Demographics and Economics of Geriatric Patient Care

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Anesthesiologists in geriatric practice care primarily for patients who are insured via Medicare, the federal health insurance program for citizens over the age of 65. The Medicare program has grown steadily in complexity and cost since its inception in 1965. It is expected to come under significant financial pressure as the population of the United States ages and the costs of providing health care continue to grow at ever-increasing rates.

This chapter is intended to provide those anesthesiologists who care for the geriatric patient population with an introduction to key health policy issues related to the Medicare program and to facilitate understanding of the demographics and economics of geriatric care with special emphasis on Medicare. The first part of the chapter is a general introduction and overview of the demographic and financial issues facing Medicare in the near future. The second part of the chapter raises some of the major policy issues that are specific to the practice of anesthesiology under the Medicare program.

Medicare Demographics and Financing Issues

The Enactment of the Medicare Program

Medicare is the federal program that provides health care insurance to all citizens who are at least 65 years old and to some disabled Americans. The program was enacted in 1965 with passage of one of the most important pieces of domestic legislation of the post-World War II period, but the legislative process that preceded it was marked by years of debate and controversy.

From the Eisenhower administration forward, the United States government struggled with how best to meet the high cost of health care for the elderly. Results of the 1950 census revealed that since 1900 the aged population had grown from 4% to 8% of the total population. Two-thirds of the elderly had annual incomes of less than $1000, and only 1 in 8 had health insurance. In response to the crisis, bills proposing hospital insurance for the aged were introduced in every Congress from 1952 through 1965.

Legislators recognized and feared the power of organized medicine to thwart passage of legislation that involved government-sponsored health insurance. Therefore, when the Johnson Administration made its proposal, it included only a mandatory plan for covering hospital expenses for the elderly. This plan is what eventually became known as “Medicare Part A.”

It was the Chairman of the House Ways and Means Committee in 1965, Congressman Wilbur Mills, who fashioned a compromise that led to the creation of “Medicare Part B,” a voluntary plan for coverage of physician expenses for the elderly that was acceptable to the American Medical Association (AMA). In the compromise proposal for Medicare Part B, physician expenses were to be reimbursed on “usual and customary” charges as long as they were “reasonable.” Physicians also retained the right to bill patients directly and in excess of the amount reimbursed by the government.

On July 30, 1965, President Lyndon Johnson enacted the Medicare and Medicaid programs by signing the Social Security Act of 1965 with these words:

There are men and women in pain who will find ease. There are those alone and suffering who will now hear the sound of approaching help. There are those fearing the terrible darkness of despair and poverty—despite long years of labor and expectation—who will now see the light of hope and realization.

The Organization and Funding of Medicare

The Social Security Administration administered the Medicare program from 1965 until 1977, when Medicare was reorganized under the Health Care Financing Administration (HCFA) within the Department of Health, Education and Welfare. In July 2001, HCFA was renamed the Centers for Medicare and Medicaid Services (CMS). In 1966, the
The Medicare program covered more than 19 million citizens over the age of 65. Coverage for the disabled began in 1973 and, as of 2003, the program served more than 40 million Americans: 35 million elderly and 6 million disabled. The Medicare program provides coverage to the aged, the permanently disabled, and people with end-stage renal disease under two parts: Hospital Insurance (HI) or Medicare Part A, and Supplementary Medical Insurance (SMI) or Medicare Part B. The Medicare + Choice managed-care plan, also known as the “Medicare Advantage” program or Medicare Part C, was added by the Balanced Budget Act of 1997 and allows beneficiaries to opt for enrollment in private-sector–managed Medicare insurance plans. The Medicare Prescription Drug Improvement and Modernization Act of 2003 became effective in 2006, and extended a new prescription drug benefit to Medicare beneficiaries known as Medicare Part D.

The CMS contracts with private-sector agents to administer Medicare program services, including provider enrollment and claims administration processes. Contractors that process Part A claims are known as fiscal intermediaries and those that administer Part B claims are known as carriers. These contractors are usually insurance companies, many of which are Blue Cross-Blue Shield plans around the United States that can act as both fiscal intermediaries and contractors. Contractors are barred by law from making a profit on services provided to the Medicare program.

Enrollment in Medicare Part A is automatic for eligible beneficiaries and covers inpatient hospital care, after-hospital care in skilled nursing facilities, hospice care, and some home health services. Beneficiary enrollment in Medicare Part B is voluntary and covers physician services, outpatient hospital services, diagnostic tests, some home health services, and medical equipment and supplies. By law, 25% of Part B program costs must come from beneficiary premiums.

Employers and employees who make mandatory contributions to the Part A Hospital Insurance Trust Fund finance the majority of the Medicare program costs. Other funding sources include general tax revenues, and the premiums, deductibles, and copayments paid by the beneficiaries. Of the Medicare program’s annual expenses ($214.6 billion in 1997), 89% are funded by people under the age of 65 in the form of payroll and income taxes and interest from the trust fund. Only 11% comes from monthly premiums paid by the beneficiaries.

Twenty-First Century Realities and the Future of the Medicare Program

Baby Boomer Demographics

The so-called “baby boomer generation,” the post-World War II Americans born between 1946 and 1964, will have a significant impact on the demographics of our society and on the Medicare program. It is predicted that as the boomers age, the number of people in the United States aged 65 years and older is expected to roughly double to 77 million by the year 2030.

Given the existing Medicare funding system, it is clear that the aging of the American population will bring fiscal pressures to bear on the Medicare program in two ways. There will be more retired beneficiaries, as boomers age and live longer than their parents, and there will be fewer workers to pay for the retiree expenses.

