On March 8, 2013, Brenda Battat, then executive director of the Hearing Loss Association of America, wrote to the Food and Drug Administration (FDA) and stated that, "HLAA supports opening more doors for consumers to seek treatment for their hearing loss. There should be options for consumers to address their specific health care needs. Not all consumers need the same level of care, and therefore providing new avenues to products and services benefits everyone. In the interest of consumers, new approaches and innovative programs must be given a chance to succeed."

One new avenue for dispensing aids is through the Internet. This article examines four online companies that offer hearing aids from basic to sophisticated and meet FDA requirements. Their websites give details about the products including ANSI 3.22 information and user guides shipped with the aids. To obtain additional information about the companies, I interviewed four people from four different companies. The interviews were done separately with the same questions asked. The transcripts of the responses were sent to the interviewees for editing. Their responses and affiliations are published below:

**Interview Participants**

**Sreekant Cherukuri, M.D.**, is a board-certified ear, nose, and throat physician in Chicago and developed the MDHearing Aid (www.MDHearingAid.com) line of affordable aids. As an attending physician in otolaryngology, Dr. Cherukuri found that he saw too many patients with hearing loss going home without a solution because they couldn’t afford the price of hearing aids.

**Patrick Freuler** has two degrees in engineering from MIT and previously spent time as a strategy adviser and investor in the health care industry. Mr. Freuler founded Audicus (www.audicus.com) after witnessing what two of his family members paid for hearing aids and feeling that hearing care should be made far more accessible and affordable.

**Ross Porter** started Embrace Hearing to make hearing aids more affordable and accessible to the millions of Americans with hearing loss. Prior to Embrace (www.embracehearing.com), he worked for many years at several Silicon Valley engineering startups. He graduated from Stanford University with bachelor’s and master’s degrees in engineering and continued his education at Harvard Business School.
Lisa Tseng, M.D., earned her medical degree and bachelor’s degree in physiological science with a minor in neuroscience from UCLA. Before joining UnitedHealth Group (www.hihealthinnovations.com), Dr. Tseng served as vice president of Strategy and Business Development at Fidelity Investments; vice president of Corporate Integration Strategy for AARP Services; and management consultant at Oliver Wyman.

**Ed Belcher:** When did your company begin offering hearing aids online and what kinds of service do you provide your customer?

**Lisa Tseng:** We began dispensing in January 2012. We have different ways of servicing customers. Customers can come to our local professional, get tested and fitted the same day, or they can have a set of custom-programmed hearing aids shipped to them. Upon receiving the aids, they can also get in-person support, engage with professionals over the phone, and/or participate in our daily audiologist-hosted telephonic seminars. Our professionals also host seminars in local communities. The staff of **hi HealthInnovations** are available nationwide when customers move or travel around the country.

During the 70-day trial period, customers do not need to pay for adjustments from a local **hi HealthInnovations** professional. After the 70-day trial period, there is no charge for adjustments if they mail the aid back to our corporate office. We will make the adjustments within one day and return the aids by priority mail. More than 60 percent of our customers are new users of hearing aids—we are expanding the hearing aid market. We have a growing staff of face-to-face local professionals who are approximately 70 percent audiologists and approximately 30 percent hearing instrument specialists. Additional licensed professionals can join our network. They pay $150 and receive cables that fit into their HI-PRO or eMiniTec device and software needed to program our aids. They also agree to perform hearing exams and adjustments per our fee schedule.

**Sreek Cherukuri:** As an attending physician in otolaryngology, I saw too many patients with hearing loss going home without a solution because they couldn’t afford the hearing aid prices. I formed the company in October 2009 to address this problem. Our hearing aids are programmed to address the most common configurations of hearing loss. We empower users of our hearing aids to make their own program adjustments and change the volume. The user-adjustments are satisfactory for 85 percent of customers.

We performed a prospective trial on the MDHearingAid PRO that was presented at the American Academy of Otolaryngology-Head & Neck Surgery annual meeting in 2012. It showed that our PRO model met or exceeded electroacoustic and user satisfaction targets using accepted instruments from the medical literature. We have similar data for our new AIR model that we are about to present. When our products were available on Amazon.com, more than 94 percent of our reviews were four or five-star ratings. We have an A rating with the Better Business Bureau, with zero complaints in 36 months. We cater to individuals who have not obtained a hearing aid due to cost.

**Patrick Freuler:** We had a pilot period between January and June 2012 and launched our current website at the end of June 2012. We are in less direct competition with clinics. Our customers are 70 percent new users and 30 percent replacement users. In the clinics, the split is reversed: 30 to 35 percent new users and the rest replacement users. We mainly provide products to new users who have found price a barrier to obtaining hearing aids.

