

Health Policy Update

Interventional Techniques in Ambulatory Surgical Centers: A Look at the New Payment System

Laxmaiah Manchikanti, MD¹, and Mark V. Boswell, MD, PhD²

From: ¹Pain Management Center of Paducah, KY; and ²Texas Tech University Health Science Center, Lubbock, TX.

¹Dr. Manchikanti is Medical Director of the Pain Management Center of Paducah, KY, and Associate Clinical Professor of Anesthesiology and Perioperative Medicine, University of Louisville, KY

²Dr. Boswell is Chairman of Department of Anesthesiology and Director of the Messer Racz Pain Center, Texas Tech University Health Sciences Center, Lubbock, TX.

Address correspondence:
Laxmaiah Manchikanti, MD
2831 Lone Oak Road
Paducah, Kentucky 42003
E-mail: drm@asipp.org

Disclaimer: There was no external funding in preparation of this manuscript.
Conflict of interest: None

Free full manuscript:
www.painphysicianjournal.com

There has been an explosive increase in procedures performed in surgery centers, with approximately 4,700 Medicare-certified surgery centers in the United States. Total ambulatory surgical center (ASC) payments have increased substantially: \$1 billion in 1996, and \$2.9 billion in 2006.

In June 1998, the Healthcare Financing Administration (HCFA; CMS), proposed an ASC rule in which at least 60% of interventional procedures were eliminated from ASCs and the remaining 40% faced substantial cuts in payments. Following the publication of this rule, based on public comments and demand, Congress intervened and delayed implementation of the rule for several years.

The Medicare Prescription Drug, Improvement and Modernization Act of 2003 (MMA) granted broad statutory authority to the Secretary of Health and Human Services to design a new ASC payment system based on the hospital outpatient payment system. The Centers for Medicare and Medicaid (CMS) published its proposed outpatient prospective system for ASCs in 2006, setting ASC payments at 62% of HOPD payments. This rule faced substantial opposition from providers, patients, and Congress. Consequently, CMS revised the rule with a 4-year transition formula to provide ASCs with 65% of HOPD payments.

Based on the new proposed rule, most interventional pain management procedures in ASCs will lose approximately 3% to 5% without taking into account that there have not been any increments since 2004, except for a few small increases for some procedures, along with the addition of office procedures, which can now be performed in an ASC setting. However, payments for procedures moved from the office setting to ASCs remain at the lower office rates, which face substantial cuts on their own.

The proposed CMS rule will have widespread effects on physician payments, ASC payments, and particularly interventional pain management physicians.

Key words: Outpatient prospective payment system, ambulatory surgery center payment system, Government Accountability Office, Medicare Modernization and Improvement Act, interventional techniques

Pain Physician 2007; 10:627-650

Ambulatory surgical centers (ASCs) date back to 1970. The first facility was opened by two physicians to establish a high-quality, cost-effective alternative to inpatient hospital care for surgical procedures. In 1982, Medicare approved payments for ambulatory surgical centers for certain surgical procedures. Allowed procedures for ASCs have

increased from 97 performed in 1982 to over 2,500 different procedures for Medicare beneficiaries in 2006. The first interventional pain management ASC was opened in 1992. There are now approximately 4,700 Medicare-certified surgery centers in the United States. In 2006, over 250 surgery centers designated themselves as single specialty, interventional pain

management centers.

Total ASC payments were \$1 billion in 1996, \$2.9 billion in 2006, and the Centers for Medicare and Medicaid Services (CMS) expects payments to exceed \$3 billion in CY2008 (1-3). However, these increases dwarf payments for hospital outpatient services, hospital inpatient services, cost increases of Medicare Advantage plans and nursing home facilities. The outpatient department (HOPD) payments increased from \$17.70 billion in 2001 to \$34.96 billion in 2008, an increase of 97.5% compared to \$1.6 billion in 2001 and \$3 billion in 2008 for ASCs with an increase of 87.5%.

In June 1998, the Healthcare Financing Administration (HCFA; CMS) proposed an ASC rule that would eliminate 60% of interventional pain procedures and substantially cut payments for the remaining 40% of procedures. However, following publication of the proposed rule, based on significant pressure from consumer groups and Congress, the 1998 rule was delayed for several years, preserving interventional pain

management procedures and allowing the addition of new procedures (4). The Medicare Modernization Act (MMA) of 2003 (5) again altered the landscape of the payment system, and which directed the Government Accountability Office (GAO) and CMS to develop a system based on the HOPD payment system.

CMS published its proposed outpatient prospective payment system (OPPS) for ASCs in 2006 with 62% of HOPD payments for ASCs with a blended formula of 50/50 ASC and HOPD payments for 2008. Due to substantial opposition, the formula was altered and a new formula is proposed for 2008 and beyond (2).

OVERVIEW OF SURGICAL SERVICES IN THE UNITED STATES

Until 1970, virtually all surgery was performed in hospitals. With development of ASCs and site-of-service differential payments for in-office procedures, the dynamics have changed (1,6). Figure 1 illustrates surgical trends in the United States with outpatient surgeries