It is predicted that the over-65 age group will grow from approximately 13% of the total population in 2000 to 20% in 2030 and will remain above 20% for at least several decades thereafter. In addition, life expectancies are continuing to increase, and typical boomers are projected to live approximately 2 years longer than their parents did, spending more years in retirement (Figure 2-1). At the same time, the labor force is expected to grow much more slowly than the population of retirees, resulting in many fewer workers per retiree. In 2000, there were 4.8 people ages 20 to 64 for each person age 65 or older. This ratio is expected to decrease to approximately 2.9 people ages 20 to 64 for each person age 65 or older by 2030 (Figure 2-2).

Although baby boomers report an intention to work longer than their parents did, it remains to be seen whether employers will accommodate this expectation and what effect this may have on the projected decrease in the worker–retiree ratio. Thus, retirement of the baby boomer generation will strain the already vulnerable Medicare program. The Social Security and Medicare

![Figure 2-1. Life expectancy of 65-year-olds. (From Congressional Budget Office based on Social Security Administration. The 2003 annual report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. March 17, 2003. p. 86. Available at: www.ssa.gov/OACT/TR/TR03/tr03.pdf.)](image-url)
Boards of Trustees are predicting that starting in 2010, when the baby boom generation begins to retire, the Hospital Insurance Trust Funds will experience rapidly growing annual deficits leading to fund exhaustion by 2019. The report also predicts that the Supplemental Medical Insurance Trust Fund, which pays for physician services and the new prescription drug benefit, will have to be funded by large increases in premiums and increased transfers from general revenues.

**Baby Boomer Expectations**

The baby boomer generation will bring millions of people into the Medicare program and these new beneficiaries will also bring with them a new set of expectations. Baby boomers constitute the first generation born to the Medicare program and the first with significant experience with managed medical insurance plans. Baby boomers also include a significant number of women with working experience and, in general, are more affluent than their forebears. They expect to enter retirement with more assets and with high expectations of the retirement experience.

A survey conducted by Roper Starch Worldwide for the American Association of Retired Persons (AARP) and entitled, “Baby-Boomers Envision Their Retirement: An AARP Segmentation Analysis,” examined the expectations, attitudes, and concerns of the baby boomers as they approach retirement. There were several key attitudinal findings from the survey. Most baby boomers believe that they will still be working during their retirement years. This is unlike previous generations and has important implications for employers as well as the Medicare program.

Only one in five boomers expects to move to a new geographic area when they retire and almost one in four expects to receive an inheritance that will affect their retirement planning. Only approximately 35% expect that they will have to scale back their lifestyle during retirement and only 16% believe that they will have serious health problems when they are retired (AARP op. cit.). These are very optimistic views of the extent to which baby boomers’ retirement years will be disrupted by particular life events.

Less optimistic conclusions emerged when the survey examined attitudes toward Social Security and Medicare: 55% had a very or somewhat favorable view of Social Security and 60% had a favorable view of Medicare. However, only 46% said that they were very or somewhat knowledgeable about Medicare and only 40% were confident that Medicare would be available to them during retirement. Indeed, baby boomers were much less confident in their abilities under Medicare to access care, choose their own doctors, or to consult specialists at the same level as under their current health plan (AARP op. cit.).

**Medicare Coverage Gaps**

These less optimistic baby boomer attitudes may reflect an astute appreciation of the limitations of the Medicare program. Benefits under the Medicare program are significantly limited. One study has found that 80% of employer-sponsored fee-for-service plans cover a larger proportion of medical expenses than Medicare does.

Medicare has not traditionally covered services such as long-term nursing care, outpatient prescription drugs, or routine vision, dental, hearing, and foot care. The Balanced Budget Act of 1997 extended coverage to include annual mammograms, Pap smears, prostate and colorectal screenings, diabetes management, and osteoporosis diagnosis. In December 2003, when the new prescription drug benefit was signed into law, it was projected that average out-of-pocket prescription drug spending for Medicare beneficiaries would be lower; however, it was also expected that 25% of beneficiaries would actually pay more as a result of the new coverage. Furthermore, it is estimated that 3.1 million low-income subsidy-eligible beneficiaries are not receiving this assistance and therefore still face financial barriers in accessing necessary prescription drugs. It will take years to fully assess the impact of this latest change in Medicare benefits on beneficiaries, providers, and the program itself.

Medicare beneficiaries rely on privately purchased or government-sponsored supplemental insurance plans to “tie in” and complement the array of services covered by the Medicare program. Supplemental insurance coverage...
for these services has been historically provided by Medicaid plans (for the poor) and by so-called “Medigap” policies for those able to afford additional coverage.

In 1999, approximately 91% of Medicare beneficiaries relied on supplemental insurance plans. Of those with supplemental insurance, 27% purchased Medigap insurance and 36% received supplemental insurance related to employment. An additional 17% were enrolled in Medicare + Choice plans and 11% qualified for coverage through Medicaid. The remaining 9% had no supplemental coverage (Figure 2-3). In 1996, Medigap premiums across the nation ranged from $233 annually for the least-expensive basic coverage, to $2205 annually for the most comprehensive plan.

Some employers, mostly large companies, also sponsor plans that cover retired workers and their spouses. In 2006, 35% of firms with more than 200 employees offered retiree health benefits, with 77% of firms in this category covering Medicare-eligible retirees. In 1988, before implementation of the Part D drug benefit, 66% of large firms offered retiree coverage.

The poorest Medicare recipients have their medical costs paid in part by the Medicaid program. Of these “dual eligibles,” those with incomes and resources substantially below the federal poverty line are entitled to full Medicaid coverage. Specifically, eligibility for full Medicaid coverage is determined by whether an individual qualifies for Supplemental Security Income, an income maintenance program designed for very poor aged, disabled, and blind Americans. Thus, Medicaid provides complementary coverage for a portion of Medicare beneficiaries.

