

COMMONWEALTH OF PENNSYLVANIA  
HOUSE OF REPRESENTATIVES

PROFESSIONAL LICENSURE  
COMMITTEE HEARING

STATE CAPITOL  
HARRISBURG, PA

MAIN CAPITOL BUILDING  
ROOM 418

TUESDAY, AUGUST 27, 2013  
1:00 P.M.

PRESENTATION ON  
SENATE BILL 137  
TO AMEND THE SPEECH-LANGUAGE  
AND HEARING LICENSURE ACT

BEFORE:

HONORABLE JULIE HARHART, MAJORITY CHAIR  
HONORABLE DAVID S. HICKERNELL, MAJORITY VICE CHAIR  
HONORABLE KEITH GILLESPIE  
HONORABLE SUSAN C. HELM  
HONORABLE MARGUERITE QUINN  
HONORABLE MARCY TOEPEL  
HONORABLE JOHN T. GALLOWAY  
HONORABLE MARC J. GERGELY  
HONORABLE JARET GIBBONS  
HONORABLE JORDAN A. HARRIS  
HONORABLE DANIEL T. MCNEILL

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*Pennsylvania House of Representatives  
Commonwealth of Pennsylvania*

## COMMITTEE STAFF PRESENT:

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MAJORITY RESEARCH ANALYST

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DEMOCRATIC EXECUTIVE DIRECTOR

DANIELLE CALEY

DEMOCRATIC LEGISLATIVE ASSISTANT

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SUBMITTED WRITTEN TESTIMONY

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P R O C E E D I N G S

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MAJORITY CHAIR HARHART: Okay. The hour of one o'clock has arrived, and good afternoon to everybody. I want to call this hearing of Professional Licensure Committee to order.

For proper recording and transcription purposes, I would like to ask all Members and testifiers to identify themselves and speak clearly into the microphones.

The first order of business is to take roll call. Michele, would you please take roll call?

(Roll was taken.)

MAJORITY CHAIR HARHART: Okay. Representative Jaret Gibbons is going to be sitting in for Representative Readshaw, who cannot be here with us. So he is acting chair for today's meeting.

We are holding this public hearing to take testimony on Senate Bill 137, which amends the Speech-Language and Hearing Licensure Act to update the provisions regarding audiologists and to eliminate the licensing of teachers of the hearing impaired under this Act.

I would like to begin with a panel of presenters from the Pennsylvania Academy of Audiology. If you'd all

1 please come forward. There is a group of you, correct?

2 DR. GONZALEZ: Yes.

3 DR. LORD: Yes.

4 MAJORITY CHAIR HARHART: Okay.

5 DR. LORD: Good afternoon.

6 MAJORITY CHAIR HARHART: Okay.

7 DR. LORD: Oh, I'm sorry.

8 MAJORITY CHAIR HARHART: No, that's okay. Before  
9 we begin doing this, because there are five of you, I will  
10 ask you to introduce yourselves and your title. Speak  
11 clearly into the mike because I do believe we are being  
12 televised.

13 DR. LORD: Okay.

14 MAJORITY CHAIR HARHART: So you may begin.

15 DR. LORD: All right. Thank you. Good  
16 afternoon. My name is Sherman Lord. I hold a doctorate  
17 degree in audiology from Salus University and am here  
18 representing the Pennsylvania Academy of Audiology as Vice  
19 President of Governmental Affairs.

20 Chairman Harhart, acting Chairman Gibbons, and  
21 all members of the Committee, thank you for the opportunity  
22 to speak before you today in support of Senate Bill 137,  
23 known as the Speech-Language Pathologists and Audiologists  
24 Licensure Act.

25 Our current licensure act is nearly 30 years old

1 having been enacted on December 21st, 1984. Since that  
2 time, the practice of audiology has evolved into a much  
3 more specialized profession with increased and demanding  
4 academic requirements in continuing education.

5 As far back as 1983, the American Speech Language  
6 Hearing Association, one of three national organizations  
7 that serve audiologists, concluded that the master's degree  
8 did not provide adequate professional preparation and  
9 recommended that a professional doctorate degree be the  
10 entry-level degree for the privilege to practice audiology  
11 in a clinical setting. The degree designator chosen was  
12 the Au.D., which is the degree that I hold.

13 There are now over 70 Au.D. training programs  
14 throughout the country, including three in Pennsylvania:  
15 Bloomsburg University, the University of Pittsburgh, and  
16 the Osborne College of Audiology at Salus University. Each  
17 provides a four-year course of study, the final year being  
18 a 12-month externship.

19 Approximately 13 years ago, the Board of  
20 Directors of the Pennsylvania Academy of Audiology  
21 recognized the need to amend our licensure law with respect  
22 to this new professional doctorate degree requirement. In  
23 fact, the target date established to fully convert the  
24 profession of audiology to a doctoring level was set for  
25 January 1st, 2007, yet almost seven years later, we in

1 Pennsylvania have a law that does not require new audiology  
2 licensure applicants to hold a doctoral degree. I'm sorry  
3 to say that Pennsylvania is only one of 11 States that  
4 still does not recognize the Au.D. as the minimum degree  
5 required to apply for a new license.

6 Another important outcome of the passage of  
7 Senate Bill 137 is that it will amend the current law to  
8 make it consistent with the manner in which audiology is  
9 currently practiced. The law in its present form is not  
10 consistent with current methods and procedures that  
11 audiologists are providing and performing every day in a  
12 variety of practice settings. Our goal is to put into  
13 statute what currently exists in regulation and is  
14 consistent with our current scope of practice.

15 Finally, I want to briefly mention the primary  
16 focus of today's hearing, and that is audiologists who  
17 provide intraoperative neurophysiological monitoring. I  
18 will defer to my colleagues who join me today on this panel  
19 to provide detailed information on the role audiologists  
20 play in the delivery of this specialized service. Suffice  
21 it to say that audiologists are not only extremely  
22 competent in the provision of this important service but  
23 have been the pioneers and leaders in the field of  
24 intraoperative neurophysiological monitoring for over 30  
25 years.

1 I respectfully ask that you vote in favor of  
2 Senate Bill 137 and thank you for your attention and  
3 consideration of this Bill.

4 And I will now turn this over to my colleague,  
5 Dr. Bray.

6 DR. BRAY: Thank you, Dr. Lord.

7 Chairpersons Harhart and Readshaw and members of  
8 the House Professional Licensure Committee, thank you for  
9 the opportunity to speak to you again. The last time I  
10 testified before this Committee was in 2010 in support of  
11 House Bill 1653 regarding the Speech-Language and Hearing  
12 Licensure Act. Today, I am here to testify in support of  
13 Senate Bill 137, a comprehensive rewrite of the earlier  
14 Bill following discussions, negotiations, and compromise  
15 with the Pennsylvania Academy of Otolaryngology and the  
16 Pennsylvania Medical Society.

17 I am requesting your support of Senate Bill 137  
18 to bring into the 21st century the licensing of  
19 audiologists in Pennsylvania.

20 I am Dr. Victor Bray, an audiologist, clinician,  
21 researcher, educator, administrator, and Dean of the Salus  
22 University Osborne College of Audiology in Elkins Park.  
23 The Osborne College of Audiology is one of the Nation's  
24 largest Doctor of Audiology training programs in the  
25 country and one of three Au.D. programs in Pennsylvania.



1           In response to an expanding knowledge base and  
2 proved technologies to assess hearing and balance function  
3 and new technologies to treat hearing loss and balance  
4 disorders, our professional academies and accrediting  
5 bodies decided in the early 1990s to move forward from a  
6 clinical master's degree profession to a clinical doctorate  
7 degree profession. All audiology training programs in  
8 America now award a Doctor of Audiology degree and there  
9 are no longer any accredited programs that award the  
10 master's degree in audiology.

11           It is important for me to emphasize that the  
12 master's degree in audiology, as specified in our current  
13 Pennsylvania Licensure Act, is no longer available through  
14 any accredited training program in the United States. The  
15 Pennsylvania law must be updated to reflect the change to  
16 the Doctor of Audiology requirement.

17           Of additional interest in this year's Bill is the  
18 scope of intraoperative monitoring, intraoperative  
19 neuromonitoring, or intraoperative neurophysiological  
20 monitoring. For today's discussions, these terms are  
21 synonymous and I will refer to the procedure as IONM.

22           One definition of IONM is that it's a technique  
23 that is directly aimed at reducing the risk of neurological  
24 deficits after operations that involve the nervous system.  
25 IONM is a technique that has evolved through the last two

1 decades. It makes use of recordings of electrical  
2 potentials from the nervous system through surgical  
3 operations.

4 IONM has been, is, and will continue to be within  
5 the nationally recognized scope of practice of audiology.  
6 The IONM section of the American Academy of Audiology scope  
7 of practice states, "Intraoperative neurophysiological  
8 monitoring: Audiologists administer and interpret  
9 electrophysiology measurements of neural function,  
10 including, but not limited to, sensory and motor evoked  
11 potentials, test of nerve conduction, velocity, and  
12 electromyography. These measurements are used in  
13 differential diagnoses, pre- and postoperative evaluation  
14 of neural function, and neurophysiologic intraoperative  
15 monitoring of central nervous system, spinal cord, and  
16 cranial nerve function."

