

Defining a new category
of hearing aids:

Learning hearing aids
and the software-based
approach.

A decorative graphic on the left side of the slide consists of several colored squares. At the top left is a small orange square. Below it is a larger dark blue square. To the right of the dark blue square is a light blue square. Below the light blue square is a medium blue square. To the right of the medium blue square is a light orange square. Below the light orange square is a dark blue square. To the right of the dark blue square is a light blue square. The background of the slide is a solid light blue.

Tomorrow sounds even better.

Introducing Whisper

01

Who we are
and the Whisper
Hearing System

Jim Kothe

02

Integrating Whisper
into your practice

Dr. Ram Nileshtar
Au.D., CCC-A, FAAA

03

Marketing
advantages for your
practice

Mike Lowery

04

Discussion

...a model that actually ensures better performance for the user the longer they use their hearing system.



Our model also allows hearing care professionals to provide the care they want without the downward price and competitive pressures they are facing today.



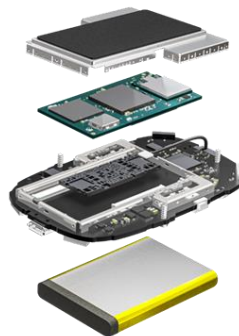
Bringing together a team of experts



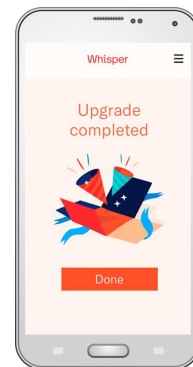
Artificial
Intelligence



Hearing
Care



Hardware
Engineering



Software
Engineering

Our investors are behind some amazing startups

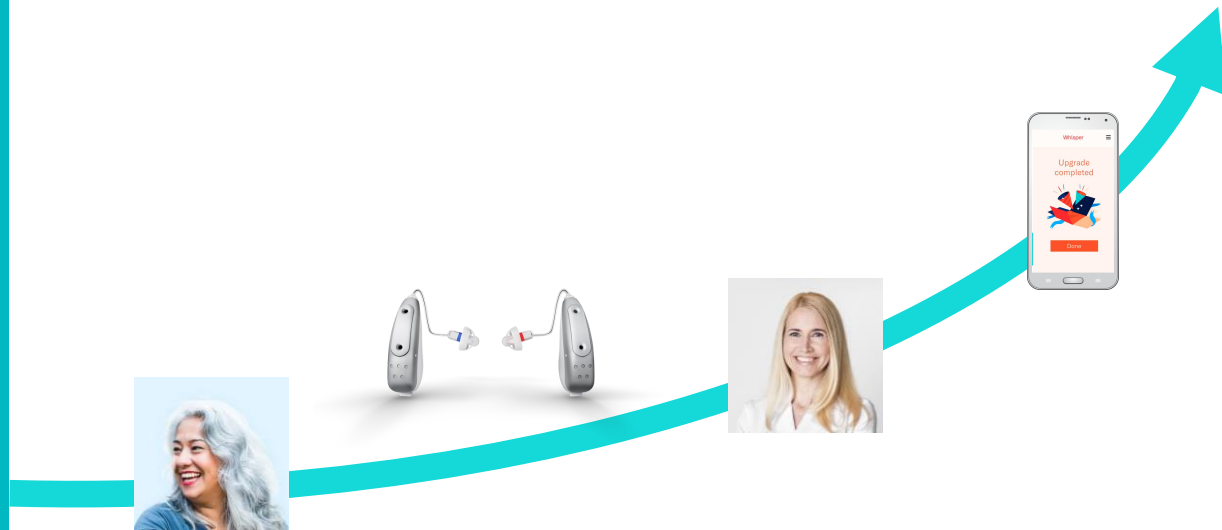


What is the real-life problem Whisper solves?

If money was no object, what would define the best hearing care we could possibly give people?



People would buy
the best technology,
get expert care
whenever they want,
and upgrade their
instruments every
year.



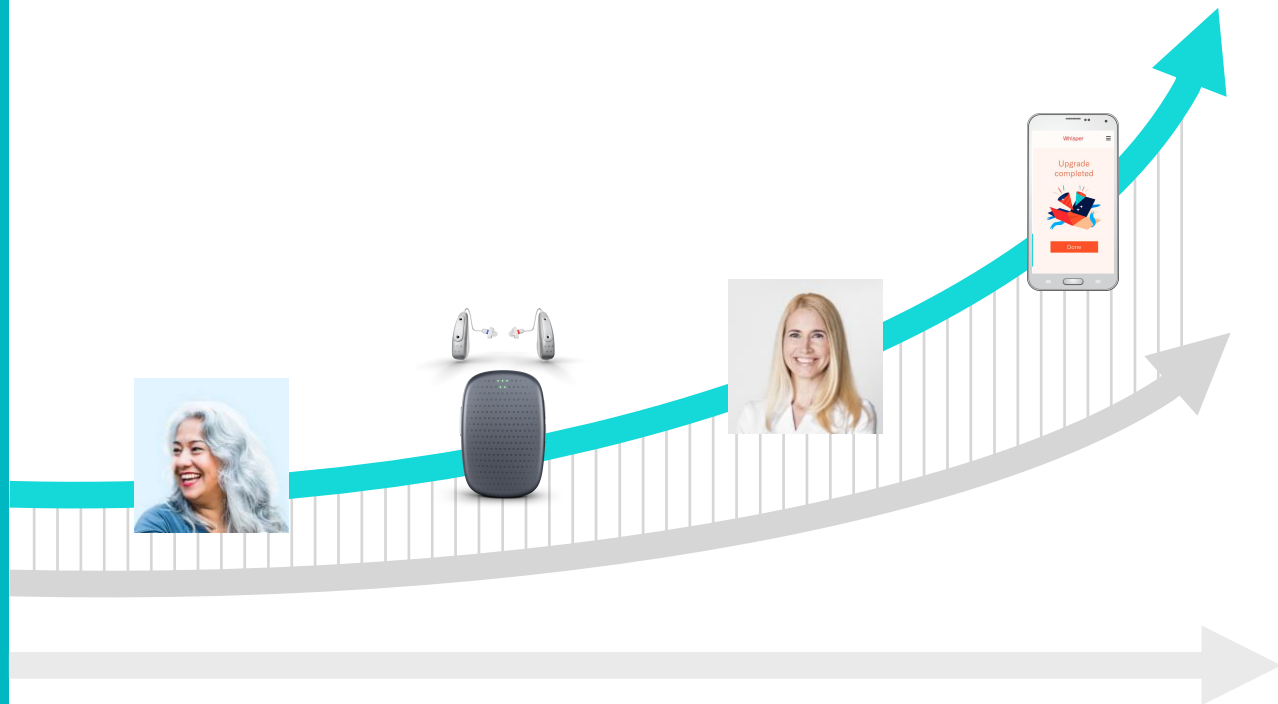
But what people
actually do is buy
only what they can
afford, get care only
when needed, and
upgrade when they
absolutely have to.



At Whisper, we call this the performance gap...and until now, hearing care has been a hardware dependent profession.



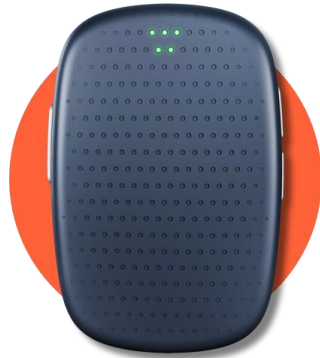
Our goal at
Whisper is to
minimize this
performance gap,
through a software-
driven system that
gets better over time.



The Whisper Hearing System isn't just another hearing aid—it's a new category of hearing aid — a Learning Hearing System



A learning hearing system



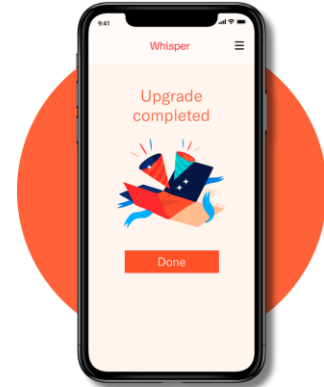
The Whisper Brain

Optimizes sound in real time
using advanced sound
separation technology.



