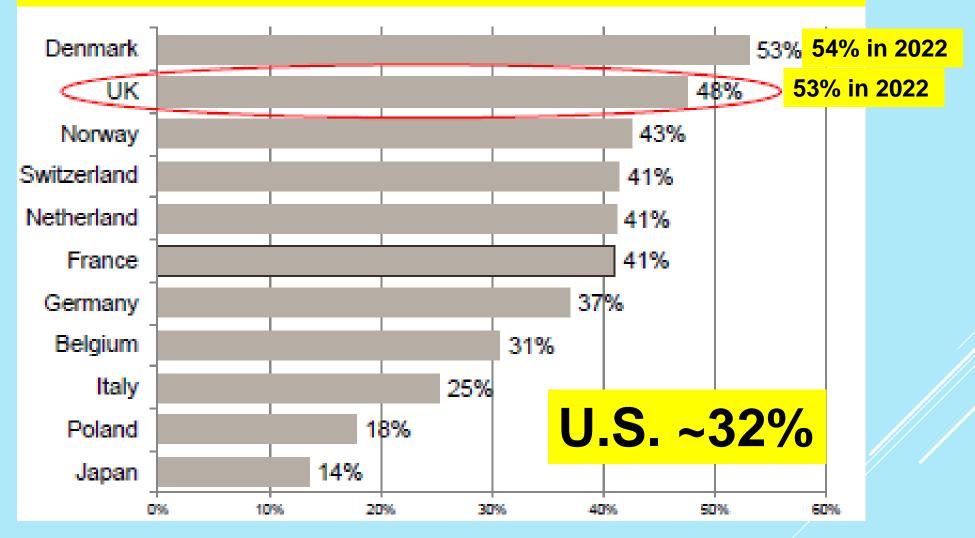
- a. Convenience and transportation
- b. Accessibility
- c. Denial re: degree of HL
- d. "Yes, I have some HL, but not to point to get hearing aids"
- e. Stigma

f. Cosmetics

- g. Performance in noise doesn't meet expectations
- h. Poor prior experience with amplification of family or friend.



EuroTrak



The British-Irish Hearing Instrument Manufacturers Association (2018)

Would providing hearing aids "free" significantly increase the US adoption rate?

- No. Numerous countries provide hearing aids at no cost or at a very significant discount. The highest adoption rate is **54%** (**Denmark**) with the lowest at **14%** (**Japan**).
- The U.S. adoption rate is ~32%. I'd predict adoption rate might increase to 45-50% if offered "free."

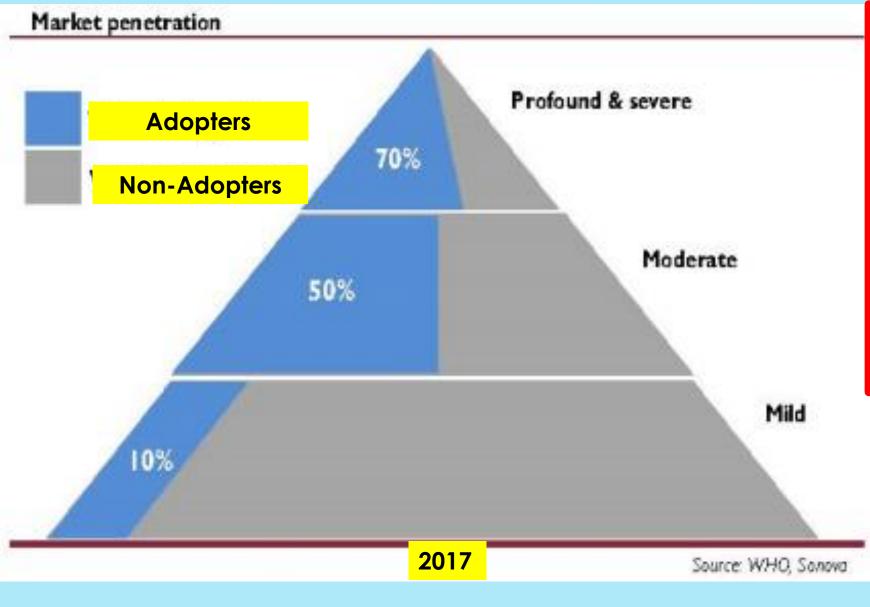
"Free hearing aids" is already occurring via <u>Medicare</u>
 <u>Advantage</u> (>36% of enrollees) and <u>other third party payer</u>
 (TPP) plans. Congress continues to discuss including hearing aids in Medicare B.

Three factors patients felt the current dispensing model does not provide that led to OTCs

| Key Factors | Solution |
|--|---|
| Excessive cost: which is a by-product of bundled model | Intelligently implement unbundled model with a entry level hearing aid fit using REM and QC 2cc measures |
| Limitations re: accessibility: travel/traffic; distance; weather; parking; etc | Offer and charge for remote care AND remote fine- tuning to reduce # clinic follow-up visits |
| Inconvenient: appt adhering to provider schedule not patient; provided a timely appt; transferred to voice mail; cancel; re-schedule; multiple visits to obtain aids, etc., | Offer and charge for remote care AND remote fine- tuning to reduce # clinic follow-up visits; aids in-stock |
| Our strategy to address these factors: | a. Dispense high quality entry-level device (in-stock) as an alternative to OTC using a unbundled model <u>AND</u> maintain bundled model with traditional aids (93%). |
| | b. Create counseling tools to provide patients a greater and honest understanding of differences between unbundled and bundled models and differences between traditional and OTC/DTC devices. |
| | c. Offer remote care and remote fine-tuning to address accessibility and convenience |

The following slide led me to believe OTCs were **not a threat**, but rather an **opportunity**.

To take advantage of this opportunity the dispensing model of the clinic operation had to change.



As HL decreases: adoption rate decreases
 I believe OTC will not have a
 (-) impact because we're not seeing these patients
 This lower rung are the consumers OTC/DTC manufacturers believe will select them instead of us (convenience, accessibility and cost).
 These can be program builders and not a threat

OTC/DTCs present a significant opportunity

1. You can't reach all **non-adopters**, but you can reach **new** and **current** patients considering OTC. These can build your practice and increase revenue. Placing information on your **website** will attract those who are considering OTC/DTC. Also, consider offering **remote care** and **remote fine-tuning** to improve **accessibility** and **convenience**. Allow your clinic to stand-out from your "competition." Finally, these patients may migrate to a higher level of technology and **refer** patients to your clinic.

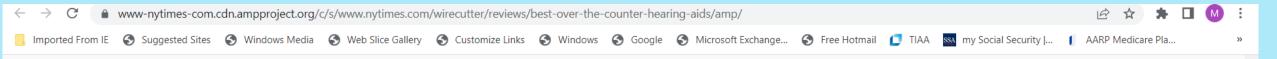
2. **New** and **current** patients **will** inquire about OTC/DTC aids when recommending hearing aids. You NEED to be prepared to address with excellent counseling tools. We created a **tri-fold** explaining adv/disadv of OTC/DTC and traditional aids AND offer both. Follows the business mantra of "they entered your house, keep them in your house."

3 Didn't adopt attitude that dispensing these "is below us." There are many high quality OTC/DTC devices available that can be programmed to hearing loss with REM (next slide).

https://www-nytimes-com.cdn.ampproject.org/c/s/www.nytimes.com/wirecutter/reviews/best-over-the-counter-

hearing-aids/amp/

August 2022



E Wirecutter

The Best Over-the-Counter Hearing Aids and Other Hearing Solutions

By Lauren Dragan

Updated August 26, 2022



Many "high quality" OTC aids that can be programmed could be added as products offered by a clinic.

New OTC aids are introduced almost daily.

*Subscribe to *Hearing Tracker*



Full List of OTC Hearing Aids

Soundwave Hearing^{*} Soundwave Hearing, 874.3305 LLC

All OTC hearing aids currently (Dec 2) approved by the FDA.