17 The other association, ASHA, says that IONM has  
18 been part of the professional practice of audiologists for  
19 more than two decades and is included in the scope-of-  
20 practice documents for our professional organizations.  
21 IONM is provided for otolaryngology, neurosurgery, and  
22 vascular and orthopedic surgical services in academic and  
23 private medical institutions by hospital-based  
24 audiologists.

25 Moreover, some private practitioners focus their

1 practices on the IONM. For instance, in 2002, Surgical  
2 Monitoring Associates was recognized as one of the fastest-  
3 growing privately held companies in Philadelphia. Surgical  
4 Monitoring Associates is now a leading provider of IONM  
5 services serving more than 70 hospitals and surgical groups  
6 throughout the Northeast. Surgical Monitoring Associates  
7 was founded by Dr. Daniel Schwartz, an audiologist and one  
8 of the developing pioneers in the rapidly emerging  
9 specialty field of intraoperative neuromonitoring.

10           The Osborne College of Audiology trains graduates  
11 to enter the specialty area of IONM. Our program of study  
12 has 130 semester credits, including over 1,000 hours of  
13 lecture, 300 hours of laboratory, and 2,500 hours of  
14 clinical training. Inside our program, the training for  
15 IONM includes at least 8 of the 64 courses. These courses  
16 are first-year Head and Neck Anatomy and Neurosciences;  
17 second-year Instrumentation and Calibration, Auditory  
18 Electrodiagnostics I, Clinical Skills, Auditory  
19 Electrodiagnostics Lab; and third-year Auditory  
20 Electrodiagnostics II, Electrophysiological Evaluation of  
21 Auditory Processing Disorders, and Intraoperative  
22 Neurophysiological Monitoring.

23           The faculty for these courses are all doctoral-  
24 level Ph.D., Au.D., or M.D. faculty with specializations in  
25 anatomy, auditory cognition, auditory neuroscience,

1 computerized instrumentation, and neuroanatomy, with a  
2 final IONM course taught by an M.D. and Diplomate of the  
3 American Board of Neurophysiologic Monitoring, who is the  
4 cofounder of Bromedicon's IONM services, a nationwide  
5 provider of medical support services, including IONM.

6 In summary, let me emphasize that our graduates  
7 are fully prepared as Doctors of Audiology to safely and  
8 effectively perform the hearing and balance services needed  
9 by the public of Pennsylvania, and an update of the  
10 Pennsylvania Speech-Language and Hearing Licensure Act is  
11 needed to reflect today's scope of practice and current  
12 standards of care in the profession of audiology.

13 Thank you for allowing me this opportunity to  
14 testify before you.

15 MAJORITY CHAIR HARHART: Okay.

16 DR. GONZALEZ: Good afternoon. My name is Jorge  
17 Gonzalez. I am the interim Department Chair of Audiology  
18 and Speech Pathology at Bloomsburg University of  
19 Pennsylvania.

20 And I thank the Committee for the opportunity to  
21 speak here. I'm very grateful for the opportunity to speak  
22 toward the merits of Senate Bill 137, and specifically, I  
23 would like to discuss a little bit about the training of  
24 audiologists that we have specifically at Bloomsburg  
25 University.

1           The actual role of audiology or the place of  
2 audiology at Bloomsburg University has a long history.  
3 Starting back in 1932, we offered our first course within  
4 the communication disorders realm. Over the next several  
5 decades, what we've done is we've developed that program  
6 through a series of different developments in coursework  
7 and curriculum and so on. In 2002 we ended up adjusting  
8 our curriculum to reflect the expansion of the knowledge  
9 base that we need to have in audiology for the practice of  
10 that field, and as such, we have then transitioned over to  
11 a Doctorate of Audiology, or the Au.D. degree, at  
12 Bloomsburg University.

13           One of my roles as the interim Department Chair  
14 is to make sure that our department and our program  
15 maintains and is current within the scope of what we do  
16 within audiology, and as such, what I have to do is make  
17 sure that we develop our program to reflect what it is that  
18 we actually do and make sure that our students have the  
19 proper education within that context.

20           We've done that traditionally throughout all the  
21 coursework we have. Not only do we offer over 120 credits  
22 of coursework that are required both academic and clinical,  
23 what we've also done is tried to make sure our students  
24 have the best experience clinically in that regard as well.  
25 We have developed a number of different laboratory

1 availability for our students to then expand on their  
2 skills as they go through, and what we have also done is  
3 tried to keep that same mindset when we've been dealing  
4 with IOM, intraoperative neuromonitoring.

5           With the IOM program, what we have done is we  
6 realized that there were some deficiencies in some of the  
7 ways that training has traditionally been done, and  
8 therefore, what we've done is expanded that breadth of  
9 knowledge for all of our students. Not only do we offer  
10 the traditional track of audiology, what we've also done is  
11 we've gone ahead and created an IOM-specific track for our  
12 students. That IOM-specific track actually takes and  
13 involves a series of nine specific courses that deal with  
14 all the topic areas we would be dealing with with  
15 intraoperative monitoring.

16           Those courses cover things such as spinal  
17 surgeries in two different capacities; we deal with  
18 somatosensory evoked potentials, motor evoked potentials,  
19 craniotomy types of surgeries; we deal with how we would do  
20 monitoring during brain mapping procedures as well; and  
21 also looking at effects of anesthesia on the surgical  
22 processes that we would be monitoring in those contexts.

23           What we always have striven to achieve is to have  
24 all of our students be very competent, very good clinicians  
25 that are able to act as part of that surgical team to help

1 minimize any problems that may arise when it comes time to  
2 the surgical event. That is the role of the audiologist.  
3 We are there to help with the surgical team, minimize any  
4 damages during these complicated neurophysiologic and  
5 neurosurgical procedures. And that is what we do.

6 One of the things that we realize is that there  
7 are not a lot of people that are properly trained in IOM,  
8 and some of my colleagues here will discuss that in just a  
9 few moments. But what we've tried to do is make sure that  
10 we can give our students the best knowledge that they can  
11 get so that they can act as part of that team and be very  
12 good, competent clinicians for the benefit of the surgeons  
13 and also the patients who are citizens of the Commonwealth.

14 We are not in any effort trying to usurp or ask  
15 for things that we have not been doing. Audiology has been  
16 within our scope of practice for many years. In fact, my  
17 predecessor at Bloomsburg was one of the individuals who  
18 worked with some of the pioneering techniques that we have  
19 while he was at the University of Pittsburgh. So we're  
20 asking just to maintain those things that we've been doing  
21 for years and also make sure that we can give the proper  
22 training and the acknowledgment of that skill for the  
23 audiologists that we have and the citizens of the  
24 Commonwealth.

25 Thank you.

1 DR. HALE: Hello. Good afternoon. My name is  
2 Tyson Hale. I'm a neurophysiologist, Doctor of Audiology  
3 employed by Geisinger Health System. I just wanted to  
4 thank the House Professional Licensure Committee and  
5 Chairwoman Harhart for the opportunity to speak today on  
6 this hearing about intraoperative monitoring. And also I'm  
7 honored to present testimony in support of Senate Bill 137  
8 sponsored by Senator Gordner, which would incorporate IOM  
9 into an audiologist's scope of practice.

10 I obtained my Doctorate of Audiology from  
11 Bloomsburg University in the IOM track like Dr. Gonzalez  
12 was just talking about. There I received all my special  
13 coursework and training in IOM and also completed a full  
14 one-year residency in intraoperative monitoring. After  
15 having gone through the program, I think it would be safe  
16 to say that Bloomsburg University audiologists are  
17 competent neurophysiologists and ready to provide IOM  
18 services, the ones that have gone through the IOM track.

19 I kind of wanted to quickly talk about how IOM is  
20 performed in the State of Pennsylvania, just the setup.  
21 Specifically, at Geisinger Health System anyway, you would  
22 have a technologist or a trained audiologist in the  
23 operating room who would set up a case for a surgery and  
24 continuously acquire data from a patient, and a physician  
25 or an oversight physician logs in and monitors the case.



1 In this sense, audiologists are functioning in the same  
2 regard as a technician. Technicians can have varying  
3 credentials from a high school diploma to a Doctorate of  
4 Audiology.

5 I want to get to the point of a physician here,  
6 which would be a Doctor of Medicine or an M.D. or a Doctor  
7 of Osteopathic Medicine, a D.O. There's two main  
8 challenges with requiring physician oversight in  
9 Pennsylvania. One, there's a shortage of physicians; and  
10 two, there's a lack of IOM training among many physicians  
11 who provide this oversight service.

12 The use of IOM during surgeries is increasing  
13 with a predicted 8 percent rise a year through 2016.  
14 There's a current estimated 750,000 cases a year being  
15 monitored. Conversely, it's estimated there's fewer than  
16 500 medical professionals monitoring these cases.  
17 Geisinger alone has increased the use of IOM to  
18 approximately 500 percent in five years. We're just about  
19 over 1,000 cases being monitored a year.

