Sleep Section Strategic Plan

I. Introduction

A. Definition of Sleep Medicine
Sleep Medicine is the medical specialty that provides the clinical assessment, laboratory testing, diagnosis, management and prevention of sleep-wake and circadian rhythm disorders in patients of any age. Disorders include, but are not limited to, sleep related breathing disorders, insomnia, hypersomnia, circadian rhythm sleep disorders, parasomnias and sleep related movement disorders. The specialty is founded upon a broad array of basic and clinical studies that have defined the biology of sleep and the pathophysiology of its disorders.

B. General Statement of the Conditions Sleep Medicine Covers and Its Core Procedures
The specialty of sleep medicine includes not only the sleep period itself, but also the impact of disturbed sleep on daytime function. The chief complaint of the patient presenting to the sleep medicine physician may be disturbed sleep, non-restorative sleep, inadequate or inappropriately timed sleep, excessive sleep or sleepiness, daytime fatigue, or unusual sleep related events or movements. Particular concerns of the sleep section members as neurologists are sleep apnea, the hypersomnias (such as narcolepsy), movement disorders of sleep, parasomnias, epileptic attacks in sleep, the impact of neurologic disorders on sleep, and the impact of sleep on neurologic disorders. However, other aspects of sleep disorders including insomnia and circadian rhythm disorders are influenced by and may exacerbate underlying neurological conditions. The specific procedures of sleep medicine include the overnight sleep study called Polysomnography (PSG) including EEG-videopolysomnography, whether conducted in the sleep laboratory or through home monitoring, and daytime studies of alertness or sleepiness (multiple sleep latency test or maintenance of wakefulness test). Special tests are useful for specific conditions such as restless legs syndrome (the suggested immobilization test). Ancillary instrumentation includes the use of activity monitoring (actigraphy) to record movements and sleep cycles. There are a variety of questionnaires and schedules to measure sleep or the sleep dysfunctions of specific disorders. Because neurologic disorders (e.g. Parkinson’s disease, myopathy, Alzheimer’s disease) and medical disorders (cardiac disease, obesity, COPD) may impact sleep or be aggravated by sleep disorders, further neurologic general medical or psychiatric studies are important to fully understanding sleep disorders.

C. Overview of Interaction with Other Specialties
Sleep is a function of the brain. Brain alterations may cause secondary sleep-wake disturbances. Sleep medicine is a multi-disciplinary specialty and neurologists work with Pulmonologists, Internists and Family Practitioners, Psychiatrists, Pediatricians, Otolaryngologists, Dentists and Psychologists to diagnose and treat sleep problems. This interaction is recognized in the joint sponsorship of the certifying examination for sleep medicine by multiple boards of the American Board of Medical Specialties (ABMS, see below), and the requirement that certified sleep centers draw on a range of specialists.

Within the AAN, many of the disease-based sections are relevant to the sleep section, since their disorders involve specific interactions with sleep and sleep disorders. The relevant sections include, but are not limited to, stroke and vascular neurology, movement disorders, neuromuscular, autonomic nervous system, child neurology, epilepsy, geriatric neurology, headache and facial pain, and multiple sclerosis. The sleep section must also interact with the section on general neurology since sleep complaints often present first to the generalist and certain sleep problems (e.g. restless legs syndrome) can be well managed by the generalist.
D. Purpose of the Document – Why this is needed
This strategic plan is needed to plot the course of sleep medicine as an important specialization of neurology over coming years and to assess current strengths and weaknesses as well as to target specific areas needed to enhance the specialty and its interaction with other disciplines. It is important to clarify and prioritize areas of concern in the field and to develop a hierarchy of goals and related plans to achieve them. This process will be of use both to the section and its members as well as the AAN in general. The section plan will assist the Academy and its committees in their planning and designing of programs and activities. Of particular concern is the new recognition of sleep medicine by the ABMS as a discipline requiring official nation certification and the place of neurology within this newly recognized sub-specialty.