Unlike Medicare, Medicaid coverage includes benefits such as prescription drugs, hearing aids, and payment for nursing home services. The Medicaid program also makes premium payments and pays a portion of Medicare deductibles and other copayments required of beneficiaries. Because this assistance must be claimed by beneficiaries through an application process, a substantial portion of potentially eligible low-income individuals, perhaps as many as 3.9 million, do not receive this aid.

As a result of these various coverage options, Medicare beneficiaries are either not covered at all or are partly covered in a somewhat unpredictable way. This variability challenges practicing geriatric medicine providers to become knowledgeable about the specific situation in which each of their Medicare-eligible patients can find themselves, especially as it may relate to the patient’s ability to comply with treatment plans.

**Prescription Drug Benefit**

Medicare was late in providing prescription drug coverage compared with most private insurance plans, and the universal public health plans in other developed nations, that have traditionally provided this benefit as an important part of comprehensive health coverage. Drug therapies can reduce the need for hospitalization by effectively managing chronic health problems of the elderly such as heart disease, diabetes, and depression. Chronically ill patients have been found to underuse essential medications because of cost considerations and to suffer serious health consequences, including an increased number of emergency room visits and inpatient admissions, as a result.

In 1998, 73% of noninstitutionalized Medicare beneficiaries had drug coverage of some kind for at least a portion of the year through supplemental insurance, such as managed Medicare plans, employer-sponsored plans, and Medigap plans. However, the out-of-pocket spending by older Americans for prescription drugs amounts on average to 50% of total costs, compared with just 34% of costs for those under age 65. The prices of the prescription drugs used most often by the elderly have been increasing in recent years. Expensive new brand-name drugs, some of which are more effective than the older drugs that they are superseding, are being brought to market at an increasingly rapid rate.

In a recent nationwide survey of chronically ill older adults, it was reported that 33% underuse prescription drugs because of concerns about out-of-pocket drug costs. Furthermore, 66% of these patients failed to discuss their intention to underuse medications with a clinician citing that no one asked about their ability to pay and that they did not believe that providers could offer any assistance.

**Impact on the Near-Poor**

It is the near-poor, those with annual incomes between $10,000 and $20,000, who are most often caught in the prescription drug cost quandary. In 1999, only 55% of the near-poor had coverage for the entire year and more than 20% of those with prescription drug coverage received it via a Medicare Advantage plan. Access to prescription drugs and levels of reimbursement for prescription drugs has decreased significantly under these managed-
Medicare plans since the Balanced Budget Act of 1997. As a result, the near-poor had higher out-of-pocket costs for prescription drugs in 1999 than other Medicare beneficiaries who were poorer (and therefore, Medicaid-eligible), and those with higher incomes. Unfortunately, the new prescription drug benefit may not lead to a significant reduction in out-of-pocket prescription drug costs for these near-poor beneficiaries who will incur costs that fall through gaps in the coverage (Figure 2-4).

In the intervening years before implementation of the new prescription drug benefit, there were some opportunities for the more than 33% of beneficiaries with no prescription drug benefits at all. Between 2004 and 2006, Medicare beneficiaries were eligible for drug-discount cards that were expected to save them up to 10%–15% on their total drug costs. In addition, beneficiaries with incomes below 135% of the federal poverty level were eligible for a $600 per year subsidy. These opportunities expired when the new drug benefit took effect in 2006.

Medicare and the Academic Health Center

The Medicare program has many shortcomings and, over the next two decades, significant reform will be required to maintain even the current level of protection that it offers to America’s elderly. This looming crisis in health care insurance for the elderly as well as the more than 40 million uninsured is of great concern to lawmakers and the public but should also be of great concern to health care providers, hospitals, and physicians, who rely on Medicare as a significant source of their revenues. In 2000, payments made by the Medicare program accounted for 31% of total national spending on hospital care and 21% of total national spending on physician and clinical services.

Physicians in academic practice have even greater reason to be interested in the plight of the Medicare program. In addition to the significant flow of funds received by Academic Health Centers (AHCs) in the form of clinical revenues, AHCs are dependent on the Medicare program for support of graduate medical education (GME) and care provided to indigent patients. All undergraduate medical students and almost 50% of all residents are trained in AHCs, which also provide most of the charity care and medical specialty services such as neonatal, burn and trauma intensive care, and organ transplant services.

**Graduate Medical Education Payments**

Since the initiation of the Medicare Prospective Hospital Payment System in the mid-1980s, GME payments have been made to AHCs to reimburse them for Medicare’s share of the costs of resident physician education. AHCs are eligible for two types of reimbursements: direct GME, covering direct costs such as resident and faculty salaries and benefits; and indirect GME, recognizing the relatively larger inpatient costs at hospitals with teaching programs.

The Federal government has provided more than $100 billion in GME support to AHCs since the mid-1980s. These funds are distributed to approximately 1000 institutions based on the number of residents trained, their costs in the reference year 1985, and their share of Medicare beneficiaries served. The top ten AHCs receive an average of $60 million each (12% of the total), and the next 40 institutions receive approximately $30 million.

![Figure 2-4. Prescription drug coverage under Medicare effective 2006. (Reproduced with permission from Iglehart. Copyright © 2004 Massachusetts Medical Society. All Rights Reserved.)](image-url)
each (24% of the total). The remaining institutions share approximately 64% of the total.27

The Federal government also provides disproportionate share payments to 4000 institutions based on the number of Medicare and Medicaid patients served. The top ten institutions receive only 5% of the total or an average of $20 million each and the next 40 institutions receive approximately 11% of the total for an average of $10 million each. The remaining institutions share approximately 85% of the total.27

Hospital and physician providers at the AHCs serve important roles in meeting the health care needs of underserved populations and in advancing the science of health care through education and research. These providers are paid by Medicare to play this important role in shaping the future of the health care system. However, the same federal system continually challenges these providers to maintain a commitment to education, research, and charity care despite declining reimbursement for these important activities.

