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How neurologists are paid

Part 1: The Medicare payment system

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Abstract

Neurologists are facing yearly reductions in reimbursement for rendered services. These reductions arise from changes by Medicare, Medicaid, and third-party payers to achieve cost savings. In Part 1, we discuss reimbursement for office visits and procedures, the relative value scale, the conversion factor used by Medicare to transform work into payments, and the recently repealed sustainable growth rate. The establishment of new codes for transitional care and chronic care management may augment the salaries of neurologists who care for patients with chronic conditions. Medicare's recent elimination of



payment for consultations and the bundling of nerve conduction studies have dramatically affected reimbursement. Large discrepancies remain between compensation for procedures and office visits. **Neurol Clin Pract 2015;5:397-404**

Physicians are dealing with many changes in health care delivery, but few are as stressful and constantly evolving as the reductions in reimbursement for care to patients covered by Medicare, Medicaid, and third-party payers. This anxiety is intensified by the need to precisely document each step in the care of inpatients and outpatients, and is compounded by the threat of audits and recovery audit contractors, the latter group whose compensation is tied to the amount of money judged to be overpaid by Medicare and other payers. This evolution of compensation affects all neurologists whether in pediatric

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or adult groups, solo or small groups, large subspecialty practices, health care systems, or academic departments.

The reductions in reimbursement stem from the need to reduce health care costs because of the large increase in covered lives brought on by increasing life expectancy, expectations for quality of care, chronic conditions, expanded benefits, and the greater use of health care resources by the elderly. Spending per Medicare beneficiary has increased from \$385 in 1970 to \$12,210 in 2013.¹ Over this time period, aggregate Medicare spending has increased from 0.7% to 3.5% of the gross domestic product.¹ The current posture of federal and state legislatures is to maintain or cut health care spending, thus imposing the reimbursement reductions on all factions of health care provision as more patients require service. At the present rate of increase, Medicare spending is projected to increase from 17% of federal revenues in 2014 to an unsustainable 27% in 2050 and 40% by the end of the 21st century.²

The changes brought forth by the Patient Protection and Affordable Care Act (PPACA) and the growing population of persons needing to receive health care will have a considerable effect on reimbursement. Changes in the distribution of payments made by the Centers for Medicare and Medicaid Services (CMS) occur every budget year, but the pool of available money does not expand (budget neutrality), so each year some specialties benefit from changes and others do not.³ In 2013, a new set of transitional care management codes were developed (Current Procedure Terminology [CPT] 99495 and 99496) and funded to pay physicians for performing face-to-face contacts within 30 days after hospitalization, skilled nursing facility stays, outpatient observation, or partial hospitalization. The intent of the codes was to improve posthospitalization care and lessen the need for rehospitalization. These codes were estimated to produce a 7% increase in payments to family practice physicians, a 5% increase to geriatric medicine physicians, and a 4% increase to internists and nurse practitioners.⁴ In a budget neutral reimbursement scheme, the increased reimbursement to physicians in primary care was offset by decreased payments to neurology, radiation oncology, cardiology, pathology, ophthalmology, and diagnostic radiology.⁵⁻⁹

These financial pressures, combined with increasing intensity of care and complexity of clinical operations, have dramatically changed the practice landscape for neurologists in solo private practice and private group practice compared to other locations of care. Between 2008 and 2014, the percentage of neurologists in solo practice dropped from 24% to 18%.¹⁰ In the same time period, the percentage in university-based and government hospital or clinic practices grew in aggregate by more than 5%.¹⁰ Increases have also occurred in public or private hospitals and in clinics. Neurologists employed by academic health centers and hospitals together outnumber those in private practice by a ratio of 2.5 to 1¹⁰ and the number of neurologists currently in solo practice is the lowest recorded since 1998.¹⁰ Nearly half of neurologists work for hospital-affiliated practices and most are employed directly by the hospital.¹¹

Payment trends affecting neurology

Reimbursement for neurologic care has shifted drastically over the past few years, beginning in 2010 with the elimination by Medicare of reimbursement for consultation codes. Based on Medicare Part B physician supplier national data from 2010, neurologists coded almost 90% of new outpatients and more than 90% of initial inpatient work as consultations.¹² Now, those consultation codes are no longer reimbursed. Even when one considers the increase in relative value units (RVUs) granted to new patient codes (99201–99205) and established patient codes (99211–99215) by Medicare in 2010, the net effect of this rule is a 14% decrease in reimbursement for initial patient encounters.

