Testimony against HB 1621 and 1622

Brad Klein, MD, MBA

Wednesday, December 18, 2013

My name is Brad Klein. I am a physician in Abington, Pennsylvania, northeast of Philadelphia. I am a specialist in neurology and I care for patients with headache, multiple sclerosis, dementia, Parkinson's disease. I am part of an 8 physician neurology practice in Abington and also direct the Abington Headache Center.

I am here today on behalf of myself and my practice, Abington Neurological Associates, and I am testifying against HB 1621 and 1622 as they are presently written. While I do not represent any other organization, my sentiments have been reviewed and supported by a number of individual physicians in other private practices in our community. HB 1621 and 1622 should not be adopted as introduced because these bills will worsen patient access to physicians and further reduce the partnership that should exist between the insurance carriers and the provider community within our commonwealth. My hope is that this testimony expands your understanding of some of the history and present day problems that have challenged the relationship between physicians and insurers and perhaps some of the reasons that lead to the creation of integrated delivery systems. My additional hope is that you appreciate the need of further transparency by the insurers before you decide to legislate on integrated delivery systems.

Pennsylvania has only a few significant commercial insurance carriers. In Southeast Pennsylvania where I practice, we face an oligopoly. According the AMA 2013 Study of Insurance Markets, Independence Blue Cross (HMO, PPO, and POS products) controls 58% of this Metropolitan Statistical Area (MSA) while Aetna controls 30% of the MSA.[i] Given the market dominance of Independence Blue Cross (IBC), for instance, this company has had the ability to unilaterally determine premiums to patients, reimbursement rates to physicians, and ultimately make patient care decisions with or without physician involvement.

As a patient and small business employer, I consequently have limited insurance products to choose amongst. When such limited competition exists, what is the incentive of these insurers to keep their premiums low? While the Blue Cross/Blue Shield companies retain not-for-profit status, there seems to be limited transparency in their methodologies for premium determinations.

As a physician in a private practice currently, we have a large problem which could be worsened by this bill in the long run if we need to merge or become employed by a hospital system to survive. Physician practice expenses are escalating rapidly. The Medical Group Management Association (MGMA) estimates that my costs to transition my practice to the new ICD-10 system by the implementation date of October 2014 will cost my practice approximately $285,000 alone.[ii] There are other extensive costs that continue to escalate, including employee health coverage, technology costs for our electronic medical records system, more compliance regulations, HIPAA regulations, malpractice, and increases in rent to name a few. Understandably, my staff would like raises to match cost of living adjustments, at least. These costs do not include the endless and needless arguments and phone calls by my staff and me to insurers to get authorization for medications and imaging approved. This process can easily take hours for us to address just one patient's needs. One study estimated the total annual cost of interacting with a health plan was $68,274 per physician, per year.[iii] Providers are also routinely

not paid for the care and services provided for months, often years, after the date of treatment. Just like any large organization, the larger the insurers become, it seems the more errors and administrative bureaucratic burden is created. Should the physician bear responsibility for this significant nonclinical time and cost?

On average, commercial insurers in Pennsylvania also pay providers less than they do in other states. We have learned this first hand when trying to recruit physicians to our practice. One recent physician applicant, moved to a similar type of practice with similar cost of living in another state, but garnered $50,000 more than we could ever hope to offer, plus a bonus. Loss of physicians is, in no small part, due to poor reimbursement rates. We learned from other independent organizations such as www.healthcarebluebook.com and www.fairhealthconsumer.org that reimbursement rates should be much higher for our area, suggesting our community is underpaid by insurers such as the Blues. In our experience, physicians generally do not move into the area unless they have family ties. As you may be aware, the physician workforce in Pennsylvania is aging, with 55% of Pennsylvania's physicians also over the age of 50 and less than 9% of physicians are under the age of 35.[iv] Approximately 40% of trainees stay[v] compared to a 1992 report noting retention rates of 60%[vi]. Pennsylvania is one of the oldest states in the country and older people use a much higher percent of medical services. Demand is growing, not shrinking. How will these bills, which effectively forces providers into accepting insurer rates without a clear and transparent process, be helpful to the Commonwealth?