Earpieces

Feature all the benefits of
a modern hearing aid.



Whisper App

Delivers regular
software upgrades.

The familiarity and convenience of BTE RIC earpieces



Earpieces

- Compression with gain management
- Feedback manager
- Directionality, beamforming
- Spectral and wind noise reduction
- Scene analyzers
- Processing speed, attack and release

Earpieces can be combined with the power of learning and the Sound Separation Engine when you need it.



Earpieces

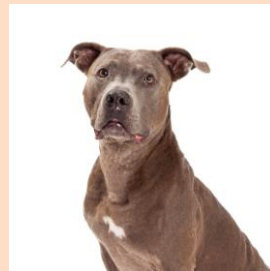
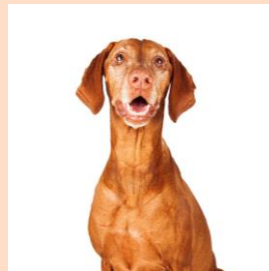
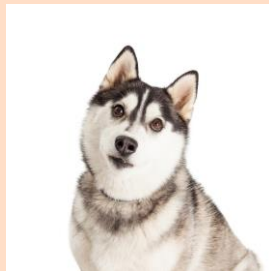
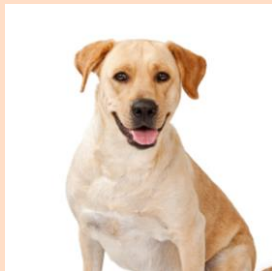
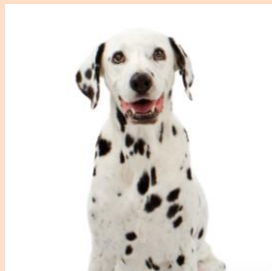
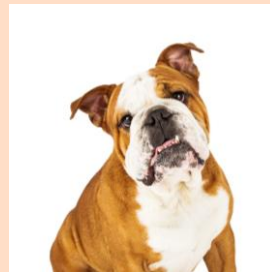
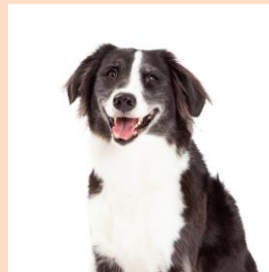
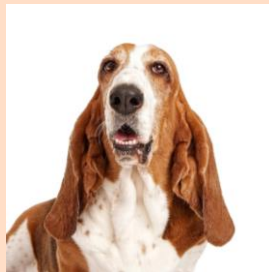
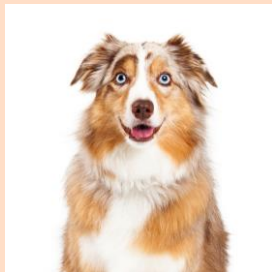
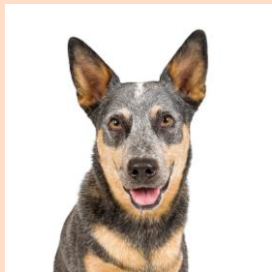
- Compression with gain management
- Feedback manager
- Directionality, beamforming
- Spectral and wind noise reduction
- Scene analyzers
- Processing speed, attack and release

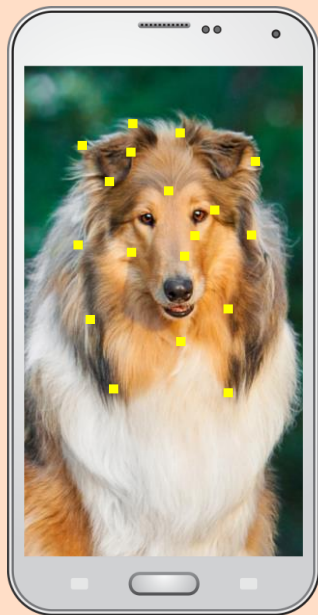


The Whisper Brain

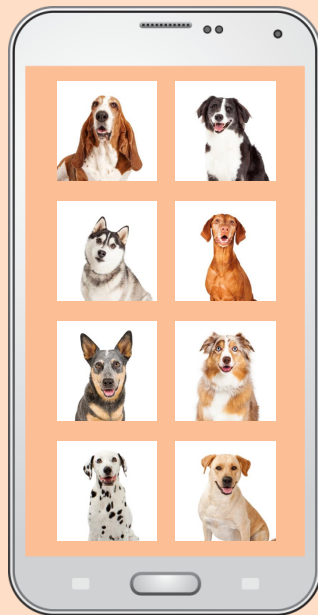
- Contains AI-based Sound Separation Engine
- Uses learned knowledge to find acoustic patterns
- Identifies specific areas of importance in the sound scene
- Gathers new information to drive future software upgrades

So how does learning over time work?





Photo



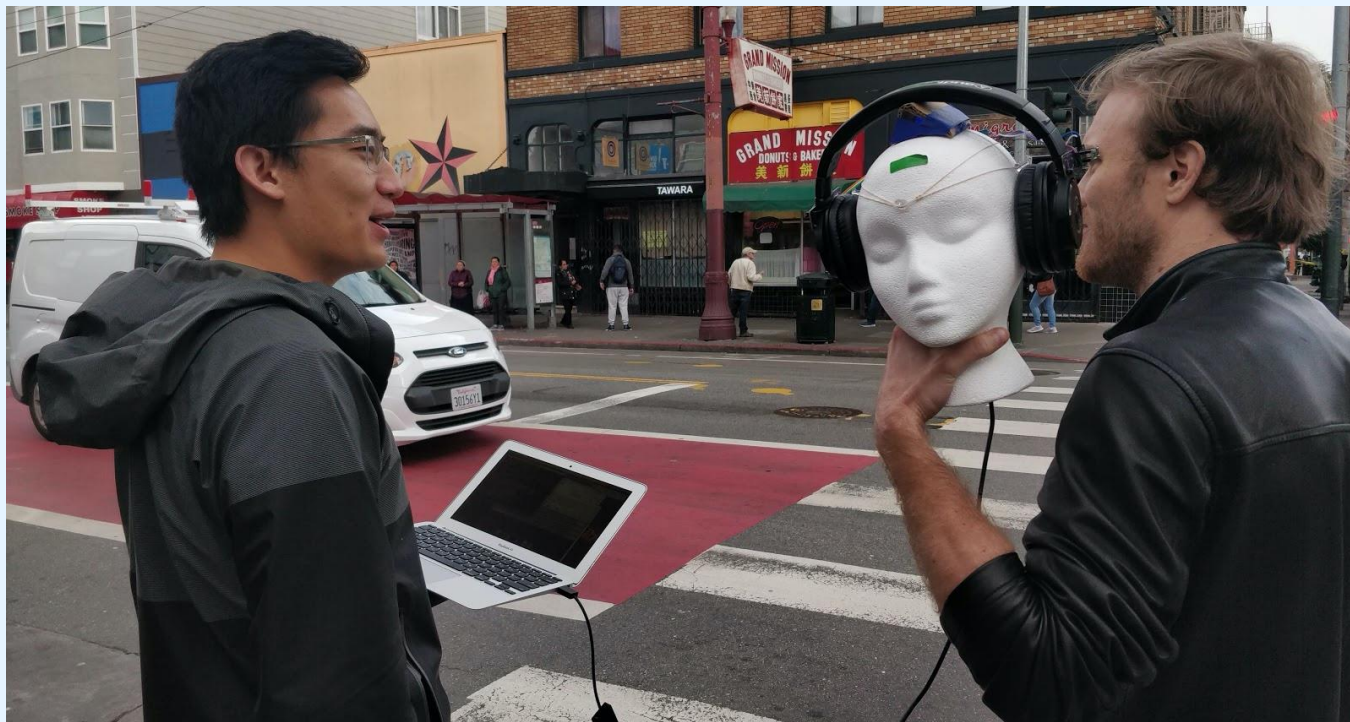
Data includes
100 dog breeds



Algorithm
predicts breed

Just like AI can use visual information, Whisper can use a proprietary AI learning model to deal with sound.

