Annual Meeting to Feature Provocative Discussions About Quality

BY VINCENT TRANCHITELLA, MD, AANEM PRESIDENT

The Plenary theme of the 2015 Annual Meeting is “The Value of Quality.” In today’s rapidly changing healthcare environment, defining and measuring “quality” care is increasingly important. Quality, however it’s defined, will impact our practices. Payers are using quality metrics more frequently. Our success in meeting quality measures will determine how and where health care dollars are distributed. Unfortunately, if we don’t participate in the process, quality will be defined for us, likely by individuals untrained in neuromuscular (NM) or electrodiagnostic (EDX) medicine. This may result in quality metrics that don’t make sense for our specialties and our patients. Additionally, in today’s world of information technology, the feeling is that all practices should be capable of providing top quality care for their patients.

We chose this year’s list of plenary topics and speakers to help our members understand what’s driving today’s push towards quality, how it’s currently being measured, how we’re getting involved in the process, and what the future may hold. We also chose to provide some examples of how quality is being integrated into best practices. It’s my hope that the audience will understand how important this topic is, how they may adjust their practice habits/patterns to comply with current quality initiatives (if needed), and how they can get involved.

Speaker Highlights

Kicking off the plenary will be the Lambert Lecture, Dr. Steven Beeson, on “Practicing Excellence – The Physician’s Role.” I’ve seen Dr. Beeson speak, and felt that his lecture was an excellent reminder of why we continue to practice medicine. I anticipate that his talk will encourage a bit of introspection, as we re-evaluate our chosen profession, our practices, and how we can be the best physicians possible.

Next, Dr. Cliff Gooch will present “Measuring Quality/Value-Based Care in Neuromuscular and EDX Medicine.” His talk will not only provide an excellent background on the historical changes in medicine, but also present more detail on how these changes affect a NM and/or EDX practice.

To finish the first day, Dr. Carlayne Jackson will present “Current Standards of Excellence in Treating Patients With ALS.” Dr. Jackson, a nationally recognized expert in treating patients with ALS, will provide an example of “quality” in treatment of ALS patients. Essentially, the goal is to have everyone who treats patients with ALS provide the best care possible, so that patients being treated in a rural area can expect the same or similar treatment as those being treated in ALS Association Certified Centers of Excellence.

The Reiner Lecture will kick off the second day, with Dr. Lois Nora presenting “Physician Quality – How This is Measured and What’s on the Horizon.” Dr. Nora, a former AANEM President, is currently the President of the American Board of Medical Specialties (ABMS). She will discuss current thoughts on how physician quality is presently measured, and how this may change in the future.

This will be followed by Dr. Timothy Dillingham’s presentation, “Normative Data for Nerve Conduction Studies – Why We Should All be Using These Studies.” Dr. Dillingham, a recent AANEM President, will present his work on how normative data for NCS was developed, and which of these studies have the strongest “evidence-based” support. Dr. Dillingham will present his argument on why this is important, and why all physicians should be using these specific techniques (unless their lab has developed their own normative data).

Finally, Dr. Greg Carter will conclude the Plenary with “Employing Evidence-Based Guidelines to Improve Care of Patients With Chronic Neuromuscular Disease.” He will discuss how evidence-based guidelines are developed, how they were applied to treatment of patients with chronic neuromuscular diseases, and how physicians can incorporate these guidelines into their own practices.

Overall, the hope is to provide attendees with a series of provocative talks, geared towards understanding what is happening in US healthcare today, and encouraging an introspective review of how to anticipate and adapt to these challenging changes, in order to provide the best possible care to our patients.

AANEM Funds New Research Project, Expands Partnership

The AANEM and Muscular Dystrophy Association (MDA) continue to build on their partnership and mission to provide neuromuscular disease education and support research related to muscle and nerve disorders.

In June, the AANEM Foundation announced a partnership with MDA to co-fund neuromuscular disease research. The first research award recipient will be formally announced in late August 2015. Research Chair, Dr. Casey Childers, said, “I am very excited to see AANEM working with the MDA to fund cutting-edge research that will improve patient care and bring hope to those affected by neuromuscular diseases.”

Continued on page 4
August Issue of Muscle & Nerve Between the Covers

Protein Testing and Mutation Detection in LGMD2A
A diagnosis of limb girdle muscular dystrophy (LGMD) used to be a non-specific term we used when a patient’s muscle disease didn’t fit into a more easily recognized category of muscular dystrophy. With the advent of molecular genetics, there is now an ever-expanding list of LGMDs, and it is difficult to keep them all in mind. In an Invited Review, Fanin and Angelini discuss the most common form of LGMD, type 2A (LGMD2A). This myopathy is now known to be the result of calpain-3 deficiency. The most useful tool for diagnosis is immunoblot analysis for calpain-3, but in about 30% of cases, this test lacks sensitivity due to gene mutations that inactivate the enzyme. The authors survey the current knowledge, advantages, limitations, and pitfalls of protein testing and mutation detection in LGMD2A and provide an update on genetic epidemiology.

Eccentric Contraction and Muscle Degeneration
In Duchenne muscular dystrophy (DMD), although dystrophin is deficient in all muscles, it is unclear why degeneration progresses differently in many of them. In an Issues and Opinions article by Hu and Blemker, the authors hypothesize that selective muscle degeneration (at least in leg muscles) results from the fact that each muscle in the leg undergoes different degrees of eccentric contraction during gait. They find a strong correlation between the degree of eccentric contraction within each muscle quantified from a computer simulation of gait and the amount of damage in each muscle quantified by fat fraction percentage in a recent imaging study. This finding supports the hypothesis and may help guide safe exercise regimens for boys with DMD. This study also shows the utility of computer simulations of muscle to inform future DMD research.

Ultrasound Study of Smartphone Users
The popular press has reported many hazards associated with smartphone overuse or “addiction”. The latter term is used advisedly, and in this issue, Inal, et.al. report an ultrasound study of the hands of smartphone users and show that those who use their phones the most have evidence for enlargement of the median nerve and the flexor pollicis longus tendon. They correlate this finding with pinch and grip strength and pain with thumb movement. They propose the term “Hand Smartphonopathy”.

Anti-HMG-CoA Reductase Antibodies
A pair of papers in this issue deal with various aspects of the muscle syndromes associated with statin use and autoantibodies that recognize HMG-CoA reductase. In the first, Chung, et.al. characterized the cellular infiltrates in biopsies from anti-HMG-CoA reductase positive patients. Macrophages with markers of M2 polarization were present in large numbers throughout the endomysium, while M1 macrophages were very rare. Although not obvious on H&E staining, muscle biopsies from these patients also include smaller numbers of CD4+ and CD8+ T-cells as well as plasmacytoid dendritic cells scattered throughout the endomysium. In contrast, CD20+ B-cells were extremely rare in the biopsies.

In another study, Limaye, et.al. investigated the association of anti-HMG-CoA reductase antibodies with biopsy-confirmed idiopathic inflammatory myositis or necrotizing myopathy. They found that the antibodies were not preferentially associated with necrotizing myopathy but were rather seen in all subtypes of inflammatory myopathy. Patients with a particular gene

CONTINUED ON NEXT PAGE
Gliai cells serve a variety of functions in the central nervous system. As the name implies they provide physical support i.e. “glue” the neurons, direct cell migration and modify axonal/dendritic growth in embryonic life, provide nutrient to neurons, serve to remove neurotransmitters from the synaptic cleft, and some produce glutamate. Astrocytes also produce hydrogen sulfide (H2S), which is an endogenous neuromodulator causing Ca2+ influx and may play a role in glutamate metabolism.  

Davoli A. and colleagues recently assessed the possible role of H2S in the neuronal death in amyotrophic lateral sclerosis (ALS). The study analyzed H2S concentration in the cerebral spinal fluid of 37 ALS patients, and controls in tissues of mouse model of familial ALS, and in spinal cord culture media. The results of this study suggest that H2S produced by glial cells may mediate motor neuron damage in ALS.

Comment: Although a number of mechanisms have been postulated for motor neuronal death in ALS the exact cause remains unclear. An increasing number of studies are now investigating the motor neuron milieu for exogenous factors that may be playing a role. So far the data on the role of H2S is somewhat contradictory as it appears to be neuroprotective in animal models of certain disorders i.e. Alzheimer and Parkinson's disease while other studies show neuronal death with apoptosis and necrosis in the presence of H2S. Nevertheless the findings from this study are intriguing and provide a novel avenue of research in ALS.