As a result, physicians have limited choices to maintain their income: attempt to negotiate directly with the insurers, see patients faster and thus end up risking quality care and safety, leave the region or state and continue practicing in more lucrative geographies, change careers, retire early, or become employed by larger systems and hope for higher rates.

Let me emphasize to you that it is *extremely* challenging for a private practice to discuss and effectively negotiate with an insurer directly. Most physicians are not business trained and their skill sets reside in medicine, not business. Specifically, their skills are not in negotiations. Most physicians went into medicine to take care of patients at the bedside. Again, it is *not* inherent in their training to run businesses or negotiate contracts with insurers. Thus, it immediately puts them at a disadvantage in negotiations. Furthermore, physicians are restricted in their ability to learn what others in the market are paid while the insurers have data on thousands of physician and practice reimbursement rates. The insurer also has the experience of perhaps hundreds or thousands of prior negotiations. Providers have no choice but to take on face value what the "usual and customary rates" are, as professed by the dominant insurers.

To make things worse, imagine a community of 75 physician practices and only two insurers. Imagine if 1 of those 75 physician practices determines that their reimbursement rates do not cover the costs of providing care to their patients. The practice reaches out to one of those two insurers to ask for an increase in reimbursement. The insurer says no. The practice now has limited choices. If the practice stops participating with that insurer, the insurer is not likely to lose because there are 74 other practices that currently take this insurer and the patients can easily shift providers. However, the practice may lose upwards of 40% of their patients and this could cause financial collapse due to the dearth of patients remaining within the practice.

The cards are truly stacked against the physician and his/her practice by default when trying to partner with the insurer in the care of the community served. Pennsylvania insurers are well aware of

these facts and have used this information to leverage against physician practices and other providers for decades.

However, it is even more challenging for an independent provider due to what happens to providers after the negotiations break down. These issues are more subtle, but yet can have an enormous negative impact on a practice. My practice looked over the above financial issues and asked IBC to assist us through improved reimbursement rates that would help us cover our costs, help us maintain the high quality we believe is important and help bring more neurologists to our community. They declined. This placed us in a precarious position as we had to choose: could we survive without IBC or should we join a larger health system simply to secure higher reimbursement rates. As you can appreciate, more doctors joining a hospital system allows the system to grow in size and power. The system can then more effectively negotiate reimbursement rates even higher than what a small practice like ours would have agreed to independently. Effectively, the insurers are encouraging us to merge into a larger system for our own survival. In the long run, not offering a compromise to independent groups clearly works against the insurer and possibly the community served if the premiums escalate to compensate the higher reimbursement rates obtained by a larger system. It seems like the insurers such as the Blues are encouraging providers to merge, become employed, and develop these integrated delivery systems. Thus the insurers are making their own beds. However, if HB 1621 and 1622 are enacted, the insurers will not have to sleep in the beds they made.

I would like to provide you a few examples of how we have been affected by IBC personally after our negotiations broke down. There was an option for patients to stay with our practice "in-network" for up to 3 months by signing a form called the "Continuity of Care." This was not offered by IBC in a letter distributed by them to all our 4,000 mutual patients, nor to those patients who called to complain. We learned this was only offered to those patients who called repeatedly or loudly. Presumably, by signing the Continuity of Care form, the patients would have the time to find another physician if they chose to do so. In order to qualify for this extended "in-network" time, our practice had to agree to all the terms and conditions of our prior contract, which we did. Apparently, this was not reciprocal. Even though IBC agreed to allow us to serve as "participating providers" to these patients for an extended period, IBC has only paid us approximately one third of these claims, now dating back to the beginning of August. You can imagine the thousands upon thousands of dollars IBC has unexpectedly not paid us has placed our practice at some financial risk and directly increased the pressure on our organization to agree to IBC's terms without argument. Perhaps IBC made an error in not paying us for services that occurred many months ago. However, we understand that IBC's Continuity of Care option is not a new concept and has been implemented by other practices in the past. This approach also deviates from Pennsylvania Act 68 whereby prompt claim payments are required within 45 days of receipt.