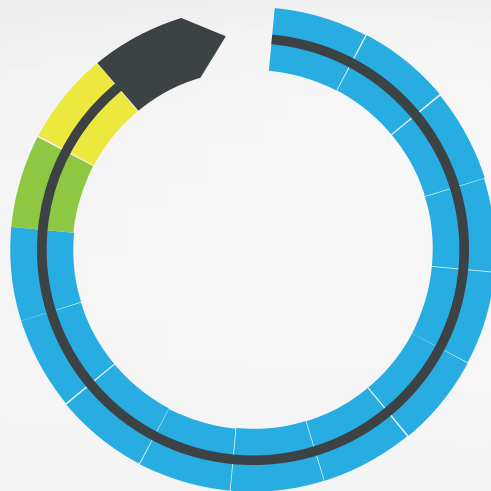




The Learning Cycle

AI algorithms

Powerful toolbox
to solve complex
computing problems



The Learning Cycle

AI algorithms

Powerful toolbox
to solve complex
computing problems



Improved performance

Better products
that solve everyday
challenges

The Learning Cycle

AI algorithms

Powerful toolbox
to solve complex
computing problems

Improved performance

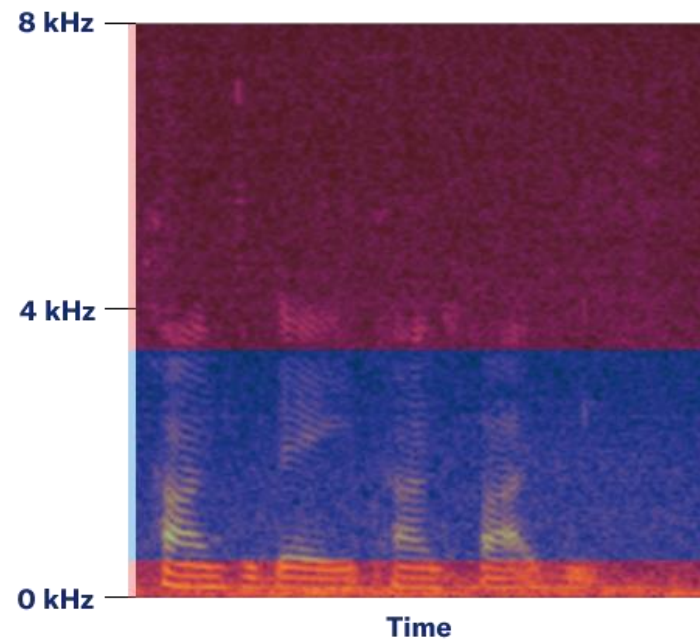
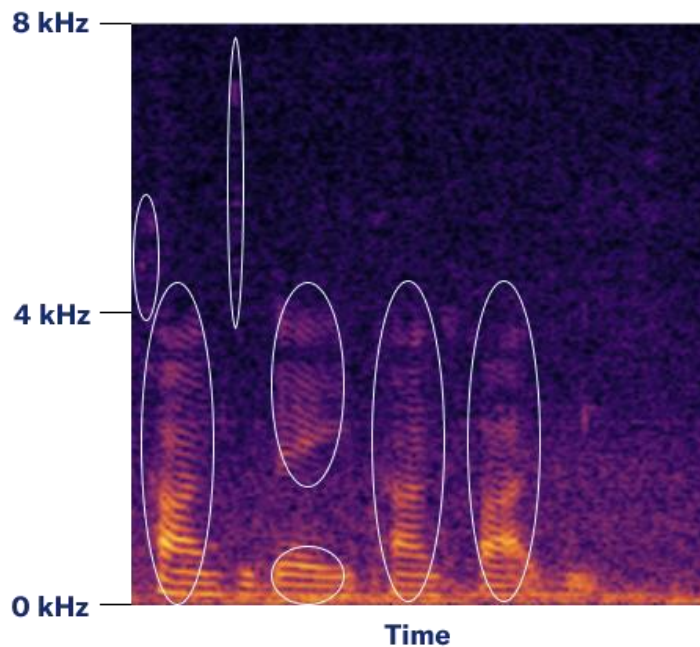
Better products
that solve everyday
challenges



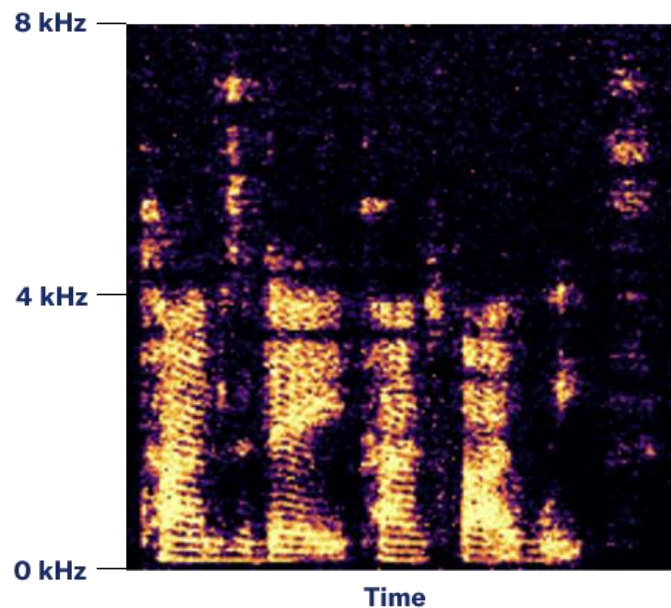
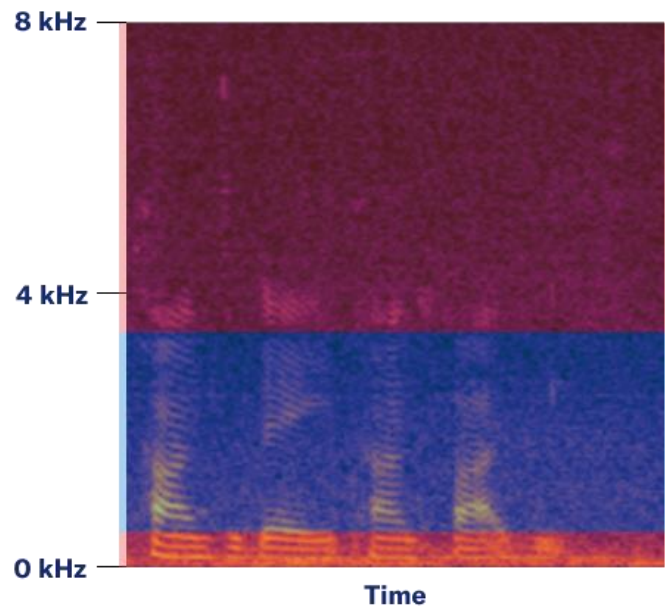
New data

New data points
about the complexities of
the real world

Spectrogram of a speaker in background noise



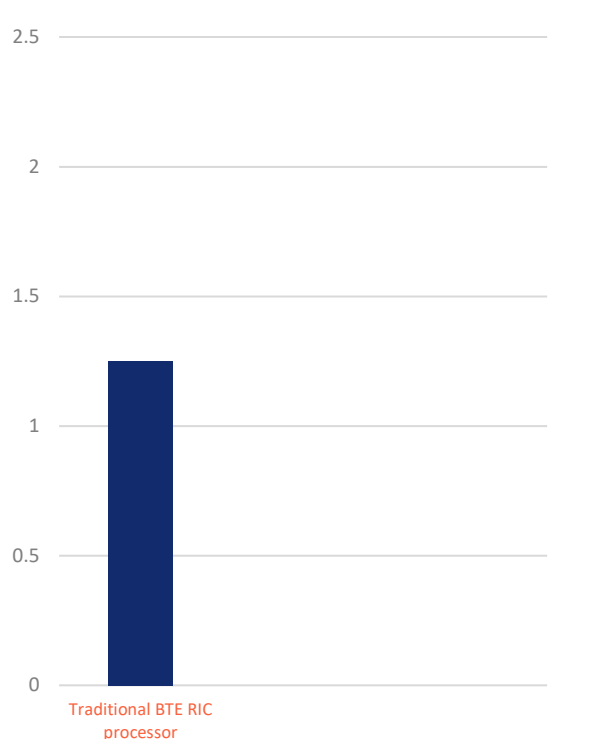
AI allows us to do something different



Why not put the AI into the earpieces?