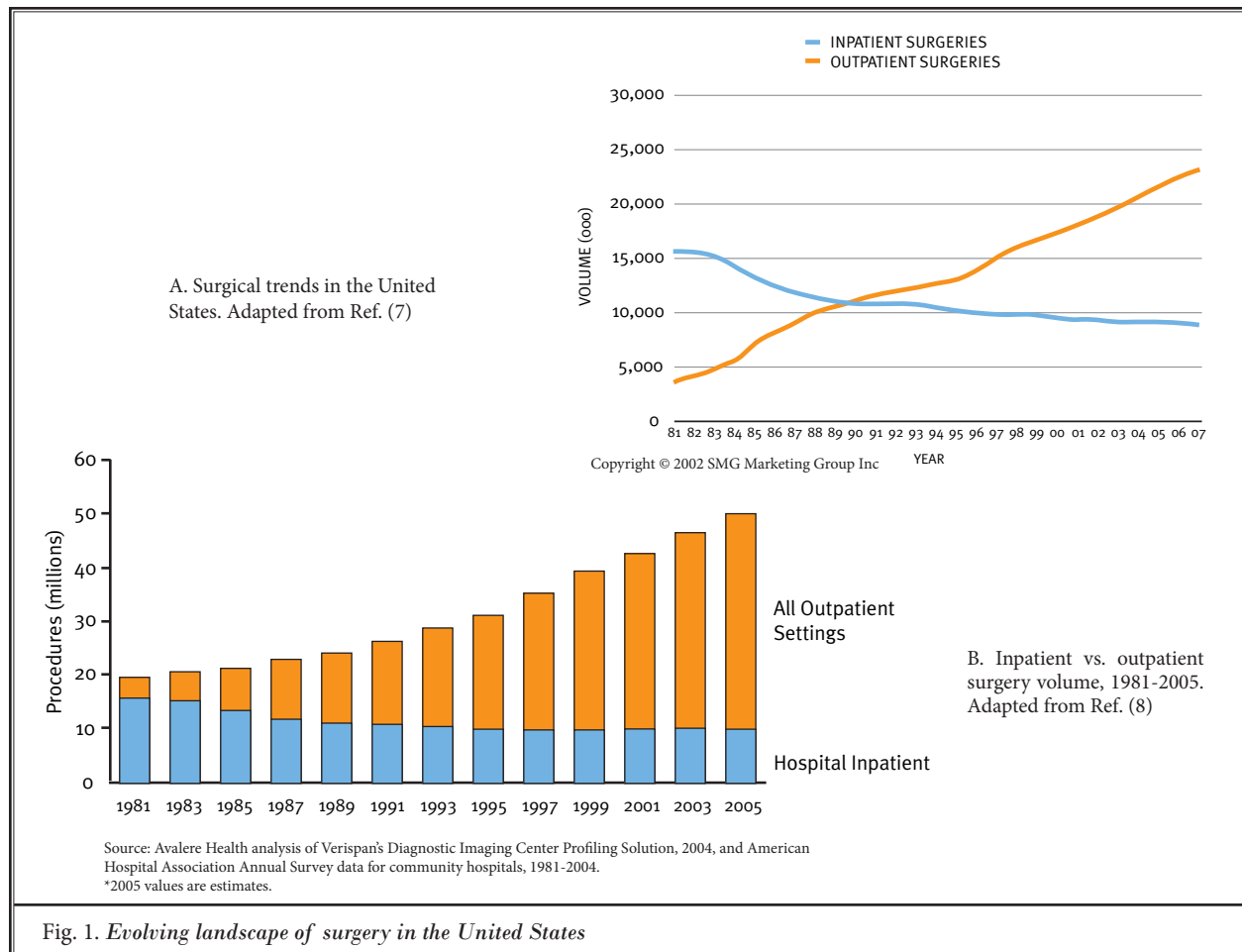


Fig. 1. Evolving landscape of surgery in the United States

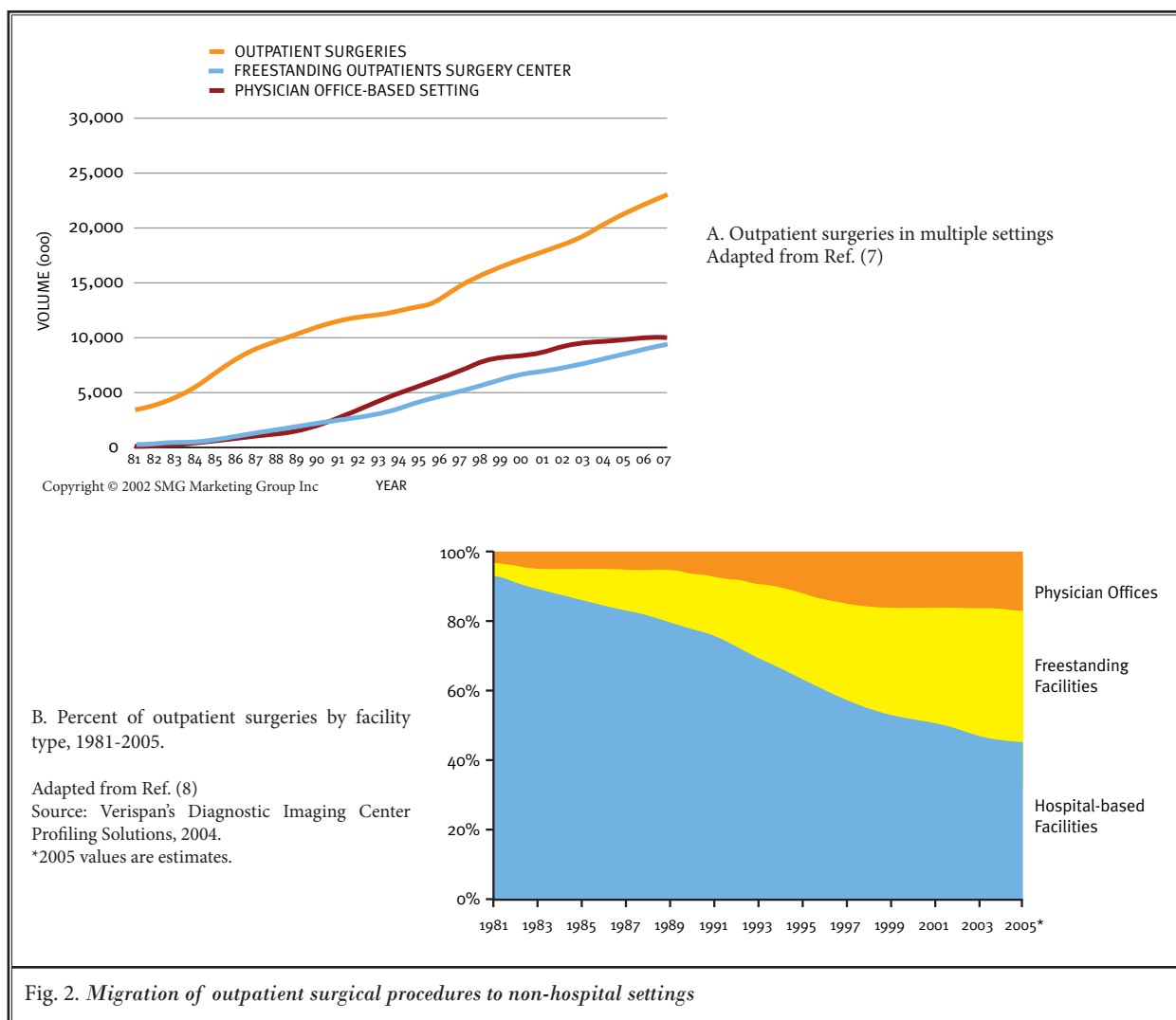


Fig. 2. Migration of outpatient surgical procedures to non-hospital settings

outpacing inpatient surgeries by 1989 (7,8). By 2007, approximately 40 million procedures were performed in all outpatient settings (including HOPDs), whereas inpatient volume decreased to 10 million procedures.

Figure 2 illustrates surgical trends in the United States, showing that outpatient surgery is quickly migrating to non-hospital settings. Since 1981, the share of outpatient surgeries performed in hospitals has fallen from over 90% to 45%, while the share performed in ASCs and physician offices has grown from less than 5% to 38% and 17%, respectively. From 1997 to 2004, the volume of ASC procedures provided to Medicare beneficiaries rose 145%, while the number of ASCs increased by 67% - on average, 240 additional ASCs per year between 1998 and 2004. Overall, ASC procedures increased to approximately 10 million by 2007.

The procedures performed in physician offices are expected to increase to over 10 million in 2007. The hospital outpatient surgeries are also expected to increase from less than 4 million in 1981 to approximately 24 million in 2007.

Table 1 and Figs. 3 and 4 illustrate the number of Medicare certified ASCs and total ASC payments from 1999 to 2006, with projected numbers for 2008. Table 1 illustrates Medicare certified ASCs increasing from 2,786 in 1999 to over 4,700 in 2006, an overall increase of 69% and an annual growth of 10%. ASC payments have increased from \$1.6 billion in 2001 to a projected \$3 billion in 2008, overall an 87.5% increase, with an annual increase of 12.5%.

