

Health Policy Review


Physician Payment Outlook for 2012: Déjà Vu

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Physician spending is complex related to national health care spending, government regulations, health care reform, private insurers, physician practice, and patient utilization patterns.

In determining payment rates for each service on the fee schedule, the Centers for Medicare and Medicaid Services (CMS) considers the amount of work required to provide a service, expenses related to maintaining a practice, and liability insurance costs. The value of 3 types of resources are adjusted on a yearly basis of the combined total multiplied by a standard dollar amount, called the fee schedules conversion factor, which was \$33.98 in 2011, to arrive at the payment amount. This factor will stay almost the same (\$34.03) unless a 27.4% cut in the sustainable growth rate (SGR) takes place or CMS enacts further reductions. With a 27.4% cut, the conversion factor will be \$24.67 in 2012 after the first 2 months if Congress fails to act.

Since the inception of Medicare programs in 1965, several methods have been used to determine the amounts paid to physicians for each covered service. The SGR was enacted in 1997 to determine physician payment updates under Medicare Part B with intent to reduce Medicare physician payment updates to offset the growth and utilization of physician services that exceed gross domestic product (GDP) growth. This is achieved by setting an overall target amount of spending for physicians' services and adjusting payment rates annually to reflect differences between actual spending and the spending target. Since 2002, the SGR has annually recommended reductions in Medicare reimbursements. Payments were cut in 2002 by 4.8%. Since then, Congress has intervened on 13 separate occasions to prevent additional cuts from being imposed.

The Medicare physician payment rule of 2012, which is still undergoing revisions -- but considered as the final rule-- is a 1,235 page document, released in November 2011. In this manuscript, we will describe important aspects of the 2012 physician fee schedule which include potentially disvalued services under the physician fee schedule, expansion of the multiple procedure payment reduction (MPPR) policy, establishment of the value-based payment modifier, changes to direct practice expenses (PEs), electronic prescribing, the Physician Quality Reporting System (PQRS), and lab testing signatures, along with their implications. Additionally, the impact of multiple changes on interventional pain management will be described.

In conclusion, interventional pain management is facing widespread challenges in the U.S. health care system. A historic reform, which has been passed by Congress and signed into law, whose survivability is not quite known yet, is affecting medicine drastically in the United States. Interventional pain management, like other evolving specialties, will probably most likely suffer under the new affordable health care law and regulatory burden.

Key words: Health policy, physician payment policy, physician fee schedule, Medicare, sustained growth rate formula, interventional pain management, regulatory reform

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As the world rings in 2012 and says goodbye to a tough year, with a proposed 27.4% cut and continuing uncertainty, practicing physicians are saying -- *déjà vu*. As we all can remember, 2 years ago Congress played with the sustainable growth rate (SGR) about 5 times. On July 6, 2011, the Centers for Medicare and Medicaid Services (CMS) issued its proposed changes to the 2012 Medicare physician fee (MFS) schedule, including a long anticipated -- and long-feared -- plan to cut Medicare pay to physicians by 30% (1). CMS is required to issue the fee schedule based on current payment rules using the SGR formula now in effect. As of July 6, 2011, physicians were scheduled for a nearly 30% decrease in reimbursement beginning in 2012 (2). Apart from the proposed cuts, the rule also included various other measures to reduce Medicare expenditures. Subsequently, in November 2011, payment policies under the physician fee schedule and other revisions to Part B for 2012 were published with a comment period of January 3, 2012 (3). However, the projected 30% payment cut for physicians from Medicare was reduced to 27.4%.

The Medicare Payment Advisory Commission (MedPAC) (4), the National Commission on Fiscal Responsibility and Reform (5), and debt commission (6) provided multiple recommendations on a physician payment fix. However, none of them were accepted. Even then, the House of Representatives passed a one year stopgap for SGR (7). Unfortunately, this bill was declared "dead on arrival" by not only the senate majority but also by the president. Following this, the Senate (8) passed a 2-month fix. After much drama, the House also agreed to a temporary 2-month SGR fix which provided a reprieve of the 27.4% cut in the payroll tax break extension bill (9).

The physician payment system is complex and intricately related to national health care spending, government regulations, health care reform, private insurers, physician practice patterns, and patient utilization patterns. This manuscript will review various aspects of physician payments and changes published in the revised 2012 CMS schedule (10-19).

1.0 PHYSICIAN PAYMENT SYSTEM

Per MedPAC (20), as of October 2011, among the one million clinicians in Medicare's registry, approximately 50% are physicians who actively bill Medicare. The remainder include health professionals such as nurse practitioners, physician assistants, and physical therapists. These health professionals either bill Medi-

care independently, accounting for approximately 10% of physician fee schedule spending, or may provide services under physician supervision. Payments for physicians' services were approximately \$62 billion in 2010, accounting for 12% of total Medicare spending. MedPAC data also shows that in 2009, almost all (90%) of beneficiaries enrolled in Medicare's fee-for-service received at least one physician service, based on a list of services and their payment rates -- physician fee schedule, physician services including office visits, surgical procedures, and a broad range of other diagnostic and therapeutic services, furnished in all settings, including offices, hospitals, surgical centers, skilled nursing facilities, and various other settings including beneficiaries' homes (10,12,15,20).

In determining payment rates for each service on the fee schedule, CMS considers the amount of work required to provide a service, expenses related to maintaining a practice, and liability insurance costs. The value of these 3 types of resources are adjusted on a yearly basis with a combination of the total multiplied by a standard dollar amount, called the fee schedules conversion factor, which was \$33.98 in 2011, to arrive at the payment amount. This factor will stay the same unless a 27.4% cut of SGR takes place or CMS enacts further reductions. With a 27.4% cut, the conversion factor will be \$24.67 in 2012 after the first 2 months if Congress fails to act. However, Medicare payment rates may also be adjusted based on provider characteristics, additional geographic designations, and other factors (20). Consequently, what a provider receives is the amount which has been determined as the final amount, less any applicable beneficiary coinsurance. In 2010, the number of distinct services that Medicare paid for under the fee schedule totaled over \$1 billion.

The conversion factor updates are also dependent on the SGR system. This formula has been intended to keep spending growth (a function of service volume growth) consistent with growth in the national economy.

Under the physician fee schedule, payments are made for each individual service, such as an office visit or an interventional procedure, ranging from a simple visit to a range of broader services associated with coronary artery bypass graft surgery. However, some of the complex services are bundled. All services are reported according to the Healthcare Common Procedure Coding System (HCPCS) or current procedural terminology (CPT), which contains codes for over 7,000 distinct services (21).

The physician payment system is based on relative value units (RVUs), which account for the relative costli-

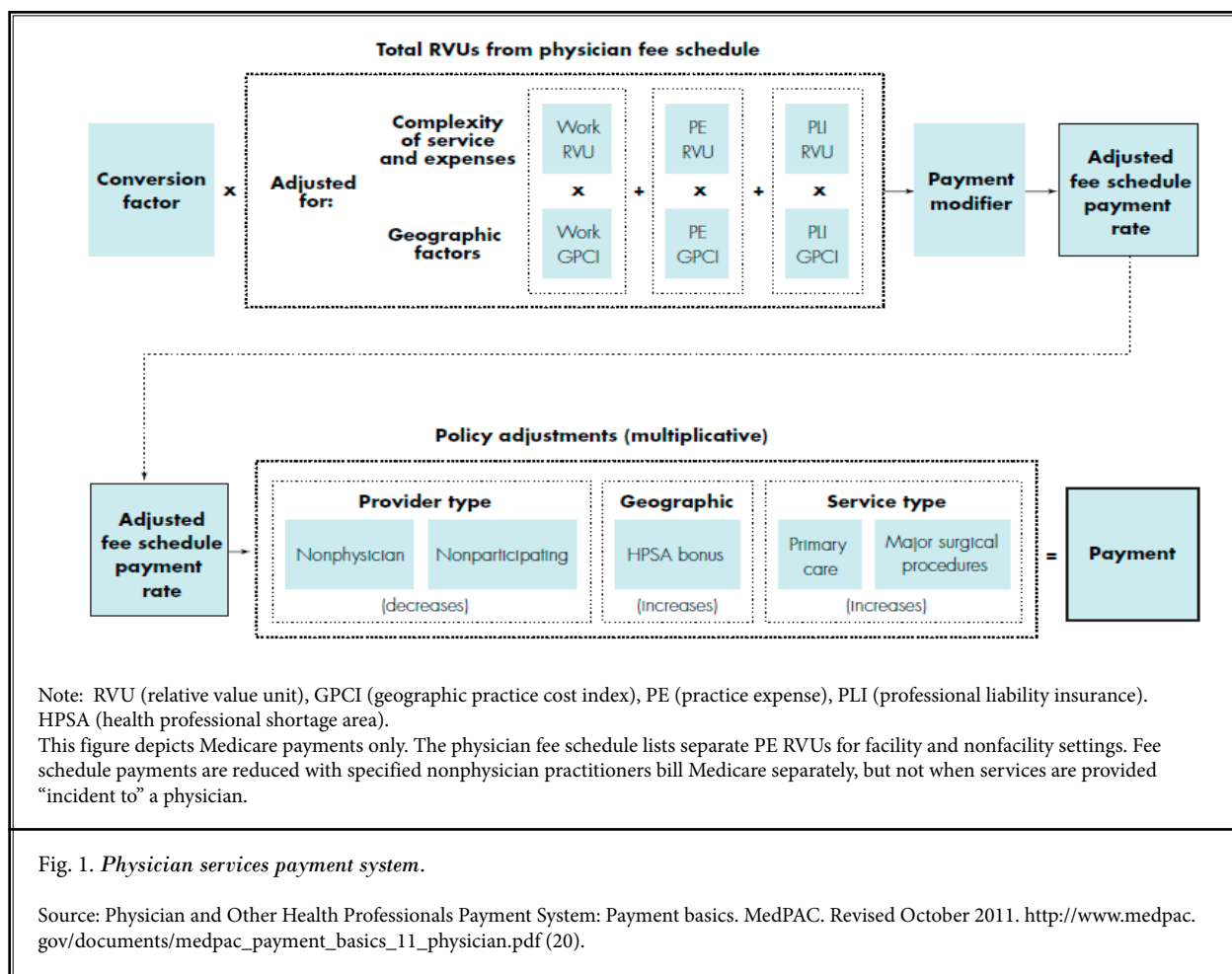
ness of the resources used to provide physician services: physician work, practice expenses (PEs), and professional liability insurance expenses. The RVUs for physician work reflect the relative levels of time, effort, skill, and stress associated with providing each service. The RVUs for PEs are based on the expenses physicians incur for office space, supplies and equipment, and expenses of non-physician clinical and administrative staff. The professional liability RVUs are based on the premiums physicians pay for professional liability insurance. Utilizing complicated calculations, Medicare arrives with total RVUs from the physician fee schedule assisted by the American Medical Association (AMA) as illustrated in Fig. 1. Further, through payment modifiers, Medicare may also adjust its payment for a service because of special circumstances with various types of modifiers.