By Abram Bailey, AuD

AcoSound Celesto-

W-BTE-M

CONNECT

CONTROL

STREAM

Aids*

Hearing Assist

Hearing Assist

Hearing Assist

otoTune™ app*

Sontro™ Hearing

| TC Hearing Aid | ls | | Product | Con | npany | FDA Class | Product Code | | |
|--|------------------------|-----------------|--|-----------------------------|----------------------------------|-----------|--------------|--|--|
| · • · · • · · · · · · · · · · · · · · · | | | Bose SoundControl Hearing Aids | Bose Corpora | tion | 874.3325 | QDD | | |
| ing aids currently | / (Dec 2022) | | BHA100 Series Braun Clear Hearing Aid | Kaz USA Inc. c Company | Helen of Troy | 874.3325 | QDD | | |
| the FDA. | | | Jabra Enhance Plus | GN Hearing A | /S | 874.3325 | QDD | | |
| ailey, AuD | | | MDHearingAid app MDHearingAid Smart hearing aids | MDHearingAid | d | 874.3325 | QDD | | |
| , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | Vibe SF Self-Fitting Hearing Aid | wsaud a/s | | 874.3325 | QDD | | |
| | | | Nuheara IQbuds 2 PRO Hearing Aid | Nuheara Limit | ed | 874.3325 | QUH | | |
| Hangzhou AcoSoun | d | QUG | Lucid® 7495* | HEARING LAB LLC | TECHNOLOGY, | 874.3305 | QUG | | |
| Technology Co.,Ltd. | | | NuvoMed HNB-4/0143 | NUVOMED, INC. | | 874.3305 | QUG | | |
| Hearing Assist II, Inc. | 874.3305 | QUG | AcoSound Leya-W-RIC-S* | Hangzhou Ac Technology C | | 874.3305 | QUG | | |
| | | | AcoSound Celesto-W-BTE-M | Hangzhou Ac Technology C | | 874.3305 | QUG | | |
| Hearing Assist II, Inc. | 874.3305 | QUG | Hearing Assist CONNECT | Hearing Assist II, Inc. | | 874.3305 | QUG | | |
| Hearing Assist II, Inc. | | QUG | Hearing Assist CONTROL | Hearing Assist | II, Inc. | 874.3305 | QUG | | |
| Soundwave Hearing | ^{9,} 874.3305 | QUG | Hearing Assist STREAM | Hearing Assist | II, Inc. | 874.3305 | QUG | | |
| | | | otoTune™ app* | Soundwave H | learing, LLC | 874.3305 | QUG | | |
| 9* Soundwave Hearing LLC | | QUG | Soundwave Hearing* | Soundwave H | learing, LLC | 874.3305 | QUG | | |
| Soundwave Hearing LLC | ^{9,} 874.3305 | QUG | Sontro™ Hearing Aids* | Soundwave H | learing, LLC | 874.3305 | QUG | | |
| | | | Device | | FDA Registered Device | | | | |
| | | Lexie B1 and B2 | | В | Bose SoundControl Hearing Aids | | | | |
| | Vibe SF | | | Self-Fitting Hearing Aid | | | | | |
| | | HP Hearing PRO | | ٨ | Nuheara IQbuds 2 PRO Hearing Aid | | | | |

First, let's address how to create an **unbundled** model to reduce charge to tackle "**cost**," but maintain **bundled** model.

Again, I think for reasons that hopefully will become clearer, it's important to offer both options.

<u>https://hearinghealthmatters.org/thisweek/2022/valente-audiology-practice-</u> management-fundamentals/



 Running a Successful Audiology Clinic: Is a Bundled or Unbundled Approach Best?

 512 views • 2 months ago

 This Week in Hearing

 Michael Valente, PhD, joins Dave Kemp to discuss the essential elements every practice owner or clinic manager should know to ...

 0:45
 Michael Valente: Thank you, Dave, for the invitation. It's always nice to talk about this particular topic, because I was involved wit...

 CC

How to calculate <u>cost/hour</u> + <u>% profit</u> to create <u>charge/hour</u> and <u>time analysis</u> using an Excel spreadsheet I created to offer <u>bundled</u> <u>and</u> <u>unbundled</u> models. Felt it is important for patients to have choice. When provided counseling on the differences between the two, **93%** selected the bundled option fitted with traditional hearing aids.

Reducing the initial charge is crucial to address "*cost*" as one reason patients pursue OTC and not audiologist care.

Our model

First, maintained our **bundled** model for **current** and **new** patients who preferred this model because, in their words, did not want to be "nickeled and dimed to death" when counseled on new unbundled model.

Second, created an **unbundled** model to reduce charge to compete with OTC/DTC. In this model, the charge for REM and 2cc analysis are included.

It's about **retention.** Patients select your clinic because they feel "you are the best." Why provide a reason for them to pursue help elsewhere? I believe clinics should offer as many options as possible.

Creating an Excel spreadsheet to create an unbundled model

- 1. Gather **profit/loss (P/L) statement** to capture:
 - a. Direct and indirect costs
 - b. Separate out costs of goods to be dispensed
- 2. Estimate billable hours: the time staff are in the clinic generating income
- 3. Calculate cost/hour = <u>direct and indirect costs</u> (–) <u>cost of</u> <u>goods dispensed</u> (/) <u>billable hours</u>.
- 4. Select desired profit (%) and add to cost/hour. This is charge/hour.
- 5. Complete **time analysis (not just face-to-face time)** for all visit types associated with your dispensing practice to create "**menu of services**" in 30 min increments using **charge/hour (**e.g., \$240/hour = \$120/30 min; \$60/15 min).

| | | AUDIOLOGY - June 2018 YTD | | | | | | | |
|-------------------------|---------|--|---------------------------------|---------------------------------------|--------------------------------|--|--|----------------------------|-----------------|
| Final P/L 2017-2018 | | Fiscal Year 18 (by location) | CAM 11 | CAM -2 | CID | West County | Research | | |
| | | | CAM 11th Fl Audio June, 2018 | <u>CAM 3rd Fl Audio</u> June, 2018 | <u>CID Audio</u> June, 2018 | <u>West County Audio</u> June, 2018 | <u>Audio Non Cinical</u> June, 2018 | <u>TOTAL</u> June, 2018 | |
| | | Gross FFS Charges | 1,762,490 | 8,095 | 425,095 | 1,409,812 | | 3,605,492 | Gross charges |
| | | Discounts | (3,801) | 11 | (219) | (819) | - | 140000 | |
| | | Provision for Contr Adj Net Collectable FFS | (458,852) col n 1,299,837 | (5,896) coint 2,210 | (36,022) col n 388,854 | (204,093) colint 1,204,900 | | (704,963) | Contractual adj |
| | | less FFS Coll pst'd to A/R | 0.701 1,289,111 | 0.498 4,030 | 0.936 397,812 | 0.866 1,220,405 | | 2,911,358 | y |
| | \prec | Net Change to A/R | 10,726 | (1,820) | (8,958) | (15,505) | - | (15,557) | |
| income | | Sales and Service | - | 89,629 | 7,027 | 100 | - | 96,756 | |
| | | Total Revenue | 1,299,837 | 91,839 | 395,881 | 1,205,000 | - | 2,992,557 | |
| | | Expense/Alloc Credits | - | | 43,568 | - | 84.2% CF | 43,568 | |
| | | Total Sources | - | - | 43,568 | - | 04.Z/0 Cr | | |
| | | Total Revenue and Sources | 1,299,837 | 91,839 | 439,449 | 1,205,000 | - | 3,036,125 | Net income |
| | | EXPENSES | | | | | | | |
| | | Faculty Salary | | | | | | | |
| | | Staff Salary Fringes | 130,102 | | 47.369 | 20 74 | 10.523 | 281,066 | |
| | | Incentives | 139,186 2,147 | 5,133 | 47,369 | 78,745 | 10,633 | 2,147 | |
| | | Consum Supplies, Other | 35,676 | 225 | 14,674 | 33,172 | | 83,747 | |
| | | Prov for Doubtful Accts | 39,571 | 182 | 9,560 | 31,702 | - | 81,015 | |
| | | Rental Expense Resale | 258,518 | | 102,676 | 34,725 302,121 | | 34,725 663,315 | Total costs – |
| | | Total Direct Expense | 925,947 | 27,429 | 319,877 | 713,235 | 56,913 | 2,043,401 | |
| | | ALLOCATIONS | | | | | | | resale |
| | | ACC Allocation | 77,079 | | | | - | 77,079 | Total direct |
| | | Overhead | 147,896 | 4,939 | 45,222 | 85,435 | - | 283,492 | Total direct |
| _ | | Clinical Space Charge to the De | • | | 15,000 | | - | 15,000 | |
| Expenses | \prec | Total Other Alloc | 224,975 | 4,939 | 60,222 | 85,435 | | 375,571 | Overhead |
| | | Business Unit Allocations | | | | | | | |
| | | Admin / JU / O&M Front End Billing | 21,533 32,023 | 193 321 | 2,889 | 12,176 24,573 | | 36,791 62,249 | |
| Profit/loss | | School Space | 1,405 | 13 | 188 | 794 | | 2,400 | |
| 1101101033 | | WUPN Alloc | 296 | 3 | 40 | 168 | - | 507 | |
| | | WUPBS Alloc JOSP Alloc | 26,165 | 104 | 7,055 | 22,551 | - | 55,875 | |
| CAM = \$30,442 | | FPP Alloc | 38 961 | 9 | 129 | 21 | | 64 1,643 | |
| CID = CAO 70C | | Registration Svc Alloc | 807 | 7 | 108 | 457 | - | 1,379 | |
| CID = \$42,705 | | Other Clin Prac Alloc | 116,584 | 1,159 | 19,417 | 89,479 | - | 226,639 | |
| WC = \$260.144 | | Total | 199,812 | 1,809 | 35,163 | 150,763 | - | 387,547 | |
| | | Encumbrance Adjustments | (7,170) | | | (42,630) | | | |
| Res = -(\$56,913) | | | | | | | | | |
| | | Total Business Unit Alloc | 199,812 | 1,809 | 35,163 | 150,763 | - | 387,547 2,806,519 | Total business |
| | | Total Dir. Exp. & Alloc | 1,350,734 | 34,177 | 415,262 | 949,433 | 56,913 | 2,806,519 | |
| Cach $P/I = (22)/(170)$ | | Accrued Profit / (Loss) | (58,067) | 57,662 | 24,187 | 212,937 | (56,913) | 229,606 | unit expenses |
| Cash P/L = \$326,178 | | Cash Profit / (Loss) | (29,222) | 59,664 | 42,705 | 260,144 | (56,913) | 326,178 | • |
| | | | | | | | | | |

