I. Introduction
A. Definition of the subspecialty or Section - Movement disorders are neurological conditions that affect the speed, fluency, quality, quantity, and ease of movement. They are divided into categories of hypokinetic and hyperkinetic movements. Hypokinesia refers to reduced and slow voluntary movement and includes akinesia, bradykinesia and rigidity. Hyperkinesia is defined as abnormal fluency or speed of movement that involves excessive and often involuntary movement, which includes dystonia, chorea, tics, myoclonus, and tremor.

B. General statement on conditions it covers and pertinent procedures (e.g. DBS, botulinum toxin injections etc) –
- Parkinson's disease and Parkinsonism
- Dystonia
- Chorea, Huntington's disease and other causes of chorea
- Cerebellar Ataxia
- Essential tremor and other Tremors
- Myoclonus and Startle
- Tics, including Tourette syndrome
- Restless legs syndrome
- Gait disorders
- Drug-induced Movement Disorders
- Psychogenic Movement Disorders
- Spasticity
- Akathisia
- Hemifacial spasm

The primary procedures performed include
- Botulinum toxin intramuscular injection with or without EMG guidance,
- Deep brain stimulation (DBS) for an expanding list of hypo- and hyperkinetic disorders tremor, Parkinson’s disease, Dystonia, Tourette syndrome (includes operating room physiology and clinical assessment and post operative programming)
- Neurophysiological studies: EMG and EEG for myoclonus, dystonia, stiff person syndrome, tremor, psychogenic movement disorders
- Management of baclofen pumps
- Motion analysis is a new neurophysiological procedure that objectively examines and quantifies movements. (Note: The establishment of such labs is underway in a small number of universities; billing for such procedures is not yet standardized.)

C. Overview of interaction with other specialties – The Section has an official liaison with the Movement Disorders Society (MDS) and joint membership in both organizations is strongly encouraged. Other specialties that share patients and procedures include: psychiatry for those neurodegenerative disorders that are manifested with psychiatric disorders as well as movement disorders, cognitive neurology for those neurodegenerative disorders that are manifested with dementia as well as movement disorders; rehabilitation medicine (comprehensive rehabilitation) is a big part of the treatments we offer most of our patients and as both specialties perform botulinum toxin injections for spasticity as well as baclofen pumps; neurosurgery partners with Movement disorder specialists in the area of DBS and baclofen pumps; sleep medicine for those neurological disorders that are manifested with sleep disorders as well as movement disorders, including Restless Leg Syndrome.
D. Purpose of the document – The strategic plan is being developed at the request of the Committee on Sections Executive Committee. The Strategic Plan is an opportunity for the section to review its history, outline the current status of the subspecialty it serves, and define short- and long-term vision and goals, as well perceived opportunities and challenges. Key AAN committees (Education, Science, Practice, Medical Economics, and Legislative Affairs) will use the Strategic Plan in developing programs and activities, thus ensuring our input into the Academy’s activities. For example, the plan will be used by the board of directors when developing a strategic plan for the AAN, the future of the profession task force to address key issues, the education committee when developing the annual meeting curriculum, etc.

E. Overall mission statement – The Section’s purpose is to enhance the education, research, and patient care skills of physicians in the area of Movement Disorders, and to encourage basic and clinical research in the area of Movement Disorders.