Since the inception of Medicare programs in 1965, several methods have been used to determine the

amounts paid to physicians for each covered service. Initially, payment systems compensated physicians on the basis of their charges and allowed physicians to balance their books by billing beneficiaries for the full amount above what Medicare paid for each service, which was short-lived. In 1975, just 10 years after the inception of the Medicare program, payments changed so as not to exceed the increase in the medical economic index (22-24). Nevertheless, the policy failed to curb increases in costs, leading to the determination of a yearly change in fees by legislation from 1984 to 1991 (22-24).

Thus, since January 1, 1992, Medicare has paid for physicians' services based on national uniform RVUs, based on the relative resources used in furnishing services. The national RVUs are established for physician work, PE, and malpractice expense (25-29).

Starting in 1998, practice expense relative value



units (PERVUs) were also developed with consideration of general categories of expenses (such as office rent and wages of personnel, but excluding malpractice expenses) comprising PEs. Separate PERVUs were established for procedures that can be performed in both non-facility settings, such as physicians' offices, and a facility setting, such as a hospital outpatient department (HOPD). The difference between the facility and non-facility RVUs reflects the fact that a facility typically receives separate payment from Medicare for its costs of providing the service, apart from payment for physicians' services. Consequently, the non-facility RVUs reflect all of the direct and indirect PEs of providing a particular service — essentially representing the facility portion of the office expense.

Similar to PERVUs, resource-based malpractice relative value units (MPRVUs) were established for services furnished on or after 2000. The MPRVUs were based on malpractice insurance premium data collected from commercial and physician-owned insurers from every state.

Since the initial implementation, RVUs have been refined several times. The first 5-year review of physician work RVUs was effective in 1997; the second 5-year review was effective in 2002. The third 5-year review of physician work RVUs was effective on January 1, 2007. As part of the 2007 final rule, CMS implemented a new methodology for determining resource-based PERVUs and transitioned them over a 4-year period. This led to significant cuts in physician payments and office overhead payments for interventional techniques. Further, since 2009, CMS has been reviewing the rates annually under the agency's potentially misvalued service initiative (10,11,30).

Adjustments to RVUs are budget neutral. Further, to calculate the payment for every physician's service, the components of the fee schedule, namely physician work, PE, and MPRVUs, are adjusted by a geographic practice cost index. The index reflects the relative costs of physician work, PE, and malpractice expense in an area compared to the national average cost for each component. Historically, physician work, PE, and the liability insurance component are represented as 52.5%, 43.6%, and 3.9% (31).

2.0 SUSTAINED GROWTH RATE

The sustained growth rate (SGR) was enacted in 1997 to determine physician payment updates under Medicare Part B with an intent to reduce Medicare physician payment updates to offset the growth and utilization of physician services that exceed gross domestic product (GDP) growth (32,33). This is achieved by setting an overall target amount of spending for physicians' services and adjusting payment rates annually to reflect differences between actual spending and the spending target. The target is the product of the growth in fee-for-service enrollment; inflation-based update factors; real GDP per capita; and changes in law or regulation. Actual growth and spending on physician services is compared to a cumulative target growth rate linked to GDP, using 1996 as the base year. The formula also limits the amount of an increase in payment rates to inflation plus 10% and it limits a decrease in payment rates to inflation minus 7%, as illustrated in Fig. 2 with inflation being measured by the Medicare Economic Index (MEI). The MEI measures changes in the costs of physicians' time and operating expenses;

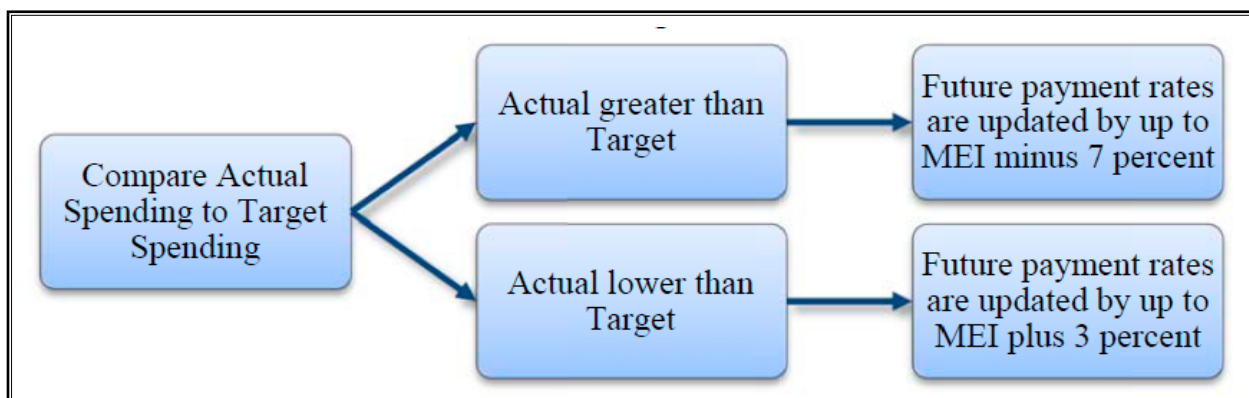


Fig. 2. Comparison of actual spending to target spending.

Source: Medicare's Payments to Physicians: The Budgetary Impact of Alternative Policies. Congressional Budget Office, June 14, 2011 http://www.cbo.gov/ftpdocs/122xx/doc12240/SGR_Menu_2011.pdf (33).

it is weighted to some of the prices of inputs in those 2 categories. Changes in the cost of physicians' time are measured using changes in non-form labor costs and changes in "all-factor" productivity. However, since 2002, spending measured by the SGR has consistently been above the targets established by the formula, requiring future payment reductions (33). The formula limits these future reductions to MEI minus 7%, thus excess spending will take many years to be recaptured.

However, despite congressional interventions to set aside steep SGR-mandated physician payment cuts, utilization growth in recent years has been relatively low, though very unpredictable. As illustrated in Fig. 3, when SGR began in the late 1990s, annual volume/intensity of growth in MFS services ranged from 1.9% to 2.9%. The growth accelerated in 2000 and 2001, reaching a plateau during 2001 to 2004, with annual growth ranging between 4.6% and 5.8%. The deceleration of growth started in 2005 ranging from 3% to 3.7% from 2006 to 2009, and dipping to 2.4% in 2010 (34).

Since 2002, the SGR has annually recommended reductions in Medicare reimbursements. Payments were cut in 2002 by 4.8% (35). Since then, Congress has inter-

vened on 13 separate occasions to prevent additional cuts from being imposed. In 2003, there was a proposed cut of 4.4% (36). However, Congress intervened and averted the projected 4.4% cut and increased the payment for physician services by 1.6% (37). In 2004 and 2005, with the enactment of the Medicare Modernization Act (MMA), scheduled rate reductions were replaced with an increase of 1.5% (37). The Deficit Reduction Act (DRA) in 2006 held 2006 payment rates at their 2005 level, overriding an additional impending 4.4% reduction (38). In 2007, Congress again approved holding the 2008 payments at the 2005 level, thereby avoiding a proposed additional 5.1% reduction (39). Repeatedly since then, multiple measures have been applied. In 2010 alone, 5 separate bills were passed to stop a 22% cut (25-28,40-46). On 13 occasions, Congress did not provide the funding necessary to reform the flawed SGR formula, resulting in steeper cuts in subsequent years. Consequently, the 10-year cost of a long-term solution has grown from \$48 billion in 2005 to nearly \$300 billion today, and it is expected to grow another 5%, resulting in an approximately 35% cut in 2013 (47).

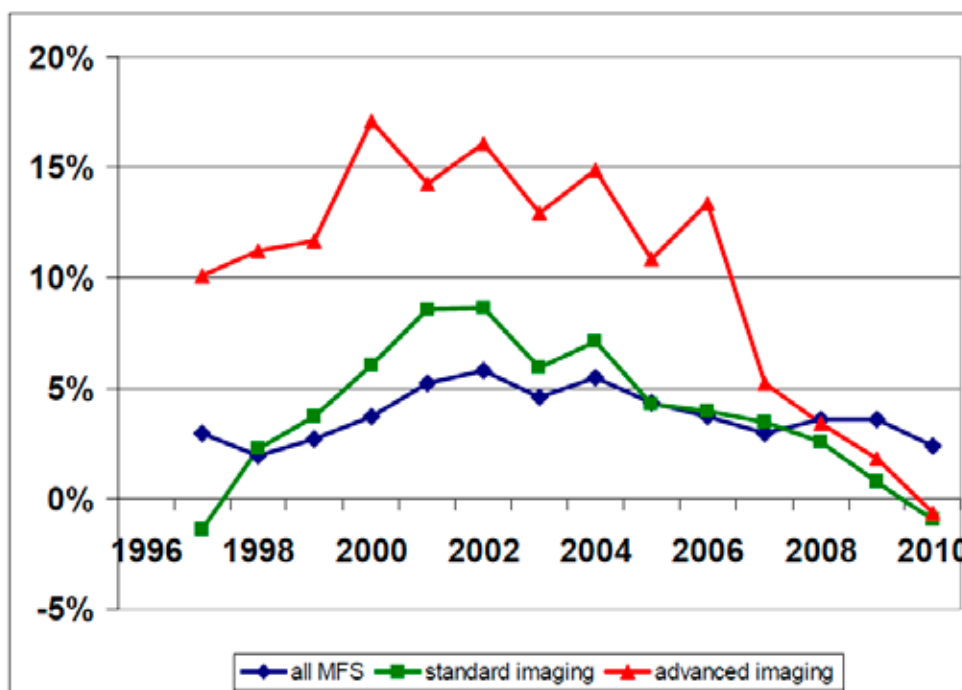


Fig. 3. Trends in volume growth since SGR inception.

Source: Statement of the American Medical Association before the House Energy and Commerce Committee Subcommittee on Health Presented by Cecil B. Wilson, MD, May 5, 2011 (34).

3.0 MEDICARE SPENDING ON PHYSICIAN SERVICES

Medicare spending for fee-for-service for beneficiaries for physician services has increased annually. During the 10-year period ending in 2009, Medicare spending for physician services – per beneficiary – increased 61% (Fig. 4). However, during the 10-year period from 2000 to 2010, spending for fee-schedule services grew from \$37 billion to \$64 billion– an increase of 72% (Fig. 5). Thus, Medicare spending on physician services has grown much more rapidly over this period than both the payment rate updates and the MEI (47). However, this may be arguable. Overall physician fee schedule payment updates totaled 7% during the 10-year period ending in 2009, whereas the MEI increased 20%. Thus, the contributions of growth are secondary to growth in the volume of services than payment rate updates. Both factors, namely updates and volume growth, combined to increase physician payments and expenses for Medicare.