The growth in hospital outpatient department procedures also has skyrocketed as illustrated in Table

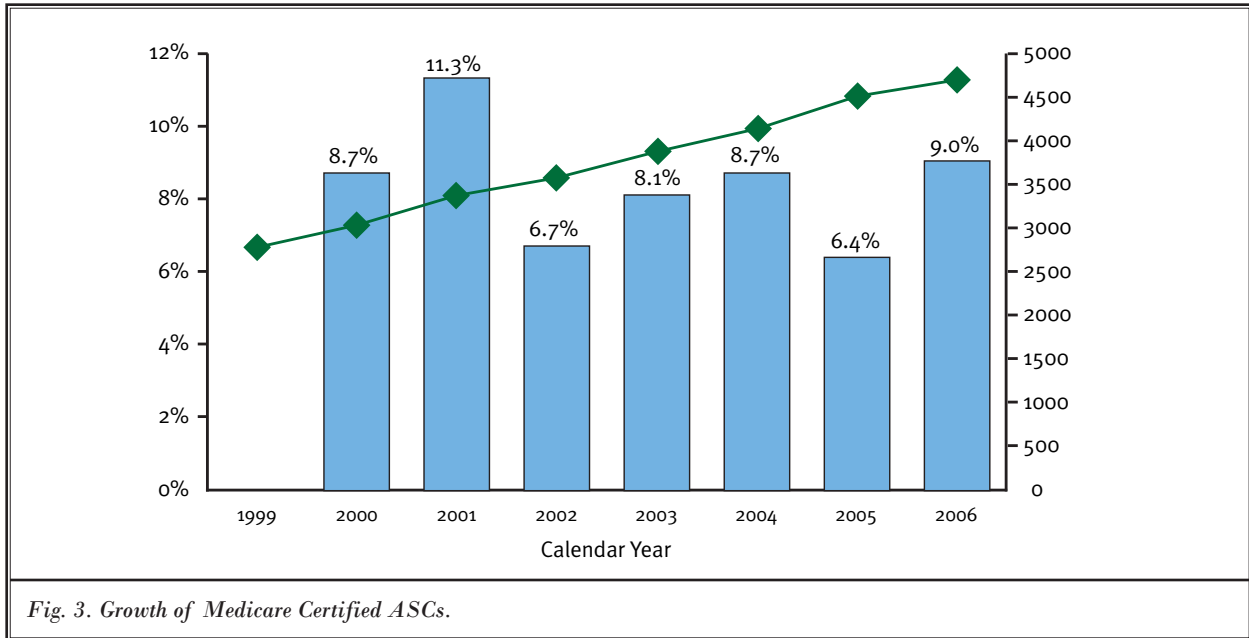


Fig. 3. Growth of Medicare Certified ASCs.

Table 1. Number of Medicare-certified ASCs and total Medicare payments from 1999 to 2005 and projected 2008.

	1999	2000	2001	2002	2003	2004	2005	2006	2008*
Total Medicare payments (Billions)	\$1.2	\$1.4	\$1.6	\$1.9	\$2.2	\$2.5	\$2.7	\$2.9	\$3.0
Net percent growth from previous year		16.6%	14.3%	18.8%	15.8%	13.6%	8%	7.4%	3.4%
% of Increase from 1999	-	17%	33%	58%	83%	108%	133%	142%	150%
Number of Medicare Certified ASCs	2,786	3,028	3,371	3,597	3,887	4,136	4,506	4,707	NA
Net percent growth from previous year		8.7%	11.3%	6.7%	8.1%	8.7%	6.4%	9.0%	
% of Increase from 1999	-	9%	21%	29%	40%	48%	62%	69%	NA

Source: A Data Book: Healthcare Spending and the Medicare Program, MedPAC report 2007 (3).

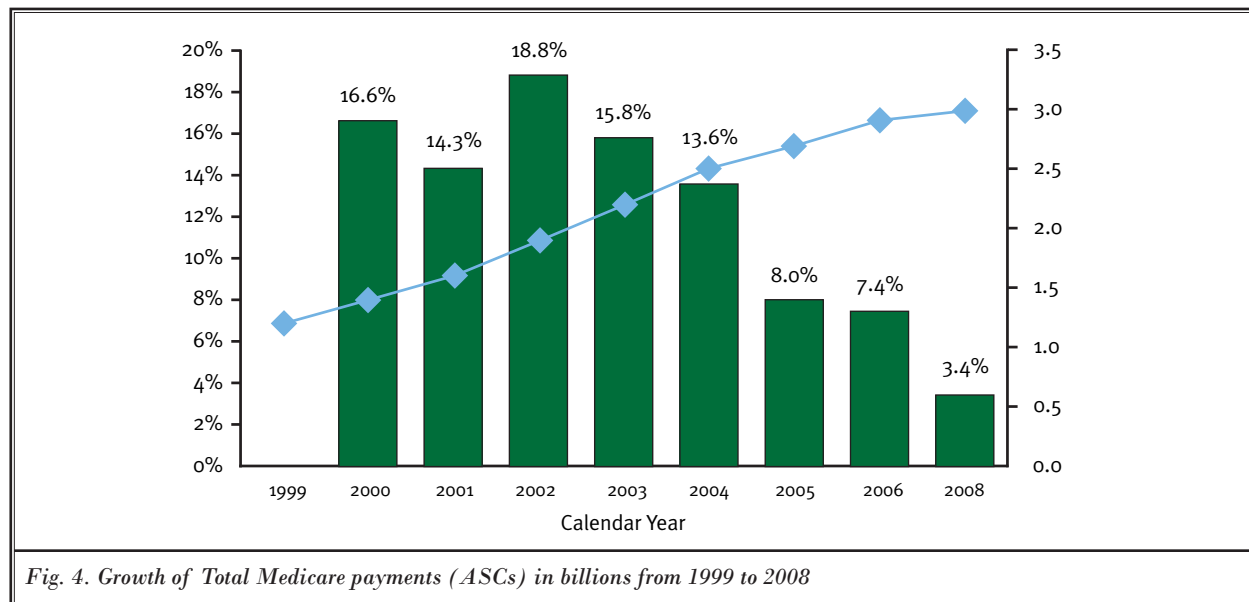


Fig. 4. Growth of Total Medicare payments (ASCs) in billions from 1999 to 2008

2 and Fig. 5 (2). The phenomenal growth in expenditures under OPSS were approximately \$18 billion in 2001, increasing to \$35 billion in 2008, constituting an overall increase of 97.5% and an annual increase of 14%. Volume and intensity increased 3.5% to 8.6% each year from 2001 to 2008 (2).

In-office procedures have increased substantially

in pace with ambulatory surgery centers and hospital outpatient growth (9,10).

Figure 6 compares healthcare payments which have increased substantially for Medicare Advantage, hospitals in general, hospital outpatient department settings with ASC payments stayed flat and decreased for physicians.

Table 2. Growth in expenditures and volume and intensity of HOPD services under OPSS from CY2001 to CY2008.

