

Still Battling Turf Wars: 2022

Turf wars are sometimes disguised as SOP issues.

By Douglas L. Beck, AuD

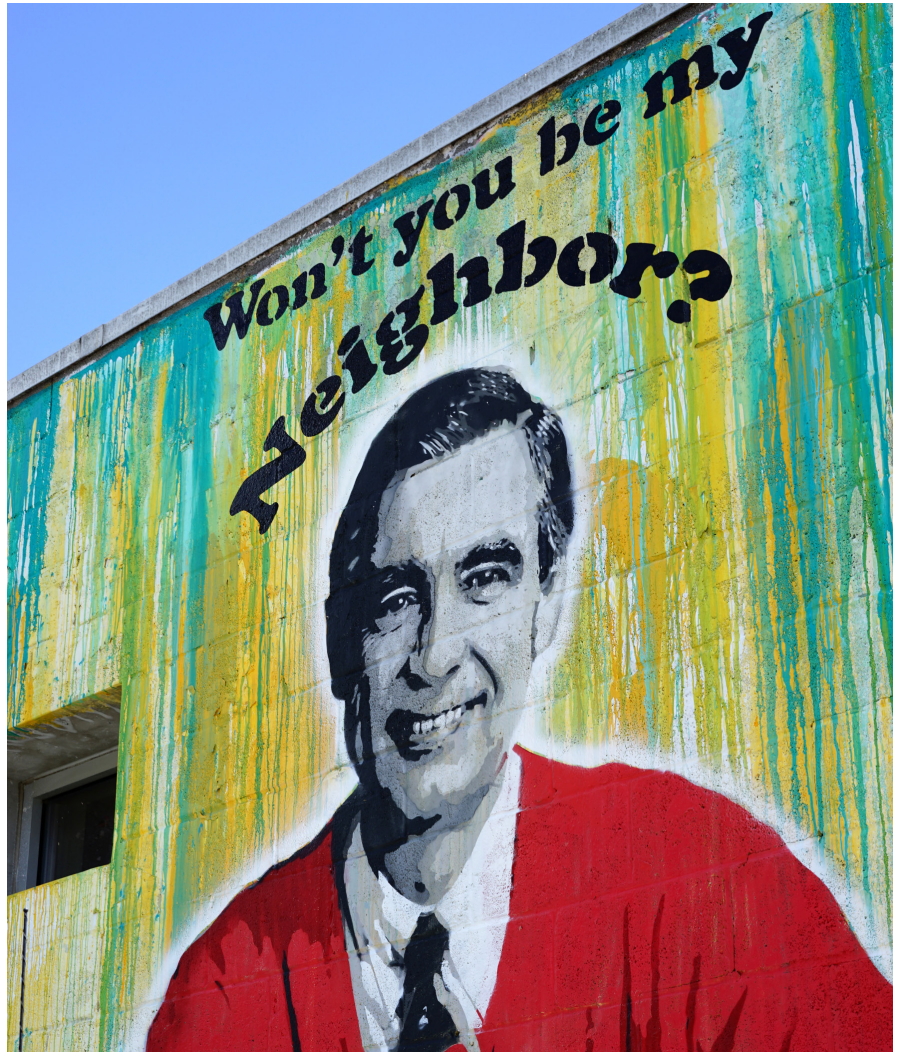
After 10 years of working primarily in the operating room, I authored, co-authored and published *The Handbook of Intraoperative Monitoring (HOIOM)* in 1994.¹

For many, that book was a shocker... and NOT in a good way! Not only were audiologists working daily in the operating room and inserting needle electrodes into the head and neck of real live patients (the needle electrodes predated disposables and were made by the same audiologist using a surgical microscope and sterilized via ethylene oxide), but audiologists were informing surgeons when various neural structures were being stimulated or were no longer responding during surgery! These technical and surgical skills were learned from other audiologists and neurotologists who believed these skills were essential for many mastoid and skull base surgical procedures and “naturally” were in the audiology domain.