II. Background/History of Subspecialty or Section

A. Landmark early works/milestones
   - World Federation of Neurology (WFN) working group on PD and related disorders, and their triannual meetings beginning 1960’s (founded by Melvin Yahr; journal founded 1994, Parkinsonism and related disorders
   - The Movement Disorder Society in its earliest form was started in 1985; Founded by Stanley Fahn, MD and C. David Marsden, MD.
   - The current Movement Disorder Society (MDS) was developed as the result of a merging of the original “MODIS” and the International Medical Society of Movement Disorders in 1992.
   - The first International Congress was held in 1990 in Washington DC.
   - The specialty initiated its own Journal in 1986; The Movement Disorders Journal.
   - The AAN began developing sections in 1980
   - The Movement Disorders Section of the AAN first convened in 1995
   - The Section established the Movement Disorders Research Award in 1997, sponsored with support from the Parkinson’s Disease Foundation. This award honors a leader in the field who gives a lecture at a movement disorders scientific session at the Annual Meeting.
   - Members of the Section have created two education contributions for AAN publication Continuum, one on movement disorders with an accompanying videotape and one on Parkinson’s disease.
   - AAN has established Botulinum toxin-Dystonia workshops at annual meeting, winter meeting, and regionally throughout the year.

B. Growth of the sub-specialty or Section to current status – The section currently has 923 members. Data on the number of fellows completing subspecialty training, number of training programs and number of practitioners, academic and private, specializing in movement disorders is not available as it has not been tracked.

C. Genesis of pertinent journals and societies (e.g. Neurology, Archives of Neurology, etc.)
   - As noted above, the Movement Disorders Society was founded in 1985 with the subspecialty Journal “Movement Disorders” being initiated in 1986 – the first and only journal with a video supplement.

D. Current Board certification and other sub-specialty organizations/boards – None

E. Other professional and disease-related organizations relevant to the subspecialty.
   - Movement Disorders Society
   - Parkinson Study Group
   - Huntington Study Group
   - Dystonia Study Group
III. Current State of the Subspecialty or Section
   A. Patient care/practice
      1. Academic – Many academic centers have movement disorder specialists and some have divisions. Academic neurologists often have a focused clinic in Movement Disorders (80-100% of clinical practice). Some are further sub-specialized, i.e. Parkinson’s disease, Huntington’s disease, DBS, Botulinum toxin use, etc. They tend to focus on a particular aspect of movement disorders a majority of the time. The focus varies depending on the medical center.

      2. Private – Movement disorders are a minor part of most general neurologists’ practice. There is pressure in private practice to remain more generalized not be so specialized. There are some neurologists who focus specifically on movement disorders but the number is very few. For those with specialty training the percent of movement disorders patients seen is approximately 25-40%. General neurologists tend to see a smattering of movement disorders patients.

   B. Research – Research funding is available from a core group of private foundations, professional societies (e.g., AAN and MDS), governmental agencies, and industry. One billion dollars per year worldwide is spent on PD. Approximately ¾ is from industry, mostly smaller companies lacking resources to bring drugs to approval (most of the companies are from outside the US). Foundations provided $20 million, US government $236 million and $1.2 billion in 2005. Notable foundations that contribute to movement disorder research include:

   - The Cure Huntington’s Disease Initiative
   - The Michael J. Fox Foundation
   - The Parkinson’s Disease Foundation
   - Hereditary Disease Foundation
   - Huntington Society of Canada
   - Huntington’s Disease Society of America
   - American Parkinson Disease Association
   - National Parkinson Foundation
   - Parkinson Alliance
   - Parkinson Study Group
   - Dystonia Medical Research Foundation
   - Benign Essential Blepharospasm Foundation
   - National Spasmodic Torticollis Association
   - International Tremor Foundation
   - National Ataxia Foundation
   - Restless Leg Foundation
   - Progressive Supranuclear Palsy Society
   - Tourette Syndrome Association
   - NORD
   - Bachmann-Strauss Dystonia & Parkinson Foundation

The AAN has also partnered with the Parkinson’s Disease Foundation to support a Clinical Research Training Fellowship for junior faculty and fellows.

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Industry – In examining the website www.clinicaltrials.gov, 195 clinical studies are active, 24% funded by industry, 16% by NIH, 36% by other (includes university and donations), and 7% combined NIH and other, 6% combined industry and other and 11% other government agencies (FDA etc). Of these 195 studies 35% are clinical therapeutics trials, 6% are imaging studies and 59% are others (physiology, non-interventional treatments, clinical assessments, devices).