The volume of physician services per beneficiary has continued to grow from year to year with some ser-

vices growing much more than others. As shown in Fig. 6 from 2002 to 2009 the volume of physician services grew by 47%. However, specific types of services, imaging, tests, and other procedures (procedures other than major procedures) grew at a rate of 65% or more (47). The comparable growth rates for major procedures and evaluation and management services were 34% and 32% respectively. However, the volume growth results show some positive trends. Overall results for 2010 illustrate increases in fee-for-service enrollment of 1.1%, increase in payments of 2.6%, and volume and intensity growth of 2.4%, which has been down from recent years. Further, these results also illustrate imaging spending to be down 5%; pay for service is also down slightly, with little to no growth in utilization per enrollee for imaging, and a modest shift to facility settings that also reduced spending. For evaluation and management services, there was a \$3 billion increase in spending or two-thirds of the overall increases in Medicare fee-for-service spending. These factors were secondary to above average to increases for many visit categories and above average volume and intensity in-

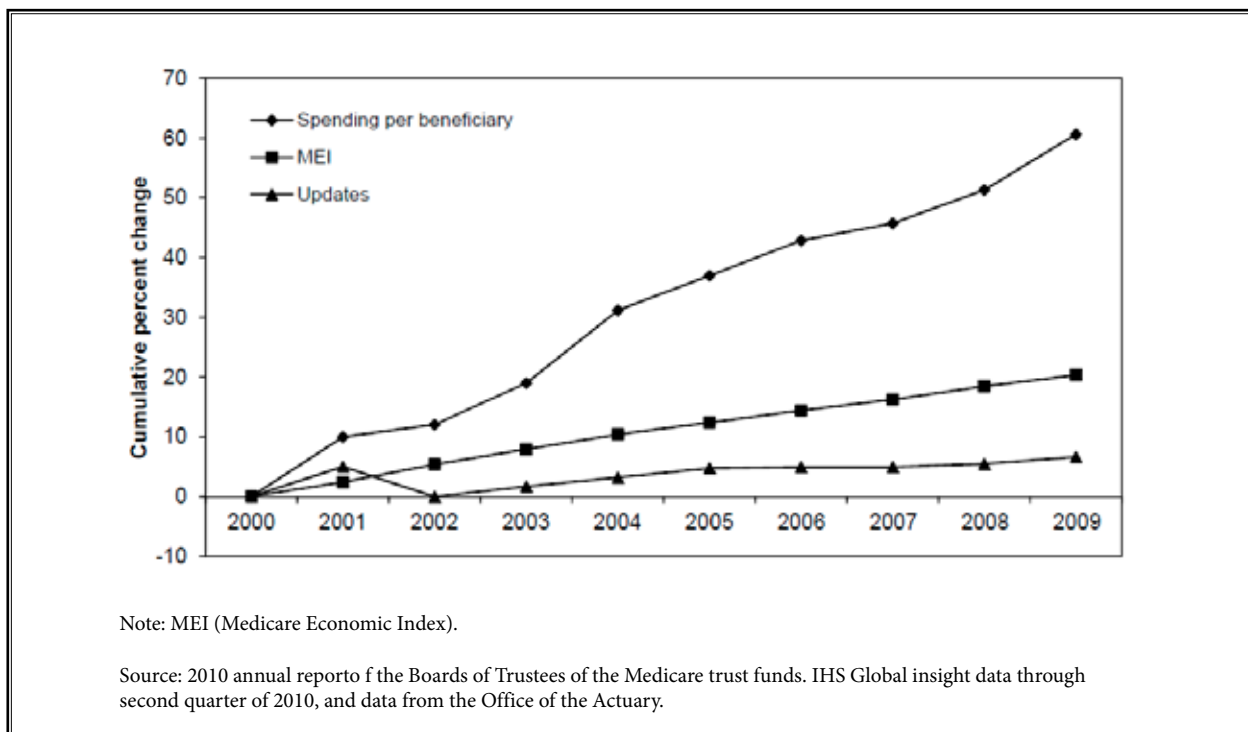


Fig. 4. Volume growth rate has raised physician spending more than input prices and payment update, 2000-2009.

Source: National health care and Medicare spending. In: A Data Book: Healthcare Spending and the Medicare Program. MedPAC June 2010, pp 3-17. <http://www.medpac.gov/chapters/Jun10DataBookSec1.pdf> (47).

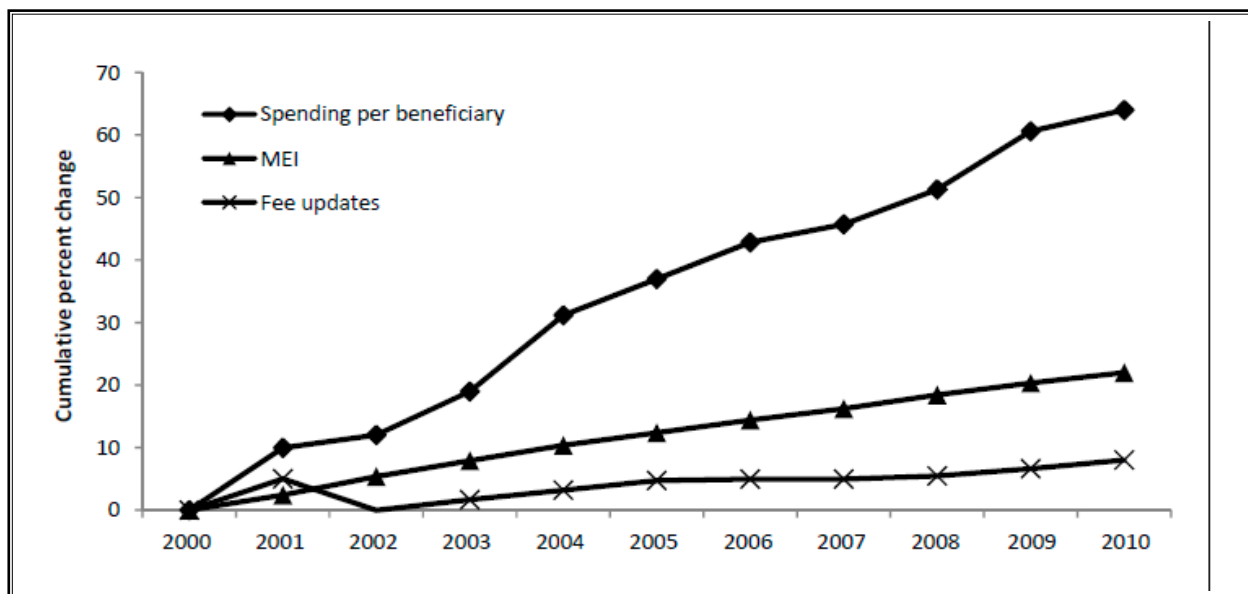
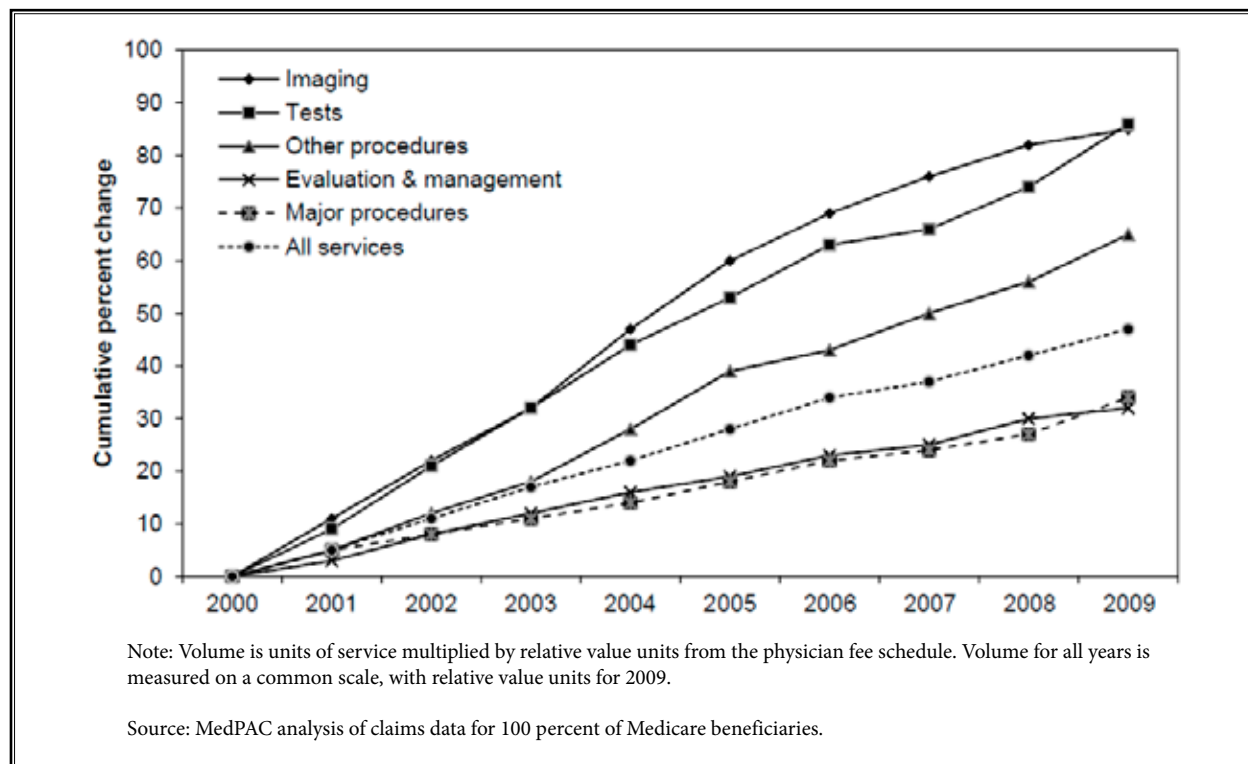


Fig. 5. Growth in spending for fee-schedule services, 2000-2010.

Source: Medicare Payment Advisory Commission Letter to Congress RE: Moving forward from the sustainable growth rate (SGR) system. October 14, 2011 (4).



Note: Volume is units of service multiplied by relative value units from the physician fee schedule. Volume for all years is measured on a common scale, with relative value units for 2009.

Source: MedPAC analysis of claims data for 100 percent of Medicare beneficiaries.

Fig. 6. Continued growth in volume of physician services per beneficiary, 2000-2009.