OPSS growth	CY2001	CY2002	CY2003	CY2004	CY2005	CY2006	CY2007	CY2008
Incurred cost	17.702	19.561	21.156	23.866	26.572	29.338	31.641	34.960
Percent Increase	10.5	8.2	12.8	11.3	10.4	7.8	10.5
Volume and Intensity Percent increase	3.5	2.5	7.6	7.4	8.6	6.4	

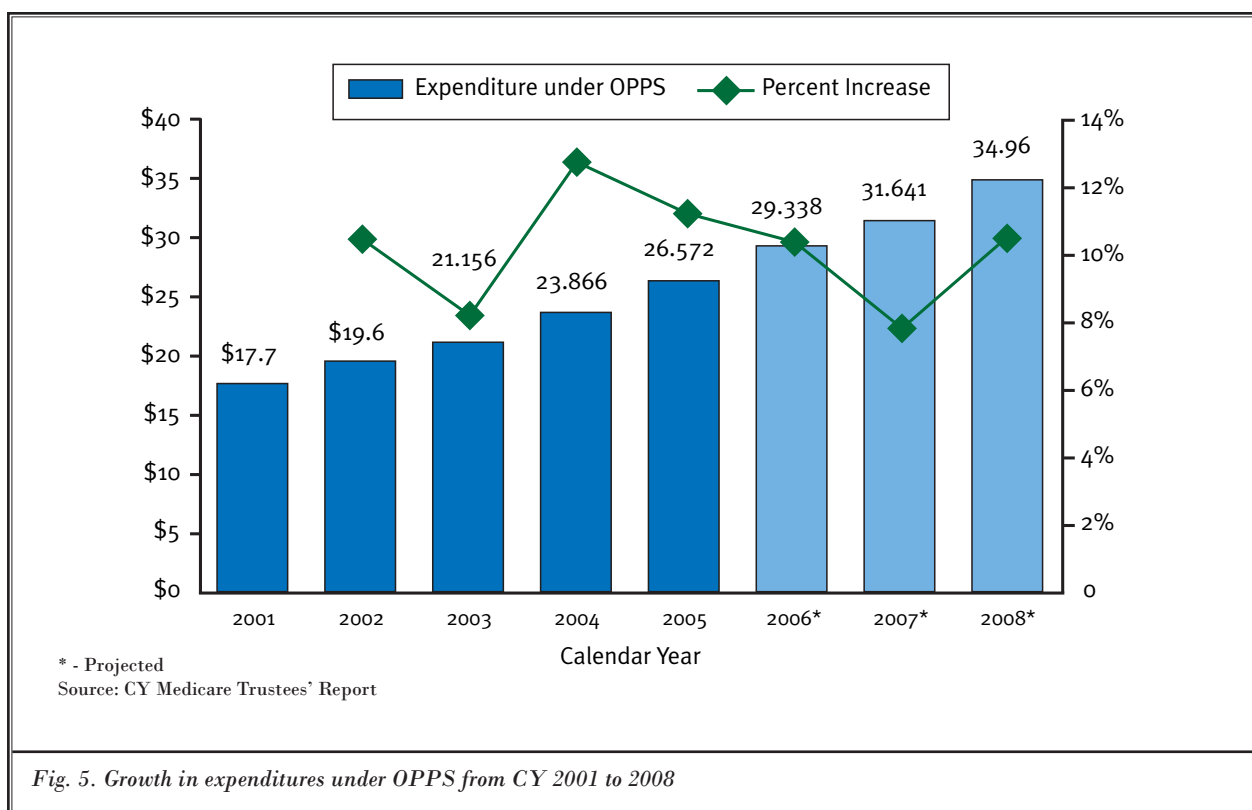


Fig. 5. Growth in expenditures under OPSS from CY 2001 to 2008

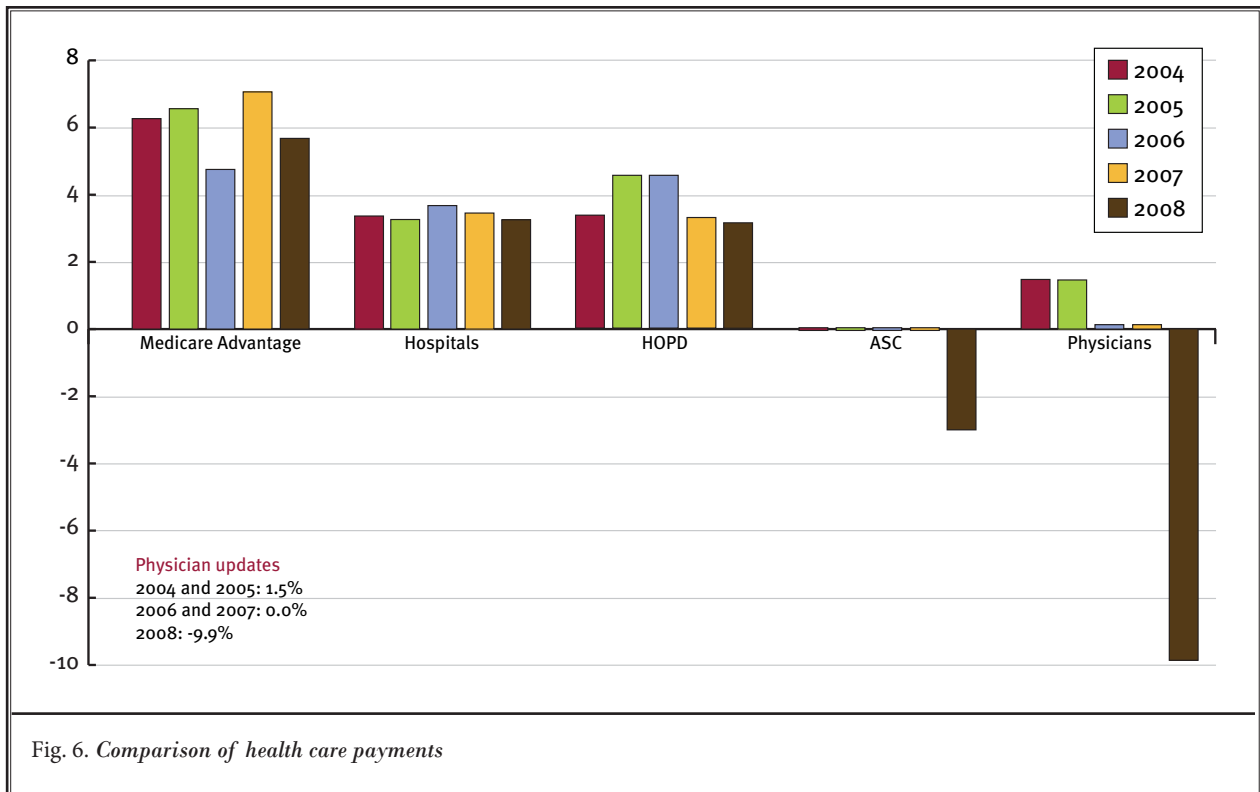


Fig. 6. Comparison of health care payments

EVOLUTION OF ASC PAYMENT SYSTEMS

In June 1998, the proposed ASC rule was so drastic for interventional pain management that the only remaining procedures that would be performed in ASCs were epidural injections and neurolytic lumbar facet joint nerve blocks (4). Based on public comments and demand, Congress intervened and the proposed rule was delayed for several years. During this period, multiple new codes were developed to describe interventional pain management and the procedures appropriately. In 2000, CMS, at the request of American Society of Interventional Pain Physicians, added 9 replacement codes to the approved procedure list.