C. Education

1. Fellowships – The AAN, American Neurological Association (ANA), and the Association of University Professionals in Neurology (AUPN) have developed a fellowship directory on the AAN website. There are currently 24 fellowship programs in movement disorders. Fellowship curricula are not standardized, but typically include clinical evaluation and management of PD, ET, and other movement disorders; Botulinum toxin injection; DBS programming. Some fellowships provide limited basic science exposure. Finally, certain fellowships provide concomitant master programs in clinical research or masters in public health.

In 2002, and again in 2006, the Section surveyed movement disorders fellowship directors to gain insight into fellowship programs and accreditation. The 2002 survey showed that a majority of the institutions offered one fellowship in movement disorders with a few offering as many as three or more. A typical fellowship lasts for two years. The survey also indicated that over 60% of the responders were in favor of seeking ACGME accreditation of movement disorders fellowships.

However, in 2006, the fellowship directors were once again surveyed. This time the results indicated that over half of the responders were not interested in pursuing accreditation but were interested in learning more about it. Based on the results, the section decided to forgo pursuing fellowship accreditation.

2. AAN and MDS Education Programs – The AAN Annual Meeting includes 16 to 18 programs in movement disorders. The AAN Fall and/or Winter Conferences also include movement disorders programs in their curriculum. At the AAN annual meeting and all regional meetings the AAN sponsors Dystonia/Spasticity botulinum toxin workshops focusing on diagnosis of dystonia and spasticity and instructing on the technique using botulinum toxin.

The International Congress of Parkinson’s disease and Movement disorders is an annual meeting sponsored by the MDS. It is a five day program with 11 plenary sessions including four on therapeutics, four video sessions, four parallel sessions and workshops as well as four poster sessions. In addition, several courses are available each year in various subspecialty areas within movement disorders. The MDS website offers several educational opportunities including webcasts of courses, access to the Movement Disorders Journal and its video archive, podcasts, and a case of the month.

3. Medical Students – In most medical schools the amount of time devoted to Movement Disorders is small. Hence, prior to deciding on a career direction (residency) students have limited exposure. As an example, at Emory University, which has a large Movement Disorder presence, first year students get 2 hours on this subject, and second year students get 9 hours of classroom teaching (this is higher than most medical schools). In third and fourth year students complete one month of neurology and only a fraction of the students participate in outpatient Neurology clinics. Of those few spend time in movement disorder clinics, usually one or two clinics in a

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Exposure to this growing specialty is quite limited in medical student education. If a program does not have movement specialists there is no exposure.

4. Education of the public – Some universities are starting to educate the public on movement disorders. The emphasis is usually on Parkinson’s disease with very little focus on other movement disorders. The organization WEMOVE is accessible to physicians and the public with a focus on movement disorders. The NIH and various foundations provide educational materials for the public and some have annual meetings for the public (i.e. National Spasmodic Torticollis Foundation and the Benign Essential Blepharospasm foundation, and the International Essential Tremor Foundation). The National Parkinson Foundation and American Parkinson’s Disease Foundation (PDF) provide support for centers to educate the public and provide written materials. PDF provides live and enduring webcasts on Parkinson’s disease for patients on its website.

D. Medical Economics issues
1. On a yearly basis, there is a risk of losing reimbursement and that is not specific to movement disorders, particularly reimbursement for established patient E & M follow-up visits.
2. Botulinum toxin type A (formulated as BOTOX®) in the US is FDA approved for cervical dystonia, blepharospasm and medically refractory hyperhidrosis. Botulinum toxin type B (formulated as MyoBloc®) is FDA approved for cervical dystonia. In April 2009, a second form of botulinum toxin (formulated as Dysport®) was approved by the FDA for cervical dystonia. In the US off label use of some of the toxins varies from state to state.
3. Reimbursement is procedurally oriented, not intellectually oriented.
4. DBS OR physiological monitoring and office programming is time consuming and reimbursement is not adequate.
5. Reimbursement for telephone calls is not a separately billable service. It is being considered part of the E & M visit. Patients with chronic disease such as parkinsonism are frequent callers.
6. EMG, for targeted injection of botulinum toxin, reimbursement is low. It barely pays for the EMG needle.
7. Botulinum toxin reimbursement is low. It barely pays for the vial.
8. Reimbursement for Motion analysis. Codes are available but not consistently reimbursed.