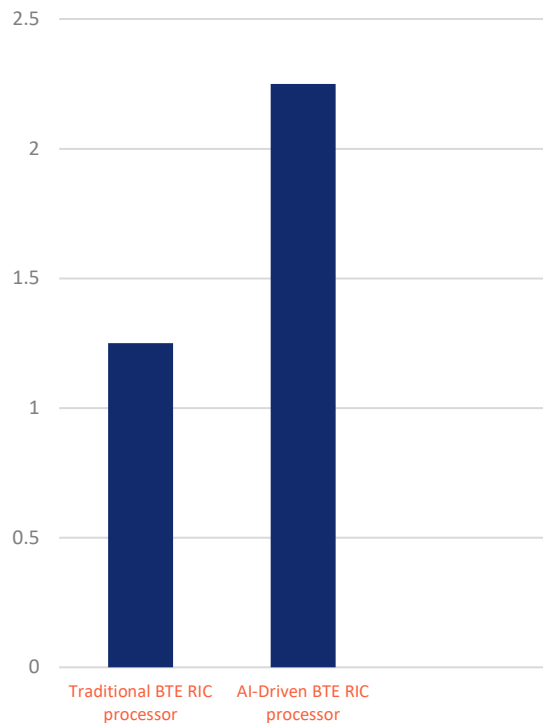


Targeting patterns
requires hearing
aids to have much
more processing
capability.



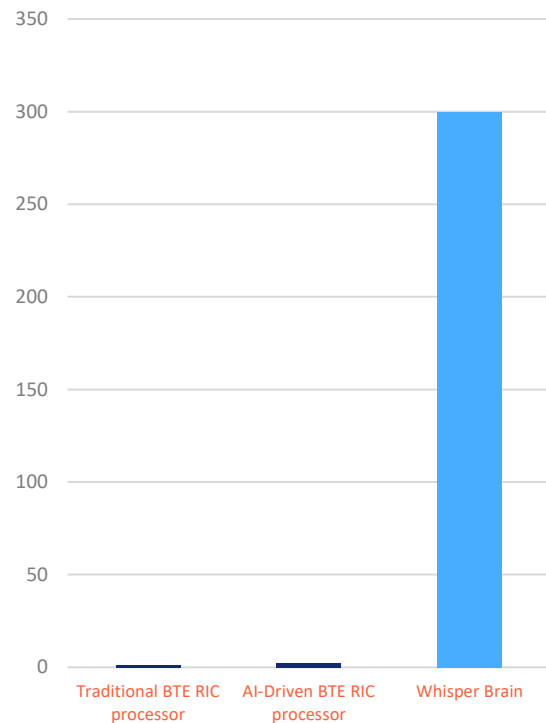
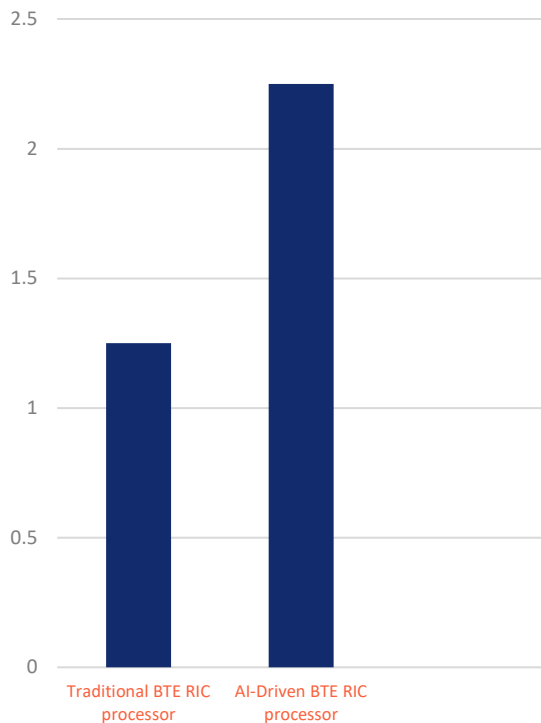


Targeting patterns
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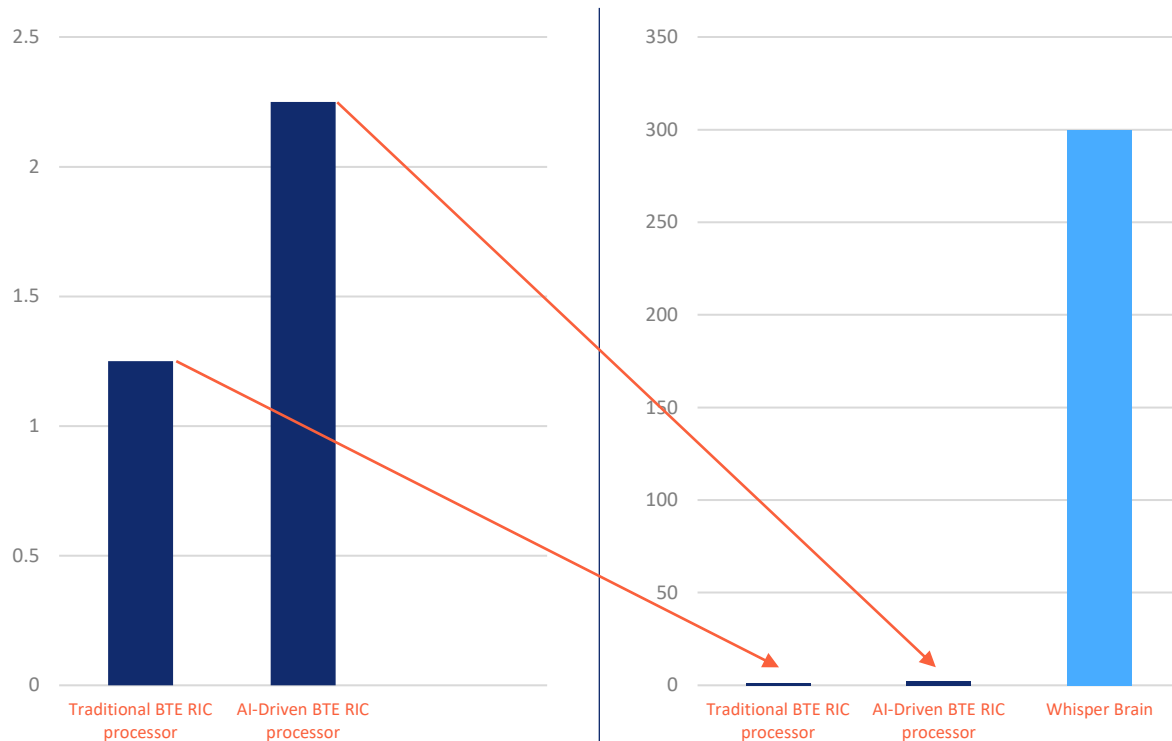


Targeting patterns
requires hearing
aids to have much
more processing
capability.





Targeting patterns
requires hearing
aids to have much
more processing
capability.



The Whisper Brain

- Enhanced algorithms to improve speech separation and noise reduction
- Maintain speech clarity with reduced loudness annoyance
- Capability to learn and get better over time




Whitepapers

Whisper White Paper

Whisper

Beyond Frequency: Artificial Intelligence, Patterns and the Whisper Hearing System



Andrew Song is the of product for Facet A mathematics & co is an expert in the Sequoia Capital's St high-potential comp

- Abstract
- Introduction
- The Whisper Learning Cycle
 - From Adjusting Frequencies to Targeting Sound Patterns
- Whisper's Sound Separation Engine
 - What Hardware is Required to Enable Advanced Processing of AI?
- The Hearing Aid That Gets Better Over Time
- Conclusion

Whisper White Paper

Whisper

Redefining Hearing Aids



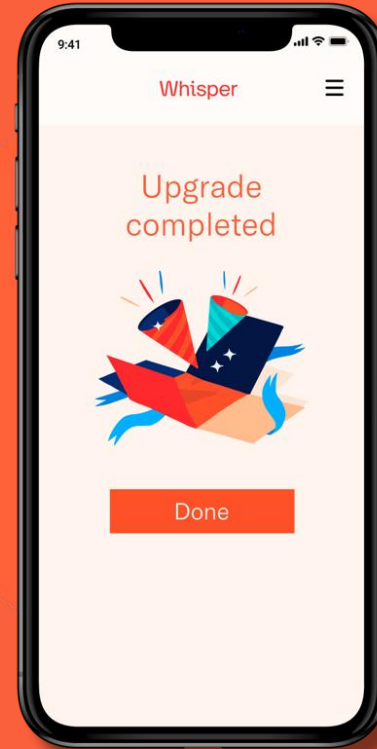
Dwight Crow is the Co-founder and CEO of Whisper. Prior to Whisper, Dwight built the ecommerce segment at Facebook and helped drive over \$1B per quarter in revenue. He was the founder of Carsabi, a machine learning based car sales aggregator which was acquired by Facebook in 2012. Dwight has a BS in Chemical Biology and Computer Science from the University of California, Berkeley.

