What Do Patients Remember?
How to Put You and Your Patients on the Same Page
By Brian Urban, AuD

Early in my career, I encountered a patient—and that patient’s wife—who would forever change the way I looked at counseling. Mr. Smith, as we will call him, was a 78-year-old retired automotive plant worker who had come in for an audiologic evaluation. The results ultimately showed a precipitously sloping, bilateral, severe sensorineural hearing loss. I thoroughly reviewed my findings and advised him to pursue a trial with hearing instruments. Before he left, I asked him if he had any questions. He responded that I had covered everything very well and that no questions came to mind. It seemed, overall, a job well done. A week later, I was pleased to see that he was on my schedule for a hearing instrument selection. However, when I stepped into the waiting room and called his name, an angry looking woman about his age vaulted from her chair and charged right past me. A few moments later, Mr. Smith slowly made his way across the waiting room towards me, all the while studying his shoes as he walked. Once we had all reached my office, the woman immediately pointed an accusing finger at me and shouted, “You told my husband that he has normal hearing! He does not have normal hearing! You tell him right now, that he does not have normal hearing!” My immediate thoughts screamed that he obviously had misunderstood me. He clearly had a significant hearing loss and I had been meticulous in my counseling. I had not told him that he had normal hearing.

Or, had I? After reflecting on my counseling in the original appointment, it became clear that while my approach would have impressed my former professors and supervisors, it did nothing to make Mr. Smith a more educated, informed patient. In my attempt to be thorough, I had exhaustively reviewed all of my test results. Basically, I gave him a summary of the better part of my graduate school education in four minutes or less. But despite my best efforts, I had obviously not been effective.

What Do Patients Remember?
Without spoiling it for you, the numbers aren’t good. Margolis (2004) reviewed this topic in conjunction with studies from other healthcare professions. Essentially, he found that in a typical counseling session, patients immediately forget 50% of the information provided by the healthcare practitioner, 25% is remembered incorrectly, while only 25% is accurately retained. The statistics are so disturbing that they deserve a second look. During an average audiologic evaluation, 1/4 of the information is remembered right, 1/4 wrong, and 1/2 is completely gone.

So what information is actually getting through to the patient? Are they going home with the right information to make an educated decision regarding their hearing healthcare? Or does their lack of understanding about their hearing loss and its ramifications cause them to fall into the abyss of tested-but-not-sold patients that are never heard from again?

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So, how are we able to tell what the patient will remember? While there is no way to precisely know what information will be retained, there is a way to predict what information is mostly likely to be remembered correctly. This principle is called the Primacy and Recency Effect. It states that: “one tends to remember best that which comes first in a learning episode and second best that which comes last” (Sousa, 2006). Understanding this basic premise causes us to look closely at how we organize our counseling sessions. Specifically, are we summarizing the most important information first and then reiterating those same points at the end of the session? In the previous example with Mr. Smith, I had talked for 2-3 minutes before I ever even mentioned his hearing loss, let alone my recommendations. Had I instead focused on what I wanted him to remember and kept the Primacy and Recency Effect in mind, I would likely have been much more successful in helping him recall the results of the evaluation. And, hopefully, would have avoided the ire of his wife.

Factors That Affect Recall
Interestingly, Margolis (2004) also found that the ability of patients to remember vital information was independent of the severity of the diagnosis as well as their overall level of intelligence. However, he did find that patient denial, familiarity with the topic, as well as whether the diagnosis was expected had a significant effect on overall recall. This means that:

1) Severity of the Diagnosis—Just because we appreciate the significance of a potential acoustic neuroma does not mean that the patient will share our level of concern.

2) Intelligence – With the exception of cases where cognitive issues are a factor, we cannot assume that patients who we deem to be intelligent will be able to retain greater amounts of information. We must force ourselves to take the same type of approach regardless of the number of PhDs behind their name and not feel as though we are being insulting or overly simplistic.

3) Denial – We must never underestimate the power of denial. For patients who are unable to accept their hearing loss, we need to focus on simplifying the message so that, at a minimum, we can plant the seed of the idea that they have hearing loss. Better to plant a seed now and hopefully see them back in a year, instead of having them go home with an inaccurate impression of their results and potentially never return for help. We may also need to be prepared to view the planting of the seed itself as successful counseling.

4) Familiarity with the Topic – A patient with previous experience with audiologic evaluations will generally be able to retain a higher amount of information than a patient new to the topic.

5) Expected vs. Unexpected Diagnosis – Many patients anticipate – or simply just hope – that we will tell them that they have normal hearing. As a result, when we explain that they have normal hearing in the low frequencies but a severe hearing loss in the high frequencies, patients will often readily remember the first part of the message but quickly forget the second.
The Patient’s Perspective
While we understand the importance of the audiologic information that we are providing, that same understanding may not be held by our patients. To appreciate the patient’s perspective, imagine that you are talking with a new acquaintance who introduces the subject of rugby.