E. Legislative Issues
- Medicare reimbursement
- Botulinum toxin & DBS reimbursement
- Stem cell research – Federal support.
- Prescription plan issues for patients
- Political Action Committee (PAC) involvement in subspecialties
- Health Insurance issues
- Rehabilitation issues
- Long term care: nursing homes, rehab centers.

IV. SWOT Analysis of the Subspecialty
A. Current Strengths in each of the 5 areas (patient care, research, education, economics, legislative)
1. Patient Care
   a) Academic
   - Mostly fellowship trained with specialized knowledge or expertise in areas including Botulinum toxin and DBS. Movement disorder patients make up 80-100% of their practice. High volume botulinum toxin practice leads to great experience and expertise.
   - DBS primarily carried out by academic centers.
   - Subspecialty, multidisciplinary clinics exist at universities for Parkinson’s disease, Huntington’s disease, ataxias, Tourette syndrome and other disorders with access to
psychiatrist, neuropsychologist, speech and physical therapists, social workers during a single visit

- Foundations have set up Centers of Excellence for PD (APDA & NPF) and Huntington’s (HDSA) which provide funding for care and research.
- The Centers of Excellence often lead to development of large support groups to provide access and services for patients.
- Some centers run support groups out of their programs: some programs have their own social workers (usually funded though other sources).
- Access to clinical trials
- Greater disease related information available for proper patient education.
- Teaching tool for residents and students. – Documentation is difficult when teaching.

b) Private

- Some practices are becoming multi-specialty and some fellowship trained neurologists enter the private sector in these groups. While this can provide patients access to specialists and clinical trials, most practices allow only 20-40% of patients to be movement disorder patients.
- Most are not subspecialty trained.
- Patients have easier access to physicians.
- Greater availability than university programs which are limited in number.

2. Research: One billion dollars per year worldwide is spent on PD. The celebrity exposure in PD has increased visibility and funding.

a) Foundations: provided $20 million per year.

- Fox Foundation has presented unique approaches to research funding and unique RFA’s
- Several subspecialty foundations.
- Provide funding for pilot grants to gain preliminary data.
- AAN Foundation provides support for fellows and junior faculty.
- Flexible infrastructure to support needs on an individual basis

b) National Institutes of Health (NIH), FDA and VA: US government provided $236 Million for PD.

- Focus is on basic science rather than clinical investigation
- Investigators have control/responsibility for funding and outcome as compared to industry, also greater indirects.
- Address issues that industry never will
- Obtaining NIH grants enhances departmental prestige and support
- Udall centers have created new opportunities for program projects.
- VA PADRECC Centers.

c) Industry: $1.2 billion per year in PD

- Approximately ¾ of funding is from industry, mostly smaller companies lacking resources to bring drugs to approval (most of the companies were from outside the US).
- Primarily clinical research dollars
- Provides its own infrastructure and funding with more flexible use.
- Provides access to multicenter trials and support for investigator initiated trials.
- Establishes meaningfully powered clinical trial data

3. Education

a) Fellowships

- Many high quality Movement Disorders fellowships which are flexible and can be tailored to the needs of the trainee. These are not accredited.