20 Due to the increased rate of IOM in surgeries,  
21 there's also an increase in demand for professional  
22 oversight. Unfortunately, patients are at risk. Without  
23 the service available, just at Geisinger, there's been many  
24 occasions that we've had surgeons having an emergent case  
25 that they would have otherwise been able to use IOM, but it

1 wasn't available because our oversight physicians were not  
2 available and there wasn't enough time to wait for an  
3 outsource company. It was ultimately justified to do these  
4 surgeries despite the risk of neurological complications.  
5 And many of these situations I could have, as a trained  
6 audiologist, been available to provide the surgery with  
7 this important service.

8           Further complicating the matter is a new Medicare  
9 policy released in January of '13, and they would basically  
10 allow a one-to-one-physician-monitoring-a-case policy,  
11 whereas before, a physician could monitor three cases at  
12 one time. Now, it's one.

13           Just to conclude, allowing this legislation to be  
14 updated by incorporating IOM into an audiologist's scope  
15 provided they had appropriate training is long overdue, and  
16 the Speech-Language and Hearing Licensure Act of 1984 has  
17 been unchanged for the last 30 years. It's time to update  
18 these outdated laws and regulations.

19           Many other States and three national audiology  
20 societies include IOM into an audiologist's scope of  
21 practice, so by passing this Senate Bill, you'll not only  
22 help to alleviate some of the problems with the lack of  
23 training and the physician shortage, but you'll also help  
24 to increase the quality of patient care.

25           Again, thank you for allowing me this opportunity

1 to speak.

2 DR. SCHWARTZ: Good afternoon. My name is  
3 Dr. Daniel Schwartz. I am one of the pioneering founders  
4 of the entire discipline of intraoperative  
5 neurophysiological monitoring having practiced it for now  
6 33 years, long before there was a recognized profession and  
7 long before most people in the United States had ever even  
8 heard of this discipline.

9 I was the founding developer of the program of  
10 intraoperative neurophysiological monitoring at the  
11 Hospital of the University of Pennsylvania beginning in  
12 1981 when I suspect my neurology colleagues were in  
13 college.

14 I continued at the University of Pennsylvania  
15 Medical Center building what was recognized as one of the  
16 most advanced neurophysiological monitoring programs in the  
17 country until 1991 when I decided to go into private  
18 practice because there was such a great need in  
19 Philadelphia and the surrounding areas from community-based  
20 hospitals and other academic medical centers that did not  
21 have this highly regarded service available for patient  
22 safety.

23 As a consequence, I went on to build and develop  
24 one of the largest, most advanced private practices of its  
25 kind in the United States, housed in Philadelphia,

1 providing intraoperative neurophysiological monitoring  
2 services to such institutions as the Children's Hospital of  
3 Philadelphia, Hahnemann Hospital, Thomas Jefferson  
4 University Hospital, and Thomas Jefferson Hospital for the  
5 Neurosciences, Pennsylvania Hospital of the University of  
6 Pennsylvania, Presbyterian University Hospital of the  
7 University of Pennsylvania, as well as probably better than  
8 50 outlying smaller community hospitals such as Mainline  
9 Health, including Lehigh Valley Hospital, and historically  
10 Wilkes-Barre, Geisinger, and pretty much every nonacademic  
11 hospital or academic hospital in and around the  
12 Philadelphia area.

13           Neurology did not become involved in  
14 intraoperative monitoring in Philadelphia until the late  
15 1990s. I was the one that directed it, and when I left the  
16 University of Pennsylvania Medical Center, the director of  
17 audiology from Temple University Medical Center, who had  
18 been directing their intraoperative monitoring, took my  
19 place. And I went on into private practice.

20           I think that I can sit here today and guarantee  
21 what the history of this field actually is. I've published  
22 probably as much or more than any currently practicing  
23 individual in the United States and have led most or a good  
24 number of the groundbreaking articles to improve the safety  
25 of patient care in all different types of surgeries across

1 the entire surgical spectrum.

2 I think I can best sum up these issues in an  
3 article that was recently published in 2010 in the journal  
4 *Spine* by Dr. John Dormans, who is the current Chief of  
5 Pediatric Orthopedic Surgery at the Children's Hospital of  
6 Philadelphia. "Availability, training, and experience of  
7 neuromonitoring personnel may set practical limits on the  
8 type and quality of neuromonitoring provided in a given  
9 setting. Specifically, there are a limited number of  
10 trained and certified individuals for technical support  
11 and/or professional clinical interpretation of  
12 neuromonitoring data. Further, there is no single agreed-  
13 on training or certifying pathway or entity.

14 In North America, many monitoring providers are  
15 uncredentialed technicians with no formal training or  
16 higher-level education. Some may not have the background  
17 in anatomy, physiology, and anesthesiology and surgery  
18 needed to interpret changes in monitoring data. Such  
19 limited educational preparation promotes use of pre-  
20 prescribed 'cookbook' approach rather than development of a  
21 patient's specific neuromonitoring plan based on risk  
22 factors, surgical strategy, and anesthetic variables.

23 Adding to the problem of who is best qualified to  
24 perform neuromonitoring based on training, education, and  
25 experience is a lack of agreement as to who is best

1 qualified to interpret neuromonitoring data. Although some  
2 physician specialty groups maintain that interpretation of  
3 neuromonitoring data represents 'the practice of medicine,'  
4 this is far from a consensus opinion.

5 A license to practice medicine does not equate to  
6 competency or knowledge in intraoperative monitoring.

7 Indeed, there is increased recognition that historically  
8 the contributions of Ph.D.s and other nonphysician  
9 doctoral-level professionals who are well versed in both  
10 the technical and interpretive aspects of neuromonitoring  
11 have been pivotal in the development of the field and the  
12 delivery of high-quality neuromonitoring services. Review  
13 of the evolution of neuromonitoring as a subspecialty shows  
14 that most of the pioneers were Ph.D.s with vast experience  
15 in evoke potential testing and interpretation. In fact,  
16 the first dedicated scope-of-practice statement from a  
17 professional organization for the practice of broad-based  
18 intraoperative neuromonitoring was for licensed  
19 audiologists with evidence of specialty expertise in  
20 neuromonitoring.

21 Over what is now three decades of intraoperative  
22 neurophysiological monitoring during scoliosis and other  
23 spinal deformity surgery, nonphysician professionals have  
24 proven no less competent or worthy of interpreting  
25 neuromonitoring data than experienced physicians in general

1 or neurologists in particular. Because they devote their  
2 professional efforts exclusively to neuromonitoring and  
3 deliver hands-on services in the operating room on a  
4 regular basis, these doctoral-level nonphysician  
5 professionals are often the best qualified to render  
6 meaningful data interpretation." That's Dr. John Dormans,  
7 the current Chief of Pediatric Orthopedic Surgery at the  
8 Children's Hospital of Philadelphia.

9 I would like to add that the American Speech-  
10 Language-Hearing Association has had a dedicated scope of  
11 practice in neuromonitoring since 1992. It was the first  
12 and actually remains the only professional society that has  
13 such a dedicated scope of practice.

14 Lastly, the Scoliosis Research Society, in their  
15 document reviewing spinal cord monitoring, highlights the  
16 role of audiologist equivalent to any physician who has  
17 similar training and background. Audiology has a board  
18 certification dedicated to intraoperative  
19 neurophysiological monitoring. As well, it has a 33-year  
20 history of involvement in neurophysiological monitoring.

21 I will end by reading a very short notation from  
22 Denis Drummond, who is the immediate past Chief of  
23 Orthopedic Surgery at the Children's Hospital of  
24 Philadelphia. And this is what he says. It's written  
25 about me, unbeknownst to me. "Daniel Schwartz, Ph.D., a

1 long-time colleague of mine, has reported the best data on  
2 this technique, the most recent report and collaborations  
3 with his colleagues at CHOP. He has clearly been the  
4 leader in this field and has been at the forefront of  
5 multimodality spinal cord monitoring. Also, he has  
6 published the seminal studies in this discipline."

7 I would ask that, as an audiologist, if over 33  
8 years audiologists, not only myself but throughout the  
9 United States, who have pioneered this field were good  
10 enough to provide the service at institutions such as the  
11 University of Pennsylvania Medical Center or the Hospital  
12 of the University of Pennsylvania; Thomas Jefferson  
13 University Hospital; Hahnemann University Hospital; Temple  
14 University Hospital; the old osteopathic hospital in  
15 Philadelphia, Philadelphia Osteopathic Hospital; as well as  
16 such renowned institutions as the University of Michigan;  
17 at San Diego Children's Hospital; University of Oregon  
18 Medical Center; University of Oklahoma Medical Center; and  
19 community hospitals throughout the United States whose  
20 intraoperative neuromonitoring is provided by audiologists,  
21 then I would submit that we have earned the role and the  
22 right to be considered experts in this field. This is not  
23 a matter of exclusion. This is a matter of patient access.  
24 This is a matter of there aren't simply enough really  
25 qualified, highly qualified and trained professional-level



1 personnel to provide the service without the continuing  
2 role of the audiologist.