“Pay for Performance” Initiatives

The CMS has recognized the need to provide incentives to hospital and physician providers who can innovate to create improved patient outcomes at lower costs. Several demonstration projects are in place to provide hospitals with reimbursement bonuses if they meet quality standards and report their results to CMS.

Physicians got their first opportunity to apply to Medicare’s physician Pay for Performance (P4P) initiative effective in April 2005. The CMS selected 10 physician group practices, with 200 or more physicians, which were eligible to earn performance payments in addition to usual fee-for-service payments. The payments were based on how well the groups managed the care of patients to prevent complications and avoidable hospitalizations thereby enhancing quality and reducing costs under both Part A and Part B of the Medicare program.28 These programs do not reward academic activities such as teaching, research, and grant work. Therefore, success of P4P programs in the academic setting will depend on how much of physician compensation is based on clinical activity.29

Summary

Many solutions to the looming Medicare crisis have been proposed. Common reform measures include changes to the age of eligibility, linking premiums to beneficiary incomes, increasing revenues via higher payroll taxes or counting Medicare benefits as taxable income, and altering the concept of Medicare as a defined benefit program.

Pundits will continue to debate the strategy of choice for addressing the Medicare funding crisis. Meanwhile, physicians and hospitals, especially those with academic missions, can have an important role in the public policy debate. Health care providers, working with their professional organizations, can serve as patient advocates in the ongoing debate to facilitate the improvement of insurance coverage and the quality of health care services provided to the growing elderly population.

Medicare Policy Issues for the Geriatric Anesthesiologist

The regulations and processes governing a physician’s interaction with the Medicare program are quite complex and a full description is well beyond the scope of this chapter. However, it is the authors’ intention to provide the practicing geriatric anesthesiologist with an introduction to policy issues specific to the practice of Anesthesiology under the Medicare program. These key issues include:

1) Participation status in the Medicare program
2) Medicare’s Resource Based Relative Value System (RBRVS) for physician reimbursement
3) Medicare’s rules for the anesthesia care team
4) Compliance-related issues for anesthesiologists

The CMS provides a specialty-specific page on its Web site that is dedicated to Medicare regulations and information specific to the practice of Anesthesiology. Physicians interested in further study of Medicare claims processing, fees and policies for the reimbursement of anesthesia services should consult CMS’s anesthesiologist Web page at: http://www.cms.hhs.gov/center/anesth.asp.

Anesthesiologist Participation in the Medicare Program

The decision to enroll as a participating provider in the Medicare program is one of the first decisions that an anesthesiologist faces when starting a clinical practice. Anesthesiologists employed in geriatric practice can expect that the Medicare program will be the primary insurer for most of their patients. Anesthesiologists, who typically encounter their patients in an operating room setting where they are not the patient’s primary provider, need to be aware of the political, patient satisfaction, and reimbursement issues related to their participation status in the Medicare program.

In 1990, only 30.8% of anesthesiologists participated in the Medicare program; this was the lowest rate of participation as a percentage of physicians by medical specialty. By 2003, participation by anesthesiologists had increased.
to 95.5%. This rate of participation closely matches that of physicians in related practices such as surgery, cardiovascular disease, ophthalmology, orthopedic surgery, pathology, radiology, urology, and nephrology.\textsuperscript{30}

It is likely that the anesthesiologist’s obligation to care for all surgical patients and new Medicare rules limiting charges from nonparticipating providers, influenced anesthesiologist enrollment decisions in the 1990s. Unfortunately, as anesthesiologist Medicare participation rates increased dramatically in the period from 1990 to 2003, the Medicare anesthesia conversion factor in the same period was decreased by almost 20%.\textsuperscript{31} One might speculate that, during a decade of significant growth in managed care and public outcry concerning increasing health care costs, the pressures from patients, colleagues, local government, affiliated institutions, and the Medicare charge limitations combined to favor participation by anesthesiology providers.

In general, participation in the Medicare program by anesthesiologists is a voluntary decision. [Medicare participation by Certified Registered Nurse Anesthetists (CRNAs) and Anesthesiologist Assistants (AAs) is mandatory.\textsuperscript{32} However, some states encourage physician participation through legislative actions and regulatory requirements, such as in The Commonwealth of Massachusetts, where Medicare participation is a condition of medical licensure. Physicians can consult with their local Medicare carrier or their regional CMS office for local Medicare participation requirements.\textsuperscript{33}

Physicians who enroll as participating providers enter into a 1-year, automatically renewable agreement to accept assignment for all covered services provided to Medicare beneficiaries. When a physician accepts assignment, they agree to accept the Medicare allowable charge as payment in full for the covered services rendered. After patients satisfy an annual deductible, Medicare pays 80% of the approved allowable charge. The remaining 20% is termed the “coinsurance” and it is the responsibility of the patient to pay this and any remaining portion of the annual deductible. Participating providers must bill the patient, or the patient’s Medigap insurance plan, for coinsurance, deductible, and charges not covered by the Medicare Part B program.

In addition to the likely political and patient satisfaction advantages to Medicare participation, there are also financial and administrative opportunities. The most significant are that Medicare fee schedule allowances are 5% higher for participating physicians, and assigned Medicare claims filed with Medigap insurance information are automatically forwarded by Medicare to supplemental insurance carriers for processing of coinsurance and deductible charges.\textsuperscript{34} A copy of the Medicare Participating Physician or Supplier Agreement (Form CMS-460) is available at http://www.cms.hhs.gov/cmsforms/downloads/cms460.pdf.