b) Residents

- Movement Disorders has been a popular specialty. With increased specialists there is increased exposure for residents
• AAN section has developed luncheons for residents to meet movement disorder specialists
• AAN provides access to high quality courses outside neurology training programs
c) AAN education programs including the annual and winter meetings are strong for movement Disorders
d) AAN developed evidence based practice parameters have been developed for various aspects of PD & ET.
e) MDS annual meeting is a significant 5 day meeting
f) Public
  • Strong programs for Parkinson’s disease & Huntington’s disease
  • APDA, NPF sponsored support groups
4. Economics
   a) None. We are one of the lowest paid medical specialties.
   b) Programs such as DBS and multi-disciplinary clinics are not well supported.
5. Legislative
   a) PD is a high profile disease that has lead to the development of Udall centers and PADRECC through acts of Congress.
   b) Parkinson Action Network lobbies for patient needs.
B. **Weaknesses** in the 5 areas
1. Patient Care
   a) Academic
      • Relationship between academic neurologists and private practice neurologists is generally poor. Current system of competition has led to a loss of collegiality. The referral flow is limited between the two.
      • High overhead impacts greatly on the profit margin. Movement disorder practice in the current system can never be profitable.
      • High level of regulation for University/Hospital practices not seen in private practices – Joint Commission. Key issue is sampling of medications for patients.
      • Decreased accessibility for University based practices, especially those in large urban centers.
      • Majority of our patient encounters are follow-up visits with chronically ill patients with multiple problems related to their underlying disorder – this is poorly reimbursed.
      • Programs such as DBS and multi-disciplinary clinics for Parkinson’s disease are not well supported.
      • Genetic testing is poorly reimbursed even for Huntington’s disease. Medicare is no longer supporting HD testing. Other areas such as SCA and PD are very expensive.
      • Neuropsychological testing and supportive psychotherapy can be only available in the context of a large academic practice, but the latter is usually poorly reimbursed with significant patient co-pay responsibility.
   b) Private
      • Few are specialty trained.
      • Less access to clinical trials and surgical therapies.
      • Try to take on botulinum therapy without proper training or experience. Patients suffer.
2. Research
   a) Foundations
      • Percent of grants funded is smaller than federal grants.
      • AAN foundation grants target new investigators but need mechanism to support established investigators for moving in new directions or bridging between R01 – especially in current environment.
• Foundation aims and goals are not always well defined
• Limited funding for clinical research

b) NIH
• Funding level ~8% makes it nearly impossible to secure funding and increased gaps in support occur due to the consistent non-funding of R01 and others on first round.
• Need infrastructure in your academic center in order to administer NIH grants (need a network or institutional support)
• High overhead with limited funds for actual research.
• Because of the high indirects the grant budget itself is usually cut significantly. Investigators often lose money with grants.
• Limited opportunities for clinical research.

c) Industry
• Increased regulation.
• No individual flexibility
• Lack of control over data
• Funding is related to areas industry wants to promote, not necessarily on what should be targeted.
• Does not enhance departmental support/profile
• Costs rising and funding diminishing. With increased costs for university overhead, IRB etc, industry is looking increasing to the private sector.

3. Education
a) AAN: Communication between the section and Topic work group and education committee not as good as it should be.
b) MDS: Issues related to their educational program – not an issue for AAN.
c) Fellowships
• No accreditation
• Fellowships do not have uniform standardized objectives between sites.
• Funding for fellowship training is limited.
d) Residents
• Limited exposure in many programs without specialists
• Many programs don’t have to take a movement disorders elective
• Residency in general tends to be more in-patient focused and most of the movement disorders patients tend to be outpatient, thus making it hard for residents to get the longitudinal experience of taking care of chronic patients with progressive disease.
• Residency in general tends to be more patient-focused and less research oriented (not sure this is a problem) I agree, the role of the residency is not to necessarily expose them to research, although there are programs requiring for them to have a completed research project before they graduate.
• Lack of continuity throughout their experience due to short rotation periods.
• Generally unfunded time for teaching for the individual faculty members.
• CME programs, AAN, MDS etc are expensive limiting access for residents and fellows.
e) Public
• Not much focus on other areas of movement disorders. Parkinson-plus disorders have a great need but there is little funding.
• There is not enough funding for education of patients and families. Time spent in the office is not reimbursable.