3           And I end in a statement from the American  
4 Medical Association. It is in regard to terminology used  
5 as to who is a recognized provider of a clinical service.  
6 "A physician or other qualified healthcare professional is  
7 an individual who is qualified by education" -- read that  
8 audiologist -- "training" -- read that audiologist --  
9 "licensure regulation when applicable and facility  
10 privileging when applicable, who performs a professional  
11 service within his or her scope of practice and  
12 independently reports that professional service." That  
13 means independent without any oversight. That is the AMA  
14 definition.

15           Audiologists are licensed, audiologists have the  
16 expertise and experience and the training, and they  
17 certainly have the oldest scope of practice dedicated to  
18 intraoperative neuromonitoring in the United States. I  
19 think they've earned that right.

20           Thank you.

21           MAJORITY CHAIR HARHART: Thank you. Now, we'll  
22 take questions. And any of the Members have questions?

23           Representative Harris?

24           REPRESENTATIVE HARRIS: Thank you, Madam Chair.

25           So I am not going to even try to act like an

1 expert on anything that you just said, and quite frankly, a  
2 lot of the stuff that you were talking about I wasn't even  
3 born when you were doing, so I won't do that.

4 I do have a couple questions. The raising of the  
5 level from a master's degree to a doctoral degree, are  
6 there any practicing audiologists who are at the master's  
7 level who will no longer be allowed to practice when this  
8 rises to the doctoral level?

9 DR. LORD: No. Current licensees will continue  
10 to be able to renew their license just like any other  
11 person in Pennsylvania who holds a license in audiology,  
12 every two years, provided they meet the continuing  
13 education requirements that are stipulated in regulations  
14 as they exist right now. But what will change is new  
15 applicants, once this new law is enacted and whatever date  
16 we define as that transition date, must produce credentials  
17 that show that they carry a doctoral degree. But current  
18 licensees who hold a master's degree will not be affected  
19 by this new law.

20 REPRESENTATIVE HARRIS: Okay. And my follow-up  
21 to that, I think I heard you say this, but I want to be  
22 sure that there aren't any more master's level programs  
23 that are teaching students at the master's level. So there  
24 won't be any students caught in a pipeline either?

25 DR. LORD: That's correct. To my knowledge, and

1 I'll ask Drs. Bray or Gonzales to correct me if I'm wrong,  
2 I think the last master's program graduated students in  
3 December 2006.

4 REPRESENTATIVE HARRIS: Okay. Okay. Thank you.  
5 Thank you, Madam Chair.

6 MAJORITY CHAIR HARHART: Before we go on with  
7 questions, I do want to recognize Representative Gergely,  
8 who has joined us. Thank you.

9 Representative Gillespie.

10 REPRESENTATIVE GILLESPIE: Thank you, Madam  
11 Chairman. Thank you, panel, for your testimony today.  
12 It's very informative.

13 How would you compare your training to that of a  
14 neurophysiologist, the physician counterpart?

15 DR. SCHWARTZ: In medical school, both take  
16 coursework in neuroanatomy and neurophysiology, and in  
17 fact, the board-certifying exam for audiologists in  
18 intraoperative monitoring requires it. Both have now  
19 coursework that will cover specific types of testing  
20 procedures and the interpretation of those tests that would  
21 be applicable for the operating room as well as information  
22 regarding the anesthetic influences.

23 Physicians, by their very nature, are not at all  
24 trained in specifics of intraoperative neurophysiology.  
25 They are trained in medicine. Intraoperative

1 neurophysiology is a very, very restrictedly defined  
2 discipline, and it requires information from many aspects  
3 within general anatomy and physiology and surgery and  
4 anesthesia, as well as a lot of things that are related to  
5 audiology when it comes to ideas such as signal detection  
6 theory, how to differentiate when there is a change in  
7 patient behavior in the operating room. That is nothing  
8 that is allied to medicine, which is the key to  
9 intraoperative monitoring, but is highly regarded as a  
10 teaching discipline in audiology. So there is crossover.

11           Training of a neurologist is not at all within  
12 the discipline of intraoperative neurophysiological  
13 monitoring. They take a residency in neurology and they  
14 may take a fellowship in neurophysiology, most often in  
15 electroencephalography for epilepsy, for example, or  
16 electromyography for the diagnosis of neuromuscular  
17 disease. And it's only been in very, very recent years  
18 that there's been any neurology involvement on a teaching  
19 basis within their fellowships long after audiologists have  
20 been involved in this for intraoperative monitoring.

21           I see a neurologist in back of me from the  
22 Hospital of the University of Pennsylvania. He came to the  
23 University of Pennsylvania a decade-and-a-half after I  
24 developed the program, so I think that that program had a  
25 long history and I think the crossover is very clear.

1           Again, it's not to be equated with the license to  
2 practice medicine. There has to be competency. Audiology  
3 has a competency board examination and certification to  
4 demonstrate it.

5           REPRESENTATIVE GILLESPIE: Okay. Well, with that  
6 answer, has there ever been an occasion where you've had to  
7 reach out to a physician to help with interpreting a test  
8 or doing an IOM procedure, you or any of the other folks?

9           DR. SCHWARTZ: No, and quite the opposite. I  
10 have, over my years, had many calls from physicians, and  
11 the audiologists that have been on my staff that I have  
12 personally trained over the 33-year period -- I've had as  
13 many as 15 audiologists on my staff -- are all currently  
14 practicing in the Pennsylvania area, are all highly  
15 regarded working at hospitals such as CHOP, Lehigh Valley,  
16 Thomas Jefferson. There is no physician; there are no  
17 neurologists. The neurologists don't have anything to do  
18 with those hospitals in terms of those programs. They're  
19 run by many audiologists.

20           REPRESENTATIVE GILLESPIE: Okay. Thank you. Any  
21 of the other fellows had any times where you've had to  
22 reach out to a physician for interpretation or for help?

23  
24           (No audible response.)  
25

1                   REPRESENTATIVE GILLESPIE: Okay. Thank you,  
2 Madam Chairman.

3                   MAJORITY CHAIR HARHART: Thank you.  
4 Representative Quinn.

5                   REPRESENTATIVE QUINN: Thank you. And I'd like  
6 to follow up on Representative Gillespie's comments.

7                   This has been very interesting. I saw that this  
8 was about audiology and so I thought I was coming to a  
9 hearing on hearing, and it's certainly been enlightening.

10                  Dr. Schwartz, I'm going to follow with you if you  
11 don't mind and I'm going to use the acronym because it's a  
12 mouthful here. You just said the IONM, "it's a very, very  
13 restrictedly defined discipline." When you say that, it  
14 causes concern for me when you have a patient with  
15 complexities beyond what could be in those medical  
16 complexities. When you're there, you are in the operating  
17 room and your focus is on the audiology and those that you  
18 just discussed, but what happens when you have that complex  
19 surgical patient, the patient with medical needs that go  
20 well beyond your very extensive and impressive scope of  
21 training?

22                  DR. SCHWARTZ: Thank you. That's an excellent  
23 question.

24                  The patient in the operating room, first of all,  
25 yes, the audiologist is present, which is very different

1 than the neurology model. The neurology model is to send a  
2 technician into the operating room that may have no  
3 background, no education, no experience, and they sit  
4 behind a computer most often, not always, but most often  
5 that could be in an office, could be miles away, could be  
6 States away. And they supervise or oversee this  
7 technician. Unfortunately, the human body doesn't wait and  
8 the human body doesn't transmit over the internet. The  
9 human body, when changes occur, they occur instantaneously.

10 A trained audiologist who specializes in  
11 intraoperative neurophysiology understands very clearly the  
12 complexity of patient disease relative to the development  
13 of a particular strategy and interpretation of the data  
14 that they're monitoring to survey the nervous system of  
15 that patient so that comorbidities if you will, for  
16 example, a child that presents with cerebral palsy and  
17 presents with pulmonary dysfunction and presents with other  
18 comorbidities that may affect neurophysiological  
19 monitoring, the audiologist, surgical neurophysiologist has  
20 to be well versed in that. And they are. They have  
21 training in it and they get it by experience no different  
22 than the neurologist. If that neurologist has to learn  
23 what are the effects of those comorbidities, it's not  
24 taught to them specifically in a classroom. It's gained  
25 through experiential knowledge.

1           Also, remember that the audiologist, surgical  
2 neurophysiologist is not treating the patient; that's the  
3 surgeon. There's also an anesthesiologist in the room.  
4 This is a team effort. The audiologist is responsible for  
5 surveying the nervous system that might be at risk for  
6 injury and to communicate any changes in nervous system  
7 behavior and also determine what might have occurred that  
8 led to that change, and then in concert with the surgeon  
9 and anesthesiologist develop an interventional strategy to  
10 reverse it so that the patient awakes whole if you will.

11           So the training is there, the experience base is  
12 there, and no different than the physician would have to  
13 gain that experience base.

14           REPRESENTATIVE QUINN: Okay. Thank you. And  
15 then to practice independent of the physician, can you  
16 speak to the advantages to the patient as well as the  
17 disadvantages to the patient?