If you examine the HOIOM (it is free at: www.douglasbeck.com) you'll see most co-authors were audiologists who also used neurophysiology-based monitoring during skull base surgery, mastoid surgery, facial nerve decompressions, acoustic neuroma resection and removal, vestibular nerve section, parotid surgery, endolymphatic sac decompression, and various vision and back surgeries.

Indeed, before the internet was in every phone, office, and home, many of us were told Intraoperative Monitoring (IOM) was not in our Scope of Practice of audiology, and the same was said about tinnitus and vestibular diagnostics and treatment. These thoughts and cautions came from very well-established, well-known, highly published, and revered audiologists. Which didn't mean I wouldn't or couldn't do intraoperative monitoring but it hadn't yet happened on a large scale. Of course, I did it.

Fortunately, the American Speech-Language-Hearing Association (ASHA, 1992) reported IOM was in our scope of practice. Thank you, ASHA! In the



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“Neurophysiologic Intraoperative Monitoring Position Statement” by the Ad Hoc Committee on Advances in Clinical Practice, Section IV, titled “Scope of Practice,” it says:

It is the position of the American Speech-Language-Hearing Association (ASHA) that neurophysiologic intraoperative monitoring is within the scope of practice of audiologists with the appropriate knowledge base and skills. The purpose of neurophysiologic intraoperative monitoring is to assist surgeons to minimize or avoid altogether the occurrence of intraoperative injury to neural structures at risk due to the nature of the pathology and their proximity to the surgical field...

Weldon A. Selters, PhD (1927 - 2022)

The profession of audiology owes a huge debt of gratitude to Weldon A. Selters, PhD as he taught many of us how to monitor facial, auditory, and other cranial nerves during otologic and neurotologic procedures. Dr Selters was also among the first pioneers to authoritatively write about the value of the auditory brainstem response (ABR) as a screening tool for detecting acoustic neuromas.² Dr Selters practiced at the House Ear Institute and the related clinical entity (The Otologic Medical Group, OMG) for many decades. He was among the greatest of the “unsung heroes” in audiology.

I’ll wager that in 1977, using ABR to detect acoustic tumors was absolutely not in his scope of practice. Which didn’t mean he wouldn’t or couldn’t do it, but the utility of ABR was not yet known or embraced by professionals. It simply hadn’t happened yet. Of course, to engage in ABR or IOM, or ABR during IOM, 40 years ago, one had to be trained by their peers. There was no American Academy of Audiology (AAA) and there was no formal IOM audiology coursework. Generally speaking, on-the-job training (OJT) consisted of three in-depth components:

1. Find a mentor, and
2. Read a lot of books and articles about anatomy and physiology with an emphasis on sensory, motor, and mixed cranial nerves (in my case), and
3. Read them again.

OJT included learning everything from sterile techniques for washing, gloving, and maintaining sterile protocols, operating room rules and protocols, universal precautions, anatomy, physiology, evoked potentials, electromyography, safe electrical parameters for stimulating cranial and peripheral nerves, and more...and to be clear, NO ONE hit the ground running. If you wanted to learn about and participate in IOM, it was a huge time commitment (months to years). Each person engaged in IOM had their own path, their own mentors, and their own timeline (based on their interest, their access to surgeons and surgical procedures, etc...) and their own story. Currently, we do have well-established standards for IOM, such as those published by the American Society of Neurophysiological Monitoring (asnm.org) and others.

William F. House DDS, MD (1923 - 2012)

Speaking of scope of practice, I had the extreme good fortune to work, study, and practice alongside Dr William F. House DDS, MD, the father of neurotology and arguably the most important neurotologist in the history of medicine. Among dozens of significant engineering, dental, and surgical accomplishments, Dr House

pioneered the design and implantation of cochlear implants,³ published and refined the middle fossa approach, as well as the trans-labyrinthine craniotomy (TLC) to remove acoustic tumors. Notably, Dr House was the “first neurotologist” and very likely the best ever (I may be biased). I worked with him personally on at least 100 acoustic neuromas and vestibular nerve sections and his knowledge, grace, dignity, and humor were stunning.⁴