E. Overall Mission Statement
In collaboration with other specialists and health professionals, the aim of the Sleep Medicine Section is to provide neurologists in general with expertise in sleep medicine and to advance studies that probe the cause of and provide effective treatment for sleep disorders. Since sleep is a universal human function, shared with animal species of many phyla, optimizing sleep through dissemination of knowledge about good sleep practices and sleep disorders is an important mission of the section.

The Sleep Medicine Section of the AAN serves to:
a. provide a forum for neurologists who are interested in sleep to communicate about all aspects of sleep medicine
b. educate general neurologists in sleep physiology and the best practices for diagnosis and treatment of sleep disorders
c. advance research in the cause and treatment of neurologic sleep disorders
d. enhance the practice and expertise of neurology sleep specialists
e. promote early education of sleep and sleep medicine in medical school and residency programs
f. advocate public education on the effects of sleep on the brain and neurological disorders

II. Background/history of Sleep Medicine and the Sleep Medicine Section

A. Landmark early work/milestones
Sleep has been a concern to humans for time immemorial, but for most of human history, the study of sleep focused solely on observation or subject reports of their sleep and dreams.

A major advance was the development of techniques to monitor the electrical activity of the brain (electroencephalography, EEG). Combined with selective electromyography, electro-oculography, and respiratory monitoring, EEG permitted the assessment of sleep states in PSG. This led to the delineation of the specific states of non-rapid eye movement (NREM) sleep and rapid eye movement (REM) sleep, providing a normative architecture of sleep. In parallel development, the importance of the circadian rhythm as an internal representative of the night/day alternation was uncovered. Adding video recordings allowed the detection and categorization of a wide variety of abnormal motor activities in sleep. Subsequent developments have incorporated imaging studies, genetic analysis, neuroanatomy, and CNS physiology.

B. Growth of subspecialty/section
Sleep medicine emerged as a discipline in the 1960’s and 1970’s. The American Sleep Disorders Association, later the American Academy of Sleep Medicine (AASM), began to establish professional standards – a sleep coding system, a board to certify sleep specialists, the American Board of Sleep Medicine (ABMS), accreditation for sleep fellowships and standards for accrediting sleep centers. Since that period, the growth of the specialty has been phenomenal. From a handful of centers and a few dozen specialists, there are now approximately five thousand individuals
practicing sleep medicine and many hundred laboratories. Today, neurologists make up approximately 20% of the members of the AASM. Major professional advances have been the acceptance of Sleep Medicine by the ABMS, providing a pathway to national certification of individuals, and by the Accreditation Council for Graduate Medical Education (ACGME), allowing national accreditation of Sleep Medicine subspecialty fellowships.

Under the guidance of Dr. Sudhansu Chokroverty, the sleep section was founded and held its first meeting in 1993. Dr. Chokroverty served as the initial chair. That first year there were 36 attendees at the section meeting and 108 members on the mailing list. The section began to publish a newsletter in the Spring of 1995. There are currently approximately 410 members of the Sleep Medicine Section.

Throughout its early history, the sleep section promoted educational programs on sleep, with a maximum of 7 educational programs at the AAN annual meeting. Subsequent chairs of the Section were Michael Thorpy, Antonio Culebras, Cynthia Comella, the late Wayne Hening and Bradley Vaughn (acting chair). There are currently 4 well attended and reviewed educational programs in sleep at the annual meeting and several poster and platform sessions. A sleep science award was established in 1998 with sponsorship by Cephalon and has been presented each year since. The Sleep Medicine Section is currently seeking funding for a second award specific to junior investigators.

C. Genesis of Pertinent Journals and Societies

Articles related to neurologic aspects of sleep medicine appear in major Neurology journals, subspecialty journals (Movement Disorders, Epilepsia), and general medical journals.

Sleep and the Journal of Clinical Sleep Medicine are sub-specialty journals sponsored by the AASM. Sleep Medicine is the official journal of the World Association of Sleep Medicine (WASM). Sleep Medicine Reviews presents review articles on sleep. There are a number of international and other journals focusing on sleep (Journal of Sleep Research, Sleep and Breathing) or circadian rhythms.

In the United States, two societies, the Sleep Research Society (SRS) and the AASM, combine to present a well attended annual meeting (the Association of Professional Sleep Societies (APSS) that has been held in June for the last 22 years (one to two and a half months after the AAN meeting). This meeting draws over 5500 attendees.