Subsequent publication of the final rule (of the 1998 proposed rule), which appeared in 2002 preserved all the interventional procedures and, in fact, added a few others (1). A subsequent rule in 2005 was also based on an old payment system (12). Medicare's initial ASC payment rates were based on ASC costs and charge data from 1979 and 1980 (1). CMS was required by law to review the ASC payment rates periodically and adjust them as appropriate. CMS last revised the ASC payment rates in 1990, using ASC data on costs and charges that CMS collected in 1986 (1). Since the payment rates were last revised, there has been sub-

stantial growth in both the number of ASC facilities and procedures performed, as well as changes in medical practice and technology.

While the ASC setting was originally intended to be an alternative to hospital inpatient care, the procedures performed in ASCs are frequently performed in the hospital outpatient setting. However, Medicare has paid ASCs and HOPDs through different payment systems. Until 2000, hospital outpatient payment systems were based on charge data which was developed into OPPS. ASCs continue to be paid under the old system, whereas HOPD surgical procedures are paid under OPPS. Procedures performed in ASCs are placed into payment groups based on similar costs, whereas HOPD procedures are placed into payment groups known as ambulatory payment classification (APC) groups, based on both cost and clinical similarity. In addition, the payment rates for HOPDs are revised annually based on cost and charge data included in reports. Hospitals are required to submit to CMS each year.

To address the issues, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) requires the GAO to conduct a study that compares the relative costs of procedures performed in ASCs

to the relative costs of procedures performed in HOPDs (5). Further, MMA granted broad statutory authority to the Secretary of Health and Human Services to design a new ASC payment system based on OPPS (5).

In August 2006, CMS published the OPPS and ASC proposed rule (13). CMS proposed a more significant expansion of the approved list of procedures that can be safely performed in an ASC setting. The rule (based on MMA, which has to be budget neutral) resulted in certain procedures increasing while many others showing decreases. The proposal will result in payments at a rate of 62% of HOPD payments for ASCs in 2007 and a blended formula of 50/50 ASC and HOPD payments for 2008.

In November 2006, the GAO released its report entitled "Payment for Ambulatory Surgical Centers Should Be Based on the Hospital Outpatient Payment System (1)." The GAO determined that the payment groups in the OPPS accurately reflect the relative cost of procedures performed in ASCs. GAO's analysis also identified differences in the cost of procedures in the 2 settings. The median cost ratio among all ASC procedures was 0.39 and when weighted by Medicare claims, volume was 0.84. Thus, it was determined that costs of procedures in ASCs are substantially lower than the corresponding costs in HOPDs. CMS stated that GAO's recommendation is consistent with its August 2006 proposed revisions to the ASC payment system (1).

In August 2007, CMS (2) issued a final rule revising the payment system for services furnished in ASCs. CMS stated that the ASC final rule expands beneficiary access to surgical procedures in ASCs and implements steps to make ASC payments more accurate, while aligning payments across Medicare's payment systems to encourage efficient and appropriate choices of outpatient settings for ambulatory surgical procedures. The Final Rule allows ASCs to be paid for any surgical procedure that CMS determines does not pose a significant safety risk to Medicare beneficiaries when performed in an ASC and that is not expected to require an overnight stay. Consequently, the final rule adds about 790 procedures for ASC payment beginning in CY2008. The proposed OPPS/ASC rule would add several additional procedures, which would result in approximately 3,300 surgical procedures being covered under the revised ASC payment system.

THE NEW PAYMENT SYSTEM

The ASC services benefit was enacted by Congress through the Omnibus Reconciliation Act of 1980 (14). The MMA of 2003 (5) repealed the requirement that

the Secretary conduct a survey of ASC costs for purposes of updating ASC payment rates and required the Secretary to implement a revised ASC payment system to be effective no later than January 1, 2008. In addition, the Deficit Reduction Act (DRA) of 2005 (15) placed limitations on payments for surgical procedures in ASCs. The Medicare Improvements and Extension Act-Tax Relief and Health Care Act (MIEA-TRHCA) (16) also provided the Secretary with an authority to reduce the annual ASC update by 2 percentage points if an ASC fails to submit data as required by the Secretary on selected measures of quality of care, including medication errors.

CMS proposed in the Federal Register a revised payment system (13) followed by the final rule (2) effective January 1, 2008. In the final rule, CMS established rules to address 2 components of the ASC payment system annually as part of the OPPS rule making cycle. CMS is required to specify, in consultation with appropriate medical organizations, surgical procedures that are appropriately performed on an inpatient basis in a hospital that can be safely performed in an ASC, or an HOPD, and to review and update the list of ASC procedures at least every 2 years. In addition, CMS has adapted methodology to set payment rates for ASC services furnished in association with covered surgical procedures, and covered ancillary services based on the OPPS relative payment weights. Consequently, the joint update process will ensure that the ASC updates occur in a regular, predictable, and timely manner. Further, the ASC final rule also revises regulations to make practice expense payments to physicians who perform non-covered ASC procedures in ASCs based on the facility practice expense (PE) relative value units (RVUs) and to exclude covered ancillary radiology services and covered ancillary drugs and biologicals from the categories of designated health services (DHS) that are subject to the physicians self-referral prohibition (2).

PROPOSED REVISIONS

Surgical Procedures

CMS defines a surgical procedure as any procedure described within the range of Category I CPT codes that the CPT Editorial Panel of the AMA defines as surgery, surgical procedures described by level II healthcare common procedure coding system (HCPCS) codes, or by category III CPT codes. The level II HCPCS codes or category III CPT codes must be directly cross-walked or are clinically similar to procedures in the

CPT surgical range that CMS has determined do not pose a significant safety risk and do not require an overnight stay when performed in an ASC. CMS also defines covered surgical procedures as those procedures for which payment is made under the revised ASC payment system.

Covered Surgical Procedures

CMS identified surgical procedures eligible for ASC, which exclude those surgical procedures that are on the OPPS inpatient list, procedures that are packaged under the OPPS, CPT unlisted surgical procedure codes, and surgical procedures that are not recognized for payment under the OPPS. CMS excludes procedures that standard medical practice dictates are expected to require active medical monitoring and care at midnight following the procedure or overnight stay as well as procedures that could pose a significant safety risk. Procedures identified as posing a significant safety risk when performed in an ASC include those that result in extensive blood loss, require major or prolonged invasion of body cavities, directly involve major blood vessels, are emergent or life threatening in nature, or commonly require systemic thrombolytic therapy.

Payment System

Payment for covered surgical procedures under the revised ASC payment system follows general principles of OPPS and APC. Relative payment weights are the basis for ASC relative payment weights. A uniform ASC conversion factor is applied to the ASC payment weights. For the first year of the revised ASC payment system, CMS adapted the OPPS relative payment weights as the ASC relative payment weights for most covered surgical procedures. However, for future years, CMS will update the ASC relative payment weights annually using the OPPS relative payment weights for that calendar year, as well as the practice expense payment amounts under the Medicare Payment Fee Schedule (MPFS) for that calendar year. Some covered office-based surgical procedures and ancillary services will be paid according to MPFS amounts if those amounts are less than the rates calculated under the standard methodology of the revised ASC payment system.