The sustainable growth rate (SGR) formula had been an ongoing concern for neurologists until it was repealed in April 2015. It created the uncertainty of not knowing year to year what reimbursement would be for services. The SGR was created by CMS in 1997 to control spending by Medicare for physician services.¹³ The rationale for creating the SGR was to ensure that

Changes in reimbursement for neurologic procedures can profoundly influence physician payment. For example, in January 2013, Medicare revised its reimbursement for nerve conduction codes.

the annual increase in the expense per Medicare beneficiary did not surpass the growth in the gross domestic product. Given the global decline in the economy for the last decade, along with a growing elderly population and health care utilization, the SGR formula created an unfair and unrealistic system for compensation of health care. Last-minute retroactive adjustments by Congress to avoid automatic SGR cuts made it difficult for physicians and health care systems to accurately predict cash flow and construct a viable business plan. To worsen matters, CMS's adjustments to reimbursement were not adequate to offset the rising costs of equipment, supplies, and medications in today's dollars, leading to reduced payment to neurologists, who shared the money pool with those rising costs. Further affecting neurologists, most managed care payers align their payments to the Medicare Part B fee schedule.

The future effect on salary and compensation structure remains equally clouded for neurologists who participate in alternative payment models and Accountable Care Organizations (ACO). The PPACA will make substantial changes to transition Medicare from a fee-for-service (FFS) environment to payments for episodes of care by implementing bundled payments and defined quality metrics.¹⁴ In an ACO, a lump sum payment for an episode of care would be distributed to all participating health care providers and for the technical components of a service.¹⁴ The ACO (and its members) would profit by expending less than the lump sum amount and would be responsible for the costs of care that exceeded the fixed payment.¹⁴ In essence, this reimbursement to ACOs represents a form of capitated care.

These changes will shape how and where neurologists choose to practice. Employment negotiations may include a complex salary structure with incentive features that may not be easy for the physician to self-audit. The rationale for an ACO is founded in a shared pathway of individual physicians working with employers to improve quality of care and reduce costs. Though value-based and patient-centered, this will be a foreign concept for physicians who have only worked in a FFS world.

Direct patient care reimbursement

Neurologists in all areas of practice derive compensation from multiple sources, but mainly from direct patient activities. The majority of personally performed services billed by neurologists include outpatient and inpatient consultations, new and established outpatient and inpatient visits, EMG and nerve conduction testing, EEG interpretation, epilepsy monitoring unit admissions, reading of sleep studies, Botox injections, autonomic testing, drug infusions, and other ancillary testing. One of the key components in calculating reimbursement is the RVU. The Relative Value Scale Update Committee of the American Medical Association establishes RVUs for each service rendered by physicians. Medicare uses RVUs as one factor in determining their allowable payment. Their formula is based on the following equation:

$$\text{Total RVU} = [(\text{work RVUs} \times \text{work GPCI}) + (\text{practice expense RVUs} \times \text{practice expense GPCI}) + (\text{malpractice RVUs} \times \text{malpractice GPCI})].$$

The geographic practice cost index (GPCI) varies statewide and even within metropolitan areas as well as between carriers for large insurance companies. GPCI is used to fairly compensate physicians who live in locations where the cost of living and the provision of care are high. A separate GPCI applies for work RVUs, practice expense RVUs, and malpractice RVUs.

Table 1 Commonly used CPT codes for evaluation and management services RVUs for level of service

Patient encounter	Level	CPT code	Total RVUs	Physician work RVUs
New patient, outpatient	3	99203	3.03	1.42
New patient, outpatient	5	99205	5.79	3.17
Consultation, outpatient	3	99243	3.51	1.88
Consultation, outpatient	5	99245	6.35	3.77
Established patient, outpatient	3	99213	2.05	0.97
Established patient, outpatient	5	99215	4.06	2.11
Inpatient consultation	3	99253	3.25	2.27
Inpatient consultation	5	99255	5.67	4.00
Subsequent hospital care	1	99231	1.10	0.76
Subsequent hospital care	3	99233	2.97	2.00

Abbreviations: CPT = Current Procedure Terminology; RVU = relative value unit.

GPCIs are higher for the states of New York, Massachusetts, and California and lower for states in the Midwest such as Nebraska and Oklahoma.¹⁵ The Total RVUs multiplied by the current year Medicare conversion factor (CF) equals the Medicare Allowable Payment.

Table 1 lists commonly used CPT codes for evaluation and management (E&M) services and their 2015 total and work RVUs. As one will observe, RVUs are higher for level 5 new outpatients and outpatient consultations than for the highest level of inpatient consultation, a peculiarity of the reimbursement system where payment does not correspond to the setting or severity of illness.