18           DR. SCHWARTZ: This is not a question of  
19 advantage; this is a question of access to competency.  
20 Nobody at this table, myself included, wants to restrict  
21 anybody from practicing that has verifiable competency,  
22 audiologists included. There is an audiology board  
23 certification that verifies competency in this field.  
24 There is a scope of practice that states in the audiology  
25 scope of practice since 1992 the development of coursework,



1 the type of training, the type of experience that the  
2 individual might have.

3           The same must hold true of a physician but there  
4 isn't. The physician is operating by nature of this global  
5 license to practice medicine, but that global license to  
6 practice medicine offers no specific knowledge database, no  
7 fundamental training specific to neurophysiological  
8 monitoring, and there is no singular board-certifying exam  
9 for a physician. It is encumbered in the  
10 neurology/neurophysiology exam where there are some  
11 questions on intraoperative monitoring but they've done a  
12 fellowship in other aspects. And that has been the  
13 historical. It's only been in the last few years where  
14 they have tried to key in on intraoperative  
15 neurophysiological monitoring long after the audiologists  
16 have been involved.

17           REPRESENTATIVE QUINN: Thank you, Doctor. Your  
18 testimony has been very interesting.

19           DR. SCHWARTZ: Thank you.

20           DR. LORD: If I might add to that, just to point  
21 out our response to concerns that were expressed by some  
22 professional organizations about the training and  
23 credentialing of audiologists for performing intraoperative  
24 neurophysiological monitoring, as part of Senate Bill 137  
25 prior to its passage in the Senate, that Bill was amended

1 to add credentialing established via the licensure board  
2 for IONM services. So just by virtue of the fact that a  
3 student graduates with a doctoral degree in audiology does  
4 not -- in Pennsylvania, I might add. This is not in any  
5 other State to my knowledge. Any other licensure law in  
6 the U.S. for audiologists does not stipulate additional  
7 credentialing documentation.

8 We have added that to this Bill to appease and  
9 set aside any concerns that anyone might have that, just by  
10 virtue of obtaining a doctoral degree in audiology you're  
11 going to go out and perform this service the next day;  
12 that's not the case. Our concern is patient safety and  
13 we've addressed that with this credentialing process.  
14 We've put it in the hands of the licensure board to handle  
15 this issue because there are a variety of credentialing  
16 opportunities. Dr. Schwartz just mentioned one through the  
17 American Speech-Language-Hearing Association.

18 So I want to make sure that everybody understands  
19 that we see this as an issue of concern and we wanted to  
20 address it.

21 REPRESENTATIVE QUINN: Thank you. Thank you,  
22 Madam Chair.

23 MAJORITY CHAIR HARHART: You're welcome. Anybody  
24 else?

25 Representative Harris.

1                   REPRESENTATIVE HARRIS: Just as interesting, so  
2 I'm trying to kind of get a handle on it, who's in the room  
3 for the IOM process? Who are all the folks in the room  
4 under this that you're supporting? Who's in that room?

5                   DR. SCHWARTZ: There have been two models. The  
6 first model of intraoperative monitoring was the model that  
7 I helped develop beginning in 1981. The field was actually  
8 supposed to be a field of professionals. Those  
9 professionals were, as I indicated, historically Ph.D.s  
10 primarily coming from the field of audiology, and much  
11 later in time neurologists and other physicians became  
12 interested in this field, and I'll say tangentially when  
13 the third-party carriers decided that they would be willing  
14 to reimburse for it.

15                   In the case of audiologists, the audiologist  
16 actually most typically goes into the room and not only  
17 delivers the service from a technical perspective but is  
18 there to interpret the information in the room directly  
19 communicating with the surgeon directly, communicating with  
20 the anesthesiologist directly so that there is hands-on,  
21 onsite information transmitted from moment to moment. That  
22 is the best way to do this. Anything that is done from a  
23 distance is not as ideal.

24                   And I had referenced this article by Dr. John  
25 Dormans. It's called "Establishing a Standard of Care of

1 Neuromonitoring." He also addresses the whole idea of  
2 remote monitoring and says that it is not the ideal. The  
3 ideal is being in the room. That's what audiologists  
4 typically do. They go in the room. They provide the  
5 patient care. In general, physicians don't go into the  
6 room. Again, I say that in general. Are there  
7 individuals? Yes. But in general, audiologists provide  
8 the professional care in the room; physicians are outside.  
9 They're in an office. They're seeing patients. They are  
10 looking at a screen. Unfortunately, when issues arise  
11 during surgery, by the time that something can be done over  
12 a screen, it often can be too late.

13 REPRESENTATIVE HARRIS: And that leads me to my  
14 second question. Okay, I understand who's in the room.  
15 Now, what happens if something goes wrong? Who has the  
16 training to sustain life or sustain whatever? If the worst  
17 of the worst happens, who's in that room to help that  
18 patient that actually has the training?

19 DR. SCHWARTZ: It's a good question. The answer  
20 is very simple. Whether it's the audiologist in the room  
21 providing the neuromonitoring or any physician in the room  
22 providing the neuromonitoring, they are not the direct  
23 responsible party for that patient's life. It is the  
24 surgeon and the anesthesiologist. The surgical  
25 neurophysiologist/audiologist/neurologist is an addendum,

1 an adjunct to the surgeon to provide neurophysiological  
2 surveillance for this patient to identify emerging injury  
3 during the course of surgery. Once that emerging injury is  
4 identified, that information is transmitted verbally to the  
5 surgeon, discussed with the anesthesiologist, but it is the  
6 surgeon who is always the captain of the ship.

7 REPRESENTATIVE HARRIS: And lastly, and I  
8 apologize for prolonging this but I'm trying to understand  
9 where we're going with this, the last part is your  
10 services, the audiologists' services, are those services  
11 covered by many of the healthcare that you would get from  
12 the State, for example, CHIP? Are those kind of services  
13 covered? Like would somebody in my district, a young  
14 person in my district who has hearing problems, would their  
15 CHIP or something like that, would this cover that expert  
16 service?

17 DR. SCHWARTZ: As long as there was recognition  
18 of the license for audiologists, then yes, there are  
19 reimbursable providers. As the CPT code that I read you  
20 from the American Medical Association, that's the  
21 definition of a qualified provider for delivering a  
22 healthcare service that is recognized whether it be a State  
23 agency or a private third-party carrier.

24 I think it's critical that everybody understand  
25 that this is an issue of patient access, particularly with

1 the onset of the new healthcare act where that access needs  
2 to be available to a much broader population. If this is  
3 restricted to a small group of neurologists in one or two  
4 academic medical centers in this entire State because, as I  
5 indicated, I had a private practice that, as an  
6 audiologist, did over 70 hospitals in this State.

7           And if you're talking about not allowing such an  
8 amendment to this Licensure Bill for something that  
9 audiologists have been practicing for three decades and  
10 restricting it only to a physician, then basically you  
11 restrict access because there's simply not enough qualified  
12 physicians at all, whether they be neurologists or anybody  
13 else or training programs for physicians or anything else  
14 to cover the current demand, let alone the demands that  
15 will occur in the future.

16           REPRESENTATIVE HARRIS: Thank you, Madam Chair.

17           And I want to thank you. The reason why I've had  
18 so many questions about this is because I've had six sets  
19 of tubes in my ears when I was a child, and I'm hard of  
20 hearing in one of my ears. And I can tell you for a fact  
21 that children throughout this Commonwealth who do not have  
22 the access to that type of care grow up at a disadvantage.  
23 And I know personally that because my mother had a certain  
24 type of medical care, that I was afforded the opportunity  
25 to get services that other young people did not get. So

1 that's why this is an important issue to me. So thank you,  
2 Madam Chair.

3 MAJORITY CHAIR HARHART: Representative Quinn,  
4 follow-up?

5 REPRESENTATIVE QUINN: Yes, thanks, one more  
6 question here.

7 When you're speaking about the role in the  
8 operating room, do you have to carry the same type of  
9 medical malpractice insurance that the physicians in the  
10 room would?

11 DR. SCHWARTZ: Oftentimes more.

12 REPRESENTATIVE QUINN: Okay.

13 DR. SCHWARTZ: But the answer is absolutely you  
14 have to carry malpractice insurance and, in addition, when  
15 you stop practicing, you have to carry tail insurance. I  
16 serve as an expert witness all over the United States.  
17 Again, I think that that is testimony to the competency of  
18 audiologists, and we have to function no differently. This  
19 is an equitability statement.

20 REPRESENTATIVE QUINN: Thank you.

21 MAJORITY CHAIR HARHART: Representative Toepel.

22 REPRESENTATIVE TOEPEL: A quick follow-up  
23 question to the comment on patient access, who determines  
24 whether your services are needed in the operating room for  
25 a surgical procedure? Because you're saying there's

1 somewhat of a shortage of the audiologists who can perform  
2 this service. And I want to let you answer that and then I  
3 think I have another question.

4 DR. SCHWARTZ: Thank you. That's an excellent  
5 question.

6 Every request for intraoperative  
7 neurophysiological monitoring that comes in comes from the  
8 surgeon, directly from the surgeon's office. One would  
9 think that if the surgeon didn't believe that an  
10 audiologist was competent, he wouldn't place his patient in  
11 the position of being monitored by an audiologist without  
12 physician oversight, but that's not the case and it hasn't  
13 been the case for three decades.