The World Federation of Neurology has a Section on Sleep Research. There are also 2 international sleep societies. The World Federation of Sleep Research and Sleep Medicine Societies hold a major international congress every four years. National and continental societies constitute the membership of the World Federation. The World Association of Sleep Medicine (WASM), founded in 2003, is an individual member organization that holds a biennial congress and is particularly focused on bringing sleep medicine expertise to those areas of the world with less developed sleep medicine. There are also many national, local, and continental societies, as well as an International Pediatric Sleep Medicine Association, founded in 2006.

D. Current Board Certification and Fellowship Programs

Sleep specialists currently take the multidisciplinary examination offered by the American Board of Internal Medicine, the American Board of Psychiatry and Neurology, the American Board of Pediatrics, the American Board of Otolaryngology and the American Board of Family Medicine. This examination, currently offered every second year, is under the administrative direction of the ABIM, but is set by a Sleep Medicine Policy and Testing Committee with representation from all participating Boards. After a 3 year “grandfathering” period, candidates will need to complete an
ACGME accredited Sleep Medicine fellowship to be eligible to take the examination. 1,376 candidates successfully completed the first examination in 2007, including 335 neurologists and psychiatrists.

Sleep Medicine fellowships are currently accredited by the ACGME. Standard requirements have been developed but these are administered by individual residency review committees. A Sleep Medicine Advisory Committee, representing all participating specialties, provides recommendations to ACGME regarding curriculum and requirements. Fellowships are one year in duration and must follow successful completion of a residency in one of the participating specialties. Currently, there are 67 accredited Sleep Medicine fellowship programs.

E. Other Professional and Disease Related Organizations Relevant to the specialty
Outside the AAN there are also organizations and congresses devoted to sleep apnea, narcolepsy, and restless legs syndrome as well as patient organizations in these areas that contribute to patient education and support. The American Academy of Sleep Medicine and the Sleep Research Society are the two largest organizations promoting clinical care and research in the area of sleep. The American Sleep Medicine Foundation, the Sleep Research Society Foundation and the National Sleep Medicine Foundation support research and education in the area of sleep medicine. Other organizations include sleep as a component of their meetings. The American Clinical Neurophysiology Society, American College of Chest Physicians and the American Thoracic Society all include significant portions of their meetings to this area.

III. Current State of the Subspecialty or Section

A. Patient care/practice
Approximately one in three individuals have a sleep complaint, with 50 to 70 million Americans suffering from a chronic sleep disorder. However, it is estimated that only ~ 10% of patients with significant sleep disorders are being properly diagnosed and treated because of the shortfall in sleep medicine physicians and the lack of sufficient sleep laboratory beds. Combining this with the higher prevalence of sleep complaints among individuals with neurological disorders compounds the need for well trained neurologist. To this point, most neurologists fail to recognize or ask neurological patients about sleep complaints, including common disorders such as obstructive sleep apnea and restless legs syndrome. The current estimate by the AASM is that we have approximately 30% of the needed general sleep practitioners to meet the clinical need and fewer trained neurologists.

Sleep laboratories are facing change. Traditionally, sleep laboratories performed overnight studies and daytime studies in the facility. This past year, Medicare’s national CMS has ruled that portable studies, as alternatives to laboratory polysomnography, are acceptable for generating data to justify payment for CPAP, under certain strict conditions. This paradigm shift may increase access to sleep studies, but questions of quality, accuracy and applicability remain. Additionally the shift has also cause some anxiety in the financial return of performing this line of service.