Another issue we discovered is that IBC does not pay out of network providers for emergency services rendered in the hospital, such as the acute strokes we manage for our hospital. When we are dealing with other insurers as out of network providers, they reimburse us directly for emergency services. However, IBC will not. When we directly asked them if we could have the patients assign payments to us, they said no and stated it is the obligation of the member to remit payment. This puts the patient who may be recovering physically and mentally from their hospitalization in a potentially uncomfortable financial and emotional position: receiving a potentially large bill that they are now responsible for and hope that IBC will pay them in a timely manner. This also puts us at more financial risk because we have found many patients who have not paid in any capacity for services provided.

Lastly, we learned that there is a relationship between Highmark and IBC. When we separated from IBC we learned that all PPO patients somehow became in-network again through Highmark's Usual and Customary rate (UCR) program, also known as its Traditional Program. Unfortunately, this program was not clearly an improvement from IBC's program. Thus in order to separate from IBC, we were required to terminate the UCR program, affecting patients that had nothing to do with IBC. You can imagine the confusion and conversations we have had to have amongst our patients and even our own staff to decipher this clearly. It seems wrong that our decision to leave one insurer should affect patients, as well as us, with another insurer. These are examples of only a few of the many complexities we have had to learn first-hand when trying to have more of a partnership with IBC.

As I hope you can see, providers that do not work in a system or are not large enough to have clout generally have limited options, limited knowledge, limited resources, and limited finances to ever actively disagree with an insurer in terms of reimbursement rates. Even after separating from an insurer, providers' financial risks (and stress) can extend much farther than the costs associated with seeing fewer patients per day. A few thousand dollars to an insurer is less than a drop in the bucket. A few thousand dollars to a provider can be devastating. It is no wonder that physicians need to look into merging or becoming employed into a larger organization if they wish to remain in the area and practice medicine.

Ultimately, insurers such as the Blues in Pennsylvania have significantly contributed to the development of large systems. It is not necessarily to develop an upper hand, but to balance the conversation and attempt a reasonable partnership. Highmark leadership helped build this bed, but does not want to sleep in it. What's worse, the same philosophy is occurring across the state with other insurers such as Independence Blue Cross. When they are not willing to partner with us, providing reasonable and competitive rates, we are forced to join larger organizations which may increase the risk of larger demands on the insurers. And at the end of the day, the true victims of this problem are the patients-your constituents.

We are reaching the apex of an outdated healthcare system. The rules of supply and demand economics do not function properly in the healthcare market. We need to change how healthcare is delivered, but these bills do not address that problem. They only perpetuate and accentuate the flaws of our existing system and continue to encourage the exodus of high quality physicians out of Pennsylvania, leaving patients with even less options than before.

If you are truly looking to transform healthcare, then a different model is needed. Legislation against integrated delivery systems should be balanced with appropriate legislative *and public* oversight of insurers equally, perhaps more so for those who are deemed not-for-profit. For instance, a Blue Cross/Blue Shield company should not be able to generate market shares of 58%. Unfortunately, I am not aware of any legislation that prevents either insurer monopolies or oligopolies in our state to protect consumers.

We need legislation that promotes transparency in the marketplace and encourages open discourse. Of note, increased reimbursement transparency is also supported by the Pennsylvania Medical Society. It would benefit the Commonwealth to halt this legislation and start over, with the understanding that transparency is a better foundation to change the system. The notion that Highmark, for instance, provides "usual and customary rates" is not reasonable. It is never explained to the public and not fair to the community.

In conclusion, I want to thank the members of this committee for learning more about the state of our healthcare system and the challenges of balancing care and cost and determining the best way to maintain access to high quality providers across the state. I am against HB 1621 and 1622 as they are written and I would be happy to work with you further to develop a more balanced approach to address the problems within our system.

Respectfully Submitted,

Brad Klein, MD, MBA
Abington Neurological Associates, Ltd.