4. Economics
• Poorly paid specialty
• Movement disorders reimbursement is low because it is based primarily on E & M visits, mostly follow-ups, and not procedures.
• “Procedures” in movement disorders, such as botulinum toxin administration (with and without EMG) and deep brain stimulation programming, have fairly low reimbursement rates.
• The way the system is set up botulinum drug costs are not reimbursed well enough, could actually lose money doing it.
• Phone management in movement disorders is substantial and time spent on the phone is not reimbursed.
• Multi-disciplinary programs: DBS, Huntington, Ataxia, PD clinics may not be fully reimbursable.

5. Legislative

• No clear political action committee involvement specifically for movement disorders
• Need help from AAN for patient care, research endeavors.

C. Opportunities for growth in each area

1. Patient Care
   b. New procedures: Motion analysis, Transcranial Magnetic stimulation, new imaging techniques
   c. New botulinum toxins for movement disorders/Reimbursement of new indications (sialorrhea)
   d. New targets for DBS for other disorders such as Tourette syndrome
   e. Genetics is a growing field including potentials for pre-symptomatic screening. This can be expanded and reimbursed.
   f. Development of quality measures for PD through the AAN is an ongoing process.

2. Research
   a. With the current economy there seem to be few new opportunities for research growth and development. It is expected that foundation funds will shrink. NIH budget may shrink further with the large deficit. Even industry funds seem to be shrinking. Small companies are unable to perform appropriate trials.
   b. Academic/Private partnerships, by diminishing overhead (indirect) expenses, may attract greater attention of industry sponsors.

3. Education
   a. The AAN has provided the section with more opportunity for input. Could improve communication with the section to do so.
   b. Fellowship: developing more standardization for programs to enhance training - possible accreditation.
   c. Residency: Increasing exposure to movement disorders by increasing number of specialists being trained. The problem may be that many are entering the private sector.
   d. Medical students: Opportunity to increase exposure.
   e. Public education: Internet should help expand this area. This area is left to foundations and Academic centers. Funding is an issue.
   f. Partnering programs with the Movement disorder society.

4. Economics
   a. With the new administration there may be opportunity to restructure reimbursement so that for treatment of chronic disease such as parkinsonism. It remains unclear if will improve or worsen the situation.
   b. Use of quality measures for reimbursement may help as long as they are appropriate.
   c. Expanding usage of DBS and botulinum toxins and new reimbursement opportunities
   d. Acquire precise information regarding the number of fellowship trained movement disorder specialists, where they are practicing and the number in
training. This information will help to guide discussion and decisions regarding physician shortages.

5. Legislative
   a. AAN PAC could help with the restructuring reimbursement for neurology in general.
   b. Address new procedures (i.e. motion analysis) and new uses of botulinum toxin and DBS.

D. Threats to achieving goals in each area

1. Patient Care
   a) The use of botulinum toxin by other specialties with uncertain training and expertise: physiatry, anesthesia, general neurology

2. Research
   a) Shortage of funding, federal, foundation, and industry
   b) Strained relationship between academia and industry.
   c) Current increased regulation of research
   d) Cost of research increasing, funding is decreasing

3. Education
   a) Current environment in relation to industry will decrease their contribution. This will increase the cost to AAN, MDS members to participate in annual meetings. This will especially impact young physicians in training or early in their practice.

4. Economics
   a) Current economic environment can impact on all aspects of specialty care, patient care, research and education.

5. Legislative
   a) Plans of the current administration are unclear in relation to restructuring reimbursement and cutting costs in health care.

E. Current status of AAN input to each area

1. Patient Care
   Development of quality measures for PD

2. Research
   AAN Foundation grants for young investigators

3. Education
   The AAN provides strong support through AAN annual and winter meetings and Botulinum toxin workshops. The number of courses in annual meetings is above average.