Source: National health care and Medicare spending. In: A Data Book: Healthcare Spending and the Medicare Program. MedPAC June 2010, pp 3-17. <http://www.medpac.gov/chapters/Jun10DataBookSec1.pdf> (47).

creases (6,47). The spending increased 7.6% for office consults and affected codes in 2009. For inpatient visits, spending was up 2.5%.

For procedures, there were above average pay increases for some categories such as eye and ambulatory surgery centers; there was also average volume intensity growth for most broad categories with a decline in volume and intensity for oncology and some surgical and cardiovascular categories.

4.0 ANALYSIS OF 2012 MEDICARE PHYSICIAN PAYMENT SCHEDULE

In November 2011, the Medicare physician payment rule of the "final rule" is still undergoing revisions (3). This was a 1,235 page document. There are numerous points to be covered in this analysis; however, only pertinent and the most important issues will be covered. MedPAC (48) and AMA (49,50) provided a detailed analysis of the proposed rule with final comments from AMA on the final rule (50). As one can expect, the focus of analysis was different for MedPAC and AMA. MedPAC (48) focused their comments on the following:

- ◆ Changes to direct practice expense inputs
- ◆ Potentially misvalued services under the physician fee schedule
- ◆ Expanding the multiple procedure payment reduction (MPPR) policy
- ◆ Establishment of the value-based payment modifier
- ◆ Hospital discharge care coordination.

In contrast, AMA (49), in response to the proposed rule, addressed the following:

- ◆ Physician Quality Reporting System (PQRS)
- ◆ Electronic Prescribing
- ◆ Confidential Feedback Reports
- ◆ Value-Based Payment Modifier
- ◆ Medicare Economic Index
- ◆ Geographic Practice Cost Indices Proposal for 2012
- ◆ Consolidating Reviews of Potentially Misvalued Codes
- ◆ Multiple Procedure Payment Reductions (MPPR)
- ◆ Codes with "23-Hour +" Stays
- ◆ Annual Wellness Visit (AWV)

AMA, in their analysis of the final rule (50), the focus was on the following:

- ◆ Sustainable Growth Rate (SGR)
- ◆ E-prescribing
- ◆ Relative Value Update Committee (RUC)

- ◆ Physician Quality Reporting System (PQRS)
- ◆ Value Modifier
- ◆ Multiple Procedure Cuts
- ◆ Geographic Practice Cost Indices
- ◆ Lab Test Signatures
- ◆ Annual Wellness Visit (AWV).

Overall there were multiple common themes.

4.1 Potentially Misvalued Services Under the Physician Fee Schedule

This issue was addressed by MedPAC, as well as AMA. Misvalued codes can be a major drain on Medicare revenues and also substantially affect practitioners. The Affordable Care Act (ACA) includes a section addressing the identification of potentially misvalued services, the collection of data to facilitate appropriate adjustments, and validation of RVUs (11). In addition, CMS is required to review and revise the relative ranking of all physician services at least every 5 years. Further, CMS also annually assigns values to new services, adjusts rankings for certain existing services, and makes other changes to the physician fee schedule. CMS generally follows recommendations from the AMA specialty society. Since people won't know exactly what this is and in that case it will be confusing, let's use the formal name for the committee and then call it the RUC. We can then explain the role of specialty societies in the composition of the RUC-- RUC and others in making these changes.

The importance of these codes comes from 2 major components of the physician fee schedule; that is, the physician work and practice expenses, which comprise about 95% of Medicare physician payments (27,45). The data and methods for estimating the work and peer resources for each physician service has been updated and improved. However, annual changes to the fee schedule still raise comments about the accuracy of the RVUs (45). Consequently, questions persist about the adequacy of the data, the transparency of the processes, the involvement of medical specialty societies, CMS oversight, and the standards against which estimates are valued (45).

The proposed physician payment schedule for 2012 addresses identifying, reviewing, and validating the RVUs of potentially misvalued services under fee-for-services. The issue of potentially misvalued services dates back to March 2006 to the report of MedPAC, which noted that misvalued services can distort the price signals for physicians' services, as well as for other health care services that physicians order, such as hos-

pital services (3,51). The reasoning provided for misvalued codes was that when a new service is added to the physician fee schedule, it may be assigned a relatively high value because of the time, technical skill, and psychological stress that are often required to furnish that service. Over time, the work required for certain services would be expected to decline as physicians become more familiar with the service and more efficient in furnishing it. Thus, the amount of physician work needed to furnish an existing service may decrease when new technologies are incorporated. Further, services can also become overvalued when PEs decline. This can happen when the cost of equipment and supplies fall, or when equipment is used more frequently, reducing its cost per use. Likewise, services can become undervalued when physician work increases or PEs rise. Thus, CMS and AMA RUC have taken increasingly significant steps to address potentially misvalued codes. The ACA (11) has directed the secretary of the Department of Health and Human Services (HHS) to specifically examine, as determined appropriate, potentially misvalued services in 7 categories as follows:

- 1) Codes and families of codes for which there has been the fastest growth
- 2) Codes and families of codes that have experienced substantial changes in PEs
- 3) Codes that are recently established for new technologies or services
- 4) Multiple codes that are frequently billed in conjunction with furnishing a single service
- 5) Codes with low relative values, particularly those that are often billed multiple times for a single treatment
- 6) Codes which have not been subject to review since the implementation of the resource-based relative value scale (RBRVS) or the so-called Harvard valued codes
- 7) Other codes determined to be appropriate by the secretary.

In addition, the act also specifies that the secretary may use existing processes to receive recommendations on the review and appropriate adjustment of potentially misvalued services. Further, the secretary may conduct surveys, other data collection activities, studies, or other analyses, as the secretary determines to be appropriate, to facilitate the review and appropriate adjustment of potentially misvalued services. The secretary is also authorized to use analytic contractors to identify

and analyze potentially misvalued codes, conduct surveys or collect data, and make recommendations on the review and appropriate adjustment of potentially misvalued services.

CMS, along with the AMA RUC, identified numerous codes in 2009, 2010, and 2011. Since the publication of the 2011 final rule with the comment period, CMS released the fourth 5-year review of work which discussed the identification and review of an additional 173 potentially misvalued codes. CMS also has initiated the fourth 5-year review of work RVUs by soliciting public comments on potentially misvalued codes for all services included in the 2010 final rule.

In addition to identifying and reviewing potentially misvalued codes, the ACA also specifies that the secretary shall establish a formal process to validate RVUs under the physician payment schedule. The validation process may include validation of a work element involved with furnishing a service and may include validation of the pre-, post-, and intra-service components of work.

Finally, CMS is statutorily required under ACA to review the RVUs of services no less often than every 5 years. In the past, CMS has satisfied this requirement by conducting separate periodic reviews in what are commonly known as CMS's 5-year reviews of work, PE, and malpractice RVUs. On May 24, 2011, CMS released the proposed notice regarding the fourth 5-year review of work RVUs. The most recent comprehensive 5-year review of PERVUs occurred for CY 2010; the same year CMS began utilizing the Physician Practice Information Survey (PPIS) data to update the PERVUs.

In addition to the 5-year reviews, beginning in 2009, CMS and the AMA RUC have identified and reviewed a number of potentially misvalued codes on an annual basis using various identification screens, such as codes with high growth rates, codes that are frequently billed together in one encounter, and codes that are valued as inpatient services, but they are now predominantly furnished as outpatient services. These annual reviews have not included codes identified by the public as potentially misvalued since, historically, the public has the opportunity to submit potentially misvalued codes during the 5-year review process.

The AMA expressed its concerns, including a strong objection to the CMS proposal to consider only nomination of active codes that are covered by Medicare at the time of the nomination. The AMA feels that this is contrary to every review that has been conducted to date and is unfair to pediatrics and others who rely

on a fair resource-based RBRVS for all services. In addition, CMS also has an established policy of publishing the relative values for preventative services and other non-covered services; hence, these codes should remain open to comment and review.

In contrast, MedPAC (48) submitted an extensive review describing each item, namely, validating RVUs of potentially misvalued services, consolidating reviews of potentially misvalued services, and identification and review of potentially misvalued services. MedPAC recommended that the process for collecting data should be designed to ensure the collection of data that are most consistent and accurate, rather than the current time estimates. For instance, participating practices and other settings could be recruited through a process that would require participation in data reporting among those selected. The cohort would consist of practices with a range of specialties, practitioner types, and services furnished. In addition, MedPAC stated that if CMS were to collect data from a cohort of practices, it could be an opportunity to collect data, not just for work RVUs, but also for PERVUs. Consequently, CMS plans to discuss the validation process in more detail in a future rule once they have considered the matter further in conjunction with the public comments.

In reference to consolidating reviews of potentially misvalued services, MedPAC agreed that the 5-year review should be consolidated with the annual review of potentially misvalued services (48). MedPAC also stated that since CMS is fulfilling this requirement with annual reviews of potentially misvalued services, a separate 5-year review could be redundant. Consequently, given the considerable overall support for consolidation, CMS appears to be finalizing their proposal without modifications to consolidate periodic reviews of work and PERVUs under the ACA and of potentially misvalued codes into one annual process. CMS also emphasizes the need to review both the work and PE component of codes that are identified as part of the potentially misvalued initiative to ensure that appropriate relativity is constructed and maintained in several key relationships:

- ◆ The work and PERVUs of codes are ranked appropriately within the code family. That is the RVUs of services within a family should be ranked progressively so that less intensive services and/or services that require less physician time and/or require fewer or less expensive direct PE inputs should be assigned lower work or PERVUs relative to other codes within the family.
- ◆ The work and PERVUs of codes are appropriately

relative based on a comparison of physician time and/or intensity and/or direct inputs to other services furnished by physicians in the same specialty.

- ◆ The work and PERVUs of codes are appropriately relative when compared to services across specialties. While it may be challenging to compare codes that describe completely unrelated services, since the entire fee schedule is a budget neutral system where payment differentials are dependent on the relative differences between services, it is essential that services across specialties are appropriately valued relative to each other.

MedPAC (48) also commented on the identification and review of potentially misvalued services. MedPAC agreed with CMS in that it is important to review certain high-expenditure procedural services, especially imaging, tests, and procedures, other than major procedures.