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[i] AMA 2013 Competition in Health Insurance, A Comprehensive Study of U.S. Markets.
[ii] http://www.mgma.com/press/default.aspx?id=22586. Last accessed December 12, 2013.
[iii] L. P. Casalino, S. Nicholson, D. N. Gans et al., "What Does It Cost Physician Practices to Interact with Health Insurance Plans?" Health Affairs Web Exclusive, May 14, 2009, w533–w543.
[iv] Department of Health information, provided by the Pennsylvania Medical Society.
[v] 2012 AAMC data calculation, provided by the Pennsylvania Medical Society.
[vi] Pennsylvania Medical Society. "The State of Medicine in Pennsylvania: An Overview of Pennsylvania's Physician Market Place" 2008.

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EDUCATION

Chief Resident — July 2006 – June 2007
Neurology Department, Thomas Jefferson University Hospital
Philadelphia, PA

Headache Fellowship — July 2007 – June 2008
Neurology Residency — July 2004 – June 2007
Preliminary year, Medicine — June 2003 – June 2004
Thomas Jefferson University Hospital
Philadelphia, PA

Medical Doctorate — Sept 1998 - May 2003
Jefferson Medical College, Thomas Jefferson University
Philadelphia, PA

Masters in Business Administration — Sept 1998 - May 2003
Health & Medical Sciences Administration program
Widener University, School of Business Administration
Chester, PA

Bachelor of Arts, Dual Concentrations Biology & Psychology — Sept 1994 – May 1998
Graduated highest honors
Rutgers College, Rutgers University
New Brunswick, NJ

RESEARCH

Sub-Investigator- Wyeth 3133K1-300/1-US: Phase III, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Efficacy and Safety Trial of Bapineuzumab (AAB-001) in Patients with Mild to Moderate Alzheimer's Disease who are Apoliprotein E ε4 Carriers — Jun 2009 – present

Principal Investigator- Chronic Migraine Treatment Trial (CMTT): Multicenter, Randomized, Double-Blind, Parallel Group, Efficacy and Safety Trial in patients with chronic daily headaches — Apr 2009 – Sept 2010

Sub-Investigator- ELN115727-301: Phase III, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Efficacy and Safety Trial of Bapineuzumab (AAB-001, ELN115727) in Patients with Mild to Moderate Alzheimer's Disease who are Apoliprotein E ε4 Non-Carriers — Mar 2009 – present

Sub-Investigator- ELN115727-302: Phase III, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Efficacy and Safety Trial of Bapineuzumab (AAB-001, ELN115727) in Patients with Mild to Moderate Alzheimer's Disease who are Apoliprotein E ε4 Carriers — March 2009 – present

Sub-Investigator- High-dose Albumin Therapy for Neuroprotection in Acute Ischemic Stroke (ALIAS 2 Trial): Multicenter, Randomized, Double-Blind, Placebo-Controlled, Efficacy and Safety Trial in patients with acute stroke — Jan 2009 – present

Researcher, Neurology Department, Jefferson Medical College — Jan 2003 – Jul 2007
Supervised by Michael Sperling, MD, developed and coordinated pilot study; retrospectively assessed medical and financial outcomes of anti-epileptic drugs.

Research Assistant, Psychiatry Department, University of Pennsylvania — Jun 2000 – Aug 2001
Supervised by Albert Stunkard, MD, and Robert Berkowitz, MD, developed hypothesis, collected, analyzed, and reported data to correlate and prospectively predict weight gain in sixty-one children aged four to six.

Research Assistant, Psychology Department, Rutgers University — Jan 1996 – Jun 1996
Supervised by Mark West, PhD, involved in neurophysiologic mediation of cocaine self- administration in the rat to determine the relationship between the firing of individual nucleus accumbens neurons and the occurrence of drug- seeking behaviors. Directly involved with interpretation, analyses, and computer integration of data.

PUBLICATIONS & ABSTRACTS

1. Blumenfeld A, Ashkenazi A, Napchan U, Bender SD, **Klein BC**, Berliner R, Ailani J, Schim J, Friedman DI, Charleston L 4th, Young WB, Robertson CE, Dodick DW, Silberstein SD, Robbins MS. Expert consensus recommendations for the performance of peripheral nerve blocks for headaches--a narrative review. Headache. 53(3):437-46. March, 2013.

2. Fabrizzio, JV, **Klein, BC.** MR Myelography: Noninvasive Diagnosis of Intracranial Hypotension Secondary to Post Traumatic Cerebrospinal Fluid Leak. Abington Annals. Vol 2, No 1, Oct 2010.