The scaling of payments also must maintain budget neutrality. To establish a budget neutrality adjustment for the revised ASC payment system, CMS used a model that accounts for the migration of surgical procedures between ASCs, physician offices, and HOPDs. The budget neutrality adjustment for CY2008 is based on updated proposed CY2008 OPPS and MPFS rates,

along with updated utilization data. The estimated ASC CY2008 budget neutrality adjustment factor is multiplied by the proposed OPPS conversion factor to establish the proposed ASC conversion factor. The standard ASC payment for most of the covered surgical procedures of the proposed 2007 rule is calculated as the product of that proposed ASC conversion factor multiplied by the proposed OPPS relative payment weight for each separately payable procedure.

However, beginning in CY2010, CMS will update the ASC conversion factor for the revised ASC payment system by percentage increases in the CPI-U (US city average) as estimated for the 12-month period ending with the mid point of the year involved. CMS has the flexibility under statute to employ a different update mechanism under the revised ASC payment system. CMS is concerned that the ASC payment system may result in additional Medicare expenditures over time. Thus, CMS will be monitoring this issue closely and re-considering the ASC update if expenditures increase inappropriately in future years.

CMS expanded the covered surgical procedure list, which includes multiple office-based procedures. While these procedures are included as covered surgical procedures, payment for the facility resources associated with the procedures identified as "office-based" will not be greater when provided in ASCs than when furnished in physicians' offices. CMS will designate office-based procedures, the procedures which are performed more than 50% of the time in physicians offices, based on CMS consideration of volume and site of service utilization data for the procedures, as well as clinical information and comparable data for related procedures, if appropriate.

Modified Payment Methodologies

CMS also established a modified payment methodology for device-intensive procedures. Payment for implantable devices is packaged into payment for the covered surgical procedures utilizing a modified ASC methodology based on OPPS data. According to the modified payment methodology, if the OPPS device offset percentage for the procedure is 80% and the OPPS national unadjusted payment is \$100, the device cost included in that payment is \$80.

As in the past, CMS discounts payments for certain multiple and interrupted procedures performed in ASCs. While most covered surgical procedures will be subject to a 50% reduction in ASC payment for the lower paying procedure when more than one procedure is performed in a single operative session, CMS

is proposing to exempt some covered surgical procedures from the multiple procedure reduction in ASCs, because they may not be subject to this reduction under the OPPS rule.

A 4-Year Transition

The rule provides a transition period of 4 years for all services on the CY2007 ASC list of covered surgical procedures. Beginning in CY2008, the contribution of CY2007 ASC payment rates to the blended transitional rates will decrease by 25 percentage point increments each year of transitional payment until CY2011, when CMS fully implements the revised ASC payment rates calculated under the final methodology of the revised payment system. However, the revised payment portion of the total ASC payment for a device-intensive procedure is not subjected to the transition policy, only the service payment portion of the total ASC payment for the procedure is transitioned over the 4-year phase in period. Procedures new to ASC payment for CY2008 or later calendar years receive payments determined according to the final methodology of the revised ASC payment system, without a transition period.

Ancillary Services

Certain covered ancillary services are allowed separate payment, while ASC services include both facility services, which are defined as services that are furnished in connection with a covered surgical procedure performed in an ASC and for which payment is packaged into the ASC payment for the covered surgical procedure. Covered ancillary services are defined as those items and services that are integral to a covered surgical procedure and for which separate payment may be made under the revised ASC payment system.

Certain services are considered as outside the scope of ASC services, including physicians services (including surgical procedures and all preoperative and postoperative services that are performed by a physician), anesthesiology services, radiology services other than those integral to performance of a covered surgical procedure, diagnostic procedures other than those directly related to performance of a covered surgical procedure, ambulance services, braces other than those that service the function of a cast or splint, artificial limbs, and non-implantable prosthetic devices and DME.

Medicare will make separate payment to ASCs for ancillary radiology services designated as separately payable under the OPPS, when those radiology ser-

VICES are provided in the ASC integral to the performance of a covered surgical procedure provided on the same day. The payment for such services is at the lower of the rate developed according to the standard methodology of the revised ASC payment system or the Medicare Physician Fee Schedule (MPFS) non-facility PERVU amount (specifically for the technical component (TC) if the services are assigned a TC under the MPFS). The packaging status of radiology services under the revised ASC payment system parallels the OPPS. Thus, any changes to the packaging of radiology services under the OPPS would also occur under the revised ASC payment system. Finally, only the ASC can receive payment for the facility resources required to provide the ancillary radiology services and ASCs are no longer able to bill as independent diagnostic testing facility suppliers to receive payment for ancillary radiology services that are integral to the performance of a covered surgical procedure for which the ASC is billing Medicare.

Proposed Payment Calculations

CMS finalized this policy to calculate ASC payment rates by multiplying the ASC relative payment weights by the ASC conversion factor. CMS provided an estimate of the CY2008 budget neutral ASC conversion factor as \$41.400. Based on the budget neutrality requirement, CMS calculated the ASC payment rates for 2008 using a complicated formula involving 13 steps. After developing the proposed CY2008 budget neutrality adjustment of 0.65, CMS multiplied the proposed CY2008 OPPS conversion factor by the proposed ASC budget neutrality adjustment. The proposed CY2008 OPPS conversion factor is \$63.693 and multiplying that by 0.65 budget neutrality adjustment yields the proposed CY2008 ASC conversion factor of \$41.400. CMS also finalized policies for calculation of the ASC payment rates for CY2009 and future years. For CY2009, CMS will compare the total weight using the CY2008 ASC relative payment weights under the 75/25 blend with a total weight using CY2009 relative payment weights under the 50/50 blend, taking into account the changes in the OPPS relative payment weight between CY2008 and CY2009. The ratios of CY2008 to CY2009 total weights will be used to scale the ASC relative payment weights for CY2009.

The ASC conversion factor is updated after CY2009 by the percentage increase in the CPI-U, as estimated by the Secretary for the 12-month period ending with the midpoint of the year involved. CMS will imple-

ment the annual updates through an adjustment to the conversion factor under the revised ASC payment system beginning in CY2010 when the statutory requirement for a zero update no longer applies.

Reporting of Quality Data

Quality data are required to be reported by HOPDs for the annual payment update. Consequently, ASCs are also required to report quality data for services furnished in ASC settings on or after January 1, 2009. ASCs that fail to report data required for the quality measure selected by the Secretary in the form and manner will incur a reduction in any annual payment increase of 2 percentage points. Proposed hospital outpatient quality measures starting January 1, 2008, include several nonsurgical indicators, however, no such indicators have been developed for surgery centers.

WIDESPREAD EFFECTS

Similar to physician payments, ASC payments have been frozen since 2003 based on MMA (5). ASC payments were frozen so that the Part D program could be instituted and the savings were transferred into the Part D program. The freezes in payments are based on CPI-U and will continue through 2009. Thus, Medicare has been struggling to balance the budget by physician payment cuts and ASC payment freezes, while adding yearly increases to other sectors of healthcare including hospitals, nursing homes, and hospital outpatient healthcare services. However, this phenomenon is not limited to Medicare itself as private insurers are reaping the benefits with multimillion dollar CEO salaries and double-digit yearly profits, while maintaining double-digit increases in premiums. In fact, based on the CMS Office of the Actuary, spending on physician services did not contribute to the increase in healthcare as much as it has in the past (17). For physician payments, CMS found that many private health plans have been able to negotiate or enforce very low rates with practices based on stagnant Medicare payments. This is conceived as part of the phenomenon of insurers often using Medicare as a benchmark or even as a ceiling in contract negotiations, or payment enforcement. The freezes in Medicare ASC payments in recent years have allowed health plans to keep their payment rates low. Basically similar to physician payments, private insurers are jumping on the coattails of Medicare, more so for interventional pain management and other low paying specialties such as gastroenterology.