Among the select list of procedural codes referred for AMA RUC review, the procedures related to interventional pain management are as follows:

- ◆ 62311, Injection(s), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed, epidural or subarachnoid; lumbar or sacral (caudal)
- ◆ 97140, Manual therapy techniques (e.g., mobilization/ manipulation, manual lymphatic drainage, manual traction), one or more regions, each 15 minutes
- ◆ 90862, Pharmacologic management, including prescription, use, and review of medication with no more than minimal medical psychotherapy
- ◆ 20610, Arthrocentesis, aspiration and/or injection; major joint or bursa (e.g., shoulder, hip, knee joint, subacromial bursa)

While the major focus is on misvalued codes for the benefit of physicians, in interventional pain management some codes have been misvalued, despite multiple requests and comment letters and congressional meetings (2,3,52-58). In some interventional pain management misvalued codes, repeatedly and without any appropriate explanation, CMS continued to utilize a higher rate of reimbursement for hospital and ASC payments for lumbar continuous epidural injection rather than cervical radiofrequency neurotomy. They failed to

take into consideration the physician work value, PE, and risk. Further, this issue was corrected after multiple attempts in the 2011 proposed schedule (2); however, in the final schedule (3), once again it reverted back to misvalues (3).

The contents of the ASIPP comment letters were as follows (57):

ASC Fee Schedule

- ◆ We continue to believe that the proposed rates are composed of misvalued estimations similar to the comments about HOPD. We do not understand the rationale for CPT 62318 being reimbursed at \$300.76, whereas the catheterization of the lumbar epidural space, CPT 62319, is reimbursed at \$516.47. These should essentially be the same as CPT 62318, 62310, or 62311 at \$300.76. Also, the reimbursement may be re-factored for procedures such as phrenic nerve block.
- ◆ Another issue related to continued misappropriation is CPT 64633 (old 64626), as in HOPD, which describes destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic single, which is reimbursed at \$300.76. In the 2012 Proposed Rule our comments were considered and the reimbursement was listed as \$512.07. Now it appears that the final rule has been replaced with the incorrect value. The reimbursement for this should be similar to CPT 64635 (old 64622), destruction by neurolytic agent paravertebral facet joint nerve, lumbar or sacral, single level of \$516.47. In fact, the procedure in the cervical spine is associated with higher risk.

HOPD Payment Schedule

- ◆ Once again we would like to express our concern about the overpayments for CPT 64408, 64410, and 64412, at the same level as epidural and neurolytic injections. The explanation provided is the routine and usual explanation, but we are not quite certain how this is realistic or accurate. In addition, neurolytic epidural injection receives smaller payments than these nerve blocks. Finally, CPT 62318, cervical epidural catheterization, continues to be appropriately priced, whereas lumbar epidural catheterization, CPT 62319, has been transferred to a different ASC category and consequently is excessively priced at \$896.2 instead of \$522.00, which is appropriate. In 2009, 41,521 procedures were performed in facility settings utilizing CPT 62319, thus an approximate increase of \$373.20 per unit will increase over \$10 million in unnecessary and excess

reimbursement. In essence, this can be transferred to other procedures like CPT 64626, with utilization of 14,892 units in 2009.

- ◆ Further, misvalued was CPT 64633 (old 64626) – neurolytic procedure for paravertebral facet joint nerve, cervical or thoracic, single level – which also continues to be reduced from a previous rate of \$949.39 in 2009 reduced in 2010 and 2011 then increased to \$896 in the 2012 proposed rule and then, reduced to \$521.90, as well as being put into a different category by misvaluing the codes. We originally believed that these were typographical errors, or errors in calculation, which can easily be corrected; CMS corrected the 2012 Proposed Rule, but reversed it again. Cervical radiofrequency neurotomy is associated with a substantially increased risk and is difficult to perform, requiring significantly more equipment than epidural injection or a nerve block. In essence, the savings from CPT 62319 may be transferred to CPT 64626. Further, similar to CPT 62318, which is associated with a higher risk and priced at a lower level (though appropriate), CPT 64626 also is priced at a lower level as a nerve block rather than being priced at a higher level considering the risk and equipment needed.

4.2 Expanding the Multiple Procedure Payment Reduction Policy

When outpatient therapy or surgical services are furnished to the same patient on the same day, Medicare reduces payments for the second and subsequent procedures to account for efficiencies and PE and pre- and post-surgical physician work. Similarly, Medicare reduces payments for the technical component of multiple imaging studies that are performed in the same session (the technical component includes the cost of the non-physician staff who perform the test, medical equipment, medical supplies, and overhead expenses). CMS proposed to expand this policy, generally known as MPPR, to the professional component of certain imaging services which includes physicians' work involved in interpreting the study's results and writing a report. When multiple computed tomography (CT), magnetic resonance imaging (MRI), or ultrasound services are performed in the same session, CMS would reduce payment for the professional component of the second and subsequent services by 50%. This proposal is based on the expected efficiencies in physician work that occur primarily in the pre- and post-service periods when multiple services are performed in the same session. This

policy is meant to be consistent with the current MPPR that applies to the technical components of multiple imaging services. The majority if not all imaging based organizations have taken great exception to this characterization arguing that the relative efficiency on the professional side is nominal. In a variation of this policy, a 20% multiple procedure reduction is applied to the PE portion of certain therapy services. Consequently, CMS also proposes to extend its current MPPR policy to the physician interpretation of 119 imaging codes that are already subject to an MPPR for the procedure (technical component itself). In addition, the agency is considering additional policies that would make up to 700 diagnostic services subject to MPPR cuts and that would include common, low-cost tests such as x-rays. The Government Accountability Office (GAO), the MedPAC and AMA-Specialty Society RVC (Relative Review Committee) Update Committees have worked on this issue and CMS is utilizing their work to justify these changes. AMA says that this analysis oversimplifies related GAO and MedPAC recommendations, misconstrues the findings of the RUC, overlooks relevant CMS data, and results in a proposal that is likely to increase costs to Medicare and its beneficiaries while further fragmenting medical care.

CMS projected savings of \$100 million a year from its proposal. AMA also commented that imaging services performed in physician offices have been subjected to substantial cuts over the last several years, and between 2006 and 2013 some will experience payment cuts of more than 60%. AMA's analysis of 2010 Medicare claims data suggests that advanced imaging services are already shifting from physician offices to HOPD settings, and a new round of payment cuts seems likely to intensify the trend.

In contrast, MedPAC supported the CMS proposal which was consistent with the recommendation from MedPAC in its June 2011 report to Congress. MedPAC also recommended that the MPPR policy should apply across all settings, including hospitals and physicians offices, because there are likely to be efficiencies in physician work regardless of the setting. When the RUC values have additional comprehensive codes that contain multiple imaging services, these new codes should not be subject to MPPR because they should already account for efficiencies associated with multiple services as per MedPAC. MedPAC also encouraged CMS to explore applying the MPPR to the technical component of diagnostic tests other than imaging, such as electrocardiograms, cardiovascular stress tests, and anatomic

pathology tests. In response to recommendations from the AMA, the RUC, and many specialties, CMS scaled back its proposal to apply a 50% reduction to the professional component of all but the highest valued codes when more than one procedure on a list of 119 imaging services is performed on the same patient on the same day (50). However, CMS did not agree with the comments that across-the-board multiple procedure cuts are inappropriate because the degree of overlapping work associated with these cases varies from service to service. Finally, it appears that instead of a 50% reduction, the final rule limits the MPPR on the 119 imaging services, CT, MRI, magnetic resonance angiogram (MRA), and ultrasound codes to 25%.

4.3 Establishment of the Value-Based Payment Modifier

The ACA (11) requires CMS to implement a budget neutral, value-based payment modifier for some physicians by January 1, 2015, and for all physicians by January 1, 2017. No later than January 1, 2012, CMS is required to publish the quality and cost measures, implementation dates, and initial performance period to be used in the modifier and to begin implementing the modifier to the physician rule-making process during 2013. CMS announced its intention to use Calendar Year 2013 as the performance year on which payment bonuses and penalties will be applied (2), in 2015, even though many aspects of the modifier, including attribution methodology, comparison groups, and affected physicians have not yet been determined and are not likely to be finalized until November 2013 (49).

In its comments, MedPAC (48) expressed its concern that CMS's proposed rule for the value modifier incorporates too many quality measures (62 measures in the draft rule). MedPAC is also concerned that consistently and accurately gathering and processing the data needed for such a large number of measures would be administratively burdensome for CMS as well as providers. The use of large numbers of measures in the value modifier could increase the year-to-year statistical variability, and therefore uncertainty into the annual calculation of each physician's or physicians group's value modifier. Further, many of the proposed process measures run the risk of crediting physicians for providing the type of routine care that the Medicare program should expect as a standard of care from all practitioners serving its beneficiaries. MedPAC has reiterated the importance of developing an episode-based resource use measure as well as per-capita measures of resource use. MedPAC

believes that Medicare should have the ability to measure both episode-based resource use and per-capita resource use in robustly identifying high- or low-resource use physicians, particularly if the results are used for Medicare payment.

AMA (49) also outlined the other specific work still to be done as laid out in the rule, which includes:

- ◆ Investigation of alternative attribution methods that would expand the number and types of physicians who could be evaluated
- ◆ Development and/or testing of various types of quality measures, including both self-reported and claims-based measures that are more outcome oriented and might focus on preventable hospitalizations, avoidable emergency room use, care coordination, and complications
- ◆ Incorporation of feedback reports and value-based modifiers into CMS's information technology systems
- ◆ Evaluation of other cost measures, such as one tied to the Medicare Severity Diagnosis Related Groups (MSDRGs) now used to pay hospitals
- ◆ Combining cost and quality data into a composite value-based modifier
- ◆ Determination of whether the modifier will be applied to individual physicians, groups of physicians, or regions of the country and whether comparisons will be made on a regional or national basis
- ◆ Deciding how to make the modifier "systems-based," as required by the ACA
- ◆ Evaluation of and potential improvements in risk adjustment tools.

Overall, the AMA strenuously opposed CMS's plan to truncate an already inadequate preparation period by basing the 2015 value-based payment adjustment on performance in calendar year 2013. AMA also was unable to support the imposition of a value-based payment modifier on any physicians unless and until there is evidence that it is possible to accurately measure value without penalizing those physicians who treat the most difficult cases for CMS. Further, the AMA commented that if CMS is compelled to initiate modifiers despite the many remaining barriers to accurate measurement, they recommend that the program be limited to large integrated health systems.

In the final rule (3), CMS, while acknowledging the strong opposition of most of those who commented, finalized its proposal to base payment adjustments in 2015 on how an as-yet-unidentified subset of physicians

perform in 2013 on a set of cost and quality measures that are still not fully determined, using a methodology that will be finalized in November 2012 (50). Quality measures for the modifiers will be based on PQRS and electronic health record (EHR) measure sets, but as noted in the rule, the measures will be updated in 2013 and could change somewhat at that time. Cost measures to be used in the modifier will be based on average total per-capita cost for the physician's patients and per-capita cost for 4 conditions (chronic obstructive pulmonary disease, heart failure, coronary artery disease, and diabetes). Further, CMS defends its decision to use 2013 as the base year by arguing that if physicians start participating in PQRS and EHR reporting now, they will have 2 years to get ready for value-based reporting. Further, CMS states that it is not logistically possible to base the modifier on performance in 2014 or 2015 as recommended by those who commented.