| | | | | | | | Available | | Total | | | | | | |
|---|------------------------------|-------------------------|---------------------------|-------------------------------|----------------------|------------------------|----------------------|----------------------|-------------|--------------|------------------------------|----------------|-----------------------------|---------------------|--|
| AUDIOLOGY - June 2018 YTD | | | | | | | Hours/FTE | # FTE | Available | | | | | | |
| Fiscal Year 18 (by location) | | | | | | | 2080 | 9 | 18,720 | 40 *52 = 208 | 0 * 9 <mark>= 18,7</mark> 20 |). Don't inclu | de <mark>4 P</mark> SR beca | use they don't bill | |
| | | | | | | | otal Direct Expense | 2 | \$2,043,401 | Total Dire | ect Exper | ıse | | | |
| | CAM 11th Fl Audio | CAM 3rd Fl Audio | CID Audio | West County Audio | Audio Non Cinical | TOTAL | otal Oth Allocation | s | \$375,571 | Total Otl | ner Exper | nses | | | |
| REVENUE | June, 2018 | June, 2018 | June, 2018 | June, 2018 | June, 2018 | June, 2018 | al Business Allocati | Business Allocations | | Addition | | es | | | |
| Gross FFS Charges Discounts | 1,762,490 (3.801) | 8,095 | 425,095 | 1,409,812 (819) | : | 3,605,492 (4.828) | Sub-Total | | | | | rect Expe | | | |
| Provision for Contr Adj Net Collectable FFS | (458,852) col n 1,299,837 | (5,896) col rt 2,210 | (36,022) col m 388,854 | (204,093) col rt 1,204,900 | | (704,863) 2,895,801 | Resale | | | | xpenses for Hearing Aids | | | | |
| less FFS Coll pst'd to A/R | 0.731 1,289,111 | 0.498 4,030 | 0.836 397,812 | 0.866 1,220,405 | | 2,911,358 | Sub-Total | | | | | | id Expens | A (| |
| Net Change to A/R Sales and Service | 10,726 | (1,820) 89,629 | (8,958) 7,027 | (15,505) | | (15,557) 96,756 | Contractual Adj | \mathcal{H} | | | | ss incom | | | |
| Total Revenue | 1,299,837 | 91,839 | 395,881 | 1,205,000 | - | 2,992,557 | | \square | | Total Exp | | | C | | |
| Expense/Alloc Credits Total Sources | : | : | 43,568 43,568 | : | : | 43,568 43,568 | Total Expense | // / | \$2,848,007 | | enses | | | | |
| Total Revenue and Sources | 1,299,837 | 91,839 | 439,449 | 1,205,000 | | 3,036,125 | Non-Billable | | | | | | | | |
| EXPENSES | | | | | | | Hours | 1 | | | | T · · · | | | |
| Faculty Salary Staff Salary | | | | | | | | Hrs/day | # days | | # Staff | Total | | | |
| Fringes | 139,186 2,147 | 5,133 | 47,369 | 78,745 | 10,633 | 281,066 | Vacation | 8 | 22 | 176 | 9 | 1,584 | | | |
| Incentives Consum Supplies, Other | 35,676 | 225 | 14,674 | 33,172 | | 2,147 83,747 | Holidays | 8 | 8 | 64 | 9 | 576 | | | |
| Prov for Doubtful Accts Reptal Expense | 39,571 | 182 | 9,360 | 31,702 | : | 81,015 | Sick | 8 | 12 | 96 | 9 | 864 | | | |
| Resale Total Direct Expense | 258,518 925,947 | 27,429 | 102,676 319,877 | 302,121 713,235 | - 56,913 | 663,315 2,043,401 | Unrecorder | 12 | | | 9 | 108 | * <mark> - Non-</mark> k | billable hours | |
| | 565,547 | 27,423 | 313,611 | (13,23) | 20,723 | 2,043,402 | Meetings | 8 | 5 | 40 | 9 | 360 | | | |
| ACC Allocation | 77,079 | | | | - | 77,079 | Personal days | 8 | 2 | 16 | 9 | 144 | | | |
| Overhead Clinical Space Charge to the D | | 4,939 | 45,222 | 85,435 | - | 283,492 | | | | | | | | | |
| Total Other Alloc | 224,975 | 4,939 | 60,222 | 85,435 | - | 375,571 | Total | | | | | 3 636 | | | |
| Business Unit Allocations Admin / JU / O&M | 21,533 | 193 | 2,889 | 12,176 | | 36,791 | Sub-Total Billable | | | | | 15,084 | 20% | | |
| Front End Billing School Space | 32,023 | 321 13 | 5,332 | 24,573 794 | : | 62,249 2,400 | | | | | | | | | |
| WUPN Alloc | 296 | 3 | 40 | 168 | - | 507 | Cost/hour Non- | | | | | | | | |
| WUPBS Alloc JOSP Alloc | 26,165 38 | 104 | 7,055 | 22,551 21 | : | 55,875 64 | Correected | | | | | ¢199.91 | Cost/hour 2 | 017-2018 | |
| FPP Alloc Registration Svc Alloc | 961 807 | 9 | 129 108 | 544 457 | : | 1,643 | | | | | | 9100.01 | | 017-2010 | |
| Other Clin Prec Alloc Total | 115 394 | 1,159 | 19.417 35,163 | 89.479 150,763 | | 226 639 | Other Non-Billable | | | | | | | | |
| | | 1,609 | 33,163 | | - | 196,196 | | | | | r | CAF | ¢2.040.04 | 7/4 5 094 | |
| Encumbrance Adjustments | (7,170) | | | (42,630) | | | No-Show | | | | | 645 | \$2,848,00 | 0//15,084 | |
| Total Business Unit Alloc | 199,812 | 1,809 | 35,163 | 150,763 | - | 387,547 | Cancellations | | | | | 6,419 | | | |
| Total Dir. Exp. & Alloc | 1,350,734 | 34,177 | 415,262 | 949,433 | 56,913 | 2,806,519 | Staff Meetings | | | | | 0 | | | |
| Accrued Profit / (Loss) Cash Profit / (Loss) | (58,067) (29,222) | 57,662 59,664 | 24,187 42,705 | 212,937 260,144 | (56,913) (56,913) | 229,606 326,178 | CEU Meetings | | | | | 0 | | | |
| | | | 4/le e un e un | | | | OSHA training | Additio | nal non-b | illahla ha | | 0 | | | |
| Points to n | | | | | | Xmas parties | Additio | | | | 0 | | | | |
| and not wh | at is being | g charged | "down the | road". | | Staff lunches | | | | | 0 | | | | |
| | | | | | Maternity Leave | | | | | 0 | | | | | |
| Each alinia | | | | | hours du | 0.40 | Jury Duty | | | | | 0 | | | |
| Each clinic | | | | | | e 10 | Teaching | | | | | 0 | | | |
| differences | s in benefit | ts (vacatio | n, sick, ho | lidays, res | search, | | Patient Seminars | | | | L | • 0 | | | |
| meetings (| - + - } | | | | | | | | | | | | | | |