Evidence of Hydrogen Sulfide Involvement in Amyotrophic Lateral Sclerosis

Genetic analyses of neurodegenerative diseases provide critical information in the investigation of molecular pathogenesis and treatment of these diseases. In an effective and successful collaborative effort, Cirulli and colleagues applied whole exome sequencing in a large case-control cohort of 2869 patients with ALS and 6405 controls. Through extensive analyses rare variants were selected within the protein coding regions of the patients and genes identified associated with risk for ALS. Seventy distinct pathogenic mutations were identified in genes previously associated with ALS. Importantly, an association between variants in the TBK1 gene (the gene encoding TANK-binding kinase 1) and ALS was identified. This gene is involved in the phosphorylation of proteins involved in autophagy and innate immunity. Mutations were also detected in the Optineurin (OPTN) gene that is involved in autophagy.

Comment: This study presents two important accomplishments in the efforts to understand the molecular pathogenesis of ALS. It constitutes one of the first successful attempts in applying exome-sequencing in a large cohort of cases and controls in a disease with a high degree of complexity, with the effective use of publicly available data. Additionally, novel association between ALS and a new gene (TBK1) and a previously associated gene (OPTN) have been detected. Both genes have a central role in autophagy and neuroinflammation. The study findings provide evidence for autophagy and degradation of proteins as important mechanisms in the degeneration of motor neurons and delineate alternative targets for future therapeutic interventions.
Proctored SAEs

This past spring, a total of 818 Neuromuscular and Electrodiagnostic Self-Assessment Examinations (SAEs) were proctored in academic intuitions across the country. After review of the 2015 test results, no questions were removed. However, with society becoming more eco-friendly, all SAEs will soon move to an exclusively online platform. Similar to years past, the Electrodiagnostic SAE included a 30-question video-based portion. While there were a few technical issues during the video proctoring portion related to institutional firewalls, we are working to resolve them for a successful 2016 SAE experience.

“I can see that a lot of time went into making the exam. I find this self-assessment experience helpful in seeing what I know and do not know, as well as seeing how I compare to my peers.”

-2015 Neuromuscular Self-Assessment Examination Candidate

AANEM Funds New Research Project, Expands Partnership

CONTINUED FROM PAGE 1

edge neuromuscular disease research. We will be looking at more research projects this fall and hope to fund more.”

The AANEM and MDA are also looking to work more closely together on education initiatives.

AANEM/MDA 2016 Annual Meetings

AANEM has agreed to provide the CME for MDA’s Clinical Conference in spring 2016.

“Partnering with AANEM to offer the CME will allow AANEM to gain familiarity with the types of sessions of interest to MDA clinicians, so similar sessions can be incorporated into future AANEM meetings,” said Valerie A. Cwik, M.D., MDA Executive Vice President and Chief Medical and Scientific Officer.

In addition, AANEM will offer a neuromuscular disease course at the MDA meeting to showcase how AANEM has grown beyond electrodiagnostic medicine to incorporate neuromuscular disease education into its programs.

MDA will further strengthen the partnership with AANEM in September 2016 by offering an MDA Clinical Directors educational session at the AANEM Annual Meeting in New Orleans, La.

Shirlyn Adkins, JD, AANEM Executive Director said, “We’re very excited to collaborate with MDA and expand our audience along with funding cutting-edge research and providing education for our meeting attendees.”

“This partnership is a win-win for attendees, speakers, researchers and exhibitors as we pool our resources to further the mission of championing the diagnosis, treatment, and care of patients with neuromuscular diseases,” Adkins added. Over the next few months, further discussions will take place between the two organizations regarding additional opportunities to partner.”

Cwik noted, “We are looking forward to a long-term relationship between AANEM and MDA that will make it easier for physicians to receive the best information available to provide better patient care.”

AANEM to Offer New Training Program Partnership for 2016 Program Year

The AANEM will roll out a unique opportunity for training programs who wish to offer complimentary AANEM memberships to their residents and fellows, as well as discounted meeting registrations.

By contributing $995 toward the AANEM’s mission of “improving the quality of patient care and advancing the science of neuromuscular and electrodiagnostic medicine”, academic departments will be considered a Training Program Partner and will receive:

• Complimentary memberships for all residents and fellows enrolled in the program (value of $50 per resident/fellow)
• Two complimentary meeting registrations for residents or fellows enrolled in the program (value of $1,000)
• Membership for the non-physician training program coordinator (Value of $150)
• Complimentary meeting registration for the non-physician training program coordinator, including registration for the training program breakfast (Value of $350)
• Monthly emails from AANEM with test-your-knowledge questions geared toward residents and fellows, and ideas for how to incorporate AANEM resources into the program

AANEM has seen increased interest from residents and fellows over the last several years, but recognizes that the cost of individual memberships can be a financial hurdle for those with varied training interests. To alleviate this, AANEM hopes to partner with the institution’s training programs. AANEM can offer benefits at a 50% discount to training programs, and the training programs will be able to pass along much of the added value to their residents and fellows.

“AANEM has a long history of providing valuable resources to both providers working with training programs and the residents and fellows enrolled in them,” explained Shirlyn Adkins, Executive Director of AANEM. “However, we want to make our membership benefits – like our robust library of educational resources, self-assessment exams, and research awards – accessible to a much broader group of residents, fellows, and training programs.”

AANEM will open enrollment for the 2016-2017 Training Program Partnership in October of 2015 at the AANEM Annual Meeting to ensure that programs have adequate time to include this valuable benefit in their 2016 budgets.

Individual memberships will continue to be available to residents and fellows enrolled in non-participating programs for $50 per calendar year.

If you are interested in participating in AANEM’s Training Program Partnership or want to learn more about AANEM’s membership benefits contact Carrie Zimmerman, Member Services Manager at czimmerman@aanem.org or 507.288.0100 or visit aanem.org/trainingprogrampartnership
Ethical Guidelines

A subcommittee of the AANEM Ethics and Peer Review Committee is nearing completion of its 2015 updates to the Guidelines for Ethical Behavior Relating to Clinical Practice Issues in Neuromuscular and Electrodiagnostic Medicine. Subcommittee members, Naomi A. Abel, MD (subcommittee chair), Eduardo A. De Sousa, MD, Matthew P. Mayer, MD, and David A. Simpson, DO (committee chair) have completely revamped the Ethical Guidelines for 2015, investing nearly a year of research and editing into the documents’ revisions.

The Ethical Guidelines were first drafted in 1994 to formalize ethical standards that neuromuscular (NM) and electrodiagnostic (EDX) physicians should observe in clinical and scientific activities, and have since been updated every five years. “Ethics serve as the foundation for medical decision making,” said committee chair, Dr. Simpson. “Both physicians and technologists who serve patients with muscle and nerve disorders will face occasional ethical dilemmas.”

Especially significant revisions made to the 2015 Ethical Guidelines include: the addition of an entire section on the ethical conduct of technologists in the EDX laboratory; a complete rewrite of guidance on informed consent; and the addition of several subsections offering guidance on genetic testing of NM disease and potential ethical dilemmas.

According to Dr. Simpson, as genetic testing becomes an increasing part of the diagnostic process for NM disease, having updated AANEM ethical guidance is imperative. “Genetic testing has profound implications that require extensive discussion prior to ordering such a test,” said Dr. Simpson. “I often have to approach patients and their families about these implications, and I don’t think physicians should be casually ordering these tests without significant counseling.”

Updates to the Ethical Guidelines will be available this fall on the AANEM website under the “Education” tab. Mindy Mickelson, project manager and staff liaison to the committee, said, “This publication really serves as a building block in the establishment of ethical standards of conduct that support best practices in NM and EDX medicine, and will, ultimately, function as a mechanism for improved patient care.”

“We are all bound by ethical behavior that influences our interaction with each other, our patients, our community, and society in general,” said Dr. Simpson. “We hope the guidelines will serve as a template and guide for such ethical behavior.”

For resources on Ethics, visit: http://www.aanem.org/Ethics

EAP benefits include:
- Free access to FIRDAPSE® (amifampridine) Tablets 10mg, which has shown positive results in the largest Phase 3 trial for the symptomatic treatment of LEMS conducted to date
- FIRDAPSE® is well tolerated and was designated a “Breakthrough Therapy” by the FDA
- The most common adverse events were oral and digital paresthesia, nausea, and headache

“Ethics serve as the foundation for medical decision making. Both physicians and technologists who serve patients with muscle and nerve disorders will face occasional ethical dilemmas.”
- David A. Simpson, DO

FIRDAPSE® Expanded Access Program (EAP)

Now, patients diagnosed with Lambert-Eaton Myasthenic Syndrome (LEMS) or Congenital Myasthenic Syndrome (CMS) can gain access to an exciting investigational treatment

BREAKTHROUGH THERAPY WITHIN REACH

Call 1-844-FIRDAPSE (1-844-347-3277), toll free, for information about EAP enrollment qualifications and protocol.