However, in the early-to-mid 1960s, after he had worked on dozens of cadavers to develop and explore the TLC approach, the operating room nurses and others who were accustomed to neurosurgeons being the only people who did “brain” work, literally hid his surgical instruments. Let that sink in for a moment. They (the OR nurses) decided that because he was not a neurosurgeon he could not operate on brains, and some hospital administrators prohibited Dr House from admitting patients to the hospital unless a neurosurgeon approved the admission. This didn’t mean he wouldn’t or couldn’t remove brain tumors, but it hadn’t yet happened on a large scale. Dr House literally had to cancel surgical procedures because his surgical instruments were missing in action, despite the fact that the TLC approach caused fewer idiopathic comorbidities and deaths than the traditional neurosurgical suboccipital approach, which was (then) the standard approach to acoustic neuromas.

Dr House wrote.⁵ “This, however, did not address the turf problem of the Los Angeles neurosurgeons. They were not happy because they might no longer receive referrals of acoustic neuromas from the otologists...” Same old same old.

Nothing New Under The Sun

Twenty-eight years ago, in the preface to the HOIOM, I wrote “as audiologists, we have little or no knowledge about the operating room...it is difficult to find graduate programs that prepare us to work in this environment...” Luckily, I was in the right place at the right time and was able to stand on the shoulders of giants, like Dr Selters and Dr William F House. In the same HOIOM preface, I addressed the ever-present “turf battles” among OR-based audiologists, nurses, EEG technicians, evoked potential (EP) technicians, and more. Even back then, turf battles were apparent between dispensers and audiologists, plastic surgeons and facial plastic surgeons, between orthopedic surgeons and podiatrists, between general surgeons and otolaryngologists for larynx and thyroid cases, between neurosurgeons and orthopedic surgeons for spinal cases, and challenges between anesthesiologists and anesthesiologists were very real. In 1994 I wrote “The most distressing part of the (turf) battle to me is the observation that audiologists often aim their cannons at other audiologists” (as was recently done to me, by a source I choose not to acknowledge or name). I wrote that specializing in IOM (back then) was actually like specializing in hearing aids, central auditory processing, aural rehabilitation, balance testing, electroneurography, or pediatric testing. The person performing the task must practice within their license and must take responsibility for maintaining his or her education and abilities. Frankly, although my license allows me to do pediatric and vestibular testing, I would never do either. It wouldn’t be fair or appropriate for me to engage in activities which are within my license, but clearly beyond my personal skill set. That is, doing something because you can, doesn’t mean you should.

In the mid-1990s while I was on the faculty of a well-known

Midwest medical school, the audiologists often used insert earphones in clinical and ABR tests, used probe tips for reflexes and tympanograms. As such, having a clear ear canal was simply essential to the practice of audiology. Therefore, I assembled two neurotologists and a general ENT to co-teach cerumen removal techniques to other audiologists. Unfortunately, a local senior audiologist (not affiliated with the medical school) complained that we were practicing beyond our license. In particular, my license was threatened when that senior audiologist wrote to the state and filed a formal complaint against me. Fortunately, the dean of the medical school and my chairman wrote extremely supportive letters to the licensure board explaining that we were practicing within our scope of practice, and how valuable these services were to the patients we serve and how wonderful it was to not have to use their (physician) limited clinical time performing simple “cerumenectomies.” Of note, at that time, nurses and multiple technicians were often tasked with cleaning ears using high-pressure, metal-encased syringes (perhaps 5-7 inches long, 1.5 inches wide) to shoot tap water into the ear canal, without much regard for pressure, temperature, or preexisting perforations, and often without the benefit of an otoscope. Ah, the good old days! Whereas, we were using microscopes, loops, and other portable direct observation protocols and tools. Learning and performing cerumen removal is now an integral part of hearing healthcare. The disagreement over earwax didn’t mean we were wrong, or that we wouldn’t, shouldn’t, or couldn’t do it, but it hadn’t happened yet on a large scale, and people seriously freaked out.