This is a difficult area for interventional pain management as there are no Physician Quality Reporting Initiative (PQRI) measures in interventional pain management thus far. Further, with the addition of ICD-10 and complicated EHR systems, interventional pain physicians may never receive a value modifier, and thus may be punished without cause.

4.4 Changes to Direct Practice Expense

Direct PERVUs include the cost of non-physician clinical staff, medical equipment, and medical supplies used to furnish a service. MedPAC commented that inaccurate prices for supplies and equipment could lead to distortion in PERVUs. In the 2011 Part B Final Rule, CMS established an annual process for considering public requests for changes to the prices of medical supplies and equipment (58). Under this process, the public may submit requests to CMS to update prices; these requests should be supported by multiple invoices from different manufacturers that show market prices, net discounts, and rebates. During 2010, CMS received a request to increase the price of a tray used for bone marrow biopsy-aspiration from \$24.27 to \$34.47. CMS proposed to accept that request for 2012.

MedPAC commented that they are concerned with the process for updating prices, which relies on voluntary requests from specialty societies, practitioners, and suppliers, because it might not result in objective and accurate pricing because each group has a financial stake in the process. Further, MedPAC commented that specialty societies and practitioners are unlikely to provide CMS with evidence that prices for supplies and equipment has

declined because this could lead to lower RVUs for services they provide. Consequently, MedPAC recommended that CMS should establish an objective process to regularly update the prices of medical supplies and equipment to reflect market prices, with a particular focus on expensive items. As an initial step, MedPAC recommended that CMS should use the General Services Administration (GSA) medical supply schedule as a data source for the prices of high-cost supply items and to reduce the prices of expensive items not on the GSA schedule by the average difference between the GSA prices and the prices in CMS's PE database for similar supplies. Other recommendations included that the agency should explore using the GSA schedule for all medical supplies and examine whether there is a similar data source for medical equipment. In addition, the GSA schedule may overestimate actual transaction prices because it does not include rebates or volume discounts. MedPAC was concerned that this year's rule does not discuss establishing an objective process to regularly update the prices of medical equipment and supplies. In the final rule, CMS commented that they are finalizing their Calendar Year 2012 proposal to accept the updated inputs as requested, for updates to price and the useful life for existing direct inputs.

4.5 Electronic Prescribing

The penalty program overview shows that the CMS plan to base 2012 e-prescribing penalties on whether the physician met e-prescribing requirements in 2011 would be continued in future years. Thus, 2012 will set a precedent for how the program operates in future years. Unless CMS modifies its current plan, AMA believes that a significant number of physicians will be subject to the 1% penalty a year earlier than called for by Congress. Consequently, CMS is proposing to continue to the 2010 and 2011 e-prescribing requirement that in order to qualify for incentives, eligible physicians and other eligible professionals must have 25 services involving electronic prescription in each calendar year. This differs from the 10 reports required to avoid a penalty and has created confusion and educational challenges regarding the programs' requirements (49). This is despite President Obama's January 18, 2011, Executive Order calling on federal agencies to reassess and streamline regulations in order to reduce the financial and administrative hardships created by these programs (10-19,30,59-64).

Further, CMS is proposing to expand the definition of a "qualified electronic prescribing system" to also in-

clude certified EHR technology. This actually is a good development and AMA and all others support it since this type of recognition is an example of the importance of synchronizing the overlapping e-prescribing and EHR programs.

CMS is also proposing criteria for applying penalties in 2013 and 2014 for eligible professionals and group practices who are eligible for e-prescribing incentives but choose not to participate or do not successfully participate in the e-prescribing program. The law that established the Medicare e-prescribing incentive program, the "Medicare Improvements for Patients and Providers Act of 2008" (MIPPA), requires a penalty phase for eligible physicians who do not e-prescribe during 2012 through 2014. Based on the interpretation of MIPPA, a physician who is eligible, but chooses not to participate in the 2013 or 2014 Medicare e-prescribing incentive program and does not qualify for a hardship exemption, would be subject to penalties of a 1.5% reduction based on the 2013 Medicare fee schedule amounts during that year and a 2% payment reduction in 2014. However, MIPPA also provides the Secretary of HHS with the authority to exempt physicians from penalties for hardship reasons.

In contrast, CMS is proposing the eligible professions can avoid an e-prescribing penalty in 2013 if they successfully participate in the 2011 e-prescribing incentive program or e-prescribe and report on at least 10 e-scripts during the first 6 months of Calendar Year 2012. To avoid the 2014 e-prescribing penalties, eligible professionals would have to successfully participate in the 2012 e-prescribing incentive program or e-prescribe and report on at least 10 e-scripts during the first 6 months of calendar year 2013. Thus, CMS's objective is to levy financial penalties in 2013/2014 based on physicians' performance during the first 6 months in 2012/2013.

The application of the e-prescribing penalty is the first of several penalty programs (e.g., meaningful use of EHRs and PQRS programs include penalties), so this approach of back dating the reporting periods to the year prior to the penalty year will become even more confusing for physicians who may be subject to multiple, overlapping penalties (49). Thus, when multiple adjustments have to be made to their claims payments, cost-sharing amounts would be fraught with errors, causing confusion to physicians and their patients. Further, CMS is also proposing to allow several reporting mechanisms to report e-prescribing activity in order to avoid a penalty. Physicians must report the G-code (G8553): 1) to CMS on their Medicare Part B claims; 2)

to a qualified registry; or 3) to CMS via a qualified EHR product to avoid penalties. Physicians however must select one mechanism and cannot report the e-prescribing measure by using more than one reporting mechanism. Overall, this seems to be a supportable proposal by all parties because of the multiple mechanisms available.

CMS has proposed multiple categories exempt from penalties.

In the final rule, CMS finalized its proposal for the 2012 and 2013 incentive and 2013 and 2014 penalty program. Despite opposition from AMA and others, as with the 2012 penalty, physicians will need to report 10 times during the first 6 months of 2012 and 2013 to avoid application of e-prescribing penalties in subsequent years. Improvements to the program include allowing the use of a certified EHR to e-prescribe and making it easier to avoid the penalties by not requiring physicians to link the e-prescribing codes to qualifying visits and allowing physicians to apply for hardship exemptions online.

Overall, e-prescribing and EHRs are major drawbacks on physicians and cause regulatory burden (59). It is generally understood that the simple implementation of EHR can help lessen patient suffering due to medical errors and the inability of analysts to assess quality. Further, EHRs can provide health decision support, fast access to medical literature and current best practices in medicine, and also may promote evidence-based medicine (EBM). However, evolving regulations and increasing prices will be major disadvantages (59,64).

The critics with a moderate point of view state that while EHRs may save the "health system" money, physicians who buy the systems may not benefit financially. EHR price tags range widely, depending on what is included, how robust the system is, and how many providers use it. The low estimations show that they cost at least \$25,000 per physician. In addition, physicians tend to see decreases in productivity as they implement an EHR at least in the short-term. It also increases labor costs. There have been multiple questions regarding if EHRs really improve quality at all. Multiple publications have introduced numerous doubts about the benefits of EHRs. In a project initiated by the Office of the National Coordinator for Health Information (ONC), surveyors found that hospital administrators and physicians who had adopted EHR noted that any gains in efficiency were offset by reduced productivity as the technology was implemented, as well as the need to increase information technology staff to maintain the system (62). Further, the Congressional Budget Office

(CBO) concluded that cost savings may occur only in large integrated institutions like Kaiser Permanente, and not in small physician offices. Most health care providers feel that EHRs compromise privacy. In 2007, the GAO reported that there was a, "jumble of studies and vague policy statements but not overall strategy to ensure that privacy protections would be built into computer networks linking insurers, doctors, hospitals, and other health care providers" (63).

The comments above are from mild critics and supporters of EHRs. However, evolving regulations and escalating costs have become burdensome not only to interventional pain management physicians, but all physicians causing many physicians to leave their practices (65,66).

Ardent critics state that there are too many disadvantages of electronic medical records and it will affect access to health care, especially considering that there are too many sweeping changes in health care at the present time. EMR implementation is meeting resistance from the major decision makers, the physicians themselves, "EHR mandate" notwithstanding. Some of the disadvantages of EHRs are as follows:

1. For those physicians who want to practice personalized medicine, drop-down menus are quite inappropriate, irritating, and reduce productivity, as these physicians pride themselves on a complete, descriptive medical record.
2. The cost of health care EMR is escalating and has been described as outrageous by some. The costs range around \$30,000 per physician; a practice with 3 practitioners, even if it includes physician extenders, would have to spend approximately \$90,000, only to find out that after 2 years they have to buy a different system.
3. The training involved is too critical and time-consuming.

Removal of federal regulations with meaningful use, etc. will save upwards of \$7.5 billion to the public and approximately \$3 billion for the government.

Further, most Medicare directors do not trust the documentation provided by EMRs. It may be useful for fraud and abuse; however, the additional regulations will not be enough for the expenses incurred. In addition, what is not recognized by many is the changing documentation regulations also increased the cost by revising the entire EMR, which is cost prohibitive.

The U.S. government set aside about \$27 billion through 2009's American Recovery and Reinvestment

Act to give doctors an incentive to move patient medical records to an electronic system. There are about 750,000 doctors, dentists, and chiropractors who qualify for the money, but only 20% of the market has adopted EMR. To top it off, it can be a confusing space: there are about 400 different EMR software makers, many with similar sounding names, says MedicalRecords.com founder Durjoy (64).

It is important to note that at the 2011 AMA Interim House of Delegate (HOD) Meeting, delegates adopted a policy to work to stop implementation of ICD-10 (67). Addressing the HOD, AMA president Peter W. Carmel, MD said, "The implementation of ICD-10 will create significant burdens on the practice of medicine with no direct benefit to individual patients' care." He went on to say that, "At a time when we are working to get the best value possible for our health care dollar, this massive and expensive undertaking will add administrative expense and create unnecessary workflow disruptions" (67).

4.6 Physician Quality Reporting System

PQRS is becoming a focal point in medical care, even though no quality indicators are available for multiple specialties, including interventional pain management. CMS proposed to provide interim feedback reports to physicians and other eligible professionals participating through the claims-based reporting mechanisms under the PQRS for 2012 and beyond. These reports will be based on claims for dates of service occurring on or after January 1 and processed by March 31 of the respective program year. Reports will be available in the summer of the respective program year. CMS is also proposing for 2012 and beyond to allow physicians and other eligible professionals who participate in the PQRS via the EHR-based reporting mechanism to have the option of submitting quality measure data obtained from the PQRS-qualified EHR to CMS either directly from the eligible professionals qualified EHR, or indirectly from a qualified EHR data submission vendor on the eligible professional's behalf. Physicians and other eligible professionals would be required to have a separate PQRS-qualified EHR product, despite the fact that physicians and other eligible professionals may have already purchased certified EHR technology for purposes of reporting under the Medicare and Medicaid EHR Incentive Programs, i.e., meaningful use program.