Now for most Americans, our experience with rugby is limited to watching Matt Damon run around in the movie Invictus. If you missed that flick, you likely know even less about the sport. As a comparison to what our patients go through, just imagine that this new friend has decided to energetically give you a crash course in the basic rules and tactics of rugby. In an effort to help you visualize what he is describing, he grabs a sheet of paper and sketches out a rugby field (pitch) and a standard play. He then uses his crude drawing to explain the various player positions, ways that the ball can be advanced, offensive and defensive strategies, as well as how to score points. Over the course of 3-4 minutes you are overwhelmed by names, techniques, and details on a game that is about as foreign as ancient Egyptian mythology. Of course, if you have some familiarity with the topic you may follow the explanation well. However, if this is your first exposure to the sport, you will likely start running through your mental To Do list within the first 15 seconds. The encounter may sound something like “finish the laundry, buy more milk, write those reports from yesterday”…after the winger has caught the ball he then tries to sprint down to the try zone for a score. He may be opposed by…” pay the electric bill before Tuesday, get the oil changed, start working on the patient newsletter for this quarter… and on and on. Despite his thorough explanation and detailed visual aid, you are probably left confused and wishing that Matt Damon could somehow make it all stop. Now you know how some of our patients feel.

Keys for Improving Recall
Research on memory shows that as the amount of information increases, the rate of recall decreases. While we may think that consistently providing 10+ minutes of detailed, comprehensive counseling will directly result in better informed patients, in reality much of our good faith effort is actually working against us. This is not to say that shorter counseling is better counseling. Yet, regardless of the length of time spent with the patient, the basic principles of improving recall and compliance remain the same. Specifically, we need to begin our counseling by stating the most important information and summarize it again at the end of the session.

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Additionally, patients benefit if we:

- Keep the information simple and specific.
- Use repetition to reinforce main ideas.
- Limit the use of jargon. Big words may be impressive, but they do not necessarily make the patient better educated.
- Address their needs. Focusing on their primary concerns first shows them that you are listening and are interested in their overall hearing health.
- Emphasize important points. If something is important, show it!
- Break the counseling into categories and ask if there are any questions before moving on.
- Do not routinely teach the audiogram.
- Provide a colorful, customized counseling summary for them to take home.

Looking back at Mr. and Mrs. Smith, I would love to have a second chance at that initial counseling session. Incorporating many of these ideas, I believe that it would have sounded something more like, “Well, Mr. Smith, your results show that you have a severe hearing loss in the high pitches in both ears. Typically, a severe hearing loss in the high pitches in both ears can make it more difficult to understand the sounds that give speech its clarity. For example the /s/, /f/, and /th/ sounds may be muffled or unclear. This is often worse when the conversation is not face-to-face or there is background noise present. These results make sense with your comments that your wife feels that you miss parts of conversations and have trouble hearing in restaurants. So, basically you have a severe, high pitch hearing loss in both ears. Before we discuss my recommendations, do have any questions about the results of the hearing test?”

Perhaps if I had taken this approach, I would not have sent him home with a completely incorrect impression of his hearing loss. Fortunately, his wife was motivated enough to drag him back and demand clarification. But how many patients never return? Hopefully by reevaluating how we counsel, we can get on the same page as our patients and situations like these will become a thing of the past.

About the Author
Brian Urban, AuD, is the co-founder and President of CounselEAR.com. CounselEAR enables hearing health providers to rapidly create customized counseling summaries and professional reports online. He is also the founder of Advanced Hearing and Balance Center in Evanston, Illinois. Dr. Urban has a Master’s degree in Audiology from the University of Minnesota and an AuD degree from Salus University. He has presented at state and national conventions and is an Adjunct Faculty member at Rush University. Dr. Urban also currently serves as President-Elect on the ADA Board of Directors and participated in the 2010 Jerger Future Leaders of Audiology Conference.

References

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1. During a typical audiologic evaluation, patients typically immediately forget
   a) 10% of information provided
   b) 25% of information provided
   c) 50% of information provided
   d) 75% of information provided

2. The Primacy and Recency Effect predicts
   a) what will cause a decrease in recall
   b) what information is most likely to be remembered correctly
   c) what inaccurate data will be retained
   d) all of the above

3. Memory research shows that as the amount of information increases
   a) the rate of recall increases
   b) the rate of recall remains the same
   c) the rate of recall decreases
   d) the rate of recall fluctuates

4. The ability of patients to remember vital information is independent of
   a) the severity of the diagnosis
   b) patient denial
   c) overall level of patient’s intelligence
   d) a and c

5. Details of the audiogram should be routinely taught at each visit for greater recall.
   a) True
   b) False

6. What portion of information do people accurately retain during a hearing healthcare visit?
   a) half of information
   b) a third of information
   c) a quarter of information
   d) a fifth of information

7. Providing each patient a customized counseling summary will
   a) Overwhelm them
   b) Cause recall to diminish
   c) Assist their recall
   d) None of the above

8. Patients’ recall will benefit when we
   a) keep information simple
   b) keep information specific
   c) limit the use of jargon
   d) all of the above

9. One tends to remember best that which comes last and second best that which
   comes first.
   a) True
   b) False

10. In a typical counseling session, ____% of information is remembered incorrectly:
    a) 75%
    b) 50%
    c) 25%
    d) 10%

For continuing education credit, complete this test and send the answer section at the bottom of the page to:

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