14 I think that, again, for me as an audiologist, I  
15 have published most of the landmark or a number of the  
16 landmark articles for the techniques that are currently  
17 used today, including most hospitals throughout the United  
18 States, particularly in children. And I would believe that  
19 if you ask the myriad surgeons in and around Philadelphia  
20 about my competency or the competency of the other  
21 audiologists that worked on my staff, they would have  
22 accolades to say and they have no problems.

23 Again, there simply is not available access, and  
24 every professional that has true competency that is able to  
25 be validated, and that's the key. This Licensure Bill says



1 it must be able to be validated. You have to show the  
2 credentials, but it needs to be able to be validated  
3 regardless of who it is, whether it's an audiologist or a  
4 physician. It must be able to be validated.

5 REPRESENTATIVE TOEPEL: Then just a quick  
6 question for clarification. The monitoring -- this is all  
7 new to me -- does that extend beyond the operating room?  
8 Does the monitoring go on into recovery and after that  
9 where you're monitoring the patient?

10 DR. SCHWARTZ: It can. It can, except for  
11 certain types of surgical procedures, most often not.  
12 There are some procedures such as brain aneurysms, et  
13 cetera, in which there might be additional monitoring  
14 beyond the operating room, but the vast, vast majority of  
15 time, 99.9 percent of the time in most institutions it is  
16 the operating room.

17 REPRESENTATIVE TOEPEL: Thank you very much.

18 DR. SCHWARTZ: You're quite welcome. Thank you.

19 MAJORITY CHAIR HARHART: Representative Gibbons.

20 REPRESENTATIVE GIBBONS: One of you mentioned  
21 that the IONM, it is something that if the services aren't  
22 available for some reason, the surgery may go forward  
23 without that. I believe that was in one of your  
24 testimonies was that it's acceptable, I guess, to go  
25 forward without but it's not, I guess, advised or is not as

1 safe?

2 DR. SCHWARTZ: Yes, I think that there are times,  
3 for example, this is again a manpower issue. If you have a  
4 very small minority of neurologists that are the only ones  
5 dedicated or restricted if you will, if this were not to  
6 pass and you said it can only be a neurologist and there  
7 only two or three, four neurologists in the entire State  
8 that want to do this -- most of them don't want to do this.  
9 We're talking about spending 8, 10, 12, 15 hours in an  
10 operating room 7 days a week because there are emergencies,  
11 auto accidents, tumors where the patient begins to change  
12 their neurologic function. This is not an 8:00-to-5:00  
13 job, and if there's not patient access to it, then surgeons  
14 have to make a decision to operate without it. And that's  
15 a patient-safety issue.

16 And over 33 years, that has occurred on more than  
17 a small number of occasions because there's simply not  
18 enough competent, dedicated professionals that this is what  
19 they do and this is all that they do. And sending a  
20 technician in the room on the weekend or at two o'clock in  
21 the morning without proper professional oversight is  
22 inadequate.

23 REPRESENTATIVE GIBBONS: Okay. And one final  
24 thing getting away from IONM back to another part of the  
25 Bill, in the synopsis of the Bill it talks about

1 eliminating the licensure requirements for teachers of  
2 hearing impaired. Why are we doing that?

3 DR. LORD: Primarily because teachers of the  
4 hearing impaired are certified by the Pennsylvania  
5 Department of Education for teaching in school settings  
6 primarily. And in the Bill when it was written almost 30  
7 years ago, I mean I was there at the time; I don't remember  
8 the exact nature of what was discussed, but I can say now  
9 that at a hearing that was held before this Committee two  
10 years ago, two individuals testified, one representing the  
11 Pennsylvania School for the Deaf in Philadelphia, the other  
12 representing the Western Pennsylvania School for the Deaf  
13 both testified to state that they no longer felt the need  
14 to be involved in this Bill.

15 REPRESENTATIVE GIBBONS: Okay.

16 DR. LORD: So, unfortunately, I can't give you  
17 the specific nature of the rationale 30 years ago, but now,  
18 they don't see a need for this because their certification  
19 is covered by the Department of Education.

20 DR. GONZALEZ: And if I may add to that, it also  
21 was an additional burden for licensure that those  
22 individuals needed to now hold, which would have already  
23 been covered through the Pennsylvania Department of  
24 Education.

25 REPRESENTATIVE GIBBONS: Okay. Thank you.

1 MAJORITY CHAIR HARHART: Okay. Thank you,  
2 gentlemen, very good testimonies and good question-and-  
3 answering. I thank you very much---

4 DR. BRAY: Thank you.

5 MAJORITY CHAIR HARHART: ---for your testimony.

6 Okay. The next testifier is Michael McGarvey,  
7 M.D., Associate Professor of Neurology and Director of  
8 Intraoperative Monitoring Programs at Hospital of the  
9 University of Pennsylvania. You may begin your testimony  
10 whenever ready.

11 DR. MCGARVEY: Good afternoon, Chairman Harhart  
12 and the members of the House Professional Licensure  
13 Committee.

14 As Representative Harhart said, I'm Michael  
15 McGarvey, M.D., Associate Professor of Neurology at the  
16 University of Pennsylvania, I'm a Fellow of the American  
17 Clinical Neurophysiologists Society, and most importantly,  
18 for our purposes here today, I'm the Director of the  
19 Hospital of the University of Pennsylvania Intraoperative  
20 Monitoring Program.

21 Thank you for the opportunity to share with you  
22 from the clinician's perspective the aspects of Senate Bill  
23 137 that could potentially jeopardize the care surgical  
24 patients receive in the operating rooms across  
25 Pennsylvania. I should point out that the Pennsylvania

1 Medical Society fully supports those aspects of the Senate  
2 Bill 137 that address an audiologist's treatment of  
3 patients' auditory and vestibular systems. Our opposition  
4 relates to the legislation's specific reference to the  
5 independent practice of intraoperative monitoring (IOM) by  
6 an audiologist and granting them the ability to  
7 independently interpret intraoperative monitoring testing  
8 results.

9           First, let me briefly explain IOM. IOM employs  
10 the use of electrophysiological testing in real time during  
11 surgery on neural tissues or during operations to them in  
12 which portions of the nervous system are specifically at  
13 risk. It is used to minimize the probability of neurologic  
14 damage and to maximize the probability of obtaining the  
15 desired surgical results.

16           IOM monitoring has two components: the technical  
17 component, which is performed by specially trained IOM  
18 technicians, including IOM technicians, audiologists, and  
19 other nonphysician doctorates who have the sufficient  
20 training and certification to perform the technical portion  
21 of intraoperative monitoring; that is, preparing the  
22 patient, placing electrodes, monitoring, collecting data,  
23 communicating their findings with a supervising physician  
24 or a physiologist.

25           The second component of intraoperative monitoring

1 is the professional component, which is the real-time  
2 review and interpretation of intraoperative monitoring data  
3 that is performed by medical doctors who have the proper  
4 credentials and expertise to perform IOM. It is imperative  
5 that a neurophysiologist oversee the IOM be readily  
6 available to interpret and discuss the findings with the  
7 surgeon and the anesthesiologist to make appropriate  
8 clinical decisions in real time. A physician has the  
9 training and the ability to do this, whereas technicians,  
10 audiologists, and nonphysician doctors do not have this  
11 medical training.

12           While patients come to rely on the physician-led  
13 healthcare team, an integrated approach does not imply that  
14 team members are equally trained and interchangeable. In  
15 the case of IOM, nonphysician audiologists or technicians  
16 are not adequately trained to interpret EEG, evoke  
17 potentials, EMG muscle signals, specifically what the  
18 ramifications of these changes and these signals mean to  
19 the patient. This is the practice of medicine. Decisions  
20 made by those without proper education and training could  
21 lead to complications and postsurgical neurologic deficits.  
22 While doctoral-level audiologists may be superbly trained  
23 in some aspects of IOM, without physician oversight and  
24 direct intervention, their ability to perform IOM at the  
25 highest level is severely limited.

1           I certainly understand and respect the additional  
2 training that doctoral-level audiologists pursue in order  
3 to perform IOM. However, to elevate them to the level of  
4 neurophysiologists, a physician neurologist, fellowship-  
5 trained in IOM, is in service to the surgical patients who  
6 enter the operating room confident that they are receiving  
7 the best possible care.

8           This amendment does not address the fundamental  
9 flaw allowing persons trained in audiology to perform  
10 medical services in other disciplines with techniques well  
11 beyond their scope of practice. The training in audiology  
12 programs [inaudible] the breadth of training in diseases of  
13 the spinal cord, nerves of the arms and legs, muscle  
14 diseases, epilepsy, Parkinson's disease, heart disease,  
15 orthopedics, and other areas of medicine that constitute  
16 the significant majority of IOM.

17           Furthermore, it makes no sense to allow  
18 audiologists to set up a certifying body to grant their own  
19 certificates of competency in other areas of medicine  
20 because the discipline as a whole is not well qualified to  
21 judge who is able to diagnose and treat disorders of the  
22 rest of the body beyond the auditory functions which are  
23 needed to competently and safely perform a professional  
24 component of the IOM service. Therefore, the proffered  
25 amendment would allow unqualified persons to perform

1 medical care to patients.