Abstract

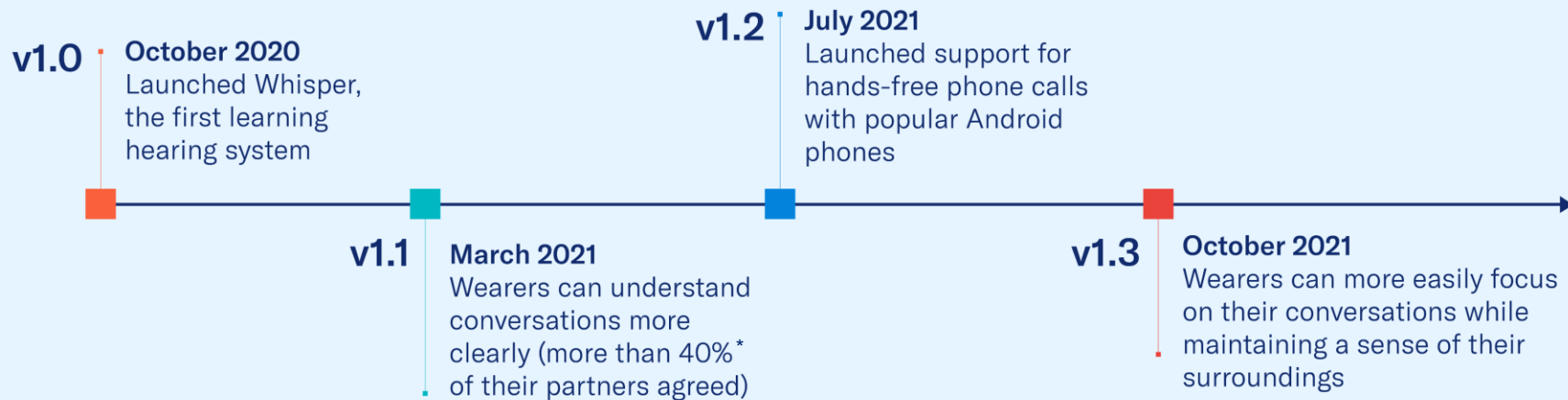
The Whisper Hearing System is a learning hearing aid, a new kind of hearing aid which gets better over time. This improvement over time is driven by regular software upgrades which keep patients and practices up to date with the latest technological advances, and a powerful new class of deep learning algorithms for directly enhanced audio. Constantly advancing an existing device's performance is made possible by two major innovations over the past five years which other hearing aids have not yet widely adopted: the artificial intelligence technique called deep learning and mobile processor chips hundreds of times more powerful than existing hearing aids.

- Abstract
- A Fundamentally New Hardware Approach
- Artificial Intelligence and Deep Learning
- Mobile Processors
- Conclusion
- References

The Learning Cycle means patients will get upgraded sound processing over time through AI software.



3 major upgrades in the year since launch



*Data on file

Whisper's first software upgrade: March 2021

Compression system overhaul

Sound Separation Engine
improvement

Fitting tools



100%

Reported voices being
the same or clearer with
this upgrade



40%

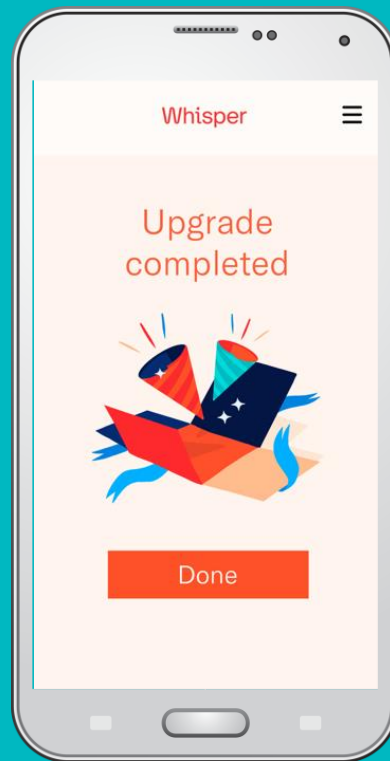
Reported their
communication partners
notice they are hearing
better after the upgrade

Whisper's second software upgrade: July 2021

Android phones

iPhone app

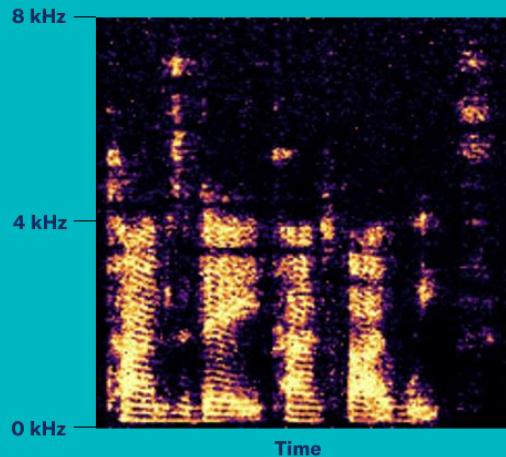
Fitting controls: Feedback
manager



Whisper's third software upgrade: October 2021

Sound Separation Engine
improvement

Noise management more
often



Stop consonants
targeted

SSE retrained to
emphasize these more



Noise management earlier,
more often

Comfort and clarity



Richard J.

“Clearer and crisper sounds, and quicker/better understanding of people’s speech around me. More clarity equals better understanding, don’t have to take time translating what people just said to me.”

* 2021 Whisper customer survey conducted after March 2021 software upgrade

This is why we believe that artificial intelligence has such an important place in hearing care.





We believe there's
a better way. One
where your patient's
hearing care keeps
pace with technology
changes.





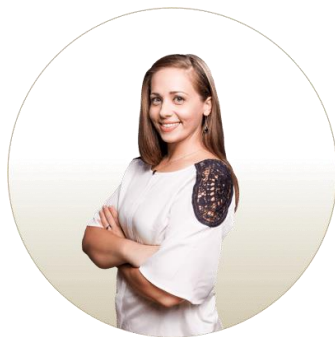
Dr. Ram Nileshtar, Au.D.,
CCC-A, FAAA

**Introducing a new category
of learning hearing aid**

My Team



Ram Nileswhar, Au.D.,
CCC-A, FAAA



Amanda Jean-Pierre,
Au.D., CCC-A, FAAA



Jordan Strong, Au.D.,
CCC-A, FAAA



Elizabeth McCutchen,
Au.D., CCC-A, FAAA

Why offer a new category of learning hearing aid?