FIRDAPSE is an investigational drug and currently not commercially available in the United States.
FIRDAPSE is a registered trademark of Catalyst Pharmaceutical Partners.
© 2015 Catalyst Pharmaceutical Partners, Inc. (Catalyst Pharmaceuticals) CPP-15031A All Rights Reserved. Printed in the USA
AANEM Accredited Laboratories to Receive Additional Benefits and Membership Status in 2016

Over 180 EDX Laboratories have been accredited by AANEM to date, demonstrating their commitment to the highest quality patient care. Beginning in 2016, for no additional fee, AANEM accredited laboratories will also receive additional benefits and a new status as “AANEM Laboratory Members.”

Only EDX laboratories that have received AANEM Laboratory Accreditation will be eligible to be AANEM Laboratory Members. AANEM Laboratory Members will receive complimentary memberships for all technologists working in their laboratories, as well as member discounts on customizable brochures for patients receiving nerve conduction studies and needle EMG. Laboratory members will also receive member discounts on the AANEM Coding Guide, and access to one-on-one coding and billing help from AANEM staff.

“The AANEM Laboratory Membership is designed to help AANEM Accredited laboratories maintain their high level of quality, and market themselves as the highest quality option to both patients and referrers,” said Bryant. “It told the story of the struggle of the Friedreich’s ataxia community and the hope for a cure through action.”

For updates about the movie, join the website mailing list at theataxianmovie.com or follow @TheAtaxian on Facebook and Twitter. As for rideATAXIA, “This year we will produce five fundraiser bike rides in Dallas, Northern California, Chicago, Philadelphia, and Orlando,” says Bryant.

Catching up With Kyle Bryant

In 2014, the AANEM awarded Kyle Bryant the Public Recognition Award for his tireless efforts to raise awareness and research dollars for Friedreich’s ataxia (FA). Bryant is an athlete, keynote speaker, and director of rideATAXIA, a bicycle fundraiser for the Friedreich’s Ataxia Research Alliance (FARA). Since 2007, rideATAXIA has raised over $3 million for FA research. Despite his diagnosis of FA at the age of 17, Kyle has completed numerous long distance bike rides, including “the world’s toughest bike race,” Race Across America (RAAM), in 2010 as part of a 4-person team representing Team FARA.

“The Ataxian,” a documentary film about Team FARA’s journey, hosted its World Premiere on June 6 at Dances with Films’ 2015 annual festival in Los Angeles, CA. The film’s world premiere sold out, received a standing ovation from its 450 audience members, and was the recipient of the Audience Award for feature documentary.

“To see our team on the big screen was an experience I will never forget,” said Bryant. “It told the story of the struggle of the Friedreich’s ataxia community and the hope for a cure through action.”

The AANEM extends a warm welcome to 157 new members who joined between January and June 2015. Names of new members are listed at www.aanem.org/membership/new-member-list. A complete online directory of all members can be found in the “membership” section of www.aanem.org.

All physician members agree to uphold the principles and guidelines described in the AANEM’s Guidelines for Ethical Behavior Relating to Clinical Practice Issues in Neuromuscular and Electrodiagnostic Medicine and the American Medical Association’s Principles of Medical Ethics. All nonphysician members agree to abide by the AANEM’s position statement, Who is Qualified to Practice Electrodiagnostic Medicine?, stating that only properly trained physicians perform and interpret needle electromyography (EMG) and interpret nerve conduction studies.
Abstract Award Recipients Honored

A record 270 scientific abstracts were approved for presentation at the AANEM’s 62nd Annual Meeting to be held October 28-31, 2015, in Honolulu, HI. This is the highest number of abstracts in the meeting’s history. The AANEM Program Committee chose two outstanding abstracts out of the hundreds approved to be honored with the Golseth Young Investigator Award and the Best Abstract Award.

Golseth Young Investigator Award Winner: Timothy S. Sanford, MD

The 2015 Golseth Young Investigator Award will be presented to Timothy S. Sanford, MD, formerly of Chapel Hill, North Carolina, for his abstract, “Correlation Between Ultrasound Measures of The Median Nerve and Electrodagnostic Severity of Median Mononeuropathy Separated by Gender.”

The research was performed during Dr. Sanford’s 3rd and 4th year of physical medicine and rehabilitation residency at the University of North Carolina. He began an interventional spine fellowship with Dr. Scott Kreiner at Ahwatukee Sports and Spine in July 2015.

“I regard AANEM as the leader in neuromuscular and EDX medicine, and I wanted my research to be reviewed and recognized by this organization,” said Dr. Sanford.

As he continues exploring his interests in electrodiagnostic (EDX) medicine, interventional spine, sports medicine, and quality improvement, Dr. Sanford expressed gratitude for this recognition, and for the support of his mentors and co-authors, Drs. James F. Howard and James J. Hill, and also the help of the other co-authors, Dr. Matthew Harris and Mitchell Cockman, CNCT.

“Winning this award will allow me to present my research to other experts in the field and receive feedback in order to improve this research and any future research projects I may undertake,” said Dr. Sanford.

The Golseth Young Investigator Award, honoring AANEM founding member, Dr. James Golseth, is presented annually for original research in NM and EDX medicine. The AANEM Foundation has been funding the award since 1998.

Best Abstract Award Winner: Donald B. Sanders, MD

The Best Abstract Award will be presented to Donald B. Sanders, MD, of Duke University School of Medicine, Durham, North Carolina, for his work entitled, “Results From the Dapper Study: Inpatient Double-Blind Placebo-Controlled Withdrawal Study of 3,4-Diaminopyridine Base (3,4-Dap) in Subjects With Lambert-Eaton Myasthenic Syndrome (LEMS).”

“This award recognizes the work of a team dedicated to bringing to regulatory approval an agent we have been using in the treatment of Lambert-Eaton syndrome for over 25 years,” said Dr. Sanders. “And it is very special to me personally, as a member of this organization for more than 40 years. The only award more gratifying for me would have been the Young Investigator Award - maybe next year!”

Looking forward to discussing his research at the annual meeting, Sanders notes, “AANEM is the premier organization for neuromuscular diseases, and those who attend this meeting will be most appreciative of the significance of our work.”

The runner-up for Best Abstract is Heather Lindstrom, MD, of Edmonton, Alberta, for her abstract, "Electrodiagnostic Studies: Do They Make a Difference?"

Celebrating the Award Recipients:

The Golseth Young Investigator, Best Abstract, and Best Abstract Runner-up recipients will present their abstracts at the Abstract Awards Presentation session during the annual meeting on Wednesday, October 28 at 10:30 am.

The topic for this year’s President’s Research Initiative Award is, “Value of an Accurate Diagnosis.” President Vincent Tranchitella, MD, will moderate a discussion with recipients explaining their research on Thursday, October 29 at 7 am in the poster area.

Abstracts printed in the October Issue of Muscle & Nerve

Scientific abstracts for the 2015 AANEM 62nd Annual Meeting will be printed in the October 2015 issue of Muscle & Nerve, and will be available in PDF format at www.aanem.org/meeting.

Follow Us on Social Media

Connect with your colleagues and keep informed about all the latest news in the field through social media – follow AANEM on Facebook, Twitter, and our brand-new LinkedIn company page. Join our new Members Only LinkedIn group to engage with AANEM members and staff.

Visit www.aanem.org/careers to browse current opportunities or to post a position.
Congratulations to the 2015 Achievement Award Recipients

**Lifetime Achievement Award:** 
Shin J. Oh, MD

Shin J. Oh, MD, will receive the Lifetime Achievement Award for the breadth and depth of his contributions to the electrodiagnostic (EDX) and neuromuscular (NM) fields. “It is humbling to receive the highest honor given by the AANEM – the one professional organization I have treasured most throughout my career,” said Dr. Oh. “By choosing me for this award, the AANEM and its members recognized my contributions. I feel extremely gratified and satisfied at this stage of my life. I can proudly show this to my grandchildren, telling them that their Grandpa has played a small but significant role in the development of electrodiagnostic medicine.”

Dr. Oh obtained his medical doctor degree from Seoul National University, Seoul, Korea, followed by residency in neurology at Georgetown University, Washington, DC. In 1970, he joined the faculty of the University of Alabama at Birmingham (UAB) School of Medicine, becoming chief of neurology at the VA medical center, as well as the director of the electromyography and evoked potentials laboratory, titles he would hold for the next 40 years – one of the longest such tenures in the history of American medicine.

Looking to the future, Dr. Oh says, “In my lifetime, this field has shown exponential growth through computer technology, and immunological and molecular-genetic, and pharmacological innovations.”

**Distinguished Physician:** 
James F. (Chip) Howard, Jr., MD

James F. Howard, Jr., MD, is the recipient of the AANEM’s 2015 Distinguished Physician Award, which recognizes a member for superior achievements as a clinician, educator, and association volunteer. “I am deeply honored and humbled to receive this award from AANEM, an organization of my peers,” says Dr. Howard. “There is no greater honor than to be recognized by one’s patients and by one’s peers for the job they have done.”