| | Available | | Total | | | | | | | | | | | | | | | | | |
|----------|-----------------------|---------|-------------|---------------|----------------|---------------|--------------|----------------------|----|------------------|----------------|---------------|----------------|----------|-----------|----------|---|-------------|-----------------------|--------------------------------|
| 1 | Hours/FTE | # FTE | Available | | | | | | | | | | | | | | | | | |
| 2 | 2080 | 9 | 18,720 | 40 *52 = 2080 |) * 9 = 18,720 | . Don't inclu | de 4 PSR bec | ause they don't bill | | | | | | | | | | | | |
| 3 1 | otal Direct Expense | | \$2,080,344 | | | | | | | | | | | | | | | | | |
| 4 | otal Oth Allocations | | \$340,249 | | | | | | | | | | | | | | | | | |
| 5 | al Business Allocatio | ons | \$383,908 | Evom | la for a | nothor | year - | | | | | | | | | | | | | |
| 6 | Sub-Total | | \$2,804,501 | Examp | ne for a | nother | year | | | | | | | | | | | | | |
| 7 | Resale | | \$660,733 | | | | | | | | | | | | | | | | | |
| 8 | Sub-Total | | \$2,143,768 | | | | | | | | | | | | | | | | | |
| 9 | Contractual Adj | | \$804,729 | | | | | | | | | | | | | | | | | |
| 10 | - | | \$2,948,497 | | | | | | | | | | | | | | | | | |
| | Non-Billable | | | | | | | | | | | | | | | | | | | |
| 11 | Hours | | | | | | | | | | | | | | | | | | | |
| 12 | | Hrs/day | # days | | # Staff | Total | | | | | | | | | | | | | | |
| 13 | Vacation | 8 | 22 | 176 | 9 | 1,584 | _ | | | | | | | | | | | | | |
| 14 | Holidays | 8 | 8 | 64 | 9 | 576 | | | | | | | | | | | | | | |
| 15 | Sick | 8 | 12 | 96 | 9 | 864 | | | | | | | | | | | | | | |
| 16 | Unrecorded | 12 | | | 9 | 108 | *12 hrs/yea | r/staff | | | | | | | | | | | | |
| 17 | Meetings | 8 | 5 | 40 | 9 | 360 | | | | | | | | | | | | | | |
| 18 | Personal days | 8 | 2 | 16 | 9 | 144 | | | | | | | | | | | | | | |
| 19 | | | _ | | | | | | 36 | Patient Seminars | | | | | 0 | | | | | |
| 20 | Total | | | | | 3,636 | | | 37 | Research | | | | | 0 | | | | | |
| | Sub-Total Billable | | | | | 15,084 | | | 38 | Other | | | | | 0 | | | | | |
| 22 | | | | | | 20,007 | | | 39 | Other | | | | | 0 | | | | | |
| | Cost/hour Non- | | | | | | | | 40 | Other | | | | | 0 | | | | | |
| 23 | | | | | | \$195.4 | 7 | | 41 | Other | | | | | 0 | | | | | |
| 24 | concetted | | | | | | | | 42 | Other | | | | | 0 | | - | | | |
| | Other Non-Billable | | | | | | | | 42 | Other | | | | | 0 | | | | | |
| 26 | No-Show | | | | | 645 | | | _ | | | | | | 0 | | _ | | | |
| 20 | | | | | | 6,419 | | | 44 | Other | | | | | | | - | | | |
| 27 | | | | | | 0,419 | | | 45 | Other | | | | | 0 | | + | | | |
| 20 | | | | | | 0 | | | 46 | Other | | | | | 0 | | + | | | |
| 30 | | | | | | 0 | | | 47 | Total | | | | | 7,064 | | _ | | | |
| 31 | Xmas parties | | | | | 0 | | | 48 | | | | | | | | + | | | |
| 32 | | | | | | 0 | | | 49 | Total | | | | | 8,020 | | + | | | |
| | Maternity Leave | | | | | 0 | | | 50 | | | | | | | | _ | | | |
| 33 34 | Jury Duty | | | | | 0 | | | 51 | Cost/hour | | | | | \$367.64 | | _ | | | |
| 35 | Teaching | | | | | 0 | | | 52 | Corrected | | | | | | | _ | | | |
| | Datient Seminare | | | | | 0 | | | 53 | | | | | | | | | | | |
| | | | | | | | _ | | 54 | | Cost/hour base | ed on Percen | t Profit | | | | | | | |
| | | | | | | | | | 55 | Cost/hour | 10% | 20% | 30% | 40% | 50% | 60% | | 70% | 70% 80% | 70% 80% 90% |
| | | | | | | | | | 56 | Non-corrected | \$215.02 | \$234.57 | \$254.11 | \$273.66 | \$293.21 | \$312.75 | Т | \$332.30 | \$332.30 \$351.85 | \$332.30 \$351.85 \$371.40 |
| | | | | | | | | | 57 | Corrected | \$404.41 | \$441.17 | \$477.94 | \$514.70 | \$551.46 | \$588.23 | T | \$624.99 | \$624.99 \$661.76 | \$624.99 \$661.76 \$698.52 |
| | | | | | | | | | 58 | | | | | | | | t | | | |
| | | | | | | | | | 59 | | | | | | | | † | | | |
| | | | | | | | | | 60 | | Cost/hour Base | ed on Desired | l Profit in Do | llars | | | + | | | |
| | | | | | | | | | 61 | \$ Profit | \$50,000 | \$100,000 | | | \$250,000 | \$300,00 | | n \$350.000 | 0 \$350,000 \$400,000 | 0 \$350,000 \$400,000 \$450,00 |
| | | | | | | | | | _ | Non-corrected | \$198.79 | \$202.10 | \$205.42 | | | | - | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 63 | Corrected | \$373.88 | \$380.11 | \$386.35 | \$392.58 | \$398.82 | \$405.05 | | \$411.28 | \$411.28 \$417.52 | \$411.28 \$417.52 \$423.7 |

Next, how a **low-cost entry level aid** using an **unbundled** model was adopted along with **counseling** as an **alternative to OTC** and provide customized **high-quality care**

<u>https://hearinghealthmatters.org/thisweek/2022/otc-part-audiology-practice-</u> <u>valente/</u>



Successfully Integrating OTC Hearing Aids into an Audiology Practice

730 views • 2 months ago

🚺 This Week in Hearing

After last week's discussion on the essential elements of running a successful practice, such as calculating cost/hour and how this ... 0:10 So here we have Mike Valente, ready to present part two of his presentation here. So Mike, take it away. Michael Valente: David

How to integrate a **entry level** hearing aid as an **alternative to OTC** using an **unbundled** model along with a *tri-fold brochure* on adv/disadv between OTC and traditional aids using **bundled** model. In our case, >90% elected the **traditional bundled** aids.

Coupler and Real-Ear Performance between PSAPs and Hearing Aids

How do today's PSAPs stack up in comparison with traditional hearing aids?

By ADAM VOSS, AuD, KRISTI OEDING, AuD, A.U. BANKAITIS, PhD, JOHN PUMFORD, AuD, and MICHAEL VALENTE, PhD

Before jumping to the conclusion that any PSAP and/or OTC hearing device would be suitable for the many different types of hearing losses, we need to look at their coupler and real-ear performance data. This study suggests PSAPs are suitable for mild losses only.