Staying at the
forefront of AI-
based technology



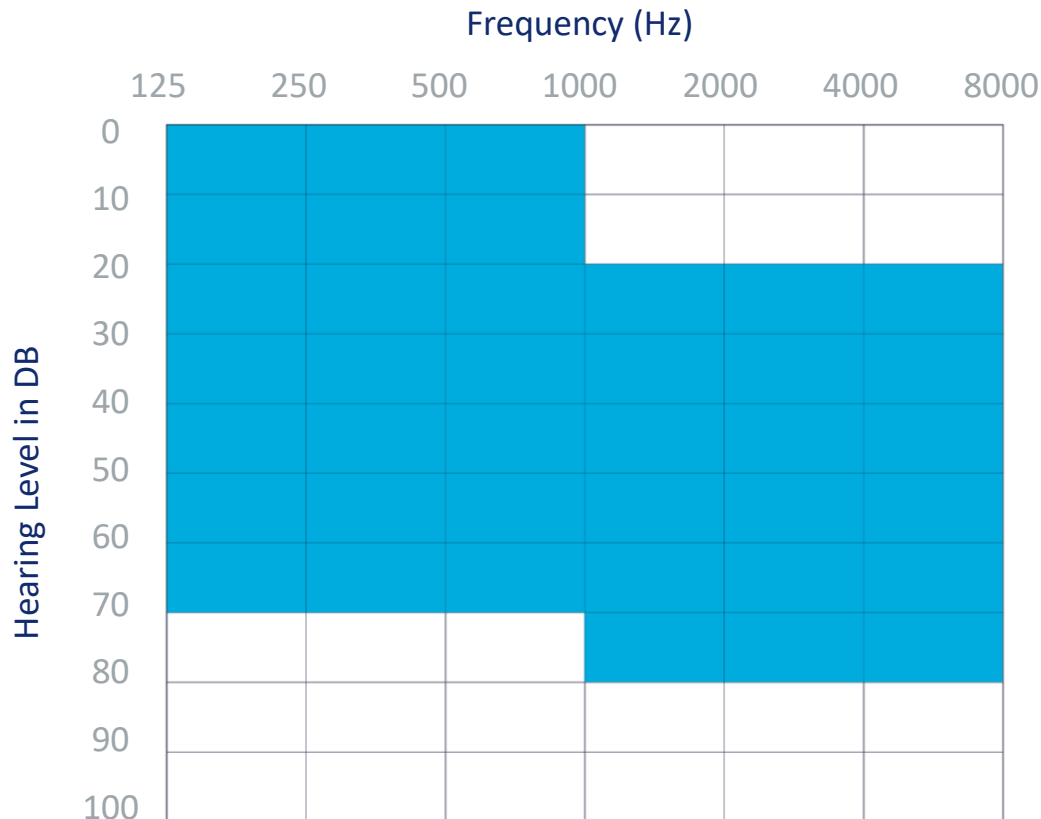
How I have integrated Whisper into my patient self-selection process

Who do I select Clinically?

- Existing & new users
- Whisper is suitable for adults with mild to severe hearing loss up to 80 dB HL.

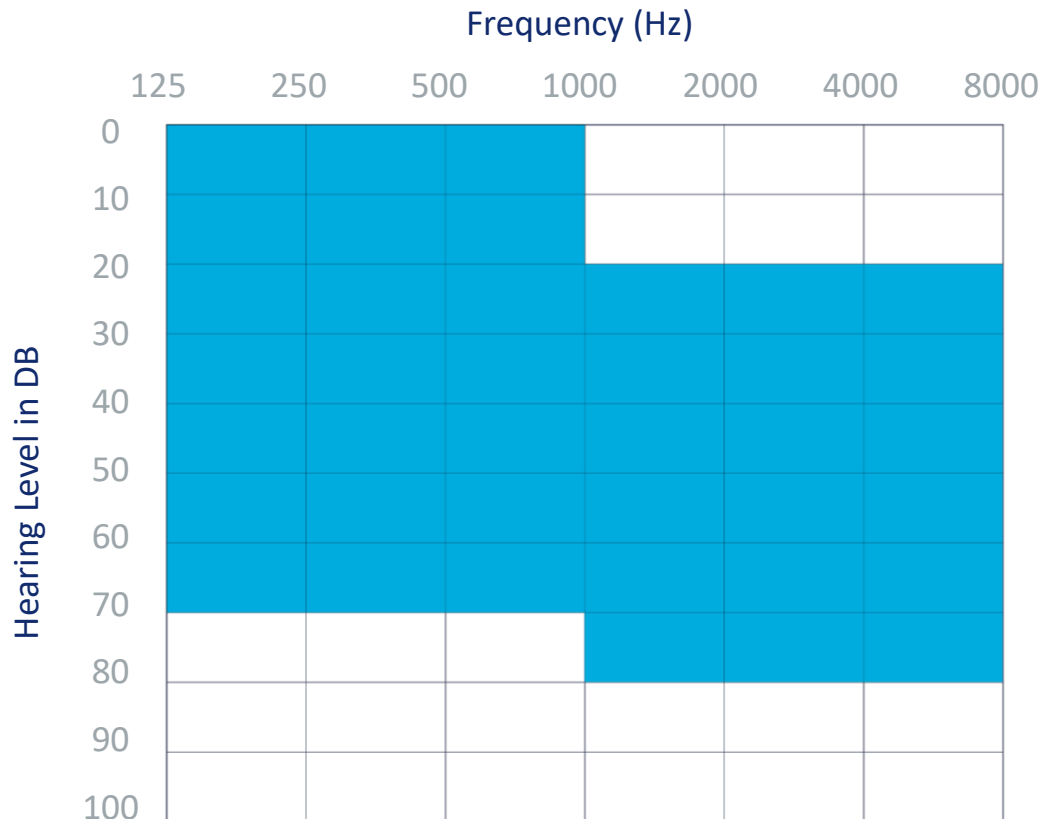
Interested in:

- Great sound
- Learning system
- Monthly plan
- New technology & AI



It is not indicated for:

- Profound hearing loss
- Unilateral hearing loss
- Mixed hearing loss
- Single-sided deafness
- Children



1. Focus on patient outcomes



2. Introduce the categories of hearing aids



Extended wear (Lyric)



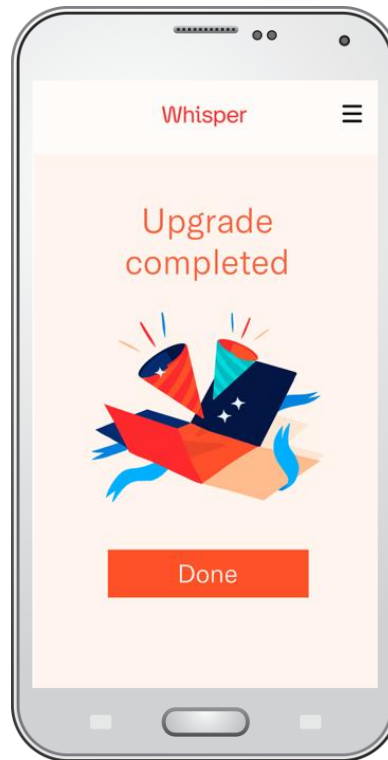
Daily wear/traditional



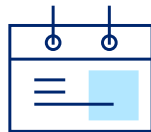
Learning hearing system
(Whisper)



3. Share the benefits of a learning hearing system.



A leasing plan simplifies access for patients



- Ongoing, expert care from my office
- 3-year subscription for the Whisper Hearing System
- 3-year loss and damage warranty



- Regular software upgrades that may add features or improve sound processing
- \$139 per month (Normally \$179)

How to handle a monthly plan in your office

1. After a successful trial, we convert it into a subscription
2. We introduce them to our billing coordinator who initiates the subscription process
3. The patient and coordinator come into the fitting room to collect information and create an account, and the patient signs before they leave
4. If there is a challenge, Whisper takes care of the issue with Allegro and the patient

The upgrade process has been very easy....

Whisper has delivered 3 upgrades this year alone:

1. The first improved understanding of conversations
2. The second added support for Android phone calls
3. The third continued improvements to the Sound Separation Engine and further improved contrasts between speech and noise

The upgrade process has been very easy....