Changes in reimbursement for neurologic procedures can profoundly influence physician payment. For example, in January 2013, Medicare revised its reimbursement for nerve conduction codes. Instead of paying for each nerve conduction study (NCS) performed, 7 new codes were created, bundling NCSs into groups. For example, code 95907 covers 1–2 NCSs, 95908 3–4 NCSs, and 95909 5–6 NCSs. The number of NCSs reimbursed is capped at 13 (code 95913) even if the electromyographer performs more studies. This revised reimbursement plan has had a major effect on neurologists who perform extensive electrodiagnosis on large volumes of patients. Other subspecialties such as cardiology and gastroenterology have been affected by bundling.

Medicare influences reimbursement each year by changing the CF paid for each RVU. This is one of the primary mechanisms Medicare uses to maintain budget neutrality in a health care system where costs are escalating. Table 2 lists the change in CF from 1992 through 2015.¹⁶

The CF rose in 14 of the 23 years since 1992, but only 15.5% in total value over this period.¹⁶ In the other years, the CF dropped or remained the same. The factor is considerably lower in 2015 than in 2006. Over a similar time period (22 years), the Medicare Economic Index (MEI) has risen 40% and Medicare payment rates have dropped by 40%. The MEI was developed in 1975 as a way to estimate annual changes in the operating costs and earning levels of physicians.¹⁷ From 1992 to 2014, the consumer price index (CPI) has jumped from 140.3 to 237.1.¹⁸ The CPI is a measure of the average change over time in the prices paid by consumers for a market basket of goods and services and reflects, in this discussion of medical economics, the eroding buying power of physician's income. Thus, measurements of medical and consumer costs have risen dramatically in contrast to Medicare reimbursement to neurologists, which has dropped.

Medicare Part B payments comprise more than 30% of the average neurologist's practice revenue (Medicare Part A is the payment to hospitals). Since most managed care companies

Table 2 Changes in the conversion factors from 1992 through 2015

Year	Conversion factors (\$)
1992	31.00
1993	31.25
1994	32.91
1995	34.62
1996	34.63
1997	33.85
1998	36.69
1999	34.73
2000	36.61
2001	38.26
2002	36.20
2003	36.79
2004	37.34
2005	37.90
2006	37.90
2007	37.90
2008	38.09
2009	36.07
2010	36.87
2011	33.98
2012	34.04
2013	34.02
2014	35.82
2015	35.80

base payments on the Medicare allowable amount, any shift in the RVUs for a service not only affects Medicare payments, but also the reimbursement amounts from insurance companies and managed care payers.

In most states, Medicaid pays less than Medicare. This discrepancy explains the tendency of some neurologists to decline consignment from patients with Medicaid except for emergency situations. One of the provisions of the PPACA was to pay primary care physicians the same rate for Medicaid as Medicare patients.¹⁹ All subspecialties in internal medicine were considered primary care physicians in this decision, including cardiologists and gastroenterologists.¹⁹ Neurologists were hoping to join this Medicaid bump, justifying its inclusion on the premise that neurologists provide primary care to many patients with neurodegenerative conditions such as parkinsonism, amyotrophic lateral sclerosis, and multiple sclerosis. However, congressional action did not materialize to add neurologists to the list of physicians entitled to the Medicaid bump. In January 2015, Congress chose not to renew the Medicaid bump for all physicians. The 10% Medicare primary care incentive payment program will continue through 2015.

Despite considerable recent changes in the values of RVUs, major disparities exist between the values assigned to cognitive services, e.g., the E&M required for direct patient care and the values for time expended in performing procedures. Income generation currently favors

In most states, Medicaid pays less than Medicare. This discrepancy explains the tendency of some neurologists to decline consignment from patients with Medicaid except for emergency situations.

proceduralists over cognitive specialists, the latter group who are primarily compensated by E&M visits, for two reasons. First, with experience, procedure times tend to shorten, yet E&M visits tend to remain about the same. Second, technical payments contribute to the higher reimbursement for procedures. The current trend in Medicare and Medicaid payments is to more closely align reimbursement for these 2 types of services. This is accomplished through a substantial cut in compensation for procedures, complemented by a small increase in payment for primary care services. For neurologists in every care delivery model, procedural care has financially supported E&M services, which alone cannot sustain the financial viability of private practice or university-type practices given the ever-rising practice overhead rates.