Adam Voss, AuD, is a Clinical Audiologist at the Washington University School of Medicine, Center of Advanced Medicine in St Louis; Kristi Oeding, AuD, is a PhD candidate at

the University of Minnesota-Twin Cities in Minneapolis; **A.U. Bankaitis**, PhD, is Vice President of Oaktree Products Inc in Chesterfield, Mo; **John Pumford, AuD**, is

earing aids currently remain the "gold standard" for treating hearing loss. Other amplification options, however, such as Personal Sound Amplification Products (PSAPs) and Over-The-Counter (OTC) devices have gained consumer and audiologist interest. This interest has increased due to recommendations from the President's Council of Advisors on Science and Technology (PCAST),1 National Academies of Sciences Engineering Medicine (NASEM),² Consumer Technology Association (CTA)3 and the media.47 The new law passed by Congress and signed by the President suggests that these PSAPs and OTCs would be appropriate for patients with "mild" to "moderate" hearing loss. The results of the current study do not agree with this suggestion, which will be explained in more detail later in this text.

One finding of the PCAST¹ report is the US adoption rate of hearing aids is approximately 15-30% for persons with hearing loss.1 The adoption rate, however, is anywhere from 6-14% for patients with "mild" hearing loss, and as great as 55-73% for patients with more severe hearing loss.8-9 While the report1 recognizes many barriers exist to obtain hearing aids (denial of hearing loss, stigma, access, limited knowledge concerning amplification options, etc), one prominently cited barrier is cost. Cost to the consumer is a significant driving force behind the increased interest in PSAPs and OTCs, as the cost of these devices can range from less than \$20 to hundreds of dollars, compared to hearing aids that can cost several hundred to several thousand dollars. It is important, however, to remember that the PSAP or OTC costs to the consumer is exclusively related to the invoice cost of the device. Hearing aids, on the other hand, include the cost of the device hearing loss. Only a few studies have examined characteristics of PSAP and OTC devices.¹⁶⁻¹⁷ Results from these studies are mixed, but overall there is a suggestion that PSAP and OTC devices can have a high maximum peak output, high *equivalent internal noise* (EIN), and not adequately match a valid prescriptive target. Some studies reported PSAP and OTC devices were appropriate for a low-frequency hearing loss,¹² "mild to moderate" gently sloping or flat hearing loss,¹² and some devices performed similarly to a hearing aid in a speech recognition task.¹¹

The primary goal of the current study is to provide additional information that can be used by hearing care professionals to counsel patients on which PSAP/OTC device might best fit their hearing loss. The current study does *not* endorse PSAPs/OTCs replacing hearing aids because the authors believe hearing aids, correctly fit by a dispensing professional, are the gold standard to achieve optimal hearing. Instead, the current study is intended to help clinicians better counsel patients who cannot afford a hearing aid on an appropriate PSAP/ OTC for his/her hearing loss.

In the current study, two "premium" hearing aids, two "basic" hearing aids, three "advanced" PSAPs, five "intermediate" PSAPs, and five "basic" PSAPs were examined (Tables 1 and 2). PSAPs were arbitrarily separated into categories based on user control/programmability and available options. Electroacoustic (ANSI S3.22-200918) and *real-ear measures* (REM) were measured using eight "typical" audiometric configurations shown in Table 3. REM examined differences between the hearing aids and PSAPS using manufacturer first-fit versus programmed to match (ie, ±5 dB at 250-6000

2018 - Hear Rev 25(11):10-18

- 1. 8 typical audiometric configurations (next slide).
- 2. Independent variables:
 - 1. First-fit and programmed REAR to NAL-NL2
 - 2. 50 and 65 dB SPL input levels
 - 3. 4 hearing aids from two manufacturers (premium and basic)
 - 4. 21 PSAPS (\$48 \$499)
- Dependent variable: "closeness" (%) to NAL-NL2 (+/- 5 dB) @ 9 freq between 250-6000 Hz)

Audiograms used in Voss et.al. (2018)

| Audiogram | 250 Hz | 500 Hz | 750 Hz | 1000 Hz | 1500 Hz | 2000 Hz | 3000 Hz | 4000 Hz | 6000 Hz |
|-----------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 1 | 10 | 10 | 10 | 10 | 10 | 15 | 20 | 30 | 40 |
| 2 | 20 | 20 | 25 | 25 | 30 | 35 | 40 | 45 | 50 |
| 3 | 35 | 35 | 35 | 40 | 45 | 50 | 55 | 60 | 65 |
| 4 | 55 | 55 | 55 | 55 | 60 | 65 | 70 | 75 | 80 |
| 5 | 65 | 70 | 75 | 75 | 80 | 89 | 80 | 80 | 80 |
| 6 | 10 | 10 | 10 | 10 | 10 | 15 | 30 | 55 | 70 |
| 7 | 20 | 20 | 25 | 25 | 35 | 55 | 75 | 95 | 95 |
| 8 | 30 | 35 | 50 | 60 | 70 | 75 | 80 | 80 | 85 |

Key points from Voss et. al., (2018)

Programming improved the ability to match NAL-NL2 re: first-fit for the 4 hearing aids, 21 PSAPs @ both input levels (50 and 65 dB SPL)

Most PSAPs could not match NAL-NL2 at either input level for first-fit or programmed when HL @ 1000-6000 Hz \geq 40 dB

For **all 8** audiometric configurations, the **2 premium and 2 entry level** hearing aids were able to adequately match NAL-NL2 when programmed at either input level

For the 4 hearing aids, there was **little difference** between **premium** and **basic** in ability to match NAL-NL2

Bear in mind that most PSAPs <u>first-fit</u> performance was poor. Performance improved when programmed, but even then performance was still poor re: hearing aids. This is especially true when HL @ 1000-6000 Hz \geq 40 dB HL.

Voss et al (2018) was the catalyst to pursue an **entry level** aid dispensed using an **unbundled** model as our initial strategy as an **alternative** to **OTC**.

Practices might decide to select other devices. This may include OTCs or other devices which seem to change daily.

Recall, this began in 2018-2019. Today, there are many new options for devices to offer. If I have time, remind me to tell you my experience with Mimi, AirPod2 Pro and a Aluratek ABC53F BT transmitter.

Developed new **counseling tools to take home.** Felt this was a key for the success of offering the new fitting option.

Also, this new option as well as information on OTC's had to be placed in our website.

Steps taken to integrate an entry level aid using an unbundled model

- Needed a inexpensive device allowing effective programming to match NAL-NL2 as best as possible for a wide variety of audiograms
- Sought HA with invoice cost ≤ \$200 and purchased 100 to keep in stock to reduce # of visits
- Contacted our four manufacturers to pursue interest in providing an entry level aid at ~\$200/aid with a 1 year warranty that could be returned
- REM and 2cc had to be part of dispensed device and this was added to invoice cost of aid using a unbundled model.
- Created a "menu" of services with charge/service based on time required for visit type. Patients counseled that all visits following the fitting would entail a charge. Signed a form acknowledging this.
- Charge to the patient had to be competitive with OTC/DTC or this new model would not be successful.
- > Up to this point the clinic, like most in the US, exclusively used a bundled model.
- Essential to maintain traditional using bundled model
- Created counseling tools to help direct patients to best option based on numerous factors
- Tracked % of patients pursuing traditional versus entry level aids

First, negotiated invoice cost for entry level aid. Selected the Phonak V30. This was replaced with their updated entry level aid when the V30 was discontinued

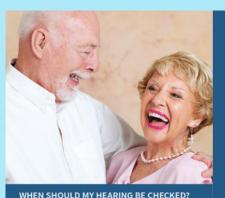
Purchased 100 aids in two colors and divided among our clinical sites.