2 I respectfully urge you to carefully consider the  
3 ramifications of granting audiologists the authority to  
4 perform IOM without mandating physician oversight. Please  
5 consider who you'd want to perform IOM for you or a member  
6 of your family: a physician-led team or an independently  
7 functioning audiologist?

8 I appreciate the opportunity to share with you my  
9 thoughts and concerns. To the best of my ability, I'd be  
10 happy to respond to any questions you might have.

11 MAJORITY CHAIR HARHART: Thank you. Any  
12 questions?

13 Representative Harris.

14 REPRESENTATIVE HARRIS: Okay. So your  
15 perspective is that the audiologists do have the specific  
16 training or the specialty training needed for IOM but that  
17 a physician should also be there during this process? Am I  
18 understanding that correctly?

19 DR. MCGARVEY: All right.

20 REPRESENTATIVE HARRIS: Or explain it to me,  
21 please.

22 DR. MCGARVEY: I want you to understand this. So  
23 an audiologist, okay, they have the scope of their  
24 practice. Some audiologists may have the technical  
25 expertise some aspects or all aspects of IOM from a



1 technical standpoint, all right. Not all audiologists have  
2 that. Those audiologists require -- this is the technical  
3 side -- a certification and they need to be vetted to do  
4 that. That's the technical side.

5           This Bill goes beyond that. They're asking for  
6 the ability to practice medicine in this Bill, that is to  
7 interpret those signals and to interact with physicians and  
8 make decisions based on those signals. That is well beyond  
9 the scope of their practice. That is the practice of  
10 medicine. All right. So some audiologists are qualified  
11 and can be certified to do the technical aspect of IOM.  
12 That is within the scope of their practice. Some  
13 audiologists are not qualified to do that.

14           Then, going beyond that, we go into the  
15 professional aspect of this, which requires medical school  
16 training, the understanding of physiology, the  
17 understanding of all procedures. It can't be limited. You  
18 need to know everything.

19           REPRESENTATIVE HARRIS: So what would your  
20 suggestion be?

21           DR. MCGARVEY: My suggestion as far as this Bill?

22           REPRESENTATIVE HARRIS: Yes.

23           DR. MCGARVEY: Is to take this amendment out of  
24 the Bill. They're asking for the ability to practice  
25 medicine on patients in the State of Pennsylvania without

1 going to medical school, without the proper training and  
2 credentialing to do it.

3 REPRESENTATIVE HARRIS: Okay. Thank you, Madam  
4 Chair.

5 MAJORITY CHAIR HARHART: Representative Quinn.

6 REPRESENTATIVE QUINN: Thank you, Doctor. I  
7 appreciate you coming here today. And I bet I could speak  
8 for others when I say that we came in this room not  
9 realizing it was going to be as complicated as it is, so---

10 DR. MCGARVEY: And thank you. This is an  
11 incredibly complex field and that's why we have concern  
12 about what they're asking for.

13 REPRESENTATIVE QUINN: Well, you mentioned that  
14 -- well, you mentioned a lot and I'm glad I didn't have to  
15 read that. I'm still working on intraoperative---

16 DR. MCGARVEY: Intraoperative monitoring.

17 REPRESENTATIVE QUINN: But you said that if the  
18 IONM is not performed well, there could be some bad results  
19 in the operating room.

20 DR. MCGARVEY: Great. That's---

21 REPRESENTATIVE QUINN: Give me some example.

22 DR. MCGARVEY: So that's a great question. So  
23 let me walk you through a case, what I would do during a  
24 case, and I'll walk you through what my technicians do  
25 during that same case. We're going to do an "awake" brain

1 mapping to resect a large tumor that involves both the  
2 motor cortex and the language cortex of someone's brain.  
3 The patient's going to be awake. I come in. I meet the  
4 patient days ahead of time. I consent them for the  
5 procedure. I tell them what I'm going to do during that  
6 procedure. Then I meet them the day of their operation.  
7 My technician applies whatever electrodes she needs to  
8 apply to get ready for the case. Then, the patient  
9 undergoes the craniotomy. We put electrode strips on their  
10 brain to watch the brain waves during the surgery.

11 REPRESENTATIVE QUINN: Can I interrupt you a  
12 second? Did you invite an audiologist into this surgery  
13 with you?

14 DR. MCGARVEY: If an audiologist would have the  
15 proper credentialing and privileges in my hospital to do  
16 the technical aspect of the case, yes, I would. And I have  
17 had audiologists who have worked for me in the past.

18 REPRESENTATIVE QUINN: Okay.

19 DR. MCGARVEY: Unfortunately, that audiologist  
20 would not have been competent to do this procedure because  
21 that is beyond the scope of his specific training and his  
22 specific practice.

23 REPRESENTATIVE QUINN: Okay. Back to the  
24 operation.

25 DR. MCGARVEY: Right. So at this point we have

1 an open craniotomy. My technician supplies the strips; the  
2 surgeon puts the strips on the brain. There's EEG on the  
3 physiology machine. I'm watching the patient's brain  
4 waves. At the same time, as I watch the screen, I'm  
5 talking to the patient. The surgeon has a stimulator. He  
6 applies electrical current to the patient's brain. I'm  
7 watching and talking to the patient. We do several things.  
8 One, I watch to see if the patient stops talking. At the  
9 same time, I need to watch the EEG, make sure a seizure  
10 doesn't occur on the EEG because if a seizure occurs,  
11 that's not arrested speech.

12           So there's really two things going on at once and  
13 I want you to get the complexity of what has to be done and  
14 why it's so important. If a person were to tell the  
15 surgeon, okay, the patient stopped talking but does not  
16 observe the physiology going on on the computer and there's  
17 a seizure, that's not speech arrest; that's a seizure. So  
18 at that point we'd have to stop the surgery, back off, and  
19 then go back at the patient again when the patient's awake  
20 and competent again.

21           At the same time, then we're going to do motor  
22 mapping. We'll watch this patient while we stimulate the  
23 motor areas of the brain around the tumor and see if they  
24 move or if they have any feelings of emotions or other  
25 things. And again, this is the practice of medicine. I'm

1 telling the surgeon what I think about what's going on with  
2 the patient when this is occurring so we can make -- we --  
3 and again, here's the difference -- so we, the surgeon and  
4 I, can make the best decision for the patient about what to  
5 do about their tumor and where to resect it.

6 REPRESENTATIVE QUINN: We just heard earlier  
7 testimony that in the operating room the surgeon is the  
8 captain of the ship. Are you telling me in your situation  
9 you're a team?

10 DR. MCGARVEY: That's correct.

11 REPRESENTATIVE QUINN: Okay.

12 DR. MCGARVEY: And again, that's the problem.

13 REPRESENTATIVE QUINN: But a team sharing equal  
14 responsibility?

15 DR. MCGARVEY: Right, I have---

16 REPRESENTATIVE QUINN: I recognize that you're a  
17 team in the other situation as well, responsibility--

18 DR. MCGARVEY: I have responsibility to that  
19 patient. I am that patient's physician. The minute I'm  
20 involved in their care, I am their physician.

21 REPRESENTATIVE QUINN: Okay. I don't want to  
22 take away from the responsibility that the audiologist had.  
23 That's why I asked the questions about the insurance that  
24 they carry as well. But it's a joint decision between you  
25 and the surgeon?

1 DR. MCGARVEY: In that particular case, yes.

2 REPRESENTATIVE QUINN: Okay.

3 DR. MCGARVEY: That case really details the  
4 complexity of what I do on a daily basis, the interactions  
5 I have with the surgeon, with the patient. And that is the  
6 practice of medicine. Under this Bill, they would have the  
7 right to do that.

8 REPRESENTATIVE QUINN: Okay.

9 DR. MCGARVEY: And they are not physicians.

10 REPRESENTATIVE QUINN: So you work with the  
11 surgeon and the anesthesiologist?

12 DR. MCGARVEY: Correct.

13 REPRESENTATIVE QUINN: They have the right to do  
14 that at present, correct?

15 DR. MCGARVEY: Who has the right?

16 REPRESENTATIVE QUINN: The audiologist. Or no?

17 DR. MCGARVEY: The practice of intraoperative  
18 monitoring requires that if---

19 REPRESENTATIVE QUINN: I'm seeing a wave behind  
20 you.

21 DR. MCGARVEY: ---requires that a physician is  
22 involved in the care of the patient, the interpretation of  
23 the data.

24 DR. SCHWARTZ: No, that's not true.

25 REPRESENTATIVE QUINN: Okay. I need to do more

1 homework before I ask more questions, okay? Thank you.

2 MAJORITY CHAIR HARHART: Any other questions? Do  
3 you have a question, Sue? Go ahead.

4 REPRESENTATIVE HELM: Sitting here listening to  
5 all the pros and cons of this Bill and all the technical  
6 procedures and everything, it just seems like there's one  
7 underlying problem that Pennsylvania, we don't have enough  
8 qualified physicians. And I hear this at a lot of  
9 different hearings. I'd just like to know what's your  
10 suggestion to cure that problem?