In a further effort to align the PQRS and the meaningful use program, CMS is proposing that physicians

and other eligible professionals specializing in internal medicine, family medicine, general practice, and cardiology report: all PQRS core measures (in the proposed rule); and report each measure for at least 80% of the eligible professional's Medicare Part B fee-for-service patients for whom services were furnished during the reporting period to which the measure applies. Since not all of the proposed PQRS core measures will apply to all of these specialties, CMS proposes to allow the reporting of these proposed PQRS core measures with a 0% performance rate.

CMS is proposing the eligible professionals may demonstrate meaningful use by participating in a PQRS–Medicare EHR Incentive Pilot that relies on the infrastructure of the PQRS. This may be achieved by an EHR data submission vendor-based reporting option or EHR-based reporting option. CMS is also proposing, with respect to claims-based reporting, that if an eligible professional reports on fewer than 3 measures in 2012 and reports on a measure that is part of an identified cluster of closely related measures, but does not report on any other measures in the identified cluster, then the eligible professional would not qualify as a satisfactory reporter in the 2012 PQRS or earn an incentive payment. Further, CMS sets forth various requirements that eligible professionals specializing in internal medicine, family medicine, general practice, and cardiology must meet satisfactory reporting of PQRS measures groups via claims-based reporting.

CMS finalized its proposal to provide interim feedback reports to physicians reporting individual measures and measure groups through claims-based reporting for 2012 and beyond. These reports will be a simplified version of the annual feedback report that CMS currently provides and will be based on claims for the first 3 months of each program year. The interim feedback reports will be provided to physicians during the summer of each program year. Despite strong opposition from the physician community, CMS finalized its proposal to use 2013 as the reporting period for the 2015 PQRS penalty. If CMS determines that a physician or group practice has not satisfactorily reported quality data for the 2013 reporting period, then its 2015 payments will be reduced 1.5%.

For interventional pain physicians, multiple questions remain regarding PQRS as there are no PQRS measures to be utilized, thus, it is unknown and unclear whether they will be penalized for the inability of CMS to provide such measures.

4.7 Lab Testing Signatures

CMS has retracted the requirement for physicians to sign lab requisitions. The rule makes the final rule in the agencies retreat from this mandate, which began with postponing implementation from January to April 2011 and then agreeing not to enforce it. CMS has now reinstated its previous policy that physician signatures are not required on requisitions for clinical lab fee schedule services.

5.0 INTERVENTIONAL PAIN MANAGEMENT

Interventional pain management is affected in this area seemingly more than any other specialty by ACA, ICD-10 implementation, EHR implementation, and infection control practices, many of which have weak evidentiary bases (59,68-98). Interventional pain management is not only facing regulatory burden (59), but also the hazards of evidence-based medicine (EBM) (68-98). Apart from the allegations of a lack of evidence, interventional pain management has been targeted for waste, abuse, and fraud, and by regulators. Office of Inspector General (OIG) studies have illustrated increases in facet joint interventions and transforaminal injections without appropriate indications, medical necessity, documentation, and inappropriate billing patterns (99,100). The growth of interventional pain management has been escalating with overall increases in epidural procedures of 4.7% and 4.2% in recent years; facet joint interventions and SI joint interventions have increased 6.9% and most recently they have been reduced by 8.2%. Disc procedures such as discography and disc decompression have been reduced 6.5% and 15.1%. Further, vertebroplasty and kyphoplasty procedures have decreased 2% and 11.5%. However, implantables and stimulators have increased 16.7% and 5.7%. In contrast, nerve blocks, peripheral nerve blocks, etc., decreased 1.8% in 2009 and increased 8.3% in 2010 (101-108). Further, substantial complications also have been reported with interventional pain management procedures (109-117).

Allegations of a lack of evidence have been addressed multiple times in the literature (72,83,84,95,96,118-138). The evidence has been presented not only for therapeutic interventional techniques, but also diagnostic interventional techniques (72,83,84,95,96,118-151). It is also well established that the prevalence of spinal pain as well as chronic pain is increasing along with health care utilization, which is reaching unmanageable proportions with not only interventional techniques, surgical interventions, and all other modalities, but also opioid therapy (152-159).

In reference to the physician payment schedule for interventional pain management procedures, we have to take many aspects into consideration. Even though significant improvement has been made with PE values of interventional pain management increasing from \$59.04 to \$156.79 per hour (10), now in the third year of implementation, there have been reductions in the MEI and inclusion of fluoroscopy for transforaminal epidural injections, all facet joint interventions, sacroiliac joint injections, discography, and disc decompression, and significant reductions in fees for add-on codes that have resulted in continuing cuts. Overall, the changes in CPT coding system are as follows:

- ◆ Fluoroscopy is included for the following procedures and the definition of multiple codes has changed.
 - 64633, Destruction by neurolytic agent, paravertebral facet joint nerve(s) with imaging guidance (fluoroscopy or CT); cervical or thoracic, single facet joint
 - 64634, Destruction by neurolytic agent, paravertebral facet joint nerve(s) with imaging guidance (fluoroscopy or CT); cervical or thoracic, each additional facet joint (List separately in addition to code for primary procedure)
 - 64635, Destruction by neurolytic agent, paravertebral facet joint nerve(s) with imaging guidance (fluoroscopy or CT; lumbar or sacral, single facet joint)
 - 64636, Destruction by neurolytic agent, paravertebral facet joint nerve(s) with imaging guidance (fluoroscopy or CT; lumbar or sacral, single facet joint (List separately in addition to code for primary procedure)
 - Further, the nerve supply of each joint is considered as a single level, instead of each nerve for all facet neurolytic codes.
 - 64490, Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; single level
 - 64491, Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; second level (List separately in addition to code for primary procedure)
 - 64492, Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint

(or nerves innervating that joint) with image guidance (fluoroscopy or CT), cervical or thoracic; third and any additional level(s) (List separately in addition to code for primary procedure)

- 64493, Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral; single level
- 64494, Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral; second level (List separately in addition to code for primary procedure)
- 64495, Injection(s), diagnostic or therapeutic agent, paravertebral facet (zygapophyseal) joint (or nerves innervating that joint) with image guidance (fluoroscopy or CT), lumbar or sacral; third and any additional level(s) (List separately in addition to code for primary procedure)
- 64479, Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); cervical or thoracic, single level
- 64480, Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); cervical or thoracic, each additional level (List separately in addition to code for primary procedure)
- 64483, Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, single level
- 64484, Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance (fluoroscopy or CT); lumbar or sacral, each additional level (List separately in addition to code for primary procedure)
- 27096, Injection procedure for sacroiliac joint, anesthetic/steroid, with image guidance (fluoroscopy or CT) including arthrography when performed
- 62263, Percutaneous lysis of epidural adhesions using solution injection (e.g., hypertonic saline, enzyme) or mechanical means (e.g., catheter) including radiologic localization (includes contrast when administered), multiple adhesiolysis sessions; 2 or more days
- 62264, Percutaneous lysis of epidural adhesions using solution injection (e.g., hypertonic saline, enzyme) or mechanical means (e.g., catheter) including radiologic localization (includes contrast when ad-

ministered), multiple adhesiolysis sessions; one day

- 62287, Decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, any method utilizing needle based technique to remove disc material under fluoroscopic imaging or other form of indirect visualization, with the use of an endoscope, with discography and/or epidural injections(s) at the treated levels(s), when performed, single or multiple levels, lumbar

- ◆ Other relevant changes for interventional pain management codes include:

- 22520, Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection; thoracic
- 22521, Percutaneous vertebroplasty (bone biopsy included when performed), 1 vertebral body, unilateral or bilateral injection; Lumbar
- 22522, Each additional thoracic or lumbar vertebral body (list separately in addition to code for primary procedure)

Do not report 22520-22522 in conjunction with 20225, 22310-22315, 22325, 22537 when performed at the same levels as 22520-22522)

(Use 22522 in conjunction with 22520, 22521 as appropriate)

(For radiological supervision and interpretation, see 72291, 72292)

- 22523, Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (e.g., kyphoplasty); thoracic
- 22524, Percutaneous vertebral augmentation, including cavity creation (fracture reduction and bone biopsy included when performed) using mechanical device, 1 vertebral body, unilateral or bilateral cannulation (e.g., kyphoplasty); Lumbar
- 22525, Each additional thoracic or lumbar vertebral body (list separately in addition to code for primary procedure)

Do not report 22523-22525 in conjunction with 20225, 22310-22315, 22325, 22537 when performed at the same levels as 22523-22525)

(Use 22525 in conjunction with 22523, 22524 as appropriate)

(For radiological supervision and interpretation, see 72291, 72292)

- 22526, Percutaneous intradiscal electrothermal an-

nuoplasty, unilateral or bilateral including fluoroscopic guidance; single level

- 22527, 1 or more additional levels (List separately in addition to code for primary procedure)

(Use 22527 in conjunction with 22526)

(Do not report codes 22526, 22527 in conjunction with 77002, 77003)

(For percutaneous intradiscal annuloplasty using method other than electrothermal, use 22899)

- 62310, Injections(s) of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution) not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed, epidural or subarachnoid; cervical or thoracic
- 62311, Injections(s) of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution) not including neurolytic substances, including needle or catheter placement, includes contrast for localization when performed, epidural or subarachnoid; Lumbar or sacral (caudal)
- 62318, Injection(s), including indwelling catheter placement continuous infusion or intermittent bolus, of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution) not including neurolytic substances, includes contrast for localization when performed, epidural or subarachnoid; cervical or thoracic
- 62319, Lumbar or sacral (caudal)
(For transforaminal epidural injection, see 64479-64484)
(Report 01996 for daily hospital management of continuous epidural or subarachnoid drug administration in conjunction with 62318-62319)
- 62367, Electronic analysis of programmable, implanted pump for intrathecal or epidural drug infusion (includes evaluation of reservoir, alarm status, drug prescription status); without reprogramming or refill
- 62369, Electronic analysis of programmable, implanted pump for intrathecal or epidural drug infusion (includes evaluation of reservoir, alarm status, drug prescription status); with reprogramming and refill
- 62370, With reprogramming and refill (requiring physician's skill)

Do not report 62367-62370 in conjunction with 95990, 95991. For refilling and maintenance of a

reservoir or an implantable infusion pump for spinal or brain drug delivery without reprogramming, see 95990, 95991)