3. **Klein, BC.** Pennsylvania Neurosociety Gives its Members a Voice. Neurosociety Insider. American Academy of Neurology. Vol 1, Issue 1. Fall, 2009.

4. **Klein, BC.** A Physician's Perspective on Seizure Drug Substitution. Epilepsy Foundations Pennsylvania, magazine special edition, November, 2008.

5. **Klein, BC.** Headache associated with AIDS. In: Gilman S, editor. MedLink Neurology. San Diego: MedLink Corporation, 2007. Available at www.medlink.com.

6. **Klein, BC.** "To serve patients and the profession, more physicians should be lawmakers," Letter to the Editor. American Medical News, American Medical Association. 50:32, August 27, 2007.

7. **Klein, BC.** Headache and Migraine. In: Five Minute Pediatric Consult. Ed. Schwartz, M. W., Lippincott Williams & Wilkins, Baltimore, MD, 2008.

8. **Klein, BC,** Young, W., Siddiq, F., Glosser, D., Tracy, J., Sperling, M. Relationship between Migraine, Epileptic Seizures, and Pseudoseizures. Abstract presented at American Epilepsy Society. June, 2007.

LECTURES & PRESENTATIONS

1. Klein, B.C. Regional Headache Management. Invited speaker to Chairman's Forum Lecture Series, Abington Health Foundation. Abington Memorial Hospital. November 4, 2013.

2. Klein, B.C. Legislative update 2013. Invited speaker to Pennsylvania Neurological Society annual conference. October 13, 2013.

3. Klein, B.C. Low Pressure Headache Case Presentation. Invited lecturer to International Congress of Interventional Neurology & Pennsylvania Neurological Society annual conference. October 12, 2013.

4. Klein, B.C. Spending Energy on Alternative Headache Treatments. Invited Grand Rounds Speaker to Abington Memorial Hospital. March 26, 2013.

5. Klein, B.C. Why do Headaches Happen? Invited lecture by Eldermed community outreach. May 2, 2012.

6. Klein, B.C. The Headache of Trauma. Invited lecture to Moss Rehabilitation Center. March 16, 2012.

7. Klein, B.C. Comprehensive headache care. Invited lecture to Abington Memorial Hospital Staff. March 5, 2012.

8. Klein, B.C. Headaches: Defeating Nerve Storms. Invited lecture at Neurological Emergencies Conference 2011, Abington Memorial Hospital. November 19, 2011

9. Klein, B.C. Acute Treatment of Migraine in Adults. Invited Grand Rounds Speaker Albert Einstein Hospital. November 18, 2011.

10. Klein, B.C. Headaches – A New Paradigm. Invited lecture at Primary Care Update 2010 conference, Abington Memorial Hospital. October 15, 2010.

11. Klein, B.C. Migraine Update and Outpatient Treatment. Invited Grand Rounds speaker at Abington Memorial Hospital, Abington, Pennsylvania. October 28, 2009.

12. Klein, B.C. State of the state, a legislative update for PA neurologists. Presentation to Pennsylvania Neurological Society during annual conference. October 24, 2009.

13. Klein, B.C., Carmichael-Derry, P. Pharmacological Management Options of Migraine in the Acute Care Setting. Lecture to Abington Memorial Hospital pharmacy staff. September 30, 2009.

14. Klein, B.C. Headache Pathophysiology and Inpatient Management. Two hour lecture to Abington Memorial Hospital Nursing. March 26, 2009.

15. Klein, B.C. Migraine Pathophysiology. Lecture to Abington Memorial Hospital Staff. January 7, 2009.

16. Klein, BC. Not tonight honey, I have a headache. Lecture to Abington, PA community. November 18, 2008.

17. Klein, BC. Avoidance of Anti-epileptic drug substitution without consent of the physician and patient. Testimony to the PA House of Representatives Health & Human Services Committee. May 19, 2008.

18. Klein, B.C. Relationship of Sleep and Headache. Lecture to Jefferson Headache Center, Thomas Jefferson University faculty & staff. January 31, 2008.