11 DR. MCGARVEY: So in the State of Pennsylvania  
12 there are places like the University of Pennsylvania which  
13 have in-house neurophysiologists like me. There are also  
14 smaller hospitals around the State which either can have  
15 in-house physicians such as me overseeing their  
16 intraoperative monitoring or they can also hire companies  
17 to do this such as Dr. Schwartz's company with physician  
18 oversight of the technicians doing the procedures.

19 So we always need to train more physicians. I  
20 think training more physicians to do this is great and  
21 that's what I, as a member of the Fellow of the American  
22 Clinical Neurophysiologists Society, and training Fellows  
23 at the University of Pennsylvania are trying to accomplish.  
24 But as we do more and more of these procedures, we are  
25 going to need more physicians to do it, and that's my job,

1 to train more physicians to do it. And, in a way, as we do  
2 more of this, we are doing more cases because we learn more  
3 and more ways of monitoring people and more and more cases  
4 that need monitoring. As surgery becomes more complex, we  
5 need more monitoring.

6 REPRESENTATIVE HELM: You're saying you'll train  
7 more but where do you find the people to train? That seems  
8 to be what the problem is.

9 DR. MCGARVEY: Right. We have those people and  
10 we need more doctors. We have those people now.

11 REPRESENTATIVE HELM: I will check into that a  
12 little bit.

13 REPRESENTATIVE QUINN: Madam Chairman, may I just  
14 follow up on that, please?

15 MAJORITY CHAIR HARHART: Sure.

16 REPRESENTATIVE QUINN: How long is that training  
17 when you do that IOM training?

18 DR. MCGARVEY: So this is a great question and it  
19 also answers what you need to do to be trained to do this.  
20 So I went through four years of medical school. I did four  
21 years of neurology residency where, in those eight years, I  
22 learned all about the human body not just one specific  
23 thing but I know everything. Then, on top of that, I did a  
24 year of training in neurophysiology, and just as an aside,  
25 I also did a stroke fellowship in all of that. And then,



1 on top of that, I almost did an internship with the person  
2 that mentored me following that in IOM. So I had hands-on  
3 learning where I wasn't by myself, where that person  
4 trained me. And I've also trained two of my own colleagues  
5 who did neurophysiology fellowships and then I spent a year  
6 training one and I'm still training the other one and it's  
7 two years in, and he's still not quite competent to do  
8 every case by himself.

9           So, again, I'm trying to tell you this is not  
10 easy. It's not something that should be looked at as an  
11 easy field. I think Dr. Schwartz said that. This takes  
12 training and it takes medical knowledge to do and it  
13 shouldn't be taken lightly because there's two things that  
14 can happen. One, you can monitor and the case can go  
15 great; or two, you can monitor and you think you see  
16 something that's wrong, you tell the surgeon you think you  
17 see something that's wrong when in fact it's not wrong;  
18 it's normal. So by over-monitoring, you also can cause a  
19 problem. Thank you.

20           MAJORITY CHAIR HARHART: Representative Gibbons.

21           REPRESENTATIVE GIBBONS: I want to ask, we heard  
22 earlier about remote monitoring, and you seem to talk about  
23 a situation where you were actually in the room monitoring.  
24 What about the remote monitoring by the physician?

25           DR. MCGARVEY: Great. That's a great question.

1 And I do remote monitoring. There are some procedures  
2 where it's okay to do remote monitoring such as watching  
3 EEG, watching SSEPs. It's easy, and you're in one-on-one  
4 communication with your technician. If you're remote, you  
5 need to be watching the case. You can't be off doing  
6 something else. You may be off-site but you need to be  
7 watching the case. You can't be off seeing other patients.  
8 You can't be off doing something else; that's not allowed.

9           You need to be dedicated and watching that case  
10 or cases. You can watch more than one case at a time. I  
11 should be fair about that. You can have several cases  
12 going at the same time and watching all of them but you  
13 need to be watching. You can't be off seeing patients in  
14 the clinic. You can't be off seeing consults. You need to  
15 be dedicated to watching those cases. That's what remote  
16 monitoring is.

17           There are certain cases where the physician has  
18 to be in the room, and I gave you an example of another  
19 one. Performing EMG is another one, so testing peripheral  
20 nerves is another one where you have to be in the room when  
21 you do the monitoring. This is just the requirement of  
22 doing the procedures.

23           REPRESENTATIVE GIBBONS: Okay. Thank you.

24           MAJORITY CHAIR HARHART: Representative Harris.

25           REPRESENTATIVE HARRIS: Thank you, Madam

1 Chairwoman.

2           So if the amendment passes, does this remove you  
3 from the room and allow the audiologist to do the process  
4 alone? Or am I confused?

5           DR. MCGARVEY: Yes.

6           REPRESENTATIVE HARRIS: Yes, I'm confused?

7           DR. MCGARVEY: This amendment gives them the  
8 ability to function independently without a physician  
9 overseeing them.

10           REPRESENTATIVE HARRIS: So this would mean that  
11 the process that you just went through about 10 minutes  
12 ago, you would no longer be in that process and the  
13 audiologist could do the process alone?

14           DR. MCGARVEY: That's our concern, yes.

15           REPRESENTATIVE HARRIS: Okay. Okay. I got it.  
16 Thank you, Madam Chair.

17           MAJORITY CHAIR HARHART: One more quickie.

18           REPRESENTATIVE QUINN: Thanks. Sorry. This  
19 remote monitoring, is this being done overseas as well?  
20 We've been touching in some of my studies with regard to  
21 telemedicine how x-rays and such are being read maybe in  
22 another country. Are you familiar with that being done in  
23 this field?

24           DR. MCGARVEY: Yes. So the difference between  
25 telemedicine, radiographic and this, is this is done live,

1 so say you had an x-ray to read, you wouldn't have to read  
2 it right when it was done. The monitoring is done live.  
3 I'll just give you an example. I'm doing an open  
4 thoracoabdominal aneurysm repair.

5 REPRESENTATIVE QUINN: Say that again.

6 DR. MCGARVEY: We're replacing someone's aorta.

7 REPRESENTATIVE QUINN: Okay.

8 DR. MCGARVEY: That case places someone's brain  
9 and spinal cord at risk for stroke and paraplegia. My  
10 technician is in the room. The technician is watching --  
11 there's an EEG running, there's SSEPs running, there's MEPS  
12 running. I'm watching that. I see a problem; I tell my  
13 technician; he tells the surgeon, just like that.

14 REPRESENTATIVE QUINN: How many other cases are  
15 you watching at the same time? Is there a limit on that?  
16 That scares me.

17 DR. MCGARVEY: So there technically now is no  
18 limit. We in the ACS are trying to force people to have a  
19 limit to how many cases they run.

20 REPRESENTATIVE QUINN: Do you need our help?

21 DR. MCGARVEY: No, we're doing a pretty good job  
22 of that. I can tell you that, and it was mentioned  
23 earlier, Medicare passed a law that only one case can be  
24 monitored at a time, but that's not all cases. There, we  
25 could use your help. We'd like to be able to monitor more

1 than one case from Medicare at a time because that does get  
2 us in a little trouble with numbers.

3 REPRESENTATIVE QUINN: Okay. Thank you.

4 MAJORITY CHAIR HARHART: Any other questions?  
5 No? Well, thank you, Doctor.

6 DR. MCGARVEY: Thank you. You guys are terrific.  
7 Thank you.

8 MAJORITY CHAIR HARHART: Thank you for your  
9 testimony. And, this is, as has been pointed out, a very  
10 complex issue. We will be taking this back as a committee  
11 and we will be reviewing it.

12 Did you have something you wanted to add or --  
13 okay. Do you want to step forward?

14 DR. BRAY: Thank you, Chairwoman. The testimony  
15 that I just heard implied that this would change the status  
16 of audiology in the State of Pennsylvania, that currently  
17 audiologists need physician oversight to do intraoperative  
18 monitoring. That's what I understood from the testimony  
19 that was just given. Audiologists have been doing this, as  
20 Dr. Schwartz talked about, for over three decades. We are  
21 not required to have physician oversight. We have never  
22 been required to have physician oversight. We have this in  
23 our current scope of practice. Thank you.

24 MAJORITY CHAIR HARHART: Thank you.

25 DR. BRAY: And there are no safety issues.

1 MAJORITY CHAIR HARHART: As I said, this is  
2 pretty complex and I need to digest this as well. So we  
3 will be looking at this as a committee and we probably will  
4 be adding amendments, maybe technical amendments to this.

5 But I do thank you all and it really was  
6 interesting. And I, too, thought it was not going to be as  
7 complex as it has been. I mean there's terminology that  
8 you use that's way over my head, I'll tell you. But I  
9 guess the bottom line is you want to make sure what you are  
10 doing, the patient comes first.

11 But with that, again, I thank you and I close  
12 this meeting. And thank you all for attending.

13  
14 (The hearing concluded at 2:30 p.m.)

1                   I hereby certify that the foregoing proceedings  
2 are a true and accurate transcription produced from audio  
3 on the said proceedings and that this is a correct  
4 transcript of the same.

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