Dr. Howard says his career path was shaped by his mentors during his training. At the University of Virginia, he was mentored by Dr. TR Johns, whose primary interest was in myasthenia gravis. He had ample exposure to Dr. Donald B. Sanders in the neuromuscular clinics, the EMG laboratory and the myasthenia gravis research laboratory, becoming Don’s first fellow, and as they say… “the rest is history!”

Dr. Howard has distinguished himself as a leader in the field of neuromuscular diseases, and is an active AANEM member. “AANEM is like a super-family. It has served as a continuing resource for my practice habits, my teaching skills, and my knowledge base,” says Dr. Howard. “AANEM has been the one organization that I have learned the most from, have had the most fun with, and love the most.”

Dr. Howard also has a long and broad history of volunteerism in the field of neuromuscular diseases beyond the AANEM. His service includes the Center for Disease Control MD STARnet Program, the MDA Grant Review Committee, the Myasthenia Gravis Foundation of America Board of Directors, and Chair of the Medical Scientific Advisory Board. He currently serves on the World Health Organization (WHO) Advisory Group of the Revision of the ICD-10 Diseases of the Nervous System, Neuromuscular Junction, and Muscle Diseases in Adults. He is also a member of the Muscle Study Group Executive Committee. He became the first recipient of the endowed James F. Howard Distinguished Professorship of Neuromuscular Disease. Dr. Howard sees EDX/NM medicine integrating itself further into a comprehensive discipline of neuromuscular and musculoskeletal medicine, taking advantage of emerging techniques, the rapid advances of molecular genetics and biomechanical engineering with the development of advanced diagnostic techniques, biomarker methodologies, and perhaps therapeutic strategies.

**Distinguished Researcher:** 
Paul E. Barkhaus, MD

The 2015 Distinguished Researcher Award honoring an AANEM member who has made continuous significant contributions to clinical neurophysiology research will be awarded to Paul E. Barkhaus, MD. “I owe everything to the control subjects and patients who have given of their time and effort over the past 20 years,” says Dr. Barkhaus.

When Dr. Barkhaus began his career, his plan was to become a psychiatrist. But when his mentor advised him that a psychiatrist needed to be knowledgeable in neurological disorders, he became fascinated by neurology. “I had the good fortune to have two great mentors in electromyography and neuromuscular..."
A past-president of the AANEM, Dr. Grant was appointed founding chair of the Laboratory Accreditation Committee in 2005. He has worked on the problem of fraud and abuse in EDX, and served as an expert consultant working with law enforcement to halt illegal practices and fraudulent billings. As the issues gained recognition, he successfully advocated for laboratory accreditation as a means to substantiate quality and to combat fraud and abuse.

Dr. Grant believes the future success of EDX and NM medicine hinges on how well we as an organization continue to lead. “We need to define quality electrodiagnostic and neuromuscular medical care, and gain acceptance by all parties involved – physicians, patients, payers, and governmental agencies. The single best way to do this is going to be continued efforts to gain universal acceptance for the AANEM EDX Laboratory Accreditation program.”

Dr. Grant proudly continues the work of his father, Arthur E. Grant, MD, who was one of the pioneers in the field of physical medicine and rehabilitation (PMR) as founder of the PMR program at the University of Texas Health Sciences Center at San Antonio. “(My father) did his EMG training with Ed Lambert at Mayo, as many of the greats did. He was always an inspiration - personally and professionally - and following in his footsteps came naturally. Even as a young child I would go to work with him and watch as he evaluated and treated patients. I became fascinated with the specialty and especially the EDX and neuromuscular aspects - and I remain fascinated to this day.”

A graduate of Texas Tech University School of Medicine, Dr. Grant completed his residency in PMR at Ohio State University. Following his residency, he set up his private practice in Medford, Oregon, where he has remained for the last 30 years.

He believes his association with the AANEM has helped him to grow in his profession and practice in the art of medicine. An attendee at 31 of the last 32 annual AANEM educational meetings, Dr. Grant said, “I find that I learn things at every meeting I attend that changes what I do in my practice - usually beginning the Monday I return to work!”

The AANEM grants Honorary Membership to non-member physicians or scientific investigators who are major contributors to the fields of electrodiagnosis, neurophysiology, or neuromuscular disease (NMD) through teaching, research, and/or scholarly publications. The 2015 Honorary Membership recipient is William M. Fowler, Jr., MD, for his scholarly achievements and clinical excellence.

“This honor means a great deal to me, as it represents the major accomplishments of my career through my contributions to neuromuscular research and treatment,” said Dr. Fowler.

Dr. Fowler received his Bachelor of Science and Masters of Education degrees from Springfield College in Massachusetts, with majors in physical education and kinesiology. He received his medical degree from the University of Southern California, then completed a residency in pediatrics, a fellowship in neurology and pediatric neurology, and a residency in PMR, all at the University of California, Los Angeles (UCLA). “In the late 1950’s and early 1960’s, there were very few practitioners or institutions interested in neuromuscular disease medicine,” recalls Dr. Fowler. He began his academic career in 1963 at UCLA. In 1967, he accepted the position of Chairman of the PMR Department at the University of California Davis, where he stayed for the remainder of his career.
A record number of abstracts from around the world were submitted for programming at the 2015 AANEM 62nd Annual Meeting, October 28-31 in Honolulu, HI. Of those submitted, 250 were selected to be presented during poster presentation sessions throughout the meeting.

All abstracts will be on display from Thursday, October 29, at 7 am to Saturday, October 31 at 9 am. Please peruse them at your leisure and plan to discuss the research with the authors during the following sessions:

- Join the recipients of the President’s Research Initiative Award for a moderated poster discussion with President Vincent Tranchitella, MD, as he discusses their research on Thursday, October 29 from 7–8:15 am. The topic of this year’s award is the “Value of an Accurate Diagnosis.”
- Authors of Posters 1-127 will be available to discuss their posters during the Coffee With the Authors session on Friday, October 30 from 7–9 am in the poster hall.
- Authors of Posters 128-254 will be available to discuss their posters during the Coffee With the Authors session on Saturday, October 31 from 7–9 am in the poster hall.

Other abstract awards presented include 30 recipients of the Junior Member Recognition Award, and 17 International Finance Assistance Award recipients (five AANEM Foundation Fellowship recipients, 12 International Federation of Clinical Neurophysiology Fellowship recipients).

An abstract guide with full abstract and presentation details will be available onsite at the meeting in both online and print formats.

World-class Research Presented at the AANEM 62nd Annual Meeting Poster Presentations

A record number of abstracts from around the world were submitted for programming at the 2015 AANEM 62nd Annual Meeting, October 28-31 in Honolulu, HI. Of those submitted, 250 were selected to be presented during poster presentation sessions throughout the meeting.

All abstracts will be on display from Thursday, October 29, at 7 am to Saturday, October 31 at 9 am. Please peruse them at your leisure and plan to discuss the research with the authors during the following sessions:

- Join the recipients of the President’s Research Initiative Award for a moderated poster discussion with President Vincent Tranchitella, MD, as he discusses their research on Thursday, October 29 from 7–8:15 am. The topic of this year’s award is the “Value of an Accurate Diagnosis.”
- Authors of Posters 1-127 will be available to discuss their posters during the Coffee With the Authors session on Friday, October 30 from 7–9 am in the poster hall.
- Authors of Posters 128-254 will be available to discuss their posters during the Coffee With the Authors session on Saturday, October 31 from 7–9 am in the poster hall.

Other abstract awards presented include 30 recipients of the Junior Member Recognition Award, and 17 International Finance Assistance Award recipients (five AANEM Foundation Fellowship recipients, 12 International Federation of Clinical Neurophysiology Fellowship recipients).

An abstract guide with full abstract and presentation details will be available onsite at the meeting in both online and print formats.

Annual Meeting Features Expanded Opportunities for Technicians, Young Physicians, Residents, and Fellows

AANEM strives to provide valuable networking opportunities for colleagues and friends from across the country and around the world. At the 2015 annual meeting, plenty of facilitated opportunities to get involved and meet new friends are included in the general meeting registration, including: Technologist Breakfast Trivia, and Resident & Fellow Breakfast Trivia, and Meet up & Mingle Network Sessions, among others.

Evening receptions are another great way to network with and meet colleagues, friends, and exhibitors. Kick off the meeting at the President’s Reception on Wednesday or the Exhibit Hall Reception on Thursday while enjoying hors d’oeuvres, wine, and refreshments.