- 64561, Percutaneous implantation of neurostimulator electrode array; sacral nerve (transforaminal placement)
- 64565, Percutaneous implantation of neurostimulator electrode array; neuromuscular
- 64575, Incision for implantation of neurostimulator electrode array; peripheral nerve (excludes sacral nerve)
(64577 has been deleted)
- 64580, Incision for implantation of neurostimulator electrode array; Neuromuscular
- 64581, Incision for implantation of neurostimulator electrode array; sacral nerve (transforaminal placement)
- 64585, Revision or removal of peripheral neurostimulator electrode array
- Codes 64600-64681 include the injection of other therapeutic agents (e.g., corticosteroids). Do not report diagnostic/therapeutic injections separately. (For therapeutic injections that not destructive of the target nerve [e.g., pulsed radiofrequency], use 64999)
- 64620, Destruction by neurolytic agent, intercostal nerve
(64622-64627 have been deleted. For image guided neurolysis of facet joint nerve(s), see 64633-64636)
- (Imaging guidance [fluoroscopy or CT] are inclusive components of 64633-64636)
- (Image guidance [fluoroscopy, CT] and any injection of contrast are inclusive components of 64633-64636. Image guidance and localization are required for the performance of paravertebral facet joint nerve destruction by neurolytic agent described 64633-64636. If CT or fluoroscopic imaging is not used, report 64999)
(For paravertebral facet destruction by neurolysis of the T12-L1 joint, or nerves innervating that joint, use 64633)
- 64630, Destruction by neurolytic agent; pudendal nerve
- 64632, Destruction by neurolytic agent; Plantar common digital nerve
(Do not report 64632 in conjunction with 64455)

Overall, the specialty of interventional pain management, as illustrated in Table 1, appears to have fared better than other specialties, but it also has suffered significant losses due to multiple other factors.

Table 1. Physician fee schedule for top 35 interventional procedures.

| CPT | Description | 2010 (CF=36.8729) | | 2011 (CF=33.9764) | | 2012 without Cut (CF=34.0376) | | 2012 with Cut (CF=24.6712) | |
|-------|--|--------------------------|--------------------------------|--------------------------|--------------------------------|----------------------------------|--------------------------------|-------------------------------|--------------------------------|
| | | Non-facility (Office) | Facility (ASC/ Hospital) | Non-facility (Office) | Facility (ASC/ Hospital) | Non-facility (Office) | Facility (ASC/ Hospital) | Non-facility (Office) | Facility (ASC/ Hospital) |
| 27093 | Injection for hip x-ray | \$181.51 | \$71.20 | \$189.25 | \$70.33 | \$195.04 | \$70.12 | \$141.37 | \$50.82 |
| 27096 | Injection procedure for Sacroiliac joint, arthrography | \$171.54 | \$70.09 | \$184.49 | \$70.67 | \$171.89 | \$82.03 | \$124.59 | \$59.46 |
| 62263 | Percutaneous epidural adhesiolysis - 2 or 3 days | \$645.97 | \$379.24 | \$708.75 | \$399.56 | \$683.48 | \$340.72 | \$495.40 | \$246.96 |
| 62264 | Percutaneous epidural adhesiolysis - 1 day | \$388.83 | \$228.36 | \$412.47 | \$232.40 | \$433.64 | \$238.94 | \$314.31 | \$173.19 |
| 62282 | Neurolytic epidural, L/S | \$281.11 | \$136.87 | \$293.22 | \$139.64 | \$295.45 | \$142.28 | \$214.15 | \$103.13 |
| 62290 | diskogrsphy each level: lumbar | \$315.05 | \$168.22 | \$331.95 | \$170.56 | \$344.12 | \$172.91 | \$249.43 | \$125.33 |
| 62291 | Diskogrsphy each level: C/T | \$295.50 | \$161.58 | \$313.26 | \$164.45 | \$326.76 | \$166.44 | \$236.84 | \$120.64 |
| 62310 | Cervical epidural | \$212.49 | \$101.08 | \$230.36 | \$103.29 | \$246.77 | \$107.22 | \$178.87 | \$77.71 |
| 62311 | Lumbar epidural | \$185.19 | \$83.74 | \$197.74 | \$84.94 | \$208.99 | \$87.82 | \$151.48 | \$63.65 |
| 62318 | Epidural or subarachnoid, catheterization, C/T | \$221.72 | \$99.24 | \$236.82 | \$99.21 | \$251.20 | \$101.77 | \$182.07 | \$73.77 |
| 62319 | Catheterization, epidural, L/S | \$202.53 | \$93.70 | \$188.91 | \$94.11 | \$185.16 | \$97.01 | \$134.21 | \$70.31 |
| 64400 | Injection, anesthetic agent; Trigeminal nerve, any division or branch | \$105.88 | \$64.19 | \$112.80 | \$66.59 | \$118.11 | \$68.08 | \$85.61 | \$49.34 |
| 64405 | Greater occipital nerve | \$105.14 | \$76.37 | \$112.46 | \$79.50 | \$97.01 | \$61.95 | \$70.31 | \$44.90 |
| 64418 | Suprascapular nerve | \$130.23 | \$72.68 | \$136.92 | \$73.39 | \$138.87 | \$74.20 | \$100.66 | \$53.78 |
| 64420 | Intercostal, single | \$153.84 | \$65.30 | \$135.91 | \$66.59 | \$125.94 | \$68.08 | \$91.28 | \$49.34 |
| 64421 | Intercostal, multiple, regional block | \$227.62 | \$90.01 | \$195.36 | \$91.74 | \$177.68 | \$94.28 | \$128.78 | \$68.34 |
| 64450 | Other peripheral nerve or branch | \$98.50 | \$68.62 | \$102.27 | \$68.63 | \$105.52 | \$69.10 | \$76.48 | \$50.08 |
| 64479 | Cervical transforaminal epidural injections | \$267.09 | \$123.59 | \$265.36 | \$131.15 | \$260.73 | \$134.11 | \$188.98 | \$97.20 |
| 64480 | Cervical transforaminal epidural injections add-on | \$136.87 | \$81.53 | \$126.39 | \$66.93 | \$124.92 | \$66.37 | \$90.54 | \$48.11 |
| 64483 | Lumbar/sacral transforaminal epidural injections | \$257.50 | \$106.98 | \$240.21 | \$102.61 | \$242.01 | \$111.98 | \$175.41 | \$81.17 |
| 64484 | Lumbar/sacral transforaminal epidural injections add-on | \$131.70 | \$67.88 | \$106.35 | \$53.00 | \$100.07 | \$52.76 | \$72.53 | \$38.24 |
| 64490 | Cervical and thoracic facet joint injections, 1st Level (Old 64470) | \$167.12 | \$109.94 | \$196.38 | \$111.44 | \$202.18 | \$110.96 | \$146.55 | \$80.43 |
| 64491 | Cervical and thoracic facet joint injections, 2nd Level (Old 64472) | \$82.27 | \$63.08 | \$97.17 | \$62.86 | \$98.37 | \$61.95 | \$71.30 | \$44.90 |
| 64492 | Cervical and thoracic facet joint injections, 3rd Level (Old 64472) | \$83.33 | \$64.16 | \$98.19 | \$63.88 | \$99.05 | \$62.63 | \$71.79 | \$45.40 |
| 64493 | Paravertebral facet joint or facet joint nerve; lumbar/sacral, 1st Level (Old 64475) | \$151.25 | \$93.34 | \$174.98 | \$93.77 | \$181.08 | \$93.26 | \$131.25 | \$67.60 |
| 64494 | Paravertebral facet joint or facet joint nerve; lumbar/sacral, 2nd Level (Old 64476) | \$73.78 | \$53.86 | \$87.66 | \$53.34 | \$89.86 | \$52.42 | \$65.13 | \$37.99 |
| 64495 | Paravertebral facet joint or facet joint nerve; lumbar/sacral, 3rd Level (Old 64476) | \$74.85 | \$54.95 | \$89.02 | \$54.02 | \$90.54 | \$53.44 | \$65.63 | \$38.73 |
| 64620 | Destruction by neurolytic agent, intercostal nerve | \$265.25 | \$164.90 | \$238.85 | \$169.54 | \$225.33 | \$173.25 | \$163.32 | \$125.58 |
| 64630 | Destruction by neurolytic agent; pudendal nerve | \$222.45 | \$186.67 | \$225.26 | \$187.89 | \$230.43 | \$190.61 | \$167.02 | \$138.16 |
| 64633 | Paravertebral facet joint nerve; C/T, single level (64626) | \$372.97 | \$236.47 | \$398.54 | \$247.69 | \$452.36 | \$235.54 | \$327.88 | \$170.72 |
| 64634 | Paravertebral facet joint nerve; C/T, each additional level (64627) | \$158.63 | \$57.55 | \$170.90 | \$58.78 | \$207.29 | \$70.46 | \$150.25 | \$51.07 |
| 64635 | Paravertebral facet joint nerve; L/S, single level (old 64622) | \$314.68 | \$175.97 | \$335.01 | \$182.79 | \$444.53 | \$230.77 | \$322.21 | \$167.27 |

Table 1 (cont.). *Physician fee schedule for top 35 interventional procedures.*

| CPT | Description | 2010 (CF=36.8729) | | 2011 (CF=33.9764) | | 2012 without Cut (CF=34.0376) | | 2012 with Cut (CF=24.6712) | |
|-------|---|--------------------------|--------------------------------|--------------------------|--------------------------------|----------------------------------|--------------------------------|-------------------------------|--------------------------------|
| | | Non-facility (Office) | Facility (ASC/ Hospital) | Non-facility (Office) | Facility (ASC/ Hospital) | Non-facility (Office) | Facility (ASC/ Hospital) | Non-facility (Office) | Facility (ASC/ Hospital) |
| 64636 | Paravertebral facet joint nerve; L/S, each additional level (64623) | \$116.58 | \$49.07 | \$125.03 | \$49.95 | \$186.53 | \$61.27 | \$135.20 | \$44.41 |
| 64640 | Destruction by neurolytic agent; other peripheral nerve or branch | \$214.71 | \$167.49 | \$217.79 | \$168.18 | \$219.88 | \$169.85 | \$159.38 | \$123.11 |
| 64680 | Destruction by neurolytic agent, with or without radiologic monitoring; celiac plexus | \$295.50 | \$159.00 | \$313.60 | \$163.09 | \$325.74 | \$166.44 | \$236.10 | \$120.64 |

6.0 CONCLUSION

Interventional pain management is facing widespread challenges as are all other specialties in the U.S. health care system. A historic reform which was passed by Congress and signed into law is affecting medicine drastically in the United States. Interventional pain management, like other evolving specialties, will probably suffer the most under the new affordable health care law and regulatory burdens. Thus, it is essential to follow all the regulations and also work within the system to improve it.

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