Medicare Payment Methodologies for Anesthesia Services

Medicare’s Resource Based Relative Value System

In 1992, Medicare implemented the Resource Based Relative Value System (RBRVS) that established a Medicare Fee Schedule (MFS) of national values for each clinical procedure code. The value comprises three relative value units that represent the physician’s work effort in rendering the service, the practice’s overhead expenses for items such as rent, office staff salaries and supplies, and malpractice insurance premiums. Under RBRVS, Medicare also implemented a new definition of allowed charges that paid physicians based on the lesser of the submitted charge or the new relative value scale fee-schedule–based amount.\textsuperscript{35}

At the time of the introduction of the MFS in 1992, Anesthesiology had already had a relative value scale for anesthesia payment in place for 30 years.\textsuperscript{36} The American Society of Anesthesiologists (ASA) Relative Value Guide, adopted almost in its entirety by the HCFA in 1989, uses values that represent components of anesthesia services: the base unit value related to the complexity of the service performed; and the time units based on the actual time the anesthesiologist spends with a patient.

Note the CMS definition of anesthesia time:

Anesthesia time means the time during which an anesthesia practitioner is present with the patient. It starts when the anesthesiology practitioner begins to prepare the patient for anesthesia services in the operating room or an equivalent area and ends when the anesthesia practitioner is no longer furnishing anesthesia services to the patient, that is, when the patient may be placed safely under postoperative care...\textsuperscript{37}

Medicare does not reimburse for modifier units, such as those designated by the ASA recognizing physical status, extremes of age, or unusual risk.\textsuperscript{38}

Medicare reimburses anesthesia services via a separate methodology under RBRVS that uses the sum of procedure-specific relative value units and the variable time units. The sum of these units is then multiplied by an anesthesia-specific conversion factor that is corrected for geographic cost differences. It was the retention of the time unit factor in the anesthesia payment methodology thatdrove HCFA to create a separate anesthesia conversion factor under RBRVS.

The Medicare Fee Schedule for Anesthesia Services

The distinction in the MFS for anesthesiologists has disadvantaged the specialty. A good illustration of the problem is the differential between Medicare and private insurance fees for anesthesiologists versus the differential for other medical and surgical specialists. The AMA reports that Medicare’s conversion factor for physician
services represents approximately 83% of the conversion factor paid by private insurers. For anesthesiologists, the Medicare conversion factor represents less than 40% of a private insurer’s rate. Therefore, Medicare payments for anesthesia services are less than half of Medicare payments for other medical and surgical services. The ASA has raised this issue of disparity in Medicare fees many times with the AMA/Specialty Society Relative Value Update Committee (RUC). The RUC is the body charged with reviewing and advising CMS on updates to work-related relative value units that are required, by law, at least every 5 years. In the first 5-year review, HCFA acknowledged the undervaluation and approved a nearly 23% increase in work values for anesthesia procedures, effective January 1, 1997. In the fee schedule effective after the second 5-year review, CMS again received endorsements for reconsideration of the anesthesia work relative value units but responded with an insignificant adjustment.

The MFS is often referenced by private insurers as a standard in setting physician reimbursement rates. It is also common for physicians from other specialties, who enjoy a more favorable Medicare-to-private insurer fee ratio, to suggest the MFS as a proxy for valuing physician services. This often occurs during joint negotiations such as those used in dividing fees for contracts paid on a global basis to physician groups. Anesthesiologists are disadvantaged when the MFS is used in this manner. It is, therefore, important for anesthesiologists to remain active in the discussion of these physician payment disparities and to work to educate others and thereby mitigate the effect of these disparities in the Medicare system and beyond.

**Proposed Changes to the Anesthesia Payment Methodology**

Anesthesiologists are involved in these important public policy debates via the activities of their professional society, the ASA, and the ASA Political Action Committee. In late 2003, the ASA charged the “Task Force to Study Payment Methodology” with studying the relationship of the anesthesia payment methodology to Medicare’s relative value payment system. The Task Force projected the threat of decreasing revenues from the ongoing undervaluation of anesthesia services under Medicare, the adoption of the MFS and payment policies by private insurers, and the projected increase in numbers of Medicare beneficiaries in the United States.

The Task Force estimated that, with Medicare beneficiaries representing approximately 30% of anesthesia services nationwide, a blended conversion factor of Medicare and private insurers is $40.25. When Medicare accounts for 50% of services, the blended conversion factor will decrease to $33.75. Furthermore, if the MFS becomes the model for a single-payer system, they predict that the blended conversion factor will decrease to $17.50 (personal communication, Karin Bierstein, Esq., American Society of Anesthesiologists, November 30, 2004).

The Task Force has been exploring a flat fee payment methodology that would capture elements both of the time and the complexity of care for a continuous period of anesthesia for each operative period, involving one or more surgical procedures. This methodology would rely on a greatly expanded anesthesia code set that would incorporate an average anesthesia time representative of procedures performed in both the private practice and academic settings.

The Task Force recommendations for a new Medicare anesthesia payment methodology will be presented to the RUC and, if approved, will be reflected in future fee schedule revisions. The principles of the new methodology were announced in the following Task Force resolution passed by the ASA House of Delegates in October 2004:

**RESOLVED**, That the Executive Committee in consultation with the Administrative Council is authorized to propose a restructuring of Medicare payments for anesthesia services based on the following principles:

- That any new coding system must accurately reflect both the complexity and duration of the associated surgical procedures to compensate for the elimination of separately reported anesthesia time;
- That the inevitable influence of a uniform Medicare conversion factor on payment rates in the private sector be thoroughly considered; and
- That any transition to a uniform Medicare conversion factor must be based on a value sufficient to protect the specialty, as a whole and in aggregate, from economic damage.

