

# Opinion & Special Articles: Neurologist

## Specialized primary care provider vs consultant

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Per the Centers for Medicare & Medicaid Services' current proposal, many specialties, including neurology, are not eligible for the increase in Medicare reimbursements that will be allocated to other cognitive specialties, such as the 7% increase for family physicians, 5% for internists, and 4% for geriatric specialists.<sup>1,2</sup> Other specialties such as anesthesiology, radiology, and cardiology are scheduled for a 3%–4% decrease in reimbursement in order to pay for the increases outlined above. Current estimates show that neurologists provide a significant amount of primary care for complex patients, yet these services are not eligible for increased payments. It is estimated that up to 60% of neurologists' services to these complex patients are ineligible for increased payments.<sup>3</sup>

### NEUROLOGISTS AS PRIMARY CARE PROVIDERS

The lines that define a primary care provider vs a specialist are blurred or nonexistent in the majority of patients' minds. How often do specialists hear, "would you mind taking a look at this?" or "I have just one more question"? Data from the National Ambulatory Medical Care Survey from 1997 to 2007 reveal that nearly 40% of visits for primary care services were with specialist physicians.<sup>4</sup>

Combine the above impression with the growing shortage of primary care providers, and it is clear that overcoming the issue of specialists acting as primary care providers will be difficult. In the current climate of health care reform, millions of newly insured patients will now be competing for physician services, creating additional delay of care due to scarcity of primary care appointments. Specialists at times will find themselves providing more primary care medicine than ever anticipated.

Diseases such as Parkinson disease and multiple sclerosis are complex and overwhelming for many primary care providers to manage. The role of the neurologist in caring for these patients has expanded to fill both specialist and primary care provider roles. Neurologists can be in a unique position to assess the need for and to facilitate integration of

other health and social services for these complex patients.

**NEUROLOGISTS AS CONSULTANTS** As many as one in 6 people are affected by neurologic disease, and with the aged population of baby boomers expanding, the shortage of neurologists is getting worse.<sup>5</sup> The number of practicing neurologists is declining. By 2020, access to neurologists will be further limited, as current estimates forecast there will be only one neurologist for every 21,000 Americans.<sup>6</sup>

Further difficulty lies in attracting medical students to this rewarding specialty. Creating an environment in which neurology services are valued and reimbursed on an equitable basis with other specialties will help draw medical students to neurology.

The attitudes of medical students are influenced by their interactions with practicing clinicians. General practice physicians admit uncertainty when diagnosing and deciding on treatment options for patients with neurologic disorders. This attitude has the potential to "poison the well," as revealed by a survey of medical students and residents.<sup>7</sup> Neurology was rated the most difficult subspecialty, and the survey respondents reported the least confidence in assessing, diagnosing, and treating patients with neurologic conditions. In fact, the term neurophobia was coined in 1994 to capture the fear and uncertainty of medical students and physicians regarding their neurology training and their ability to care for patients with neurologic problems.

Bridging the gap early on by integrating basic sciences with hands-on bedside teaching and interaction can help to highlight the importance of neurologists and clarify what neurology residency training is all about. Medical students have very little exposure to neurology as a specialty and limited one-on-one interaction with neurology specialists.<sup>8</sup> Medical students are often exposed to the field of neurology in their final year of training, past the point at which they have chosen their field for residency training.

Research supports the specialist role for neurologists, particularly for stroke and complex neurologic disorders such as multiple sclerosis, Parkinson disease,

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and Alzheimer disease. For example, acute ischemic stroke patients cared for by neurologists compared to non-neurologists were less likely to be dead or dependent (modified Rankin Scale 3–5) at the time of discharge after controlling for stroke severity and comorbidity.<sup>9</sup> Also, a 2011 retrospective cohort study of Medicare beneficiaries showed a statistically significant reduction in hip fractures, need for skilled nursing facility placement, and likelihood of death in patients with Parkinson disease when managed by a neurologist vs a primary care physician.<sup>10</sup> It is suggested that a potential cost savings favors a neurologist managing the pharmacologic treatment of Parkinson patients, but exact amounts are difficult to calculate.

**OUR OPINION** Neurologists possess the unique knowledge base and experience to diagnose and manage complex neurologic disease. Primary care physicians are adept at managing multiple chronic disease states while improving quality of life and preventing morbidity and mortality. When multiple disease states coexist with a neurologic disorder, the primary care provider is most suited to manage these patients. The neurologist can provide specific consultation regarding the comorbid neurologic illness.

**DISCUSSION** In partnering with the primary care provider, the neurologist has the power to create a positive impact on specific neurologic diseases and overall quality of life for patients. With the current health care reform in motion, the need for additional highly trained neurologists will be magnified substantially. It is our hope that the climate of reform will increase the attractiveness of neurology as a specialty for both medical students and actively practicing neurologists. With reform in progress, the compensation for neurologists will not escape adjustment, but it is hoped that it will occur in a positive direction, as proposed for the other cognitive, nonprocedural areas of medical care.

## AUTHOR CONTRIBUTIONS

Shaheen E. Lakhani: drafting/revising the manuscript, study supervision. Mitchel Schwindt: drafting/revising the manuscript. Bashar N. Alshareef: drafting/revising the manuscript. Deborah Tepper: drafting/revising the manuscript. MaryAnn Mays: drafting/revising the manuscript.

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## REFERENCES

1. Brooks M. Neurologist income declines, frustration grows. *Medscape Medical News* Apr 25, 2012.
2. Lowes R. CMS proposes primary care raises funded with specialist cuts. *Medscape Medical News* Jul 6, 2012.
3. Gandey A. Neurologists left out of healthcare reform, proposing amendment. *Medscape Medical News* Apr 15, 2010.
4. Kale MS, Federman AD, Ross JS. Visits for primary care services to primary care and specialty care physicians, 1999 and 2007. *Arch Intern Med* 2012;172:1–2.
5. World Health Organization. Neurological disorders: public health challenges. Available at: [http://www.who.int/mental\\_health/neurology/neurodiso/en/index.html](http://www.who.int/mental_health/neurology/neurodiso/en/index.html). Accessed July 17, 2012.
6. American Academy of Neurology. The critical role of neurologists in our health care system. Available at: <http://www.aan.com/advocacy/issues/tools/109.pdf>. Accessed July 17, 2012.
7. Zinchuk AV, Flanagan EP, Tubridy NJ, Miller WA, McCullough LD. Attitudes of US medical trainees towards neurology education: “neurophobia”: a global issue. *BMC Med Educ* 2010;10:49.
8. Ringel SP, Vickrey BG, Keran CM, Bieber J, Bradley WG. Training the future neurology workforce. *Neurology* 2000;54:480–484.
9. Goldstein LB, Matchar DB, Hoff-Lindquist J, Samsa GP, Horner RD. VA Stroke Study: neurologist care is associated with increased testing but improved outcomes. *Neurology* 2003;61:792–796.
10. Willis AW, Schootman M, Evanoff BA, Perlmutter JS, Racette BA. Neurologist care in Parkinson disease: a utilization, outcomes, and survival study. *Neurology* 2011;77:851–857.

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