19. Klein, BC. Sleep: Neurobiology, physiology, and assessment. Lecture to Jefferson Headache Center, Thomas Jefferson University faculty & staff. January 3, 2008.

20. Klein, BC. The Future of Neurology in Pennsylvania. Invited Grand Rounds speaker at Drexel University, Philadelphia, Pennsylvania. June 29, 2007.

21. Klein, BC. The Future of Neurology in Pennsylvania. Lecture to Thomas Jefferson University Neurology Residents. June 2007.

22. Klein, BC. Sphingolipidoses, peroxisomal disorders, and pediatric issues. Residency In-service Training Exam (RITE) review lecture to Neurology Residents. February 2007.

23. Klein, BC. Headache & Pain. Residency In-service Training Exam (RITE) review lecture to Neurology Residents. December 2006.

24. Klein, BC. AVM: Diagnosis and Management, Part II. Lecture to Thomas Jefferson University Neurology Residents. November 2006.

25. Klein, BC. AVM: Diagnosis and Management, Part I. Lecture to Thomas Jefferson University Neurology Residents. October 2006.

26. Klein, BC. Cranial Nerve Two: A look at anatomy, function, physiology, and then some. Lecture to Thomas Jefferson University Neurology Residents. August 2006.

27. Klein, BC. Glycogen storage diseases, when sugar metabolism goes bad. Lecture to Thomas Jefferson University Neurology Residents. February 2006 & January 2007.

28. Klein, BC. Introducing the letter 'A': aphasia, apraxia, agnosia, abulia, and the frontal lobe. Lecture to Thomas Jefferson University Neurology Residents. January 2006.

29. Klein, BC. Hydrocephalus. Lecture to Thomas Jefferson University Neurology Residents. October 2005.

30. Klein, BC. ADHD: Diagnosis and treatment in children. Lecture to Jefferson Medical College medical students. March 2002.

PROFESSIONAL EXPERIENCE

Physician Consultant, S.M.A.R.T. Link Medical, Inc.; Lansdale, PA	Sep 2005 – Jun 2007
Web Developer, Neurology Department, Thomas Jefferson University	Jul 2005 – Jun 2007
Computer Fellowship, Jefferson Medical College	May 1999 – Aug 1999
Volunteer mental health counselor, Kennedy Hospital, NJ	Jun 1995 – Sep 1996

EDITORIAL EXPERIENCE

Reviewer: Neurology: Clinical Practice	2013
Reviewer: Headache, The Journal of Head and Face Pain	2009, 2013
Editorial Board: Abington Annals	2010 - present

ACADEMIC APPOINTMENTS

Medical Director, Abington Headache Center Abington Memorial Hospital, Abington, PA	Apr 2009 - present
Assistant Physician, Division of Neurology Abington Memorial Hospital, Abington, PA	Jul 2008 – present

ADVOCACY ACTIVITIES

American Academy of Neurology

Member, Practice Management and Technology Committee	Apr 2013 - Present

American Headache Society

Member, Medical Economics Committee	Aug 2013 – Present

American Medical Association

AMA Alternate Delegate, Pennsylvania Medical Society	Aug 2007 – Nov 2007
Chair, Pennsylvania Resident & Fellow Section Delegation to AMA-RFS	Nov 2006 – Oct 2008
Delegate, Resident & Fellow Section	Nov 2005 – Oct 2008
Alternate member, AMA-RFS Reference Committee A-07	Jun 2007