These resolutions were referred for further study, and the ASA does not expect that a modification in the anesthesia payment methodology will occur in the near term.

**The Sustainable Growth Rate Formula**

The CMS uses a Sustainable Growth Rate (SGR) system to determine annual changes in the physician fee schedule. This system compares physician spending based on the volume and intensity of services provided against spending targets tied to inflation and the gross domestic product, and adjusts physician fee schedules accordingly to meet the targets. In 2002, this process resulted in a 5.4% reduction in physician fees, and the need for ongoing reductions was predicted up through 2016. This triggered congressional interventions that overrode the SGR system in the years 2003, 2004, and 2005 and mandated a Government Accounting Office (GAO) review of the problem.

Anesthesiologists have a large stake in securing the success of these efforts, and other efforts to reform the
Medicare payment methodology specific to anesthesia services. However, it is important to note that unless there is modification of the SGR statute, any updates to the MFS must meet spending targets and, therefore, where one physician group gains, others must lose.

In a period when the Medicare program faces many economic challenges, it is unlikely that the interests of any one group of physicians will prevail without a strong, well-targeted political effort. A focus of this political effort in the future will be the discussion of the looming problem of access to anesthesia care by the ever-growing numbers of Medicare beneficiaries.

The Anesthesia Care Team

There are a variety of ways for anesthesiologists to provide services for reimbursement under Part B of the Medicare program. Medicare reimburses the services of an anesthesiologist when the physician personally provides them or if an anesthesia care team provides them under medical direction or supervision. Anesthesia claims modifiers are used to denote whether services were provided personally, “medically directed,” or “medically supervised.” Medicare reduces reimbursement based on the series of claims modifiers that denote how the services were delivered (Table 2-1).

The anesthesia care team is defined as an anesthesiologist working with any of the following professionals:

CRNAs
AAs
Residents or interns
Student Nurse Anesthetists (SNAs)44

In most cases, when an anesthesiologist and a CRNA are providing a single anesthesia service, Medicare recognizes the service as if personally performed by the anesthesiologist.

Medical Direction Versus Supervision of Concurrent Procedures

When an anesthesiologist is involved in directing up to four concurrent procedures, Medicare recognizes the services as concurrent medical direction and sets out specific guidelines for documentation and reimbursement of these services. (See Compliance section for documentation requirements.)

Anesthesiologists are allowed to furnish additional services to other patients under an exception to the four concurrent case limits. This exception, which varies by state, generally applies to the following services, if they do not “substantially diminish the scope of control exercised by the physician” providing the medical direction:

Addressing an emergency of short duration in the immediate area;
Administering an epidural or caudal anesthetic to ease labor pain;
Providing periodic, rather than continuous monitoring, of an obstetric patient;
Receiving patients entering the operating suite for the next surgery;
Discharging patients in the recovery room; or
Handling scheduling matters.44

When services are provided in excess of four concurrent cases and the allowed exceptions, the services will fail to meet the medical direction requirements. These services are provided under what Medicare terms medical “supervision” and are reimbursed to the physician at a fraction of the MFS allowable through limits in billing for base and time units. Under the supervision requirements,

Table 2-1. CMS Anesthesia Care Team Claims Modifiers Matrix.

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<thead>
<tr>
<th>Modifier</th>
<th>CMS definition</th>
<th>Payment % of allowable to provider</th>
</tr>
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<tbody>
<tr>
<td>AA</td>
<td>Anesthesia services performed personally by anesthesiologist</td>
<td>100% to anesthesiologist</td>
</tr>
<tr>
<td>AA/GC</td>
<td>Anesthesia services performed personally by anesthesiologist with resident involvement</td>
<td>100% to anesthesiologist</td>
</tr>
<tr>
<td>QK</td>
<td>Medical direction of up to 4 concurrent anesthesia procedures involving qualified individuals</td>
<td>50% to anesthesiologist</td>
</tr>
<tr>
<td>QK/GC</td>
<td>Medical direction of up to 4 concurrent anesthesia procedures involving 2–4 residents</td>
<td>50% to qualified provider*</td>
</tr>
<tr>
<td>QX</td>
<td>CRNA service with anesthesiologist medical direction (reported by CRNA)</td>
<td>50% to CRNA</td>
</tr>
<tr>
<td>QY</td>
<td>Medical direction of CRNA by anesthesiologist for 1 case (reported by anesthesiologist)</td>
<td>50% to anesthesiologist</td>
</tr>
<tr>
<td>AD</td>
<td>Medical supervision by a physician; more than 4 concurrent anesthesia procedures</td>
<td>3 base units, no time units. 1 unit if anesthesiologist documented presence at induction</td>
</tr>
</tbody>
</table>


*Residents are not qualified for reimbursement.
the physician must still ensure that a qualified individual performs any procedure in which they do not personally participate.45

Requirements of the Attending Physician Relationship

Physicians in academic practice fall under additional Medicare requirements that govern the “attending physician” relationship. This relationship exists when an attending anesthesiologist provides care to a patient in a teaching hospital involving anesthesia residents.

In 1992, when RBRVS was introduced, a new rule was announced that was to eliminate the practice of full reimbursement for an anesthesiologist medically directing two concurrent cases with anesthesia residents. The ASA was able to persuade Medicare to postpone implementation of the new rules until 1994; however, the impact of this change has been significant. The ASA estimates that the cost to academic anesthesiology programs of this change alone exceeds $50 million annually.46 The ASA has been working to encourage CMS to restore full payment for two concurrent teaching cases.