Special educational sessions will also be available. Residents, fellows, and young physicians will benefit from the basic workshops and educational sessions focusing on practice and techniques, while several workshops featuring hands-on learning and actual case studies will be available to technologists, taught by some of the most advanced technologists and physician teams in the field. Objectives from some of these workshops include:

- how to perform basic NCSs in the upper and lower extremity,
- perform repetitive stimulation, common pitfalls of NCSs, identify common mononeuropathies in the upper and lower extremity as well as discover how to use this knowledge to work through a case and come up with the correct diagnosis.

CALL FOR SUBJECTS: Consider acting as a workshop subject. It’s a great opportunity to get involved in the meeting and truly be hands-on during educational sessions. Subjects will be compensated for their time in addition to the educational opportunity. Interested individuals may contact Amy White, awhite@aanem.org for further details.

Clinical Pearl: Mapping Your Way to the Ulnar Nerve

Mary Franklin, CNCT, R.EEG.T, is a technologist at Baptist Princeton Medical Center in Alabama. She recently sat down with neurologist, Dr. William W. Campbell, the inventor of ulnar inching, to discuss the Martin-Gruber anomaly, ulnar mapping, and the "10 centimeter" theory.

“Dr. Campbell pointed out that one does not always see a higher amplitude of median CMAP at the elbow with a Martin-Gruber,” said Franklin. “Of course the amplitude should always be lower than the wrist, but if it is the same value as the wrist it could be a Martin-Gruber. If this is the case, the technologist or physician would investigate further by recording from the ADM and FDI, while stimulating the median to prove. I never realized that you could have a Martin-Gruber anomaly when the amplitude would be identical at the wrist and elbow. This was very enlightening. Dr. Campbell is so knowledgeable and explains things so well that podcast listeners are in for a real treat.”

To hear what else Franklin and Campbell discussed, check out their podcast, NCS Technique for Ulnar Neuropathy, and many more at http://www.aanem.org/Education/All-Education-Products.
Record Number of Junior Members to be Recognized at 2015 Annual Meeting

A record number of 28 junior members will be recognized at the 2015 Annual Meeting. The Junior Member Recognition Award encourages physicians-in-training to submit research for the opportunity to be recognized for their efforts.

Presenting at the meeting is also a valuable learning experience for residents and fellows. As part of the recognition, recipients are offered a peer review by members of the Program Committee, who review their research during their poster presentation session and give comprehensive feedback for future presentations.

To qualify for the Junior Member Recognition Award, the first author of an abstract must be a junior member of the AANEM at the time of submission and available to present at the meeting. Congratulations to the following 2015 recipients:

- Syeda L. Alqadri, MD
- Jose David Avila, MD
- Yoonhee H. Choi, MD
- Megan E. Clark, MD
- Matthew A. Danielson, MD
- Irisa Devine, MD
- Alexander Dietz, MD
- Rachana Gandhi, MD
- Scott Homer, MD
- Rebecca Hurst, MD
- Parul Jindal, MD
- Mohamed Kazamel, MD
- Staci D. King, MD
- Benjamin Koo, MD
- Erin E. Manning, MD
- Shaway N. Mazell, MD
- Elie Naddaf, MD
- Andrea D. Nitu-Marquise, MD
- Katrina Pack, MD
- Dennys Reyes, MD
- Reiner Henson B. See, MD
- Syed A. Shah, MBBS, MD
- Sheetal Shroff, MBBS
- Randy Taneja, MD
- Thananan Thammongkolchai, MD
- Lisa M. Williams, MD
- Ning S. Yang, MD
- Shumaila Sultan, MD

Get Ready for Silent Auction Action – Fun with a Cause

The AANEM Foundation’s silent auction, its largest annual fundraising event, always draws a lot of attention at the AANEM Annual Meeting. Attendees enjoy bidding on fun, educational, and unique items while supporting the Foundation’s research initiatives. This year, the Silent Auction will take place on Thursday, October 29 in the meeting exhibit hall, where attendees can preview and bid on auction items throughout the day. Bidding will conclude during “Happy Hour in the Hall.” “By concentrating the bidding to one day and closing the auction during a social event, we’re hoping to create a new sense of excitement for the auction,” says Foundation & Corporate Relations Director, Brenda Riggott. “After a long day of educational sessions, attendees can retreat to the exhibit hall to enjoy light appetizers, wine, and refreshments, and socialize with colleagues and exhibitors while bidding on their favorite items.” Funds raised are used to support the research initiatives of the AANEM Foundation, including research awards for young physicians, awards for outstanding research submitted to the annual meeting, financial assistance for international physicians from disadvantaged countries, clinical research fellowship opportunities, and neuromuscular research partnerships, including the new partnership with the Muscular Dystrophy Association.

AANEM members and industry partners are encouraged to donate items to the auction. Popular items include signed textbooks, jewelry, electronics, vacation getaways, hand-crafted items, and medical equipment or supplies.

To donate to the 2015 AANEM Foundation Silent Auction simply complete the online donation form at: www.aanemfoundation.org/Donations/Silent-Auction. Individual donations can also be made online at www.aanemfoundation.org/Donations. Auction items and individual donations are tax deductible to the extent of the law.

Your contribution to the AANEM Foundation is a contribution to:
- Fund outstanding neuromuscular and EDX research
- Acknowledge young physicians who conduct research and present posters at the AANEM Annual Meeting
- Help physicians from disadvantaged countries receive neuromuscular and EDX education they could not otherwise afford
- Support the funding of clinical research fellowships that encourage young physicians to conduct neuromuscular research

Your contribution to the AANEM Foundation helps advance the science of neuromuscular and EDX medicine through research and education that will improve the quality of life and care of patients with muscle and nerve disorders.

Have You Made Your Contribution to the AANEM Foundation?

Contribute to the AANEM Foundation today! Go to www.aanemfoundation.org/Donations
100% of your donation goes to fund Foundation programs. Contributions to the AANEM Foundation are tax deductible to the extent of the law.
Measuring Quality in EDX Medicine

“Quality health care” – “This is a phrase that is being heard more and more frequently, but what exactly is quality health care, and how do we measure it?”

The Institute of Medicine (IOM) defines quality as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”

A quality measure is information from a patient’s record, operational process or survey that is converted into a rate, percentage or time that shows how well providers are providing health services to patients. Quality measures typically identify a gap in care, measures it, and allow for process or outcome improvement.

Quality problems can be classified into one of three different categories:

• Overuse—this occurs when a health care service is provided under circumstances in which the potential for harm exceeds the possible benefit.

• Underuse—this is a failure to provide a health care service when it would have produced a favorable outcome for a patient.

• Misuse—occurs when an appropriate service has been selected but a preventable complication occurs and the patient does not receive the full potential benefit of the service.

Measures used to assess and compare the quality of health care are classified as either a structure, process, or outcome measure.

• Structural measures—give consumers a sense of a health care provider’s capacity, systems, and processes to provide high-quality care.

• Process measures—focus on clinical processes which may lead to a better outcome.

• Outcome measures—assess the results of health care, including those that are experienced by patients.

Pay-for-performance and other quality-based payment initiatives have heightened the importance of collecting quality measures. Quality measurement tied to financial incentives is one of many approaches value-based programs are using to promote system-wide improvement.

Quality patient care is one of the pillars around which AANEM has built its strategic plan. Recognizing the increasing need for measure sets designed to measure quality issues specific to neuromuscular (NM) and electrodiagnostic (EDX) physicians, the AANEM Quality Measure Subcommittee was officially formed this past spring. This subcommittee is tasked with identifying gaps in care specific to NM and EDX medicine and working collaboratively to develop sets of measures that can be utilized in practice. The priority of the first measure set to be developed will be gaps in care identified for carpal tunnel syndrome (CTS), with a goal of completion by fall of 2016.

AANEM policy staff will continue to provide the membership with updates regarding the development of the CTS measure set.

How to Correctly Use Modifier 25

Modifier 25: Significant, separately identifiable evaluation and management (E/M) service by the same physician on the same day of the procedure or other service. Since the publication of the 2014 report “Questionable Billing for Medicare Electrodiagnostic Tests” published by the Office of Inspector General (OIG), questions about the proper usage of this modifier have increased. In the report, the OIG identified seven measures to flag potential fraud, waste, and abuse in electrodiagnostic (EDX) medicine. One of these measures was “Physicians with an unusually high percentage of EDX test claims using modifier 25.”

Does this report mean that a physician cannot bill for an E/M service on the same day as the procedure? No. There are many patient-physician interactions that clearly require both a neurologic, physiatric, or EDX evaluation and EDX testing. A policy that categorically denies reimbursement for correctly documented E/M codes when billed with EDX codes is inappropriate. Allowing billing for both an E/M code and EDX codes in the proper circumstances increases the quality of patient care and reduces the costs associated with unnecessary treatment or surgery due to incorrect diagnoses.