Treatment options are available for many sleep disorders, and many patients have dramatic responses. The treatments vary from sleep hygiene education to medication to devices and surgical options. Some of these therapies require a multidisciplinary approach including Otolaryngologist, Oral Maxillary Surgeon, Dentist, Psychiatrist, Psychologist, Pulmonologist, Cardiologist or any of their pediatric counterparts

B. Research
Research in sleep medicine is still a young field, but has grown considerably. Over 95,000 articles are published using the key word “sleep” on Medline. The range of research topics include
fundamental studies of the neural mechanisms involved in state determination and the impact and implications of sleep disorders and sleep deprivation. Ground-breaking work has shown the intricate links of sleep to endocrine output, metabolic regulation, mood, cognition, memory and vascular disease. One sleep disorder, REM sleep behavior disorder, may predict the future onset of degenerative diseases such as Parkinson’s, multi-system atrophy and Lewy body dementia. Narcolepsy is the disorder that led to the discovery of a new neurotransmitter, hypocretin (orexin).

The quality of sleep research has also improved. The field is publishing more double blind placebo controlled studies and population studies. This improvement in quality of research parallels the development of sleep research as a national agenda. In 1993 the NIH established the National Center on Sleep Disorders. This center is responsible for promoting sleep research within NIH. By 2004 there were 331 sleep related grants sponsored by 17 institutes in NIH with NHLB leading the charge. Private foundations such as those supported by the AASM, NSF and SRS support research and the development of sleep researchers. These research projects involve new collaborations across many scientific and clinical disciplines.

C. Education
The rapid growth in the understanding of sleep medicine and its relationship to neurology and neurological disorders made it necessary for the AAN Sleep Medicine Section to address the demand of increased training and education at all levels. For practitioners, the AAN previously designated one day CME courses and symposia to the topic of sleep. This progressed to a current offering of six courses annually, underscoring the commitment of the Sleep Medicine Section to educate a wide range of target audiences with different interests and levels of experience. Apart from popular courses introducing the field of sleep medicine, case presentations and research updates are also well received. Overviews on recent developments in sleep medicine and highly specific presentations on conditions such as restless legs syndrome and narcolepsy offer the neurologist guidance for daily practice. The overlapping multifaceted aspects of sleep and its disorders are reflected in the frequent discussions of sleep-related topics in other educational activities of the AAN, such as courses in movement disorders, headache and dementia. The recently expanded AAN offerings of educational material in print and digital media (e.g. recordings of CME courses on CD or mp3 file format) as well as access to online information through www.aan.com allow further outreach to both the general as well as neurology communities. In addition, the sleep section periodically sponsors Continuum editions on sleep disorders. The AAN sleep section and its members are also involved in a wide range of educational activities as a part of other organizations, including the American Academy of Sleep Medicine, National Sleep Foundation, Sleep Research Society and the American College of Chest Physicians. These organizations offer several educational venues through the year.

In 2005, the ACGME began accrediting sleep medicine fellowships to follow specific primary training such as neurology, psychiatry, internal medicine, pediatrics and otolaryngology. Sleep medicine and polysomnography also can be part of a clinical neurophysiology training program. In 2001, the Neurology Residency Review Committee incorporated language that sleep and sleep disorders be included in the topics required to be taught as part of neurology residencies. Although this is a modest gain, it marks the first acknowledgement of the need to introduce the subject to young neurologists. Unfortunately, less than half of neurology residency programs have an affiliated sleep center in the same institution. This lack of exposure and access continues to be major hurdles for expansion of training within our discipline. At the medical student level sleep and sleep medicine still average less than one hour of instruction during the four years of training. Most of this instruction surrounds the recognition of sleep apnea. This minimal exposure demonstrates the need for a stronger influence of sleep education at the medical student level.
D. Medical Economics Issues
Economically, sleep disorders and insufficient sleep cost our society in many ways. Individuals with sleep deprivation and sleep disorders are more likely to develop other medical issues. Sleep deprivation has been linked to weight gain, depression and a greater number of accidents. Obstructive sleep apnea has been linked to hypertension, vascular disease and diabetes. Patients with restless legs syndrome have a higher risk of stroke and heart attack. The typical cost of a sleep study is between $2,000-2,700. Therapies also have become expensive. CPAP machines, typically used to treat obstructive sleep apnea, cost between $500-1,500 dollars per machine with an additional $200-300 in supplies per year. Medications for insomnia are estimated to exceed $13 billion annually in the United States. Beyond the individual cost, sleep disorders increase the likelihood of accidents and decreased productivity. Insomnia alone is estimated to cost our society nearly 100 billion dollar per year in lost productivity and accidents. Sleepiness is estimated to contribute to approximately 15-20% of automobile accidents.