| | Widex | ReSound | Phonak |
|--------------------|---|---|--|
| | Unique | Enya 3 | V-30 |
| Cost | \$215 | \$225 | \$200 |
| Warranty | 1 | 1 | 1 |
| Channels | 4 | 8 | 8 |
| Bands | 4 | 8 | 8 |
| Programs | 3 | 4 | automatic: 2 |
| Tinnitus | Yes | Yes | Yes |
| Return? | No | Yes | Yes |
| Change color | Yes | Yes | Yes |
| Extend Warranty | Yes | Yes | ? |
| Battery | 312 | 312 | 10/312/312T/13 |
| Frequency Shifting | Yes | No | Yes |
| | | | |
| OSPL90 | 114 | 116 | 114 |
| HF F/O Gain | 55 | 57 | 46 |
| EIN | 21 | 23 | 19 |
| Battery drain | 1 | 1.23 | 1.2 |
| Phone Rating | M4/T4 | T2-T4 | M2/T2 |
| | Warranty Channels Bands Programs Tinnitus Return? Change color Extend Warranty Battery Frequency Shifting OSPL90 HF F/O Gain EIN Battery drain | CostUniqueCost\$215Warranty1Channels4Bands4Programs3TinnitusYesReturn?NoChange colorYesExtend WarrantyYesBattery312Frequency ShiftingYesOSPL90114HF F/O Gain55EIN21Battery drain1 | UniqueEnya 3Cost\$215\$225Warranty11Channels48Bands48Programs34TinnitusYesYesReturn?NoYesChange colorYesYesExtend WarrantyYesYesBattery312312Frequency ShiftingYesNoOSPL90114116HF F/O Gain5557EIN2123Battery drain11.23 |

| * | These services built into charge for aid(s) | | | | Mon | Bin | | Example of menu based on charge/hour of \$240 |
|----|--|--|---|----|-------|---------|-------------------------------|--|
| | Basic Aid | Basic Hearing Aid | | | \$640 | \$1,000 | | |
| 1. | *HAE | Menu | | | | | Charge | OTC/DTC |
| 2. | *2cc measure (QC) | Change color of case | | | | | \$55/aid | 1. No HAE |
| 3. | *Programmed to NAL- | REM after initial fit Counsel on use of aids | _ | | | | \$120 \$120 | 2. No 2cc measures |
| | NL2 | Download App and pair | | | | | \$120 | 3. Not programmed to NL- |
| 4. | Aids "in stock" | Counsel on App | | | | | \$60 | NL2 |
| 5. | 1-year warranty | Coupler measure | | | | | \$60 | 4. Will take time to obtain |
| | 4-week trial; can return | Earmold/ear 1/2 hour visit | | | | | \$100 \$120 | 5. May not have 1 year |
| | We're not going | 1 hour visit | | | | | \$240 | warranty |
| | anywhere | Unaided and aided speech in noise (QuickSIN) | | | | | \$120 | 6. May not have 4 week |
| 8 | Purchase extended | Unaided and aided questionnaire | | | bunc | | \$60 | trial or ability to return |
| 0. | warranty | Additional programming (fine- tuning)/1/2 hour | | | arge | | \$120 | 7. May be out of business |
| a | We repair or send for | Return aid(s) for repair | | | these | - | \$120 | 8. Perhaps can't purchase |
| 5. | repair | Replace receiver(s) | | Se | ervic | es | \$60 + cost of receiver | extended warranty |
| 10 | Provide remote | Troubleshooting (dead, weak, excessive | | | | | | 9. Care for repairs yourself |
| | care/remote fine-tuning | drain, Fb, etc) Routine maintenance (replace | _ | | | | \$60/15 min \$60 + cost of | 10. May not offer remote |
| 11 | Far greater level of | dome/wax guard) | | | | | supplies | care/remote fine-tuning |
| 11 | - | Loudness judgments Address questions via | | | | | \$120 | 11. Far lower level of service |
| | service than many | email/text/phone | | | | | \$60/15 min | than our entry level aid |
| | OTC/DTC | Domes, waxguard, retention pieces ,etc Supplies - see meny of charges for supplie | | | | | \$5/pack | and roun only for or ald |

Supplies - see menu of charges for supplies

Patient brochure on options for hearing aids



Barnes-Jewish West County Hospital 1044 N. Mason Road, Suite L20 St. Louis, MO 63141 Appointments: 314-362-7509 Center for Advanced Medicine 4921 Parkview Place, Suite 11A St. Louis, MO 63110 Appointments: 314-362-7489 Central Institute for the Deaf 4560 Clayton Avenue St. Louis, MO 63110 Appointments: 314-747-7100

Toll free, all locations: 800-437-5430



ADULT AUDIOLOGY

Your Options for **Hearing Devices**

· Receive complaints that you have the radio or television volume turned up too loud.

· Hear a buzzing, ringing, chirping or roaring in

Your hearing should be checked by a clinical

audiologist if you:

your ear(s).

- Have difficulty understanding children's voices.
- · Find that people often seem to mumble or speak unclearly.
- Have difficulty understanding people in noisy environments
- Often ask others to repeat themselves or misunderstand conversations.
- Find it a strain to understand a conversation.
- Notice environmental sounds seem too loud.

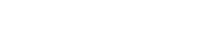
For more information, call 800-437-5430





Physicians

HEARING.WUSTL.EDU



WASHINGTON UNIVERSITY PHYSICIANS

THE WORLD OF HEARING AIDS AND AMPLIFICATION IS CHANGING.

According to the National Institutes of Health, about 28.8 million people in the U.S. could benefit from using hearing aids. However, only 15-30% of those with hearing loss opt for hearing aids. One reason for this is thought to be the cost.

With today's technology, there is no reason to be left out of the conversation. Hearing aids and personal sound amplifiers can now be purchased online, in retail stores and in pharmacies at several different price points.

Options available for sound amplification include personal sound amplifiers (PSAPs), over-thecounter (OTC) devices and hearing aids. So how do you decide on the best instrument for your hearing loss?

WHAT ARE MY OPTIONS FOR HEARING DEVICES?

Hearing Aids an a regulated medical device that must be prescribed by a licensed hearing professional. Washington University offers the full array of hearing aids, along with testing, real-ear measures and fittings customized specifically to each person's type and degree of loss. Sophisticated hearing aids can be expensive, and our recommendations come without any bias for a manufacturer or device type - Washington University audiologists don't get commissions on sales. With this bundled package, patients get free after-fit care, adjustments and replacement parts during the warranty of the device.

Basic, or Entry-Level Hearing Aids re offered ac at a lower cost. by was Basic hearing aids offer less sophisticated options than some of the more advanced alternatives. Even with fewer options, Washington University audiologists can make basic hearing aids accommodate most patients' hearing loss, but there is a charge for each fitting and service visit.



One in eight people in the U.S. over age 12 has hearing loss in both ears, based on standard hearing examinations.

Personal Sound Amplification Products (PSAPs) are marketed for hearing enhancement

and an enot intended to be used for hearing loss. Washington University does not offer these devices. They can be purchased online or overthe-counter without a hearing evaluation or doctor's prescription.

Over-the-Counter (OTC) Paring devices are by the FDA, and will be available in the year 2020. This new class of self-programmable devices will be marketed for individuals with mild to moderately-severe hearing loss. They will be available at retailers without a prescription. While these devices may improve access to hearing devices for some people, because they can be purchased without the assistance of a licensed audiologist, they also carry the risk of being used improperly.



WHY CHOOSE WASHINGTON UNIVERSITY?

Service quality is a priority with our staff of professionals and is exhibited in everything from scheduling to follow-up care.

We offer:

- Recommendations for hearing aids based on your custom needs. All types and levels of technology will be addressed. If you choose a PSAP or OTC device, verification of these devices and follow-up care will be offered with a fee for the services applied.
- Selection of many manufacturers' hearing aids in a variety of price ranges (our staff does not receive commissions).
- Free follow-up visits for the duration of a nonbasic hearing aid warranty (2-3 years) for the best possible hearing aid performance.
- Free hearing aid reprogramming and cleaning for the duration of the warranty (2-3 years) of a non-basic device.
- Free orientation class on the care, use and expectations of hearing aids.