Practice expenses for surgery centers have shown

substantial increases, 2 to 4 times higher than the Medicare inflation index. In real terms, this provides a decrease in payments. Figure 6 illustrates annual cost increases for Medicare Advantage plans, hospitals, HOPDs, as well as mostly flat payments for ASCs and significant decreases for physician payments, with either 0% updates or 1.5% updates on projected cuts.

HOPD PAYMENT SYSTEM

When the Medicare statute was originally enacted, Medicare payment for hospital outpatient services was based on hospital/specific costs. The Balanced Budget Act (BBA) of 1997 (18) authorized implementation of a prospective payment system for hospital outpatient services (OPPS). In addition, the Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act (BBRA) of 1999 also made major changes in the hospital OPPS (19). This was followed by changes in Medicare, Medicaid, and SCHIP Benefits. The Improvement and Protection Act (BIPA) of 2000 (20), made further changes in the OPPS. Again, the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003 (5) and the Deficit Reduction Act (DRA) of 2005 (15) made more changes in OPPS. In addition, the Medicare Improvements and Extension Act under Tax Relief and Health Care Act (MIEA-TRHCA) of 2006 made the final changes (21).

The OPPS was first implemented for services furnished on or after August 1, 2000. Under the OPPS, CMS pays for hospital outpatient services on a rate-per-service basis that varied according to the ambulatory payment classification (APC) group to which the service is assigned. The OPPS includes payment for most hospital outpatient services. The OPPS rate is an unadjusted national payment amount that includes the Medicare payment and the beneficiary copayment. The OPPS special payments may be made for new technology items and services referred to as "transitional pass-through payments," for at least 2, but no more than 3 years, for certain drugs, biological agents, devices used for the treatment of cancer, and categories of other medical devices. CMS also has established a special APC group for technology services that are not eligible for transitional pass-through payments and for which there was lack of sufficient data to appropriately assign them to a clinical APC group. OPPS rules are published on annual basis.

The advisory panel on ambulatory payment classification (APC) groups (the APC panel) acts in an advisory capacity and provides recommendations

and is not restricted to using data compiled by CMS, and may use data collected or developed by organizations outside the department in conducting its review.

Interventional Pain Management

Based on OPPS for hospitals, interventional pain management did not fare very well. The basic payments were \$165 to \$181 starting in August 2000. Hospitals refused interventional pain management

procedures and many hospitals actually closed the programs. At this time, during a 2000 APC panel meeting, a reclassification for interventional procedures was made, resulting in increased payments over the years as shown in Table 3 and Fig. 7.

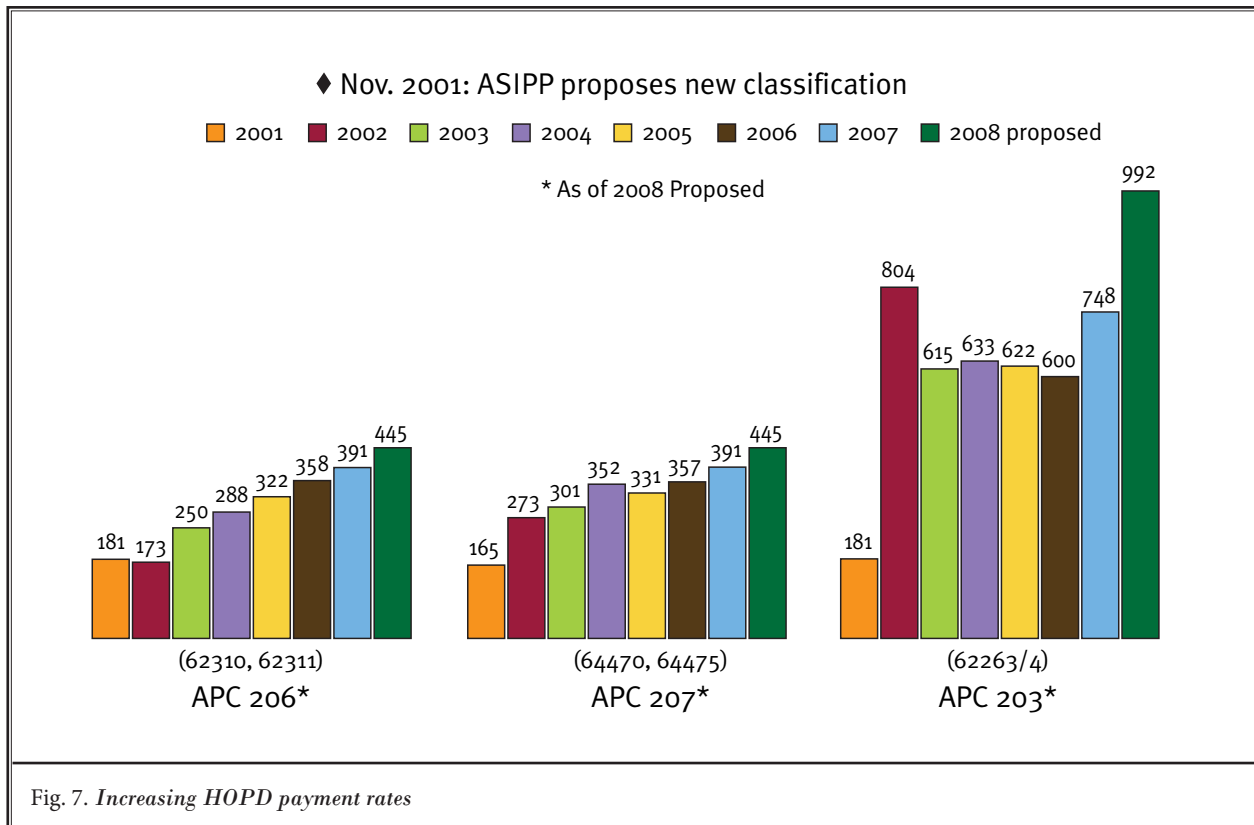
The proposed rule for 2008 (2) also uses basic methodology proposed in the past with re-calibration of APC relative payment rates for services furnished on or after January 1, 2008.