E. Legislative Issues
1. Sleep Technology Legislation
The performance of sleep studies is highly dependant on the availability of sleep (polysomnographic) technologists. There are a number of pathways available for training of sleep technologists. Some are qualified respiratory therapists or electoneurodiagnostic technologists. Many are trained on the job. Others have completed formal training in sleep technology either through accredited college associate degree or diploma programs or through an introductory program sponsored by the American Academy of Sleep Medicine (A-STEP program). Legislative activity is ongoing in many states to limit the performance of sleep studies to respiratory therapists. This is strongly opposed by the sleep medicine community as having potentially disastrous effects on the availability of sleep studies. Sleep technology is well recognized as an independent allied health profession. The response from the sleep medicine community has been to sponsor legislation providing state recognition and control of the profession of sleep technologist. While this has been successful in many states, ongoing activity is expected for many years to come.

2. Drowsy Driving Legislation
Drowsy driving legislation has been introduced in some states, criminalizing driving after extreme sleep deprivation or in the setting of illnesses or medications causing hypersomnia. The sleep medicine community supports such efforts related to voluntary sleep deprivation but opposes any legislation which might criminalize illness and result in patients with treatable conditions avoiding consulting physicians for fear of restriction of driving privileges.

3. Resident Work Hours
Currently the Institute of Medicine is completing a review of resident work hours. This may result in recommendations to alter the current ACGME requirements and may result in the introduction of state or federal legislation to control resident working conditions. The sleep medicine community is carefully monitoring these developments; in general, we believe that the medical profession should police these matters through organizations such as ACGME rather than have controls imposed through legislation.

4. Sleep Research
The National Center for Sleep Disorders Research housed within the National Heart, Lung and Blood Institutes is responsible for the coordination of all NIH research on sleep. The sleep community favors legislation increasing the NIH budget with special reference to the National Center and those Institutes which support research into sleep and sleep medicine.
IV. SWOT Analysis of the Subspecialty

Strengths
1. Recognition of sleep medicine by ABMS, ACGME and ABPN as a neurological subspecialty with representation in the AAN as a formalized section
2. Large membership of the Sleep Medicine section with many nationally and internationally recognized experts in the field who teach across many disciplines
3. Well received educational venues for Sleep Medicine including courses, symposia and reviews (Continuum), with strong faculty and excellent content
4. Sleep is well-recognized as an important factor in daily life by both the general public and the healthcare community and similar demand high quality care
5. Specialty based established and accepted practice guidelines
6. Existence of Center for Sleep Research within NIH (centered in NHLBI)

Weaknesses
1. Low participation in Sleep Medicine Section by members in the section meetings and in the general AAN meetings and less than desired submission of abstracts.
2. The AAN and its meeting is not viewed as a key leader for issues of sleep and the brain in that the major meeting is the APSS which attracts more sleep neurologists, younger physicians and offers more training opportunities
3. Limited venues for exposure of sleep related research to neurologists
4. Limited funding of research for the overlap of sleep and brain function and dysfunction
5. High amount of commercially funded research
6. Neurologists comprise only 20% of the membership of the AASM among MDs and are outnumbered by pulmonologists by about 2.4-3.0:1. This impacts the influence that neurologists might have in the organization and also might affect the perception that neurologists and others might have about the role of neurology in sleep medicine

Opportunities
1. Development of several learning opportunities to attract and engage general neurologists and sleep specialists in venues such as web based pod casts or seminars, e-learning tools, on-line learning modules, case-based learning modules, or annual “mini courses” for general neurologists and sleep specialists as a part of the AAN meeting that would include advanced courses in sleep.
2. The AAN should work with the AASM on many public policy issues, including status of sleep technologists, drowsy driving, resident work hours and research funding
3. Improve the amount of sleep education, especially at the resident level, by influencing changes in the RRC
4. Improve the Medicare/CMS/ insurance company payment of sleep procedures, therapies and care of sleep patients
5. Improve funding opportunities for neurologists in sleep residencies.
6. Partner with the AASM on increasing education of sleep medicine at the medical school level and increase the amount of sleep related topics in medical school education of neurological disorders.

