Data logging is an industry-standard feature offered by every hearing instrument manufacturer. Hearing healthcare professionals rely on data logging to gain basic insights into patient behaviors, such as the number of hours they are wearing their hearing instruments, whether they are making volume control adjustments, and even if they are using their manual programs. However, it is limited to capturing a patient’s listening experience based solely on the current technology level in their hearing instruments.

Log It All is a new feature that builds on the traditional benefits offered by data logging, capturing real-life patient data that enables you to have evidence-based conversations with patients about their lifestyle and technology level choices. It’s a paradigm shift in data logging, only from Unitron.

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Favorite sound: wind chimes
The traditional approach

It’s a common scenario: a patient reports that their hearing instrument batteries aren’t lasting as long as they should, so their hearing healthcare professional uses data logging to troubleshoot the problem. Data logging reveals that the hearing instruments are being used for 24 hours continuously, which would suggest that the battery door is remaining closed even during periods when the hearing instruments shouldn’t be in use, such as at bedtime.

While the above approach is useful for understanding basic patient behaviors with respect to their hearing instruments, having a window into how effectively a hearing instrument’s technology level fits within the listening environments in a patient’s day-to-day life is a much more powerful tool that you can use to enhance your counseling. It was this insight that inspired Unitron to create Log It All.

Real life, real data

Log It All is a feature available in all Unitron North platform products. Since it works on top of the traditional data logging model, you still get all of the information that data logging typically delivers. Log It All then goes above and beyond the expected to deliver deeper insights into patient listening needs.

Seven distinct environments – Log It All captures information about the listening environments that patients spend time in as they relate to the seven distinct environments in Unitron’s SoundNav automatic program: Conversation in quiet, Conversation in a small group, Conversation in a crowd, Conversation in noise, Quiet, Noise, and Music.

All technology levels – Traditional data logging only reveals information related to the current technology level of the hearing instrument. In contrast, Log It All provides data on all seven environments within SoundNav, regardless of the actual number of environments covered by the hearing instrument’s technology level. This lets you know how well a technology level is meeting a patient’s listening needs.
True listening needs – Listening needs vary from patient to patient. Log It All puts them into clear focus, allowing you and your patients to see the percentage of coverage that their current hearing instrument technology level provides in the listening environments where they are actually spending time. This evidence provides greater insight for which level of technology will provide the most benefit.

See the difference

Log It All shares data specific to the patient’s actual listening environments in much more granular detail than traditional data logging. In Fig. 1 you can see pie chart graphs of two participants who wore the same technology level hearing instruments during a three-week fitting. The graphs show a traditional data logging view that only breaks listening down into the two available environments: quiet and noise. As you can see, both wearers are showing very similar patterns with virtually identical use and wear times in the environments provided at that technology level.

Fig. 1 – Traditional data logging*

*Graphs are based on actual field trial data collected during validation of Moxi™ hearing instruments on the North platform.
The Log It All view in Fig. 2 reveals a very different picture. The graphs clearly demonstrate that these two participants have unique listening needs:

- Both wearers show considerable usage time across all seven SoundNav environments, which is more environments than their current hearing instruments cover. The data accurately reflects their current active listening lifestyle.

- If these wearers were looking to purchase hearing instruments, their individual differences in time spent in the actual environments strongly indicate the need for different technology level recommendations for each of them.

*Fig. 2 – Log It All*

*Graphs are based on actual field trial data collected during validation of Moxi hearing instruments on the North platform.*
The role of patient input

When it comes to making technology level recommendations, all hearing healthcare professionals gather subjective input from patients at some point to help inform their decisions. However, the methods for gathering that information will vary depending on each person’s unique counseling style preferences.

Conversations – This approach is very subjective, asking patients directly about their perceptions around lifestyle and requirements.

Questionnaires – This approach involves using industry-standard questionnaires to profile a patient’s lifestyle and identify where they experience listening challenges. The Client Oriented Scale of Improvement (COSI) and Abbreviated Profile of Hearing Aid Benefit (APHAB) are two examples of questionnaires that the industry uses to let patients self-report on listening needs. While the information gathered is still fairly subjective, it is useful for highlighting listening situations that are particularly bothersome to patients, as well as providing an indication of the level of importance to the patient. These questionnaires can also be leveraged during follow-up appointments to indicate which listening situations have improved with amplification and which are still causing problems.