However, inherent within all codes for services and procedures is time for an E/M component. This means that there are many situations where billing a separate E/M code is NOT appropriate. So what are some instances where it might be appropriate to bill for a separate E/M? Below are four main categories that could clearly require both:

• A patient is referred for an EDX evaluation with no diagnosis; however, the patient has additional problems requiring E/M.

• A patient is referred for EDX testing of one medical problem; during the E/M process the physician determines that EDX testing is necessary.

• A patient is referred for EDX testing of one medical problem, but actually has a different problem that demands additional E/M.

• A patient is referred for EDX evaluation with no diagnosis other than complaints of symptoms, requiring further E/M of the patient.

When an E/M is performed on the same day as an EDX procedure, fits the requirement of being truly “significant” and “separately identifiable”, and cannot be considered to be part of the E/M inherent within the procedure, these circumstances may be reported by adding modifier 25 to the appropriate level of E/M service.

As always, make sure the patient’s medical record documents and supports the expansion of the E/M code beyond that included within the procedure.

O n April 16, 2015, President Barack Obama signed the “Medicare Access and CHIP Reauthorization Act of 2015” (MACRA) into law. MACRA permanently repealed the Sustainable Growth Rate (SGR), replacing it with a new framework designed to reward physicians for quality over quantity. MACRA also reauthorized funding for the Children’s Health Insurance Program (CHIP) through 2017, delayed enforcement of Medicare’s “two-midnight rule” until October 1, 2015, and streamlined Medicare’s three quality reporting programs (Meaningful Use, Value-Based Modifier and Physician Quality Reporting System) into a single system. So what does this mean for AANEM members?

First, all physicians received a 0.5% payment increase to Medicare payments as of July 1, 2015. This payment increase will continue annually through Dec. 31, 2018. However, physicians are still subject to Medicare’s three quality programs and their penalties/bonuses through 2018 (payment adjustments under these programs will sunset at the end of 2018). Second, beginning in 2019, physicians must earn Medicare payment increases through their performance in one of two payment systems: the Merit-based Incentive Payment System (MIPS) or Alternative Payment Models (APMs).

**MIPS**

Physicians that elect the MIPS track will receive an automatic Medicare pay increase of 0.25%. They will also receive a score (0-100) that will determine additional bonuses or penalties. The composite score will be based on four main categories:

- Clinical quality
- Meaningful use of electronic health records (EHRs)
- Resource use efficiency
- Clinical practice improvement

The scoring will be based largely on already-existing standards from Medicare’s current quality reporting programs. Additional measures will be created through a rule-making process that will include input from medical specialty societies, such as AANEM. More details on the measures are expected to be released in the coming months.

Bonus payments or penalties will be determined by comparing the physician’s score from the previous year. The maximum bonus adjustment will start at 4% in 2019, gradually increasing to 9% in 2022. The maximum penalties mirror the bonuses, starting at 4% in 2019 and growing to 9% in 2022. Interestingly, the maximum penalties under MIPS is lower than the maximum penalties under Medicare’s three current quality reporting programs combined.

**APMs**

An alternative to participation in MIPS is participation in an Alternative Payment Model (APM). MACRA does not contain much detail on the types of payment models that will be eligible for payment under the APM track, but Patient-Centered Medical Homes (PCMHs) have been identified as one of the eligible models. A Technical Advisory Committee will be created to set criteria to review and develop additional APMs. There will be an open comment period during the development of the criteria.

This track will likely be more conducive to larger practices but MACRA will provide $20 million annually to assist practices of 15 or fewer eligible professionals (which includes physician assistants, nurse practitioners and other allied health professional) and practices in rural or under-served areas who wish to participate in an APM.

**Bottom Line**

As of now, physicians treating Medicare patients are still subject to the current quality reporting programs ( Meaningful Use, Value-Based Modifier and Physician Quality Reporting System). This will remain true through the end of 2018. All physicians will receive a 0.5% payment increase in Medicare payments annually through the end of 2018. Beginning in 2019, physicians receiving Medicare payments will have to choose to participate in MIPS or a qualified APM. More information about the specific measures for MIPS and what constitutes an eligible APM is expected to be released over the next several months. AANEM policy staff will share all updates as they are released.

---

**Coding With Carrie**

### Why are there so many more ICD-10 codes than ICD-9?

**Carrie Says:** The biggest differences in the diagnosis codes of interest to EDX physicians is increased specificity and laterality. For example, with ICD-9, the diagnosis code for carpal tunnel syndrome (CTS) is 354.0. There is only one code, and it does not differentiate which limb is affected. In ICD-10, there are now three codes for CTS, G56.01 (right upper limb) and G56.02 (left upper limb) and G56.00 (unspecified upper limb).

Under ICD-10, physicians will be required to document which side of the body is affected, which limb, which nerve, etc. specific to that diagnosis code. Most of this documentation occurs in the normal day-to-day processes already in place by physicians. However, if for some reason this documentation is not possible, there are always less specific ICD-10 codes that can be used.* In the CTS example above, if the patient’s medical record didn’t specify which limb was affected, G56.00 (unspecified upper limb) would be used.

The best way to prepare for the increased specificity that comes with ICD-10 is to perform an assessment of the ICD-9 diagnosis codes that your office currently utilizes most often. Once you have pinpointed these ICD-9 codes, you can create a “crosswalk” between these diagnosis codes and their ICD-10 counterparts. This will allow you to see the levels of specificity that will be required in your documentation. At this point, an audit of past medical records will help assess if there is enough information contained in your records or if there are significant gaps. A documentation improvement program implemented now will go a long ways toward feeling prepared for ICD-10 in October.

For example of a General Equivalence Mapping (GEM) crosswalk specific to neuromuscular and electrodiagnostic medicine, please visit the AANEM Member-Only Coding Resources page, found on the AANEM website.

*CARRIE WINTER, RHIA

Some insurance companies will not reimburse for “unspecified” diagnosis codes.
Ensuring Optimal Patient Care by Advancing Electrodiagnostic Laboratory Standards

Many patients and their families rely on electrodiagnostic (EDX) medicine, including needle electromyography (EMG) and nerve conduction studies (NCSs), for quality healthcare. Unfortunately, fraud, abuse, and the proliferation of testing by unskilled practitioners is jeopardizing the health and wellness of individuals impacted by serious neuromuscular conditions such as ALS, muscular dystrophy, and neuropathy. For many Americans, delay in an accurate diagnosis relying on EDX medicine can have significant consequences for their health and their healthcare.

In 2013, the Centers for Medicare and Medicaid Services (CMS) reduced reimbursement rates for EMGs and NCSs in an effort to curb fraud and abuse in EDX medicine. This action has done little to deter bad actors that operate with minimal overhead and continue to profit off the reduced rates while defrauding both the government and the patient community. Unfortunately, the reduced rates have had the unintended effect of further hindering patient access to quality care by disrupting the practices of qualified EDX practitioners -- neurologists and physiatrists. Losing reputable sites of care for EDX medicine has hit rural and medically underserved communities particularly hard.

Moving Forward

In an effort to protect patients and promote quality medical care, the AANEM has hired a medical lobbying firm, the Health and Medicine Counsel of Washington (HMCW), to assist with creating a national mandate to set minimum standards for providing quality EDX studies. HMCW staff and AANEM policy staff, along with assistance from some key congressional offices, are working to set up an initial meeting with CMS to begin developing a National Coverage Determination (NCD) to set standard requirements, based on those in AANEM’s Laboratory Accreditation program, for Medicare reimbursement of any EDX study. Using standards set up for laboratory accreditation has been accepted by CMS as a method of improving patient care for sleep medicine and breast cancer patients. Once the NCD process has formally begun, it generally takes 6-9 months for a final decision from CMS.

What is an NCD? Medicare limits its coverage to items and services that are deemed reasonable and necessary. This can take the form of setting specific requirements for the performance of specific tests, such as a nerve conduction study or an electromyography. The NCD will only technically apply to Medicare claims, but private payers tend to adopt CMS’s determinations. For more information on what the whole process looks like, please visit CMS’s website: www.cms.gov/Medicare/Coverage/DeterminationProcess/.

What You Can Do

First and foremost, get your EDX laboratory accredited through AANEM’s EDX Laboratory Accreditation program to ensure that you meet the standards. For more information on how to do this, please see our website at: http://www.aanem.org/Accreditation. Second, as these efforts progress, AANEM may be reaching out to members for their help in contacting their federal legislators to help put pressure on and reinforce the importance of this issue with CMS. Third, once the NCD process has formally begun, there will be a public comment period and you will be encouraged to participate online.

AANEM policy staff will continue to provide the membership with updates on these efforts via eNews, social media, and email.
AANEM • August 2015 • 15

Achieving AANEM Accredited Laboratory Status is News Worth Sharing

When you’re committed to providing the highest quality patient care, it’s not only gratifying to earn recognition for your efforts, but also essential to upholding important, credible standards recognized nationwide by patients, referral sources and payers.