In January 2004, CMS took an interim step toward changes in the reimbursement guidelines for medical direction of residents. The new rule expands billing options for teaching anesthesiologists who are involved in providing care with residents for two concurrent anesthesia cases. In the new ruling, anesthesiologists can choose to bill the usual base units and anesthesia time only for the period they are actually present with the resident if they are present throughout pre- and post-anesthesia care and if this is documented.

In the rule, CMS has also included language that allows the attending anesthesiologist to determine if a request for payment of the full time payment for both cases is warranted. This request must be provided with written documentation that he/she spent “sufficient time” with each patient considering factors such as patient condition, residents’ experience, proximity of the operating rooms, and the actual time the attending anesthesiologist spent in each operating room in making the determination.47 Anesthesiologists choosing to use the interim rule as a revenue opportunity must weigh potential benefits against the compliance risks and the investments in faculty education and system modifications needed to support a new documentation and billing process.

Compliance Issues

All physicians who interact with the Medicare program are obligated to assure that their business practices conform to the requirements of the program. This can be a daunting task because although a busy participating physician can delegate Medicare transaction authority to others, he/she retains all of the responsibility and risks related to the actions of his/her agents. Furthermore, the stakes for providers are high. Physicians who are found to be in violation of Medicare regulations can suffer both civil and criminal penalties as well as exclusion from the program. Physician practices can minimize the risks by adopting comprehensive compliance plans and assuring thorough internal controls, and training for all physicians and staff.

The Office of the Inspector General (OIG) does not mandate the adoption of compliance programs, but they have formulated seven fundamental elements of an effective compliance program. These elements are:

- Implement written policies, procedures, and standards of conduct
- Designate a compliance officer and compliance committee (e.g., a billing clerk and physician in a small practice)
- Conduct effective training and education
- Develop effective lines of communication
- Enforce standards through well-publicized disciplinary guidelines
- Conduct internal monitoring and auditing
- Respond promptly to detected offenses and develop corrective action plans

Anesthesiologists should consult with their compliance officers to gain what should be an in-depth understanding of their obligations as providers in the Medicare program. An introduction to some of the key compliance issues affecting anesthesia practice, including reassignment of benefits, Medicare fraud and abuse initiatives, and medical record documentation follows.

For further information on compliance programs, one should consult the OIG postings in the Federal Register and on the OIG Web site at http://oig.hhs.gov/fraud/complianceguidance.html.

Reassignment of Medicare Benefits

Anesthesiologists who provide care to Medicare beneficiaries undertake responsibility for compliance with myriad complex and sometimes conflicting regulations. Anesthesiologists who practice in a group or academic setting, where administrative duties for billing and collections are delegated and Medicare payments are frequently reassigned to another entity, should be best informed of these responsibilities.

When a physician reassigns benefits under the Medicare program, they legally authorize another person or entity to bill Medicare on their behalf and to receive payments that would otherwise be sent directly to them. However, despite this written delegation of authority, the physician retains all responsibility for ensuring that the claims made on their behalf are in full compliance
with Medicare regulations. In addition, the physician retains responsibility for assuring that their agent meets all confidentiality obligations and other state and federal regulations.

Even the best-intentioned physician may encounter difficulties in determining how to meet his/her obligations for compliance with Medicare regulations. The GAO tested the accuracy of carriers’ responses to inquiries in a telephone audit. The GAO asked staff at the Medicare carriers to respond to “frequently asked questions” concerning physician billing procedures that were taken from the carriers’ own Web sites. The GAO survey report concluded that physicians who do call their carriers with questions would “more often than not receive wrong or inaccurate answers.” These problems were attributed to limits on resources for information system modernization and oversight activities, and limits on CMS’s authority imposed by the Congress and Executive branches.

**Medicare Fraud and Abuse**

Although the federal government has chosen to limit CMS resources for facilitating its administrative mission, it has significantly increased resources for the investigation of fraud and abuse. Public administration experts have noted that these resources could be better spent on preventive measures such as improved management of the program and effective measures to monitor and deter inappropriate payments, thereby minimizing the need for enforcement. However, this has not occurred and, as of 2000, CMS spent more than 25% of its total administrative expenses in its campaign against fraud and abuse.

Many federal agencies are involved in protecting the Medicare program and ensuring provider compliance with all regulations. The OIG in the Department of Health and Human Services investigates suspected Medicare fraud or abuse and develops cases against providers. It has the authority to audit and inspect CMS programs and to act against individuals providers with civil money penalties and/or exclusion from participation in all federal health care programs. The OIG also has authority to refer cases to the United States Department of Justice for criminal or civil action. In its 2006 semiannual report, the OIG evidenced an active role in combating waste, fraud, and abuse, citing savings of more than $38.2 billion, 3425 exclusions, 472 criminal actions against individuals and entities, and 272 civil actions.

Medicare defines fraud as “the intentional deception or misrepresentation that an individual knows to be false or does not believe to be true and makes, knowing that the deception could result in some unauthorized benefit to himself/herself or some other person.” Abuse relates to practices that directly or indirectly result in unnecessary costs to the Medicare program. It is similar to fraud but is found when there is no evidence that the acts were committed knowingly, willfully, and intentionally.

Some examples of fraud that should be immediately apparent to providers include activities such as the falsification of records, billing for services that were not furnished, or misrepresenting the type of service provided by using inappropriate codes. However, other actions that also constitute fraud and abuse may not be as apparent to providers. These include providing incentives to Medicare patients not provided to other patients such as the routine waiving or discounting of patient coinsurance and deductible payments. Other actions include billing Medicare on a higher fee schedule than other patients, breaching the agreements to accept assignment or participate in the Medicare program, or failing to provide timely refund of overpayments made by Medicare and beneficiaries.