4. Economics
   Unclear

5. Legislative
   Legislative affairs committee and PAC – impact is not clear

V. Specific Vision, Goals and Objectives for the Subspecialty/Section

A. Short Term (over next 5 years): Our overall goals relate to providing the highest quality care for our patients, highest level of education for students, residents, fellows and peers and the availability of dollars for high quality research that will move discovery forward. Developing such a vision in the current economic climate is difficult. Specific strategies and measures have not been developed as of this time. This is an area the AAN could be helpful. However we have listed some goals and discuss how the AAN might play a role.

1. Specific defined goals and targets
   Education:
a) The section has developed, years ago, guidelines for fellowship programs but there has been and implementation. This needs to be revisited and if agreed on by the section may lead to seeking accreditation.

b) Students and residents have limited exposure to movement disorders in many programs. The academy has attempted to expand on that through continuum and educational programs. But programs are expensive and difficult for residents to attend. Perhaps special resident programs can be developed. Also programs to increase awareness among medical students would be useful. We are unaware of any such programs that are currently active.

c) Create a registry for training programs and/or a listing of people who have specialty training. This could be placed on our web site. This is something the section needs to do through surveys with the help of the AAN.

d) Obtain statistics on future employment opportunities and outcomes of people training in Movement Disorders fellowships. This could go along with the registry of programs as well.

e) The section would like to have more of a role in selecting and developing education courses for the Annual Meeting although the program has been quite good. This could be done through topic work group. Perhaps the section can select members or have the chair of the education subcommittee for the section sit on the committee.

f) Create subspecialty winter meetings, in addition to the Botulinum Toxin/Dystonia workshops. There could be special, lower, tuition costs for those in training.

g) Increased public education for movement disorders other than PD. PD is clearly the most visible of movement disorders. The public needs to be made aware of other less common, often more devastating disorders.

h) Partnering opportunities with MDS – an integrated program at AAN co-sponsored by AAN MD section and MDS.

Research

i) A major area of concern in relation to research involves senior scientists who are between grants and need bridging and others changing direction. In addition, there are some senior clinicians looking for a new direction in clinical research. The AAN foundation has done an admirable job creating opportunities for young investigators in helping them get started. They could take the lead on this opportunity as well by creating grants for senior scientists, not just junior scientists.

j) The current relationship between industry and academia is in disarray. There is little trust on both sides and yet both sides need the other. Improved relationships between academia and Industry could come about by clear guidelines. Perhaps the AAN can take the lead on this through legislative and industry connections. This could clear the way for increased appropriate interactions and research for the betterment of patient care.

Communication

k) Information on the section webpage could be expanded. Access to the section newsletter and other features is not obvious on the home page.

l) Relationship between academic neurologists and private practice neurologists is generally poor. Current system of competition has lead to a loss of collegiality. The referral flow is limited and the patients suffer. Improved relationships between academia and private sector would improve care for our patients. How to address this is unclear.

Practice

m) This is a difficult area to examine with health care reform on the way and the current economic environment. The AAN is already trying to address this through legislative presence.

n) The AAN is taking the lead on developing quality measures for PD with the pay for performance structure. This has only just begun and is not being done for other movement disorders. Perhaps this will improve quality of care and even reimbursement but it is not clear.
The AAN needs to be at the forefront of improved reimbursement for standard cognitive follow-up visits, botulinum toxin therapy, DBS. The issue of subspecialty care needs to be addressed because of the complicated nature of the cases we see in practice.

DBS centers, like stroke centers, would improve care for patients requiring this intervention. This was brought to our section a year or two ago. Perhaps the AAN can help in this endeavor.

Reimbursement for genetic testing has disappeared, even for Huntington’s disease. This is an important area that needs to be addressed. In addition appropriate guidelines for the use of genetic testing need to be developed. In Movement disorders the section plus the genetics section could lead the way in developing such guidelines.