Turf Wars: 2022

Turf wars still exist and are sometimes disguised/package as SOP issues (“We can do this, they cannot do this” which more broadly becomes “Us versus Them” which indicates we have been trained, and they are not able to be trained, which is just silly). SOP is almost always years behind clinical practice (for example, as above; Dr House designing and implanting cochlear implants in the early 1960s, 25 years before the FDA approved it for adults), Dr House created multiple new and advantageous approaches to skull base tumors, and having his surgical tools hidden and patient admission rights

curtailed because he wasn’t the previously recognized facilitator. Or, Dr Selters using ABR to detect brain tumors before most of us ever heard of ABR; me arguing SOP acceptance of IOM and cerumen removal.

Frankly, SOP issues appear to be often raised by those that want to maintain the status quo and protect their turf. We all get it. It’s the way it is and always was, and probably always will be. Patient safety is, of course, paramount to all of us. EVERY. SINGLE. PROFESSIONAL. All of us agree patient safety is absolutely and indisputably paramount. All of us took and take patient safety and professional practice very, very seriously.

However, despite patient safety being paramount, iatrogenic injury has occurred on (rare) occasions from interventions by surgeons, nurses, chiropractors, audiologists, physical therapists, hearing instrument specialists, optometrists, dentists, dental hygienists, orthopedic surgeons, podiatrists and many more. If we’re honest, it has also happened to each of us (“the only people who haven’t fallen from horses are those who don’t ride horses and liars.” Beck, 1999). I believe each and every licensed health professional holds patient safety and well-being as paramount. Unfortunately, we cannot legislate outcomes. Stuff happens. Innovators and leaders still innovate and lead and develop ideas, protocols, technologies, and more, to improve our previous ideas, protocols, and technologies.

Of course, now we have the Internet and smartphones. Unfortunately, one might argue that access to knowledge has probably replaced actual knowledge. That is, in my quiet and serene most Mark Twain moments I sometimes think, “Seems to me we’ve never had more access to information, and yet, less knowledge.” Alas.

I am very involved with cognitive screenings. I study, publish, and lecture on the value and impact of cognitive screenings and how that relates to healthcare professionals across audiology, otolaryngology, and hearing instrument dispensers, as well as optometrists, ophthalmologists, speech-language pathologists, pharmacists, and just about every licensed healthcare professional.

Consequently, I have thoughts and opinions I’d like to share about these issues as I believe cognitive screenings are very impor-

tant and some screenings are very simple to administer (some cognitive screeners are self-administered, actually) after appropriate (CEU-based and other) professional training.

1. There are currently some 55 million people with dementia, and that number will triple by 2050.

2. Hearing care professionals (HCPs) refer to other members of the professional community for air-bone gaps, unilateral sensorineural hearing loss, pulsatile tinnitus, smoking cessation, diabetes management, diabetes care, suspicious skin lesions, suicidal ideations/expressions and depression, unusual tympanic membranes, and more. To me, cognitive screenings are the same. We are licensed health professionals and we need to take care of the whole patient the best we can.

3. Kricos⁶ reported hearing loss and cognitive decline overlap and often masquerade and/or parade as each other. She was exactly correct. To me, this indicates that HCPs should carefully consider, contemplate, and identify auditory versus non-auditory causes of hearing and supra-threshold listening disorders (STLDs). Specifically, having mild-to-moderate sensorineural hearing loss (SNHL) does not rule out (or protect the patient/client from) other etiologies and/or co-morbidities. SNHL, neurocognitive disorders (NCDs), and STLDs are not silos. They can exist in isolation or in tandem and often do. If we don’t acquire and examine test results that indicate speech and noise disorders, NCDs, and/or STLDs, these problems will be invisible to us, we will not refer, the patient will not be diagnosed or treated early, and meaningful intervention and the opportunity for an improved trajectory will not occur.