**Physicians at Teaching Hospitals: Office of the Inspector General Initiative**

Physicians in academic practice have been made most keenly aware of government efforts to enforce compliance with Medicare rules. Over the past decade, the government recovered $149 million from 15 universities that failed to document compliance with Medicare payment policies related to attending physician supervision of services provided with resident involvement.

The Physicians at Teaching Hospitals (P.A.T.H.) initiative of the OIG has had long-lasting and costly effects on academic practices. Physician groups that paid settlements or were subject to civil or criminal prosecution were required to enter into multi-year Institutional Compliance Agreements with the federal government. These agreements impose requirements that closely follow the structure of a compliance program but can be more stringent. They obligate practices to develop and adhere to a rigorous set of compliance standards involving audits of physician billing practices and annual physician and staff education, under threat of additional penalties. AHCs have reported that annual compliance program costs, after P.A.T.H. settlement, are absorbing millions of dollars.

**Documentation Requirements**

Medical record documentation is the primary source used for judging compliance with Medicare regulations. Documentation should be timely and must support the medical necessity of the service as well as the level and scope of service provided. As with all medical record documentation, it must be legible and signed by the provider. Bills should not be submitted unless adequate documentation exists for the services.
Documentation of Anesthesia Time

The prominence of time in the Medicare reimbursement methodology for anesthesiologist services drives documentation requirements. Since January 1, 1994, Medicare has reimbursed anesthesia time based on the actual number of minutes of anesthesia provided calculated in fractions of 15-minute units, rounded to one decimal place.

This standard for the precise documentation and reporting of anesthesia time presents challenges, especially in practices without automated anesthesia record-keeping systems.

Unsynchronized timepieces within the operating room suite can create disparities in timekeeping documentation as recorded by the anesthesiologist and other members of the surgical team such as nurses, perfusionists, and surgeons. Unsynchronized timepieces between anesthetizing locations and a lack of diligence can also cause an anesthesiologist to create the appearance of overlap of anesthesia services (i.e., concurrency) when indeed the services were provided consecutively. These discrepancies frequently become apparent upon subsequent audit of the documentation when it is more difficult to initiate corrections.

Documentation of Medical Direction

When an anesthesiologist is involved in directing up to four concurrent procedures, Medicare recognizes the services as concurrent medical direction.

Documentation of concurrent medical direction must support the physician’s completion of “7 steps.” This documentation evidences that the physician:

- Performs a preanesthesia examination and evaluation;
- Prescribes the anesthesia plan;
- Personally participates in the most demanding procedures in the anesthesia plan, including, if applicable, induction and emergence;
- Ensures that a qualified individual performs any procedures in the anesthesia plan that he or she does not perform;
- Monitors the course of anesthesia administration at frequent intervals;
- Remains physically present and available for immediate diagnosis and treatment of emergencies; and
- Provides indicated postanesthesia care.

In May 2004, CMS issued new interpretive guidelines for surveyors regarding the documentation of the inpatient postanesthesia assessment as required in the Hospital Conditions of Participation for the Medicare Program. The revision allows the postanesthesia follow-up to be performed and documented by the individual who administered the anesthesia, or by a delegated practitioner who is qualified to administer anesthesia.

Documentation by Teaching Physicians

In January 1997, Medicare imposed a requirement for use of the “GC” claim modifier to denote the involvement of residents in the delivery of anesthesia services and to certify that the teaching anesthesiologist was present during key portions of the service and immediately available during other parts of the service. In 1999, CMS extended the requirement to include a written attestation from the attending physician that these requirements were met.

In November 2002, CMS implemented revised guidelines governing the documentation requirements for teaching physicians who care for patients with the involvement of resident physicians. These requirements restrict payment for teaching physician services to those that support the presence of the teaching physician during key portions of an anesthesia procedure and during the entire time for separately reimbursable procedures such as line and catheter insertions.

The most complex of these guidelines govern the documentation of teaching physician involvement with residents in the provision of evaluation and management services. Interested physicians should consult the Medicare Carriers Manual, Section 15016 for specifics of these guidelines. However, there are important general principles that the anesthesiologist should follow in all cases whether or not the resident and teaching physician services are provided contemporaneously:

- Teaching physicians cannot evidence their presence and participation via documentation of these activities by the resident or by “countersigning” a resident’s note. They may reference the resident’s note in their own note, but must independently document presence and participation in the critical portions of the service.
- The composite of the teaching physician’s note and the resident’s note may be used to support the medical necessity and level of service billed.

Physician providers must be proactive in assuring compliance with the complex and dynamic requirements of participation in the Medicare program. Development of a compliance program, review of physician billing and documentation, and ongoing education and training of providers and staff will help physicians minimize compliance risk.

Summary

Medicare is the primary health plan serving our nation’s elderly, an important source of revenue for physician and hospital providers, and a major underwriter of medical education and charity care in the United States. The program will experience growing, annual deficits starting in 2010 when Medicare costs are first predicted to
2. Demographics and Economics of Geriatric Patient Care

exceed financing sources as the baby boomers begin to retire. In the interim, strategies for dealing with the impending crisis in Medicare will be a continual source of debate and providers should be represented in the discussions.

A large majority of anesthesiologists in the United States are enrolled as participating providers in the Medicare program. Many of the rules and regulations governing their interactions with the program are unique to the practice of anesthesiology and have significant implications for how clinical and business operations are conducted and whether, indeed, participation remains a viable strategy for anesthesiologists in the future. Geriatric anesthesiologists, by virtue of their subspecialty focus, should be best informed of Medicare policy issues and should participate in ongoing discussions to reshape Medicare as it enters an uncertain future.

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