For more information, call 800-437-5430

Why select our clinic

| Factors | Premium and Advanced HA | Basic HA | PSAP | OTC |
|---------------------------|----------------------------|--------------|------|-----|
| Hearing Test | \checkmark | \checkmark | X | X |
| Hearing Aid Evaluation | \checkmark | \checkmark | X | X |
| Quality Control | \checkmark | \checkmark | X | X |
| Real Ear Measures | \checkmark | \checkmark | X | X |
| After Fit Care | NC During Warranty | $\sqrt{*}$ | X | X |
| Extended Warranty | \checkmark | \checkmark | X | X |
| Loaner | NC During Warranty | $\sqrt{*}$ | X | X |
| Counseling | NC During Warranty | $\sqrt{*}$ | X | X |
| Warranty | 2-3 years | 1 year | ? | ? |
| 4 Week Trial | \checkmark | \checkmark | X | X |
| Return for Credit | \checkmark | \checkmark | ? | ? |
| Adjustments | NC During Warranty | $\sqrt{*}$ | X | X |
| Solvency | \checkmark | \checkmark | ? | ? |
| Replacement parts | NC During Warranty | \checkmark | X | X |
| * Additional fee | NC = no charge | | | |

Number entry level aids dispensed (July 1, 2019 – January 31, 2020) Then the pandemic hit

| CAM | | | | | |
|---------|---|--|---|--|--|
| U A III | | CID | | WC | |
| HA | Entry | HA | Entry | HA | Entry |
| 24 | 2 | 4 | 1 | 23 | 2 |
| 22 | 2 | 11 | 0 | 34 | 2 |
| 28 | 1 | 7 | 1 | 39 | 2 |
| 22 | 4 | 8 | 0 | 21 | 4 |
| 20 | 3 | 9 | 0 | 23 | 4 |
| 25 | 2 | 19 | 0 | 36 | 0 |
| 36 | 0 | 9 | 0 | 30 | 0 |
| | | | | | |
| 177 | 14 | 67 | 2 | 206 | 14 |
| | | | | | |
| CAM | | CID | | CAM | |
| 177 | | 67 | | 206 | |
| 14 | | 2 | | 14 | |
| 0.08 | | 0.03 | | 0.07 | |
| | | | | | |
| 450 | | | | | |
| 30 | | | | | |
| 0.07 | | | | | |
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Although this wasn't completed before I retired I would meet with our **website** staff to expand the information in our brochure and place on our website.

We need to educate potential patients on OTC, DTC, traditional hearing aids, unbundling, bundling, etc. We need to educate on the provided services to address these different technologies.

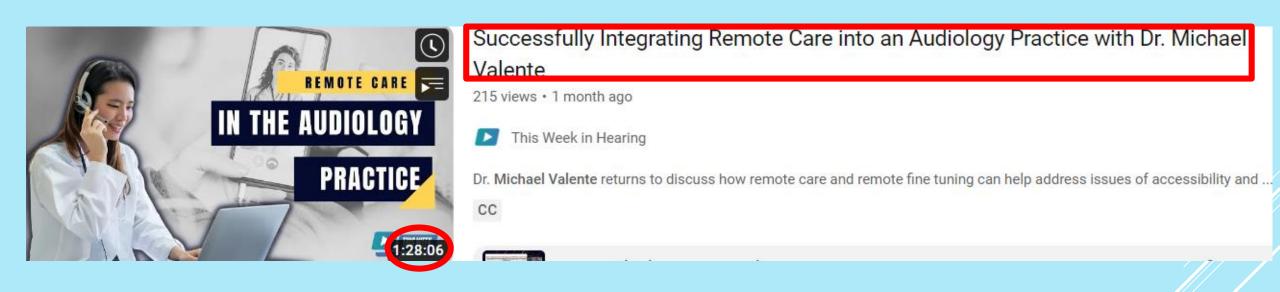
Also include information on offering remote care and remote fine-tuning.

Finally, let's address how remote care and remote fine-tuning was created and introduced to address accessibility and convenience. This component was still a "work in progress" when I retired in 2020.

Be sure to check your state licensure law

Note: several **OTC/DTC** companies and insurance plans provide this service.

https://hearinghealthmatters.org/thisweek/2022/remote-care-audiologypractice-management/



Discuss how to integrate *remote care* and *remote fine-tuning* using an *unbundled* model to address *accessibility and convenience*.



Survey Reveals 90% of Americans Used Telehealth in The Past Year





Differentiating remote care and remote fine-tuning

<u>Remote care</u>: Resolve problems remotely (e.g., secure zoom), but does not use manufacturer software or require a clinic visit. This addresses **accessibility and convenience**. Audiologists have been engaging in this form of "remote care" for years (i.e., telephone; e-mail), but "seeing" the patient along with his/her hearing aids significantly improves the ability to resolve problems without the need for an office visit.

<u>Remote fine-tuning</u> (synchronous and asynchronous): resolves problems remotely via smartphone using a strong WIFI or smartphone with unlimited data and does not require an office visit. This uses manufacturer software to reprogram hearing aids as well as provide additional services provided within the software. This also addresses accessibility and convenience.

Examples of remote care

1. How many times have you seen patients and thought this problem could have been resolved remotely without the need for an office visit? Would open space in the clinic for other patients and visit types and improve convenience and accessibility for patients.

2. Counsel: correct insertion of earmolds/domes/batteries; reconnect aids, phone and other devices; download updated app and check pairing, connect TV device and other devices to stream to aids; R/L dome or mold; change wax guards; receiver problems; etc.,

3. Troubleshoot TV device, remote mic and/or streamer, charger, moisture in tubing or cracked tubing, battery, corrosion. **Is an appointment required as follow-up to resolve the problem?**

4. Can be charged using "menu of services" (unbundled) or NC (bundled for duration of warranty).

5. Can be provided by a **audiology assistant** depending upon licensure laws.

I contacted our manufacturer reps at Widex, Phonak, ReSound and Starkey to learn how often remote fine-tuning is utilized by their accounts.

All were surprised that **remote fine-tuning** was used <10%. This was surprising given its' potential to **improve** <u>patient care/satisfaction</u>, <u>accessibility and convenience</u> and increase # appointments and revenue.

Their assessment why **remote fine-tuning** was not used:

- a. Hesitant to adopt and learn new technology
- b. Hesitant to counsel on **availability** and **advantages** of remote fine-tuning
- c. Lacking knowledge of **how** to integrate remote fine-tuning into their practice
- d. Lacking knowledge of how/what to charge
- e. Concerned re: Scope of Practice and state/federal laws
- f. Fear of **losing patients** if **they** didn't see their patients **in the clinic**
- g. Confident patients couldn't handle or have access to this technology

Fear of losing patients

Audiologists fear "losing" patients if remote care and remote fine-tuning were offered in spite of improving accessibility and convenience.

Is this concern legitimate when so many **other** healthcare professionals routinely schedule remote care and don't report their patients haven't returned for in-office visits when face-to-face is necessary?

Remote care and remote fine-tuning are **marketing tools** used by many DTC/OTC manufacturers and insurance plans to attract consumers to purchase their products and abandon "brick and mortar" clinics

Fear of violating Scope of Practice or state/federal laws

Fear of **violating** federal and/or state **licensing laws or scope of practice** is legitimate, but can be answered by viewing AAA and ASHA links, state licensing boards or obtain legal advice.

This could be an issue with **asynchronous** remote-fine tuning.

For example, we contacted the **Missouri licensing board** for advice on the providing **RC and RFT**. We **never** received a response. To circumvent this obstacle we sought the advice of **General Counsel** before moving forward.

ASHA Resources

COVID-19: Tracking of State Laws and Regulations for Telepractice and Licensure Policy

Payment and Coverage Considerations for Telepractice Services During Coronavirus/COVID-19

AAA Resource

https://www.audiology.org/telehealth-and-licensure/

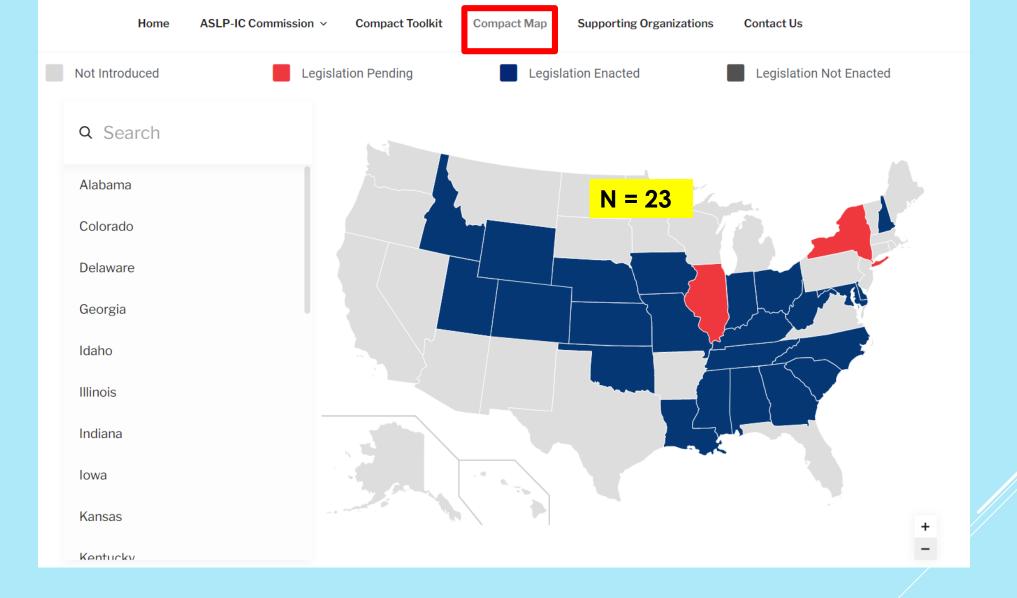
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| March 8, 2018 | | | | | | | |
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ASLP-IC

Audiology & Speech Pathology – Interstate compact

https://www.asha.org/advocacy/state/audiology-and-speech-language-pathology-interstate-compact/

https://aslpcompact.com/



Patients can't "handle" remote care or remote fine-tuning

A. **Zoom, Microsoft Team and face-time** are widely used by our patients for a variety of social and professional communication.