Congress continues to promote short-term fixes to encourage quality care, value, and cost savings. Examples include the innovative payment models, such as accountable care organizations, value-based purchasing,²⁰ and episode of care (single payment). These proposals are too new and untested to predict their future, acceptance in health care, and effect on neurologists.

Emergency department (call-pay)

The growth in the number of accredited stroke centers in the United States has been pivotal in permitting neurologists to negotiate on-call (OC) pay. Although most neurologists do not receive compensation for OC duty, hospitals have recognized the value of neurologic consultation in the emergency department (ED). This OC payment, valued similarly to compensation for serving on a hospital committee, is regulated and must be based on fair market value, as defined by Stark regulation. Typically, OC compensation is paid only for coverage of the ED and not for general neurology ward and consultation services. The reason for compensating emergency OC coverage is the expectation that the neurologist will be available for immediate face-to-face services, particularly for stroke care. Several contracting scenarios have been created with the most common a flat rate for day, evening, or weekend coverage. This movement to pay for OC service has helped to drive the neurohospitalist movement as a defined specialty.

REFERENCES

1. The Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds. 2014 Annual Report. Washington, DC: The Trustees; 2014.
2. Congressional Budget Office. The 2014 Long-term Budget Outlook. Washington, DC: Congressional Budget Office; 2014.
3. 2015 Medicare Values. Available at: https://www.aan.com/uploadedFiles/Website_Library_Assets/Documents/3.Practice_Management/1.Reimbursement/2.Medicare/1.Medicare_Payments/RVU.pdf. Accessed December 3, 2014.
4. Transitional Care Codes. Available at: <http://medicaleconomics.modernmedicine.com/medical-economics/news/user-defined-tags/99495/making-sense-new-transitional-care-codes?page=full>. Accessed May 18, 2015.
5. Centers for Medicare & Medicaid Services, Department of Health and Human Services. Medicare Program; Revisions to Payment Policies under the Physician Fee Schedule, DME Face-to-face Encounters, Elimination of the Requirement for Termination of Non-random Prepayment Complex Medical Review and Other Requirements to Part B for CY 2013. Final Rule. Federal Register 77, No.

- 222 (November 2012): 68891–69380. Available at: <http://www.gpo.gov/fdsys/pkg/FR-2012-11-16/pdf/2012-26900.pdf>. Accessed December 3, 2014.
6. Optum 360. Multiple Procedure Reductions Apply to More Services for 2013. Available at: <https://www.optumcoding.com/CodingCentralArticles/?id=981>. Accessed April 15, 2015.
 7. Sorrel A. Cardiologists' suit against Medicare pay cuts dismissed. *American Medical News* January 18, 2010. Available at: <http://www.amednews.com/article/20100118/government/301189949/6/>. Accessed April 15, 2015.
 8. College of American Pathologists. CMS Halts Plan to Cap Pathology Payments to APC Rates, Payments for Other Key Services Reduced. *Statline*; 2013. Available at: http://www.cap.org/apps/cap.portal?_nfpb=true&cntvwrPtlActionOverride=%2Fportletlets%2FcontentViewer%2Fshow&_windowLabel=cntvwrPtl&cntvwrPtl%7BactionForm.contentReference%7D=statline%2Fstat120513.html&_state=maximized&_pageLabel=cntvwr. Accessed April 15, 2015.
 9. 2013 Medicare Physician Fee Schedule Estimates a Negative 7 Percent Cut to Radiation Oncology. Available at: <https://www.astro.org/Advocacy/Medicare-Cuts.aspx>. Accessed April 15, 2015.
 10. American Academy of Neurology. 2014 Insights Report Based on 2013 Data and Information: A Report from the Member Research Subcommittee of the American Academy of Neurology. Minneapolis: American Academy of Neurology; 2014.
 11. Craft K, Donofrio P, Shepard KM, Coleman M, Esper GJ. Practice and payment trends in neurology in 2012. *Neurol Clin Pract* 2013;3:233–239.
 12. Medicare Part B Physician/Supplier National Data Calendar Year 2010, Evaluation and Management Codes by Specialty. Available at: www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareFeeForSvcPartsAB/downloads/EMSpecialty2010.pdf. Accessed September 5, 2015.
 13. Sustainable Growth Rates & Conversion Factor. Available at: <http://www.cms.hhs.gov/SustainableGRatesConFact/>. Accessed December 3, 2014.
 14. Fisher ES, Shortell SM. Accountable care organizations: accountable to what, to whom, and how. *JAMA* 2010;304:1715–1716.
 15. Physician Fee Schedule Search. Available at: <http://www.cms.gov/apps/physician-fee-schedule/search/search-criteria.aspx>. Accessed December 3, 2014.
 16. Medicare Conversion Factor. Available at: http://codapedia.com/article_204_Medicare-conversion-factor-from-1992-2009.cfm. Accessed December 3, 2014.
 17. Medicare Economic Index. Available at: <http://medical-dictionary.thefreedictionary.com/Medicare+Economic+Index>. Accessed December 3, 2014.
 18. Consumer Price Index. Available at: <http://www.neo.ne.gov/statshtml/78.html>. Accessed December 3, 2014.
 19. Affordable Care Act. Available at: <http://www.medicaid.gov/AffordableCareAct/Provisions/Downloads/Q-andA-Managed-Care-Increased-Payments-for-PCPs.pdf>. Accessed December 3, 2014.
 20. Blumenthal D, Jena AB. Hospital value-based purchasing. *J Hosp Med* 2013;8:271–277.