From the standpoint of an accredited laboratory, completion of the AANEM’s Laboratory Accreditation application process signifies successfully meeting objective standards differentiating the quality of their care. As Nevada’s first physician-owned outpatient laboratory to receive this rating, Clinical Neurology Specialists West (CNS West) is excited to spread the word about their recent accreditation.

“This exemplary accreditation of our lab represents confirmation of our commitment to outstanding patient care services, from start to finish,” said CNS medical director Dr. Leo Germin. “My multi-disciplinary team of clinical professionals and I have worked long and hard to create the most effective possible neurology electrodiagnostic laboratory.”

While they found the application process mostly an affirmation of their existing standards, “It was a good experience for us,” said CNS Director of Billing, Carol Gutierrez, CPC. “We updated our EMG manual, and some of our process and policies. With respect to the way we write the reports, it was an affirmation that we were already doing quality reports.”

Earning accredited status is not only news CNS is proud to share – certificates of accreditation prominently displayed at all sites and media releases/social media posts widely distributed – but also a necessary step toward defining universally accepted EDX and neuromuscular quality care.

As a strong advocate for both patient education regarding their health and compliance with the AANEM policy, “Who Is Qualified to Practice Electrodiagnostic Medicine”, Dr. Germin is concerned about mobile diagnostic technicians performing EDX studies without EMG or physician supervision.

Dr. Germin supported the defeat of a Nevada Senate bill that would have allowed non-licensed practitioners to perform EMG studies in their or other providers’ offices. He believes that payers require education regarding the indications that EDX studies should only be performed under direct EDX trained board certified neurologists or PMR physicians, and for the future in the accredited EMG laboratories only.

Having earned AANEM exemplary accreditation for his own laboratory, Dr. Germin is eager to educate patients about the importance of seeking out the best quality of care for their medical needs.

“This is his passion,” says Gutierrez. “He wants to make sure people have their EMG in the right place.”

AANEM Rolling Out Lab Reaccreditation Process for 2016

In 2016 the first laboratories accredited by the AANEM for excellence in EDX medicine will be up for renewal of their five-year certifications. Since launching the AANEM Laboratory Accreditation program in April 2011, over 180 labs in 41 states have applied for and earned accredited status.

The AANEM Laboratory Accreditation Committee has been working with AANEM staff to create an online reaccreditation process, with plans of communicating the process by January 1, 2016.

“The AANEM’s EDX Laboratory Accreditation program has become extremely popular. It now includes hundreds of private labs as well as major academic medical centers,” said AANEM Laboratory Accreditation Chair, Dr. Peter Q. Warinner. “Many of these labs will be up for renewal in the coming years. Understanding the administrative burdens currently plaguing the medical profession, the AANEM’s goal is to make the re-credentialing process simple and efficient with minimal paper work.”

The plan is to provide a straightforward reaccreditation process focused on answering the important questions, reassuring patients that the accredited laboratories are providing the highest quality medical care.

“‘The reaccreditation application is being set up to look and feel a lot like the annual compliance reports, with a few extra sections of updated information,’” said AANEM Professional Standards Manager, Derek McMurchie. “Updated patient reports for new physicians are one of the key topics that will be revisited when completing the reaccreditation application. Just like with the initial application, correct patient reports are a key component in AANEM Laboratory accreditation.”

Please watch for communications in early 2016 about the process. If you have any questions, send an e-mail to accreditation@aanem.org.
S tengel and colleagues analyzed muscle biopsies from 21 patients with anti-synthetase syndrome-associated myositis. Ultrastructural analysis identified mononuclear actin filament inclusions in 17 of these biopsies but in none of the patients with other inflammatory myopathies. The four samples that did not have actin filament aggregates were distinguished by a relative paucity of inflammatory infiltrates, little perimysial fragmentation, and sparse necrotic fibers. Gene expression of molecules involved in regulation of actin levels was analyzed. Expression of XPO6 and PFN2 were elevated in both nuclei and cytoplasm. The proteins these genes code for exportin-6 and profiling-2 that work to export actin-profilin complexes from the nucleus. CFL2, which codes for the actin-shuttling protein cofilin-2 was down regulated in both nuclei and cytoplasm. CFL2, which codes for the actin-shuttling protein cofilin-2 was down regulated in both nuclei and cytoplasm.

Comment: Though it is often considered a subset of polymyositis was down regulated in both nuclei and cytoplasm. the anti-synthetase syndrome is distinguished from other inflammatory myopathies by the involvement of multiple organ systems beyond skeletal muscle, including the lungs, heart, gastrointestinal tract, skin, and joints. This study demonstrates a distinctive ultrastructural feature of anti-synthetase syndrome, and is a first step towards providing an explanation for the pathogenic and phenotypic difference among inflammatory myopathies.

About the News Science Editorial Board

The board helps to highlight significant, timely science news items for AANEM members. It reviews articles in journals and websites, identifies newsworthy items in the field, and writes article summaries.

Board members

Zaeeem Siddiqi, MD, PhD, Chair
Shan (Sarah) Chen, MD, PhD
Andrew J. Haig, MD
Ileana Howard, MD
Nicholas E. Johnson, MD
Carlos A. Luciano, MD
Leigh Maria K. Ramos-Platt, MD
Andrew W. Tarulli, MD
Agnes Walbom, MD, MS
Kenton P. Wang, DO

Myalgias associated with exercise are commonly noted in which of the following myopathies?

A. Infectious myopathies.  
B. Metabolic myopathies.  
C. Toxic myopathies.  
D. Congenital myopathies.  
E. Mitochondrial myopathies.

Answer on Page 20

What is the generator of a complex repetitive discharge?

A. Motor unit.  
B. Muscle.  
C. Terminal axon.  
D. Mini end-plate potential.  
E. Anterior horn cell.

Answer on Page 20

MRI neurography is an emerging modality in the assessment of peripheral nerves and T2-weighted or short tau inversion recovery (STIR) images are able to delineate the fine details of peripheral nerves that are not accessible with other imaging techniques. Using 3-dimensional reconstruction of STIR images Shibuya K. and colleagues studied patterns of nerve hypertrophy in chronic inflammatory demyelinating polyneuropathy (CIDP) in 33 patients and compared them to other variants of demyelinating polyneuropathies. The technique was able to show longitudinal morphological changes from the cervical roots to the nerve trunks in the proximal arm, areas that are typically not seen in routine imaging. Of the typical CIDP patients 88% showed mostly symmetric nerve enlargement with predominant involvement of nerve roots. Patients with Lewis–Sumner syndrome showed multifocal fusiform hypertrophy in the nerve trunks.
Efficacy of Idebenone on Respiratory Function in Patients with Duchenne Muscular Dystrophy Not Using Glucocorticoids (DELOS): A Double-Blind Randomized Placebo-Controlled Phase 3 Trial

In Duchenne muscular dystrophy (DMD) only corticosteroids, have been shown to have a disease modifying effect, particularly if started in younger boys. The use of steroids may be limited in older non ambulatory boys due to side effects related to a decade of corticosteroid exposure. Mouse models of DMD indicate protective effects of idebenone on cardiac and pulmonary systems.

In this double-blind placebo controlled study with a 1:1 ratio 96 boys over the age of 10 with DMD not using corticosteroids were treated with placebo or idebenone for 52 weeks. Interestingly, the authors chose pulmonary function parameters, namely change in peak expiratory flow, as the primary endpoint. A 5.96% difference in the percent change of the peak expiratory flow between the idebenone and placebo groups, which was statistically significant. There were minimal adverse events in the treatment group.

Comment: This is the first phase III study in DMD that has demonstrated a positive result with an intervention except corticosteroids. Idebenone appears to be a safe and well-tolerated, and may offer a potential alternative to steroids. Interestingly, this study also recruited an older patient cohort than many of the ongoing treatment trials in DMD. The clear limitation of the study is the use of the peak expiratory flow as the primary outcome measure. It remains to be seen how well this measure correlates with other functional measures or those related to quality of life.

Reaching Higher Levels of Stimulation

Digitimer offers high output stimulators for understanding human physiology & diagnosing neuropathologies.

DSS Biphasic Current Constant Stimulator
- User-defined Stimulus Shapes
- Software/Hardware Controllable
- Nerve Excitability Tests • CE Marked

DS7A/DS7AH Constant Current Stimulators
- Nerve and Muscle Evaluations
- Up to 1Amp & Variable Timing
- Patient Safe • CE Marked & FDA Cleared

Contact us for more information:
Digitimer Ltd
37 Hydeaway, Welwyn Garden City, AL7 3BE, UK
E-mail: sales@digitimer.com
Tel: +44 (0)1707 328347 Fax: +44 (0)1707 373153

AANEM Annual Meeting
No Suits Required

As you pack for this year’s AANEM annual meeting, plan to set aside your suit coat and grab your favorite casual wear. We invite you to enjoy the ocean breezes of the open-air Hawaii Convention Center in comfort by dressing island cool and casual - colorful shirts and sandals welcome.