4. The people most likely to demonstrate hearing loss and superathreshold listening disorders, as well as mild or major NCDs, are the exact same older adults. Their signs and symptoms occur in exactly the same slice of the population and many will have identical or similar complaints (cannot understand speech in noise, can’t recall what someone just said, people mumble). Therefore, it seems reasonable that all HCPs should determine whether the auditory manifestation of these complaints is primarily due to auditory, non-auditory, or both, via speech-in-noise tests, listening and

communication assessments and cognitive screenings. If we don't, nobody else will.

5. It is beyond dispute that hearing loss and suprathreshold listening disorders are highly related, correlated and associated with cognitive decline and NCDs (see recommended readings available online at the hearingreview.com).

6. Livingston et al⁷ identified hearing loss as the most significant modifiable risk factor with regard to dementia risk. Fortunately, there is significant evidence that if mild cognitive impairment (MCI) is screened and diagnosed and treated early, patients may decrease their dementia risk by some 40% by attending to the 12 modifiable risk factors, of which hearing loss was the most significant.

7. Cognitive screeners are not diagnostic; they are not standalone. When someone tests positive (ie, they have a non-normative result) the recommended course of action is to refer to their physician (GP, PCP, internal medicine, family doctor, etc...) for further review, guidance, and action. "Automated" digitally delivered cognitive screening requires 5-7 minutes, requires no professional interpretation, and is self-administered and automatically scored. A report for the physician is automatically produced which details the domains evaluated and the results.

In the 2018 ASHA document titled "Scope of Practice in Audiology," the Ad Hoc Committee On The Scope Of Practice In Audiology, in the section titled "Diagnostics for Hearing, Balance, and Other Related Disorders" states: Administration and interpretation of diagnostic screening that includes measures to detect the presence of hearing, balance, and other related disorders. Additional screening measures of mental health and cognitive impairment should be used to assess, treat, and refer (American Academy of Audiology, 2013; Beck & Clark, 2009; Li et al., 2014; Shen, Anderson, Arehart, & Souza, 2016; Sweetow, 2015; Weinstein, 2017, 2018)."

8. Medicare encourages professionals to offer screenings for the benefit of the patient (getting them to the right provider, sooner), the family, society, and to help provide more effective care earlier, and at a lesser cost (Fifer, 2021).

9. There is no "one size fits all." Let's admit that hearing screenings by school

nurses and other people not licensed in hearing healthcare happens. Health screenings staffed by whomever are common at senior citizen homes, assisted living centers, nursing facilities, shopping malls, doctor's offices, schools, and more. Evoked Potential (EP) specialists are sometimes really, really good at ABR and ECoG. Cerumen removal and irrigation by med-techs and nurses using irrigation syringes happens every day. Newborn screenings are often done by caring and helpful volunteers, as these tests (OAEs and ABRs) are automated, the same with some cognitive screenings. Blood pressure checks are often facilitated by dental hygienists and dental technicians, none of whom diagnose, all of whom refer when hypertension or other anomalies are noted. And yet, the sky hasn't fallen.

10. These well-intentioned actions from lesser degreed people haven't negatively impacted healthcare on a large scale. Rather, when people have a sincere interest in helping others, and when they have the opportunity to learn, they usually do. These lesser degreed people often provide more holistic, patient-centered care, and ultimately provide the patient with an opportunity for a better quality of life.

Samantha Sikorski HIS, ACA is a dear friend of mine, and she happens to be a hearing aid dispenser (not an audiologist) at Sikorski Hearing and Tinnitus Wellness Center in Rice Lake, Wisconsin. I asked her to write a quick anecdote about her cognitive screening experience. She sent this to me on September 30, 2022.