Threats
1. The loss of neurological input into sleep medicine by the lack of available voice and low participation of neurologists in sleep disorders. Unless the AAN proactively seeks participation of sleep specialists at the AAN meeting, there is the threat of either stagnating at the same level, or having reduced participation of neurologists in sleep medicine and sleep specialists in neurological issues.
2. The attraction of better known and supported neurologic subspecialties and the lack of formal required training in sleep medicine in neurology residencies leads most neurology residents away from a career in sleep medicine
3. Limited resources funding education and research, including the lack of interest by the NINDS on the impact of sleep on brain function and dysfunction

4. Rapid growth in knowledge threatens that general neurologists will have such a large knowledge gap with current concepts; they will be perceived as out of touch and insignificant in the field.

5. Current funding of sleep-related procedures will not be maintained.

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

A. Short Term (over next five years)

1. Specific defined goals and targets
   a. Improve quality of care of sleep issues in patients with neurological disorders
   b. Increase education of practitioners in sleep medicine to include a sleep course independent of the AAN
   c. Improve sleep medicine representation at the national meeting
   d. Increase education of sleep medicine in residency
   e. Maintain/increase funding of the Sleep Science Young Investigator award
   f. Enhance the AAN’s backing of the NINDS support for sleep research
   g. Improve joint operational ventures with other organizations interested in sleep medicine

2. Operational strategies to achieve goals
   a. Develop practice guidelines for neurological aspects of sleep
   b. Call for more proposals for courses offered by the AAN
   c. Increase the number of abstracts accepted by the AAN in sleep medicine
   d. Lobby for change in the RRC rules to include more sleep medicine in residency
   e. Develop an AAN specific core curriculum and teaching sets for residents
   f. Discuss with the AAN leadership further need of NINDS funding of sleep research
   g. Contact potential funding sources for awards
   h. Work with the AASM on common goals of the section and organization
   i. Include an AASM board member on the Sleep section executive committee

3. Specific action items for each goal
   a. Develop two practice guidelines for neurological aspects of sleep
   b. Advocate for biannual courses in sleep medicine
   c. Increase sleep courses at the AAN by increasing the number of proposals for courses
   d. Double the numbers of abstracts accepted
   e. Work with the AAN to advocate to the RRC to make access to a sleep laboratory mandatory
   f. Develop with the AAN specific training presentation slides for neurology residents to be offered to residency directors
   g. Meet with the AAN leadership and discuss approaches to the NINDS prioritization of Neurology based issues in sleep medicine
   h. Approach multiple funding sources including Pharma, private donors and organizations aligned with the goals of the Sleep Science Young Investigators award
   i. Meet with the AASM leadership to discuss common goals and joint operations
   j. Recruit and include an AASM board member on the Sleep section executive committee member
   k. Include an ex officio member of the AASM board to the Sleep section executive committee
4. Role of AAN in achieving goals
The AAN is seen as a leader in the areas of neurology and the care of patients with neurological issues. The AAN has specific resources that could be relatively easily dispensed upon these short term goals. The development of courses and seminars would require resource allocation, planning and strategic marketing. Similarly, resources allocated toward improving resident education are a principle function of the AAN and will require specific strategic resource allocation. However internal projects such as increasing the number of abstract accepted, and advocating for RRC changes or furthering interests of the NINDS in sleep aspects of neurological disorders require little financial resources. Therefore the direction the AAN’s leadership chooses sets the course for the degree of integration between neurology and sleep medicine.

5. Benefit to AAN and sub-specialty in achieving goals
The immediate benefit of increasing number of abstracts accepted to the meeting increases the number of meeting participants in the meeting. Further educational opportunities in sleep medicine would also provide a financial benefit to the organization and in the longer term increase the number of neurologists involved in sleep medicine and therefore increase membership. The influence over more long term issues such as training program design and research money will ensure more long term establishment of the AAN in the field of sleep medicine.