AANEM Board Member, Gregory T. Carter, MD, (who has been known to wear Hawaiian shirts to board meetings) encourages all attendees to join him in loosening up to embrace the island way of life. It’s an invitation he takes seriously - at the last board meeting a challenge was issued: if all board and committee chairs wear Hawaiian shirts to the annual meeting, “I’ll make the sacrifice to suit up for the next board meeting,” agreed Dr. Carter. We’d like to see that happen. Please join us and ditch the ties! Dr. Carter gave his top three reasons for dressing casual at the annual meeting:

#3: It’s the one chance for a neurologist to dress like a PMR doc
#2: People will think you are with the NSA if you wear a suit with sunglasses in Hawaii
#1: It’s hard to put a bow tie on a Hawaiian shirt

In the spirit of embracing casual wear, we’ve planned themed dress-up days (for fun photo ops):

Wed, Oct. 28: NFL/MLB day
Thu, Oct. 29: Alumni day/college alma mater day
Fri, Oct. 30: Hawaiian shirt day

Shirlyn Adkins, AANEM executive director noted, “I am looking forward to finding other Packer fans on NFL day. I don’t really want to see anyone in a Dallas Cowboy or Seattle Seahawks jersey, so please leave those at home. They both bring back bad memories!”

Look forward to leaving the hustle and bustle of work life behind, while you fully enjoy the beautiful surroundings, and a great educational experience at AANEM’s Annual Meeting in Honolulu.
The AANEM 62rd Annual Meeting, October 28-31, 2015, in Honolulu, Hawaii, promises cutting-edge advances from the top researchers and physicians in the industry.

This meeting is unique in that it offers multi-specialty cross training in an intimate setting for healthcare professionals interested in research, diagnosis, and clinical management of patients with muscle and nerve diseases. This year's highlights include:

**“The Value of Quality” Plenary**

This year's plenary session centers on value, quality, and excellence in a healthcare system that's constantly changing. Led by six world-class speakers with a variety of backgrounds, including Stephen Beeson, MD, author of *Practicing Excellence: A Physician's Manual to Exceptional Health Care*, attendees can expect to discover: why and how quality measures are being utilized to monitor physician practices, how quality measures can be applied to NM and EDX medicine practices, how evidence-based medicine has been applied to develop normative data for NCSs and how to use this data in a practice, how to utilize the American Board of Medical Specialties measures for physician competency, quality, and achievement of life-long learning objectives, and describe how this may change in the future, and how quality measures and evidence-based guidelines have been utilized to develop best practices for treatment of NM diseases, including muscular dystrophy and ALS.

**Symposia, Courses and Other Educational Sessions**

Throughout the meeting, attendees will have the opportunity to participate in more than 100 basic and advanced sessions for specialists at any stage of their career. With most programming included in general registration and a maximum of 33.5 AMA PRA Category 1 Credits™ (CME) or 33 AANEM continuing education credits (CEUs), the meeting is also a great value.

Topics span across EDX, NM, musculoskeletal, and practice-based specialties and are presented in lecture, special interest group sessions, “Ask the Expert” discussions, and hands-on workshops.

Program highlights include: Challenging NM and EDX Cases, Updates in NM Disorders, Genetic Issues in NM Diseases, NM Complications of Infection and Vaccination, Palliative Care of NM Disorders, Antibodies and Biomarkers in NM Disease, NM Ultrasound, EDX and Ultrasound Mononeuropathies and EDX in Challenging Circumstances.

**Location and Tours**

October is a great time to visit Hawaii, and Honolulu has it all. It is home to some of Hawaii’s most historic sites, most notable beaches, and is also Hawaii’s hot spot for culture, arts, entertainment and food.

In addition to world-class educational sessions, the annual meeting offers several AANEM-sponsored tours around Honolulu. For the active enthusiast, there's a Diamond Head Crater Adventure or a Sail and Snorkel Tour. For a more laid-back approach to sightseeing, register for a Honolulu City Lights Cocktail Cruise or the Pearl Harbor Tour. Cycle Waikiki, Valley of the Rainbows and a Zombie Pub Crawl in celebration of Halloween are also sure to be popular tours during this year's meeting. More tour details and costs can be found online at www.aanem.org/meeting.

The Hilton Hawaiian Village, the official hotel of the 2015 Annual Meeting, is set on 22 oceanfront acres of Waikiki’s widest stretch of beach. The property boasts five pools, 20 restaurants and bars, the Mandara Spa, and Camp Penguin children's program. When you're not at the annual meeting learning about the latest in EDX and neuromuscular medicine, be sure to take in the beauty and excitement of everything Hawaii has to offer. With endless activities, attractions, and high-end shopping options within walking distance of the resort, you and your guests are guaranteed to enjoy your time in Honolulu.
Opportunities for Fellows, Residents, Young Physicians, and Technicians

One of the most valuable aspects of any AANEM meeting is networking with peers from across the country and around the world. Many facilitated opportunities to get involved and meet new friends are included in the general meeting registration, including: Technologist Breakfast Trivia, Resident & Fellow Breakfast Trivia, and Meet up & Mingle Network Sessions among others.

Evening receptions are another great way to network with and meet colleagues, friends, and exhibitors. Kick off the meeting at the President’s Reception on Wednesday or the Exhibit Hall Reception on Thursday while enjoying hors d’oeuvres, wine, and refreshments.

Special educational sessions for fellows, residents, young physicians, and technicians are also available. Residents, fellows, and young physicians will benefit from the basic workshops and educational sessions focusing on practice and techniques. Several workshops featuring NCSs, hands on learning, and actual case studies will be available to technicians.

CALL FOR SUBJECTS: Another great opportunity to get involved in the meeting and truly be hands-on during educational sessions is to consider acting as a subject for workshop programming. Subjects will be compensated for their time in addition to the educational opportunity. Interested individuals may contact Amy White, awhite@aanem.org for further details.

Social Event

Plan to join fellow meeting attendees at the AANEM 2015 concluding Social Event: The Hawaiian Luau Experience. Waikiki’s only outdoor luau features hula performers and a diverse array of Hawaii’s culinary influences in an incredible rooftop setting.

The 2015 62nd AANEM Annual Meeting will not disappoint! For full details on educational sessions, tours, and social events or to register, visit our website, www.aanem.org/meeting.
AANEM ACCREDITS NEW ELECTRODIAGNOSTIC LABORATORIES

Sentara Neuromuscular and Autonomic Center – Kamal Chémali, MD*
CHS Neurosciences Institute - Charlotte – Urvi Desai, MD*
Winchester Neurological Consultants – Neil Crowe, MD*
Clinical Neurology Specialists – Leo Germin, MD*
Wake Forest Baptist Medical Center – Francis Walker, MD*
Neurodiagnostic Laboratories – Ziad Blaik, MD
Ohio State University PMR – William Pease, MD*
University of Illinois Medical Center, EMG Laboratory – Lawrence Zeidman, MD*
Clinical Neurophysiology Laboratory, St. Louis University Hospital – Ghazala Hayat, MD*
St. Josephs Outpatient EMG Lab – Beth Stein, MD*
Children's Mercy Hospitals and Clinics – Matthew Mayer, MD
Wesley EMG Laboratory – Tulio Bertorini, MD*
Lakeshore Medical Clinic, Ltd – Ajaz Qhavi, MD

*Acreditation with Exemplary Status

Sierra Summit - The Sky is the Limit
The EMG system that scales with your needs.

- From single office to extended laboratory
- From lightweight mobile to ergonomic workstation
- From stand-alone system to limitless networking
- From routine to the most advanced studies
- Select the hardware that you need: 2 to 12 recording channels, 1 or 2 electrical stimulators, auditory stimulator or visual stimulator
- Future proof with free lifetime software upgrades
- Outstanding service

Visit us online at www.cadwell.com or give us a call at 800-245-3001 for more information.

PHYSICIAN TEST YOUR KNOWLEDGE ANSWER

B
Source: Introduction to Common Neuromuscular Disorders Coursebook; W. David Arnold, MD, Andrew H. Dubin, MD, MS, Erik Ensrud, MD, and Shawn P. Jorgensen, MD

On Sale Now

Online SAEs

2015

Use EDX and NIM SAEs as study guides or earn CME credits and meet MOC requirements for ABPN and ABPMP

Sierra Summit - Sky Limit - 1-15.indd   1
12/31/2014   1:37:08 PM