Cognitive Screening in a Dispensing Practice

It has been over five years since I began administering cognitive screenings in my practice. At the time, there were very few people talking about the value of cognitive screenings in a hearing care office; in fact, people couldn't understand why I would be doing them at all. Prior to screenings, I would refer a person I suspected with a neurocognitive disorder to their MD only to have the physician suggest their hearing aid be 'turned up.' I had enough! I selected the screening tool that required me to become a certified rater to ensure I was educated in proper testing protocols as well as referral strategies. Since then, I've created a large network of physicians who now review my

results through a clearer lens and, together, patient outcomes are better because of it. In my office, we refer to these as "comprehension assessments" and it is an extension of our hearing evaluation. I like to explain that the hearing test helps us understand hearing but falls short of helping us understand how one listens. I explain that the easiest way to do that is by giving them verbal tasks; some are simple, while they may find others to be difficult. In the end, I am able to get a far better idea of how they will do with a hearing aid. While prepared for it, I couldn't possibly foresee the impact this would provide for those turning to me for help.

In 2021, a 60 y.o. female scheduled a hearing test due to her difficulties understanding speech. She reported her family was frustrated with her. Audiometry revealed thresholds to be within the 'normal' range, save for 6-8kHz. Her SIN score was 1. Clearly something was going on but I had nothing to support a referral – nothing to offer her hope or help. I explained that I wanted to see how she 'used the information she was hearing' and, to assess that, I would be giving her tasks to complete. I administered a cognitive screening. The possible score on this type of screening is 30 points; with ≥ 26 being normal, she scored a 21. We discussed her sadness and I encouraged her to establish care with a physician to address this. I wondered if her sadness/potential depression was affecting her results, so we scheduled a repeat screening three months later and I encouraged her daughter to attend. At this appointment, she confirms being prescribed an antidepressant and noted no change in hearing. Her daughter confirms the family's belief that mom 'never pays attention.' Her repeat cognitive screening score was identical to the previous – 21/30. Carefully, I explained that I perform testing to determine candidacy for hearing aids; she is not a candidate. Further, she was having difficulty comprehending the information she heard. I knew someone in her network who I could trust to review and consider my notes. I sent the physician historical, audiological, and known medical data along with her screening results. She called me from the parking lot after her appointment, crying. 'Thank you,' she said, 'for listening to me when others didn't. I just knew something was wrong.'

Final Thoughts

The older I get, the more I see turf battles as impediments to progress, rather than as a protocol to improve the quality of life or the outcomes for the patient/client.

ASHA wrote decades ago “neurophysiologic intraoperative monitoring is within the scope of practice of audiologists with the appropriate knowledge base and skills.” I think they hit the nail on the head. With appropriate knowledge, skills, training and a true desire to take a holistic approach to patient-centered-care, and while holding patient safety and well-being paramount, we can all participate. It is my opinion that the goal is not for all of us to have the same license, education, or degree. The goals are for each of us to become all we can be, to practice within our licenses, to practice within our areas of expertise, and to help as many people along the way as possible and to hold patient safety and well-being forever paramount. It’s about compassion and competence, it’s not about the letters after your name.

Fred Rogers probably said it best. “Look for the helpers. You will always find people who are helping.” Those are the people I choose to work with.

References

- 1.Beck DL. Handbook of Intraoperative Monitoring. Singular Publishing Group; 1994.
- 2.Selters WA, Brackmann DE. Acoustic tumor detection with brain stem electric response audiometry. Arch Otolaryngol. 1977;103(4):181–187.
- 3.Mudry A, Mills M. The early history of the cochlear implant: A retrospective. JAMA Otolaryngol Head Neck Surg. 2013;139(5):446–453.
- 4.Beck DL. Interview with William F. House MD, president and founder, AllHear, Inc. AudiologyOnline. <https://www.audiologyonline.com/interviews/interview-with-william-f-house-1849-1849>. Published August 28, 2000.
- 5.House WF. The Struggles of a Medical Innovator. CreateSpace/Amazon Publishing; 2011.
- 6.Kricos PB. Audiologic management of older adults with hearing loss and compromised cognitive/psychoacoustic auditory processing capabilities. Trends Amplif. 2006;10(1):1-28.
- 7.Livingston G, Huntley J, Sommerlad A. Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. The Lancet. 2020;396(10248):P413-P446.



RECOMMENDED READINGS in Cognition and Audition and Amplification : Available in the online version of [The Hearingreview.com](https://www.hearingreview.com)