- Currently patients come in for upgrades as Whisper trains both providers and patients on this new approach
- Whisper has ensured clinical awareness of the changes and gave me the opportunity to adjust the fit as needed
- My experience with these:
 - Experience has been excellent and patients like the improvements and concept of getting upgrades
 - At the appointment: You are not fixing a problem-- you're improving their hearing system. Positive clinical and patient experience
 - Process is quick and seamless, and Whisper has been there to support me

Patient Success Story



- Patient G L Age 72
- Mild sloping to Moderately Severe Bilateral Symmetrical SNHL
- Previous user (5 Years)
- Was struggling in several listening situations and was interested in new technology
- Attended a Virtual Webinar on the Technology and process. Loved the concept, technology and process
- Pre and Post treatment SSQ

Patients Success Story - Results

Questions	Pre-fit	Post Fit 80 Days	Diff
1) You are talking with one other person & there is a TV on in the same room. W/O turning TV down, can you follow what the person you're talking to says?	6	8	+2
2) You're 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?	6	8	+2
3) You are in conversation with 1 person in a room where there are many other people talking. Can you follow what the person you are talking to is saying?	5	9	+4
4) You are in a group of about 5 people in a busy restaurant, You can see everyone else in the group. Can you follow the conversation?	5	8	+3
5) You're in a group & the conversation switches from one person to another. Can you easily follow the conversation w/o missing the start of what each new speaker is saying?	6	9	+3
6) You are outside. A dog barks loudly. Can you tell immediately where it is, w/o having a look?	4	6	+2
7) Can you tell how far away a bus or a truck is, from the sound?	5	7	+2
8) Can you tell from the sound whether a bus or truck is coming towards you or going away?	5	8	+3

Patients Success Story - Results

Questions	Pre-fit	Post Fit 80 Days	Diff
9) When you hear more than 1 sound at a time, do you have the impression that it seems like a single jumbled sound?	6	9	+3
10) When you listen to music, can you make out which instruments are playing?	5	9	+4
11) Do everyday sounds that you can hear easily seem clear to you (Not blurred)?	5	8	+3
12) Do you have to concentrate very much when listening to someone or something?	7	9	+2
TOTAL	65	98	+33

Combined Total = 34% and 33 Point improvement.

Final Thoughts

- Easy to introduce as a new category
- Easy Fit
- Easy to verify with Real Ear
- Easy to get patient to sign subscription
- Easy to handle upgrades



Introducing the Whisper Hearing System in your market:

Mike Lowery, Growth Leader,
Whisper

Over 150,000 consumers interested in Whisper



POPULAR
SCIENCE

PULSE 2.0

GIZMODO



Whisper named in top 50 artificial intelligence firms



Whisper In The News

Forbes

- “The Top AI Companies to Watch in 2021”

New York Times

- “Hearing Aids for the Masses

Fast Company

- “World Changing Ideas Awards 2021”

Android Police

- “One of the most innovative hearing aid manufacturers is introducing support for Android”

Advantages to your practice



Unique benefits of working with Whisper

Practice Benefits

- First mover advantage
- New, compelling marketing message
- Retention through upgrades
- Price integrity
- Increasing satisfaction levels

Profit Advantage

- Diversify your balance sheet with re-occurring revenue
- Immediate revenue post fitting - high profit/year
- 3 year repurchase cycle increases lifetime value
- No hassle of managing cost of goods or monthly payments

What attracts patients

Staying current with technology

- Access to a hearing system that regularly improves with upgrades
- Access to the newest hardware every 3 years

Unique pricing model

- All inclusive plan
- No upfront costs
- Affordable monthly payments
- Similar to cell phones

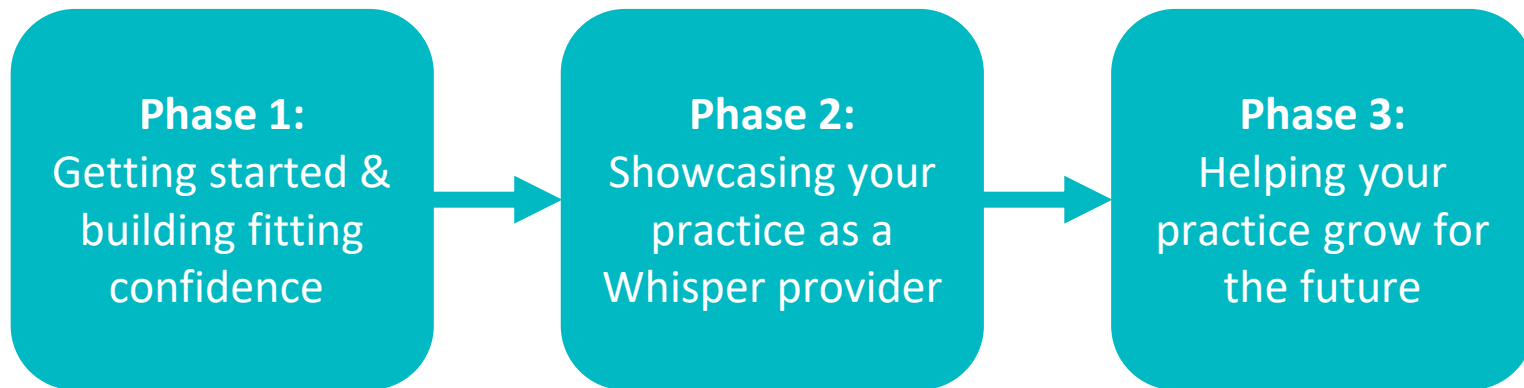
Your care

- Expert care at the local level
- Ongoing support through their hearing care journey
- Included in the monthly plan

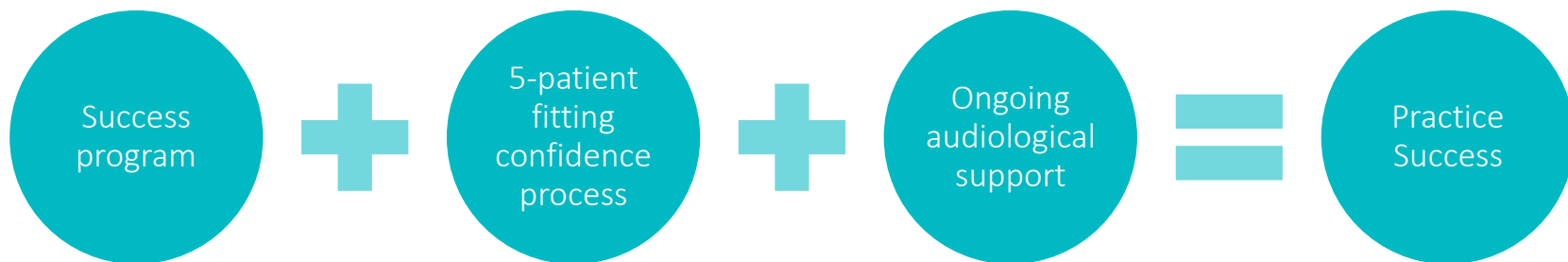
Introducing Whisper to your local marketplace

Whisper's Success Program

Helping your practice succeed with Whisper



Becoming an expert in a new category



Be at the forefront of introducing Whisper to your marketplace

Month 1

- Website
- PR Announcement
- Database letter/newsletter
- Waiting room videos

Month 2

- Special event: Whisper Challenge Event, Fitting Day

Month 3

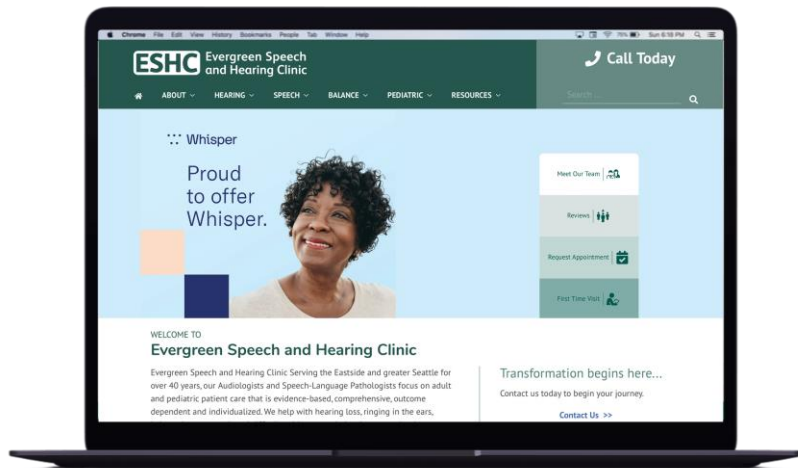
- Educational AI webinar to introduce your patients to the promise of AI in hearing care

Website

Featuring Whisper on your practice website will elevate your practice as the local, independent hearing care clinic offering the latest breakthrough technology