No matter how you collect information from your patients, their perceptions of listening needs are influenced by many factors that can result in them unintentionally painting an incomplete picture. Log It All removes the subjectivity from the equation, providing an objective view into the listening environments where they actually spend time.
Log It All provides evidence-based insights

No matter how long the patient has had their hearing instruments, the information that Log It All provides will always be up to date, reflecting the lifestyle that the patient is currently experiencing in their life.

Get familiar insights – Since Log It All works on top of traditional data logging, you still get guidance on which programs to fine-tune, as well as the data required for troubleshooting issues.

Do a sanity check – The data from Log It All gives you the security of knowing whether the patient’s actual listening experiences match up to their self-reported listening needs. For example, you could use the Hearing Satisfaction Questionnaire (HSQ), which was developed by Unitron, to capture how important different listening environments are to a patient. Comparing their HSQ responses to Log It All data lets you know if those important environments are being covered and provides a good indication that the patient will want to take action if they aren’t. Since Log It All provides logging even in environments not offered by a patient’s current technology level, it’s easy to see whether they would benefit from moving to a technology level that covers the additional environments.

Start the conversation – Use Log It All as a tool to gently open the door to new options for patients. You can use the data to complement your clinical judgment on the best course of action for each patient, whether it is recommending moving to a higher technology level or simply adding a manual program to their current hearing instruments. The choice is yours.

Help them see the ‘why’ – Even if a patient is experiencing some challenges with the current technology level in their hearing instruments, it can still be difficult for them to imagine how moving to a higher level will translate into benefits in their day-to-day life. Log It All provides an additional way to open up the conversation and get them comfortable with the idea of a higher technology level. It helps patients put the higher technology level into a personal context and understand how it benefits them based on their unique lifestyle.
See it, hear it, believe it

When Log It All provides data suggesting that the patient would benefit from an alternate technology level, Unitron’s new North platform offers solutions that are completely unique in the industry to help you get the best end result for patients. Flex:trial™ and Flex:upgrade™ allow your patients to experience the technology level you are recommending, immediately and in their own lives, so they can hear the difference having the right technology makes.

<table>
<thead>
<tr>
<th>Flex™ solution</th>
<th>Benefits to hearing healthcare professionals</th>
<th>Benefits to patients</th>
<th>How Log It All supports Flex</th>
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| Flex:trial     | • Provide patients with an immediate trial of any technology level  
• Let patients personally experience the technology level you recommend in their personal lives and the associated benefits of amplification | • Engages them in the decision  
• Reduces fear and uncertainty  
• Speeds up acceptance  
• Empowers them to make informed decisions around which technology level is right for them | • Logs data on the environments patients are actually spending time in to help facilitate the discussion around which technology level a patient should trial  
• Highlights listening needs that may go unmet if a patient chooses a lower technology level than you are recommending |
| Flex:upgrade   | • Upgrade patients from their current technology level to a higher level in the hearing instruments they are wearing right now | • Experience a higher technology level immediately without the need to buy a new set of hearing instruments  
• Have improved confidence in their decision  
• Hear the difference in technology levels in their own hearing instruments | • Logs data on the environments patients are actually spending time in to see if their current technology level is covering the listening environments they spend time in  
• Provides visual proof as to why a higher technology level may be more suitable for the listening demands a patient encounters frequently |
Enhance counseling with Log It All

Log It All is the next evolution of data logging. A standard feature in all North platform products, it builds on the useful information provided by traditional data logging to paint a very detailed portrait of the listening environments where patients actually spend their time. This provides hearing healthcare professionals with evidence-based insight into the lives of their patients as they relate to the seven environments within SoundNav. It also allows them to do something they never could before: support their technology recommendations based on a patient’s real-life listening needs.

References:


At Unitron, we care deeply about people with hearing loss. We work closely with hearing healthcare professionals to provide hearing solutions that improve lives in meaningful ways. Because hearing matters.