We have two audiologists working for us who determine if our aids are appropriate for the customer. They look at every hearing test sent to us and make sure it is complete. In some cases, in spite of the medical waiver, we ask the customer to see an ear, nose and throat doctor (ENT) for further testing and obtain a medical clearance before we proceed. When we feel the hearing aid and customer are a good match, the hearing aid is programmed and shipped to the customer. We offer adjustments for the lifetime of the product. We call everyone who receives our aids and find out how the aids are working for them. We evaluate our aids and service by: 1) return rate; 2) reviews on our website; 3) survey responses; and, 4) follow-up phone calls.

**Ross Porter:** We launched the website in December 2011. We take a lot of pride in the quality of hearing aids we offer and the quality of fitting we provide. About 50 percent of our customers have never worn hearing aids before.

Our fitting team is led by a board-certified audioprosthologist with decades of programming experience, including significant remote programming experience. When a customer selects hearing aids and submits an order along with an audiogram, he receives a confirmation by email from us with several questions to help us better make the fitting. There are frequently additional conversations at this point—we emphasize continuous communication during the fitting process. We also have a database of local (to the customer) audiologists who will adjust our hearing aids, and we help initiate communication between the audiologists and our customers. Many audiologists are happy to make adjustments for a moderate fee around $50-$100 for a one-time adjustment or sell a package of adjustments over the lifetime of the aids for $200-$300. Customers are generally willing to pay market rates for local service.

**Ed:** What process did you use to select the manufacturer of your aids?

**Sreek:** MDHearingAid is not a reseller; we manufacture our own hearing aids. Our goal is to provide affordable hearing aids and we found that purchasing components from suppliers then integrating and packaging them ourselves provides the lowest cost to us and thus allows us to offer the aids at the lowest cost to our customers.

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Patrick: There are not a lot of manufacturers to choose from. There are the “Big-Six” and a handful of smaller manufacturers. We contacted a series of independent manufacturers that had been in business for a few decades, asking for sample products along with spec sheets. We asked our audiologists to evaluate the samples. Ultimately, we needed to put the selected products online and let the customers decide.

At the end of the pilot period, we replaced two of our three initial products. All current products are selling well and get good reviews.

Ross: That was a difficult part of getting started. There are a lot of manufacturers that do not permit online sales. They currently sell through clinics and do not want audiologist pushback and potential audiologist boycotts of their products if they were to sell online. Among the manufacturers that would work with us, we selected one that was fairly large and had high-quality aids. We also selected a manufacturer that was familiar to audiologists, because we knew that audiologists would need to be familiar with the aids in order to provide adjustments locally, if needed.

Lisa: We did a lot of research to determine what people wanted in a hearing aid and what services they wanted along with the hearing aid. We developed a must-have list of aid features and customer services. Then we researched manufacturers that had aids that met our list. We found that brand-name manufacturers were reluctant to lower their price and cannibalize their own market. So we moved upstream and found manufacturers that did not have a consumer brand but still produced high-quality aids and were willing to allow us to distribute their products at a lower price.

Ed: Do you keep statistics on how many adjustments are needed after hearing aids are shipped and the percent of returns for credit?

Patrick: Approximately 15 percent of shipped hearing aids come back for a second adjustment. Ninety percent of our customers are satisfied with a second adjustment. We provide free reprogramming for the life of the aid. Our return rate (with money returned) is well below the industry norm (typically 20 to 25 percent).

Ross: Our team has a very high “first fit” success rate. More than 50 percent of our customers do not come back to us for a second fitting or ask for help locating a local audiologist for further adjustments. Among customers who do seek adjustments, only a small number request more than one. Return rate data in the industry is a closely guarded secret, but we understand that the industry wide rate is 30 percent or more. We have a return rate of 15 percent.

Lisa: We have very few aids that come back for adjustments and our returns are much lower than the industry norm. It is rare that we have to make multiple adjustments.

Sreek: We have seen rates between 20 to 25 percent for industry wide returns. We are far below 15 percent.

Ed: Which individuals with hearing loss would you not advise to purchase your aids?

Ross: We are honest about advising potential customers to go elsewhere if we can’t fit them perfectly. We want to make sure the individual gets appropriate care and products. We don't service people under 18 adults with hearing loss outside of the range of our hearing aids.

Lisa: If consumers need a lot of adjustments because their hearing loss fluctuates a lot, they will need frequent in-person support. The other consumers we are not engaged with now are very young children with hearing loss. We want them to see a school audiologist who can provide support in speech-language development.

Sreek: We don’t sell to people with profound hearing loss, with “cookie-bite” or low-frequency hearing loss. These people need custom programmed hearing aids and/or special earmolds. We don’t sell to individuals under the age of 18.

Patrick: We suggest customers in need of earmolds go to a local clinic. People who have profound hearing loss would not qualify for our aids. We help them find local clinics. We do not sell to people less than 18 years of age.