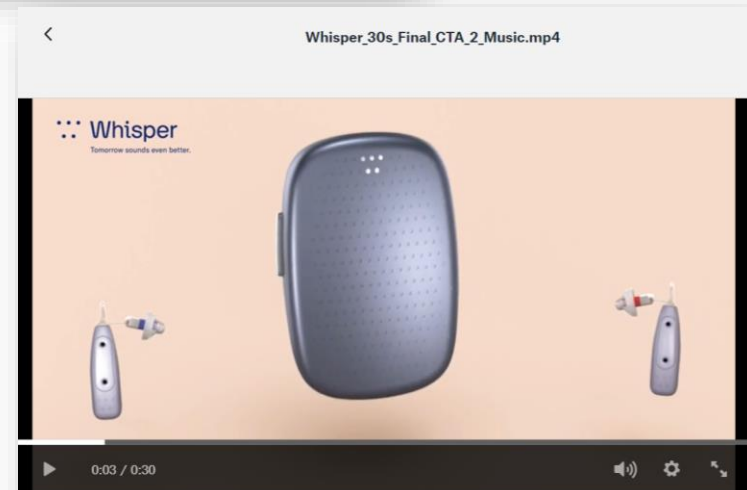
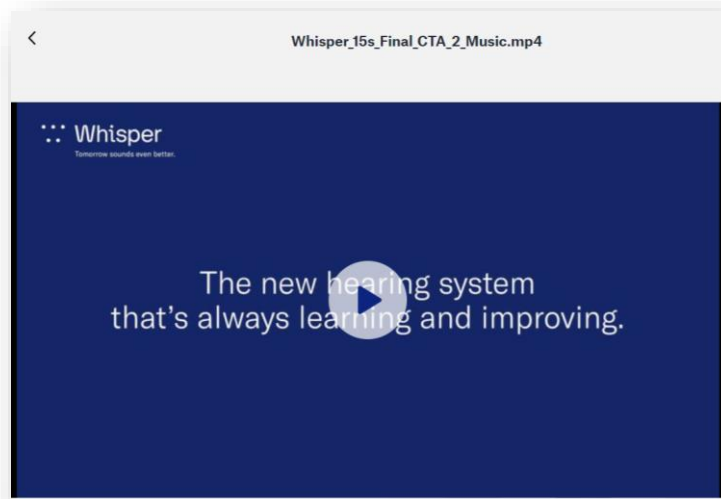
We can provide:

- Home page header graphic
- Home page special feature content
- Hearing aid manufacturer/brand page content
- Detailed technical content for analytical patient types



Videos

Waiting room videos with
and without music



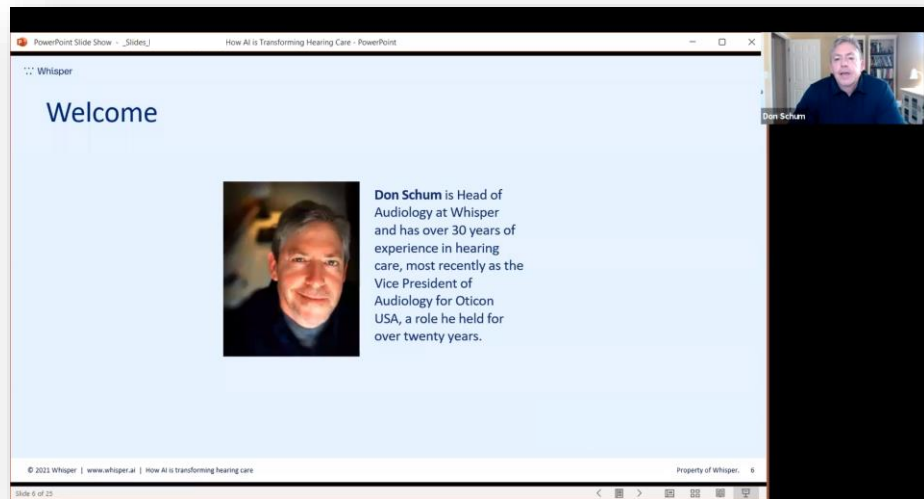
Database Letter

- 2-3 Week Lead Time
- Combine new patient acquisitions with existing patient upgrades to realize clinical confidence and success for your practice.
- Bring the excitement of Whisper to your existing patient database with a letter designed to upgrade existing users and reengage Tested Not Sold patients with a special fitting event.



Educational Webinar

Introduce new and existing patients to the breakthrough AI-powered Whisper hearing system in an open, educational style forum.



Special Fitting Event

Leverage marketing vehicles that work in your market with Whisper-provided creative customized for you, and discuss possible co-op opportunities with Whisper Marketing team.

Consider one or more of the following:

- Follow Up Database Letter
- Newspaper Ad/Inserts
- Practice Newsletter
- Practice Website
- Direct Mail
- In-Person Consumer Seminar
- Digital Search & Display
- Social Media Paid & Organic • Magazine • Radio • TV • Physician Referral Marketing



Challenge Event



Tomorrow sounds
even better.

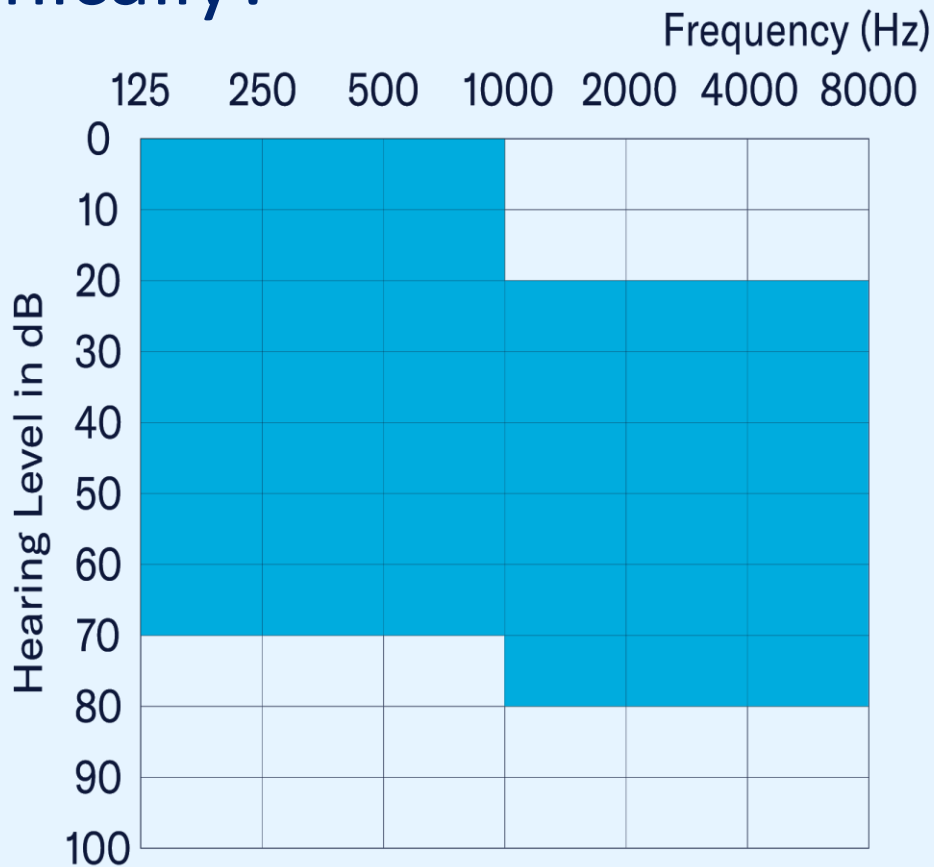
Q & A

Appendix



Who do I select clinically?

- Adults with mild to severe hearing loss Mild to severe up to 85Db
- Existing & new users
- Interested in:
 - Great sound
 - Learning system
 - Monthly plan
 - New technology & AI
- **It is not indicated for:**
- Profound hearing loss, unilateral hearing loss, mixed hearing loss, single-sided deafness or for use with children



Upgrades process is easy

Whisper has delivered 3 upgrades this year alone:

1. The first improved understanding of conversations
 2. The second added support for Android phone calls
 3. The third which just launched at the beginning of this month continued improvements to the Sound Separation Engine and further improved contrasts between speech and noise
- Currently having patients come in for upgrades as Whisper trains both providers and patients on this new approach
 - Whisper has ensured clinical awareness of the changes and gave me the opportunity to adjust the fit as needed
 - My experience with these—what did patients say, how did I find the process

Add Anniversary of Whisper

Videos

Waiting room videos with and without music