Multi-disciplinary clinics are being developed for many neurological disease. Currently such clinics exist for diseases such as ALS, HD, Muscular dystrophy. However, although these clinics represent the appropriate way these and other diseases need to be managed and should be the wave of the future, reimbursement is poor and they tend to be financial losers. The clinics rely on philanthropy or granting mechanisms that are few and far between or they disintegrate. Reimbursement for multi-disciplinary clinics needs to be addressed with third party payers.

Procedures such as Botulinum toxin injection are not longer the sole purview of the movement disorder specialist. Programs sponsored by the AAN, Neurotoxin institute and others have trained non- neurologists. The expanding use of botulinum toxin into non-movement disorder areas also possibly infringes on the movement disorder specialists area of expertise. As uses of botulinum toxin expand, this infringement of the movement disorder specialist practice will continue to grow.

B. Long Term (over the next 5-10 years)
   1. Specific defined goals and targets
      a) To this point the movement disorder section has not pursued certification/accreditation. It is felt there is no advantage to this endeavor. If there were, reimbursement issues or funding for fellowships this many move us forward.
      b) Reimbursement for new procedures DBS for other movement disorders using new targets, TMS, Motion analysis, imaging techniques. These will play a role in the care of patients. We should not allow reimbursement to be so low as to preclude their use.
      c) As demonstrated, NIH funding opportunities are dwindling. And opportunities for clinical research are low. Increased NIH funding for neurology in general could be addressed through AAN legislative services with input from the sections.
      d) Funding for the development of consortia to study less common disorders; dystonia, HD, Tourette’s, ET. This to could be done through the AAN by increasing awareness and then though lobbying congress. All with the input from the section.
      e) Reimbursement for new therapies: new targets for DBS, drug therapy should be addressed up front. Perhaps a plan on how to move forward with such situation before inappropriate levels are developed would be a good long term goal that the section would be interested in participating in.

VI. Summary/Concluding Statement
The movement disorder section has numerous areas where the AAN can provide support in improving education, practice and research. Many of these items are specific to our section while others are common to many subspecialty sections. These have been presented at the COSEC retreat and are listed below.

   1. Issues specific to our specialty.
      • Training programs
         ▪ Need for a registry of programs & trainees
         ▪ Standardization of fellowships
         ▪ Consideration of problems and benefits of accreditation of these.
      • Public education & research funding on “orphan” disorders limited. The AAN could help organize such programs.
• Relationship between academia and industry is confusing – need clearer guidelines. AAN could take the lead on this ever changing problem.
• Specialty programs complex but not well supported (ie: DBS). AAN legislative affairs could support such programs.
• Develop guidelines for DBS centers similar to stroke centers: according to “Best Practices”.
• Enhanced involvement of movement disorders on the MEM of the AAN. There is no member of the movement disorder section on MEM. The absence of representation could put movement disorders at a strategic disadvantage.

2. Issues shared with other sections:
   • Education issues: students and residents do not get enough exposure to our subspecialty. No exposure to transdisciplinary programs.
   • Programs available through the AAN Expensive for those in training. Are there smaller regional meeting that can be developed to focus on subspecialties?
   • Enhance educational opportunities via development of subspecialty winter meetings & programs at Annual meeting (including selection of speakers)
   • Web page expansion: interactive
   • Enhance communication AAN with sections and members so as to empower sections.
   • AAN & specialty organization should find were they are complementary – less competitive including meeting programs.
   • Research support middle level & senior scientists through AAN foundation grants
   • General research funding: General concerns in economic environment; limited opportunities in industry, foundation and federal, role of the stimulus?; stem cells; limited funding for clinical research, increasing costs.
   • Reimbursement: cognitive visits, procedures, genetic tests (movement), multi-disciplinary centers, new procedures, phone calls.
   • Insurance coverage: Prescriptions, Long term care, rehabilitation, equipment
   • Quality measures: need AAN to be active in the process and sections need to play active role. Transparent process (PQRI, AQA, AQF)