AUTHOR CONTRIBUTIONS

Peter D. Donofrio: drafting/revising the manuscript, acquisition of data. Gregory L. Barkley: drafting/revising the manuscript. Bruce H. Cohen: drafting/revising the manuscript, study concept or design. David A. Evans: drafting/revising the manuscript. Gregory Esper: drafting/revising the manuscript, study concept or design, analysis or interpretation of data. Bryan Soronson: drafting/revising the manuscript. Jeffrey Buchhalter: drafting/revising the manuscript. Amanda Becker: drafting/revising the manuscript, study concept or design.

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P.D. Donofrio serves on scientific advisory boards for CSL Behring, UCB CellTech, and Baxter; has received funding for travel or speaker honoraria from Talecris Pharmaceuticals; serves on the editorial board of *Muscle & Nerve*; receives research support from CSL Behring; and has received honoraria from the AAN for speaking activities and serving on committees. G.L. Barkley receives a stipend from the AAN for time spent at the AMA-RBRVS Update Committee (AMA-RUC) as a representative of the AAN; receives research support from NeuroPace and NIH (National Institute of Neurological Disorders and Stroke, NICHD); and has received honoraria from the AAN for speaking activities and serving on committees. B.H. Cohen serves on scientific advisory boards for Stem Cell Transplantation for MNGIE (nonprofit), Neurofibromatosis Consortium, and the Department of Defense, and as Chairman of the External Advisory Board of Clinical Protocols; serves on the editorial boards of

Pediatric Neurology and *Mitochondrion*; serves as Editor for *Motive Medical Intelligence*; serves as a consultant for Stealth Biotherapeutics and Mitobridge; serves/has served on speakers' bureaus for Transgenomic Labs, Courtagen Labs, and United Mitochondrial Disease Foundation; serves as a consultant to Health and Human Services for the Division of Vaccine Injury Compensation Program; receives research support from NIH, Edison Pharmaceuticals, Raptor Pharmaceuticals, Stealth Biotherapeutics, and Reata Pharma; has received reimbursement for travel expenses related to scientific study management; has provided expert testimony in medico-legal cases; and has received honoraria from the AAN for speaking activities and serving on committees. D.A. Evans has received funding for travel from Merz Pharmaceuticals; serves on the editorial review board for *MGMA Connection*; is Chief Executive Officer of Texas Neurology; serves as a consultant for Merz Pharmaceuticals and Allergan; and has received honoraria from the AAN for speaking activities and serving on committees. G. Esper receives compensation for Executive Education as an affiliate professor for HEC Paris School of Business; receives research support from the American Association of Medical Colleges; has provided expert testimony in medico-legal cases; and has received honoraria from the AAN for speaking activities and serving on committees. B. Soronson has received funding for travel or speaker honoraria from the Society of Clinical Research Associates, Medical Group Management Association, Texas Neurological Society, and Campbell Alliance; serves as a consultant for Raleigh Neurology and Texas Neurology; and has received honoraria from the AAN for speaking activities and serving on committees. J. Buchhalter serves on scientific advisory boards for NIH, Charlie Foundation, and IDIC 15; has received funding for travel or speaker honoraria from and serves as a consultant for Eisai Ltd., Lundbeck, and Upsher-Smith Labs; serves on the editorial boards of *Clinical Neurology News* and *Pediatric Neurology*; receives research support from Alberta Health Services; and has received honoraria from the AAN for speaking activities and serving on committees. A. Becker is Senior Director, Medical Economics & Quality for the American Academy of Neurology. Full disclosure form information provided by the authors is available with the **full text of this article at Neurology.org/cp**.

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