Pennsylvania Neurological Society	
Founding President	Jan 2007 – Oct 2009
Immediate Past President	Oct 2009 - Present
Chair, Legislative Advisory Committee	Oct 2009 - Present
Course Director, 2nd Annual PA Neurological Society Conference	Oct 2008
Course Director, 1st Annual PA Neurological Society Conference	Oct 2007
Co-Editor, PNS Newsletter	Jan 2008 – Oct 2008
Pennsylvania Medical Society	
Vice-Chair, Young Physician Section	Oct 2008 – Sep 2011
Chair, Resident and Fellow Section	Oct 2006 – Oct 2008
Delegate, PA Medical Society	Oct 2003 – Sep 2011
Pennsylvania Medical Political Action Committee	
Director, Board of Directors	Oct 2004 – Oct 2006
Philadelphia County Medical Society	
Member, Nominating Committee	Dec 2006 – Oct 2007
Director, Board of Directors	Jun 2006 – Oct 2007
Chair, Resident and Fellow Section	Oct 2005 – Oct 2007
Alliance for Headache Disorders Advocacy	
Treasurer	Jan 2008 - present
Thomas Jefferson University, Philadelphia, PA	
Course Director, 4th Annual Neurology Update 2007	Oct 2007
Thomas Jefferson University Hospital, Philadelphia, PA	
Member, Clinical Informatics Committee of the Medical Staff	Oct 2004 – Jun 2007
Resident Representative, TJUH Internal Review Committee	Nov 2004
Jefferson Medical College, Philadelphia, PA	
President, Jefferson Medical College Student Council	Jan 2001 – Dec 2001
Vice-President, Jefferson Medical College Student Council	Jan 2000 – Dec 2000
Treasurer, Jefferson Medical College Student Council	Jan 1999 – Dec 1999
President, Student Interest Group in Neurology (SIGN)	Apr 1999 – Apr 2000
Co- President, Co-founder, Society for Tomorrow's Physician	Sep 1998 – May 2002
Rutgers University	
Co-President, Co-founder, Entrepreneurial Leaders of America	Jan 1995 – Apr 1998
Sigma Alpha Rho	
National Membership Chair	Feb 1996 – Feb 1997
National Board of Directors	Feb 1995 – Feb 1997
National Convention Director	Feb 1995 – Feb 1996

HONORS AND AWARDS

- **AMA Physician's Recognition Award** 2007
- **Rodney D. Bell Resident Teaching Award** 2007
- **AHS/Merck US Human Health Clinical Fellowship Award** 2007
- **Donald M. Palatucci Advocacy Leadership Forum- Mentorship Program** 2007
- **Neurology on the Hill** 2006
- **Donald M. Palatucci Advocacy Leadership Forum** 2006
- **Neurology & Clinical Neurophysiology Award**, Neurology Associates, Philadelphia 2005
- **Arthur Krieger Memorial Prize in Neurology**, Jefferson Medical College (JMC) 2003
- **Kaplan Medical Honors Society,** Honor for excellence on USMLE I 2000
- **Helen and Gabriel Lavine Scholarship**, JMC, Award for excellence in clinical informatics 1999
- **Psi Chi National Honors Society in Psychology,** Rutgers College 1998
- **Gamma Sigma Alpha Honor Society**, Rutgers College, National honors fraternity 1998
- **Dean's Award for Excellence**, Rutgers College 1997
- **Rutgers Merit Scholarship,** Award for excellence in academics 1997
- **Rutgers Alumni Association Award for Community Service** 1997
- **Ralph DeFalco Scholarship**, Rutgers College, Award for excellence in Biology 1997
- **Golden Key National Honors Society,** Rutgers College 1996

LICENSURE & CERTIFICATION:

- Diplomate, American Board of Electrodiagnostic Medicine *Expiration Dec 31, 2021*
- Diplomate, Headache Medicine, United Council for Neurological Subspecialties *Expiration Oct, 2018*
- Diplomate, American Board of Psychiatry & Neurology *Expiration June, 2018*
- Medical License, Commonwealth of Pennsylvania *Expiration Dec 31, 2012*
- American Stroke Association, NIH Stroke Scale certification *Expiration Dec, 2015*

PROFESSIONAL SOCIETY MEMBERSHIP

- American Association of Neuromuscular & Electrodiagnostic Medicine 2009 - present
- International Headache Society 2008 - present
- Montgomery County Medical Society 2008 - present
- AAN Professional Association Political Action Committee 2008 - present
- American Headache Society 2007 - present
- Pennsylvania Neurological Society 2006 - present
- American Medical Association 2005 - present
- American Academy of Neurology 2004 - present
- Philadelphia Neurological Society 2004 - present
- Pennsylvania Medical Society 2003 - present
- American Medical Political Action Committee 2003 - present
- Pennsylvania Medical Political Action Committee 2003 - present
- Philadelphia County Medical Society 2003 - 2008