B. Yes, there are patients who do not want to use or are unable to use this service, but **audiologists** or **HIS** of several **manufacturers of OTC/DTC products and apps** provide this service. Surely, the audiologists/HIS providing remote care and remote fine-tuning and the patients using these services can't be different or smarter from the patients seen in Audiology clinics

C. The patients of other **healthcare professionals** routinely use remote care. Almost all of the ENT staff (nurses, nurse practitioners and physicians) use remote care. Our **physician and dentist** offer this option when we schedule appointments

D. Data from the **government accountability office** on use of telemedicine by **Medicare** recipients

Fear of how to fit into schedule – several suggestions

Need to think "out of the box" and collaborate with colleagues within and outside of your organization. I contacted **four** colleagues in **private practice**. Excellent presentations on **Audiology Online**. There are several **Facebook** groups. For example, I belong to **Audiology Antics and Anecdotes for All Hearing Professionals** and **Audiology Best Practices**

Change the schedule of one or more audiologists:

- Schedule ½ hr visits one day/week/audiologist. This is what our physician does.
- Schedule 1/2 hr visits in the AM or PM/audiologist. This is what ENT staff did

Perhaps audiology assistant

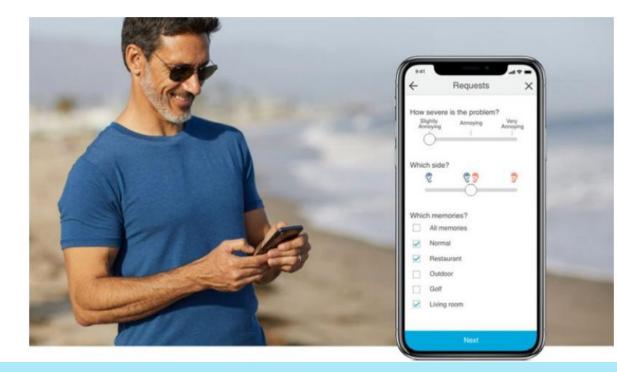
- Offering **remote care and remote fine-tuning** would help **promote** the clinic as providing a service probably not offered by other clinics. Separate yourself from your competition.
- Place fact that you offer these services on your website

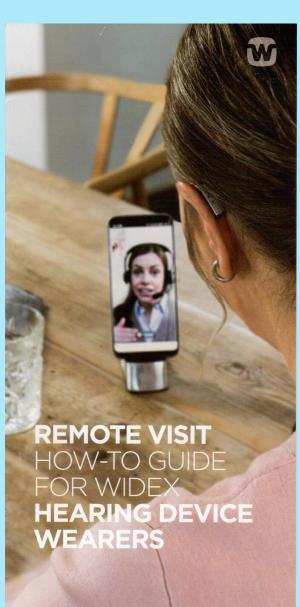
To promote remote fine-tuning we created **manufacturer-specific** handouts

- > What is **remote care** and **remote fine-tuning**?
- How can remote care and remote fine-tuning benefit me?
- Advantages of remote care and remote fine-tuning
- Limitations of remote care and remote fine-tuning (<u>manufacturer specific</u>)
- What are the next steps?
- How do I schedule a session?
- What requirements are necessary for a remote care or remote fine-tuning session? (*manufacturer - specific*)
- What is cost (patient specific)?
 - No charge
 - Annual package of three appointments = using the charge/hour
 - "Pay as you use" = using the charge/hour
- Provide manufacturer brochures on remote fine-tuning

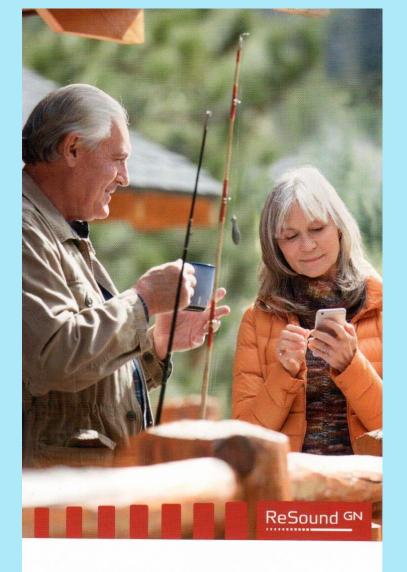


HEARING CARE ANYWHERE





WIDEX REMOTE CARE



ReSound Assist

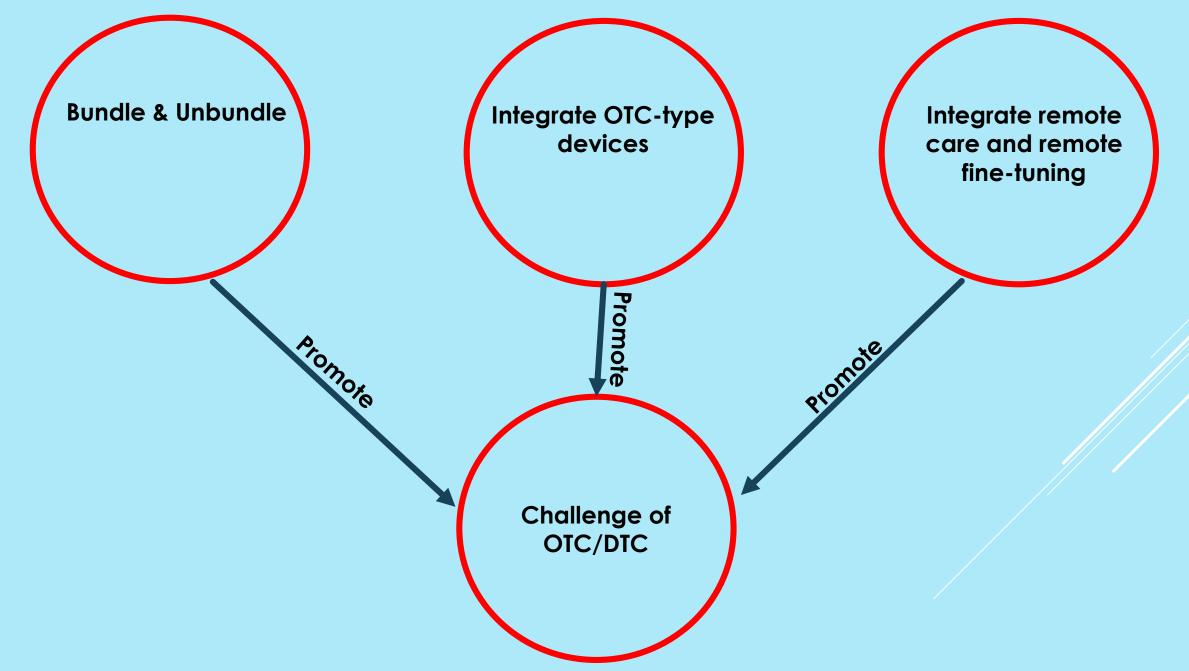
Hearing care wherever you are



Finally, created **step-by-step instructions** along with screenshots for each manufacturer on how to perform remote-fine-tuning.

These were "tested" before forwarding to each audiologist to be used by the staff as guides ("cookbook") until became comfortable with its' use.

Three-Prong Approach to Address Challenge of OTC/DTC



Thank you for your interest.

If you have any questions please contact me @

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