6. How will sub-specialty assess and address success/failure for each goal/area?
Success in the number of courses and abstracts will be measured by the number of courses offered and the number of abstracts submitted to the AAN meetings. The goals of influencing the RRC and NINDS will be more subjective in the influence we can have on changes within the RRC and NINDS opinion of sleep medicine inclusion. These areas may take great time since opinion may be less objective and require more time to see the final results.

B. Long Term (over the next 5-10 years)
1. Specific defined goals and targets
   a. Increase the presence of neurology in sleep medicine from 20 to 25%
   b. Increase the size of the section membership
   c. Make sleep medicine part of all neurology residency training programs
   d. Influence public policy on sleep related issues
   e. Increase research in neuroscientific area of sleep
2. Operational strategies to achieve goals
   a. Continue to increase the presence of education of neurology in sleep medicine courses and programs
   b. Advocate sleep medicine part of all neurology residency training programs
   c. Work closely with the AAN leadership on promoting sleep medicine in the realms of practice, training, research and public policy.
3. Specific action items for each goal
   a. Provide 2 major courses and programs for sleep medicine per year
   b. Advocate to the RRC for inclusion of sleep medicine rotation in training programs
   c. Promote the AAN leadership in sleep medicine advocacy to the NINDS for more research funding of sleep related projects.
   d. Provide influence over public policy in areas related to sleep medicine.
4. Role of AAN in achieving goals
As a resource for many physicians and organizations, the AAN has significant authority and respect in the area of neurological disorders. This position is valuable to influence the
direction the field of neurology. The AAN can play a major role in furthering the prominence of Neurology in the world of sleep medicine and the role of sleep within neurology. The AAN can approach this with three major fronts: internally by increasing courses and abstract at meetings, in parallel organizations by improving the education of residents and externally by influencing research funding and support of public policy. This would require the AAN leadership to recognize sleep medicine as a subspecialty of Neurology and be willing to commit resources to further the integration of sleep medicine and neurology.

5. Benefit to AAN and sub-specialty in achieving goals
The growth of sleep medicine offers a new growth potential for the AAN. This growth would be dependent upon the investment of the organization in showing commitment to the discipline and demonstrating leadership. This investment has several benefits to the AAN by recruiting members with interest in sleep medicine, increasing the number of physicians interested in sleep attending the AAN meetings, promoting the influence of neurologists in the field of sleep medicine and improving quality of care for neurological patients with sleep issues.

6. How will sub-specialty assess and address success/failure for each goal/area?
The success of these areas will increase the number of section members. Failure of these goals will lead to the further decline of sleep in neurology. Interest in sleep medicine by the AAN can be measured by the number of neurologists in the section, number of abstracts submitted to the AAN and number of peer reviewed articles published in Neurology. These metrics are going to lag behind the changes implemented; however, the number of neurologists entering sleep medicine fellowships may be a leading indicator

VI. Summary/Concluding Statement
1. Summary of mission/vision/values for specialty
The Sleep Medicine Section of the AAN is dedicated to educating general neurologists in sleep medicine, advancing research in the cause and treatment of neurologic sleep disorders, advocating public education on the effects of sleep on the brain and neurological disorders, promoting early education of sleep and sleep medicine in medical school and residency programs and furthering the integration of the disciplines of sleep and neurology.

2. Global conclusion and assessment of sub-specialty’s place within the larger scope of AAN, other subspecialties, neurology in general and related fields (e.g. neurosurgery).

Neurology is at a crossroads in defining the scope of the discipline. Should we be the premier resource for all disorders of the brain and should we pursue the understanding of how neurological functions interact and present opportunities to benefit our patients and society, or should we narrowly focus our efforts on traditionally viewed brain disorders? This cross roads is at the heart of the sleep section. The AAN, to date, has played a passive role in sleep medicine during which time the prominence of neurology in sleep medicine has declined. Continued decline is certain with this continued course. However, this does not have to be the case. Sleep, as a function of the brain, is intricately involved in the function of the brain and offers exciting opportunities in diagnostic and therapeutic options for patients with primary and secondary neurological issues. Additionally many patients with sleep disorders present with neurologically based complaints. These opportunities need champions of major societies to promote further development.
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