Table 3. *New APC classification for interventional techniques.*

ASIPP PROPOSAL	CMS PROPOSAL AND MODIFICATIONS
<p>Level II</p> <ul style="list-style-type: none"> ◆ Moderate Complexity Nerve Blocks and Epidurals ◆ CPT 27096 (not specified), 62270 (APC 210 - \$148.79), 62272 (210), 62273 (212-\$180.53), 62310- 62319 (212) ◆ Why clinically homogenous: mostly single injections, performed in spinal area, with somewhat higher technical complication risk ◆ Why resources homogeneous: single tray; requires sterile preparation; may or may not need fluoroscopy (based on patient needs or provider approach); may be performed in the operating room, recovery room, or other HOPD locations; local anesthetic and/or steroids; may or may not require sedation; intensity of monitoring and recovery all similar; may or may not require iv (based on patient needs or provider approach); moderate recovery time (20-30 minutes) ◆ Recommendation: Move Services from APC 210 to APC 212 	<p>Level III nerve injections (<i>proposed as Level II interventional techniques</i>)</p> <p>These codes include:</p> <ul style="list-style-type: none"> 62270 – spinal puncture, lumbar, diagnostic 62272 – spinal puncture, therapeutic, for drainage of spinal fluid (by needle or catheter) 62273 – injection, epidural, of blood or clot patch 62310 – cervical/thoracic epidural 62311 – lumbar/caudal epidural 62318 – continuous epidural – cervical/thoracic 62319 – continuous epidural – lumbar/sacral 64614 – chemodenervation extremity(s) and/or trunk muscle(s) (it may be a misprint. We will comment on this, should be in Level VI)
<p>Level III</p> <ul style="list-style-type: none"> ◆ Moderate High Complexity: Epidurals, Facet Blocks, and Disk Injections ◆ 62280-62282 (APC 212), 62290 (No APC), 62291 (No APC), 64420 (211), 64421 (211), 64470 (211), 64472 (211), 64475 (211), 64476 (211), 64479 (211), 64480 (211), 64483 (211), 64484 (211), 64510 (211), 64520 (211), 64530 (211), 64630 (211), 64640 (211) ◆ Clinically homogenous: precision interventional techniques performed for diagnosis or treatment of conditions involving persistent pain; greater Technical complication risk; more difficult to access relevant sites than Level II procedures ◆ Resource homogenous: requires fluoroscopy, contrast, sterile environment, sterile preparation, and special spinal or Chiba needles, drugs, local anesthetics, and/or steroids; iv access and fluids; most require iv sedation; tray [sometimes]; moderate to significant recovery time (20 to 45 minutes) ◆ Recommendation: keep or move to 211 and recalculate with a smaller number of services that bear a tighter resource and clinical relationship to one another 	<p>Level IV nerve injections (<i>proposed as Level III interventional techniques</i>)</p> <p>These were moderately high complexity procedures including epidurals, facet blocks and disk injections. These codes include:</p> <ul style="list-style-type: none"> 62280 – neurolytic subarachnoid 62281 – cervical/thoracic epidural - neurolytic 62282 – lumbar/sacral epidural - neurolytic 64420 – intercostal nerve block - single 64421 – intercostal nerve block - multiple 64470 – facet injection – cervical/thoracic - single 64472 - facet injection – cervical/thoracic - additional 64475 – facet injection – lumbar/sacral- single 64476 - facet injection – lumbar/sacral- additional 64479 – transforaminal cervical/thoracic - single 64480 - transforaminal cervical/thoracic - additional 64483 - transforaminal lumbar/sacral - single 64484 - transforaminal lumbar/sacral - additional 64510 – stellate ganglion block 64520 – lumbar or thoracic sympathetic block 64530 – celiac plexus block 64630 – pudendal nerve neurolysis 64640 – peripheral neurolysis

Table 3 (continued). *New APC classification for interventional techniques.*

ASIPP PROPOSAL	CMS PROPOSAL AND MODIFICATIONS
<p>Level IV</p> <ul style="list-style-type: none"> ◆ High Complexity: Lysis of Adhesions, Neurolytic Procedures or Removal of Implantable Pumps and Stimulators ◆ CPT 62263 (APC 212—\$180.53), 64600 (211), 664605 (211), 64610 (211), 64620 (211), 64622 (211), 64623 (211), 64626 (211), 64627 (211), 64680 (211), 62355 (105-\$746.92), 62365 (105) ◆ Clinically homogenous: patients have failed other interventional techniques and are invasive in nature, with significant potential complications ◆ Resource homogenous: requires operating room or procedure room with sterile environment, significant sterile preparation, fluoroscopy, significant special supplies (e.g., (1) for lysis of adhesions, RK needle, Racz catheter, contrast, 10% sodium chloride solution, local anesthetic and/or steroids, iv antibiotic, special dressing with antibiotic cream and multiple injections; and, (2) for radiofrequency neurolysis, lesion generator, multiple radiofrequency needles, and grounding pad); local anesthetic; significant recovery period (30 to 60 minutes); almost all require iv sedation ◆ Recommendation: move these to APC 105 to reflect their high complexity and demanding resources 	<p>Level V nerve injections (<i>proposed as Level IV interventional techniques</i>)</p> <p>These codes include:</p> <ul style="list-style-type: none"> 62263 – percutaneous epidural adhesiolysis 64600 – neurolytic – trigeminal – small branches 64605 – neurolytic – trigeminal – 2/3 division 64610 – neurolytic – trigeminal – at foramen ovale 64620 – intercostal neurolysis 64622 – facet neurolysis – lumbar/sacral - single 64623 - facet neurolysis – lumbar/sacral - additional 64626 - facet neurolysis – cervical/thoracic - single 64627 - facet neurolysis – cervical/thoracic - additional 64680 – celiac plexus neurolysis



Explosive Growth of HOPD

OPPS services have increased during an explosive phase in program expenditures for hospital outpatient services. Total spending has grown at an annual rate of 14% under the OPPS and the Medicare trustees' project that total spending under the OPPS will increase by more than \$3 billion from CY2007 through CY2008 to nearly \$35 billion. Implementation of the OPPS has not slowed outpatient spending growth over the past few years; in fact, double-digit spending growth has generally been occurring. CMS is greatly concerned with this rate of increasing program expenditures under the OPPS. Table 2 and Fig. 5 show growth in expenditures under OPPS from CY2001 to CY2008 and percent increase in volume and intensity of hospital outpatient services.

As with the other Medicare fee for service payment systems that are experiencing rapid spending growth, brisk growth in the intensity and utilization of services is the major reason for the current rates of growth in the OPPS, rather than general price or enrollment changes as per CMS. In its March 2007 report to Congress, MedPAC (13) confirmed that much of the growth in service volume from 2003 to 2005 resulted from increases in the number of services per beneficiary who received care rather than from increases in the number of beneficiaries served. Further, MedPAC found that while the rate of growth in service volume declined over the time period, the complexity of services defined as the sum of the relative payments rates of all OPPS services divided by the volume of all services increased, and that most of the growth was attributable to the insertion of devices and the provision of complex imaging services. MedPAC also had suggested that relatively complex hospital outpatient services may be more profitable for hospitals than less complex services. Thus, favorable payments for complex services give hospitals an incentive to provide more of those complex services rather than fewer basic services which increase overall service complexity. This may lead to re-calibration of the system consequently based on value-based purchasing.

IMPACT OF STARK III RULES

The proposed CMS rule for the physician fee schedule expanded Stark regulations, which may also affect ASCs (22,23). Some of the key concepts relevant to ASCs include anti-markup rules, under arrangements, percentage-based compensation, and per-click arrangements.

Anti-markup rules pertain to several types of imaging services, wherein a physician cannot purchase an image or an MRI and resell it to Medicare or Medicaid and profit from such a resale. Proposed regulations will extend its current policy, which applies to only the purchase of the technical component of an imaging service for a purchased professional component. Other revisions incorporated into the proposed rule involving reassignment from a full-time employee and amounts charged, which can not include any space or equipment lease payments, etc., may have some effect on ASCs.

The next rule, which may have some effect on ASCs, as well as hospitals, is under arrangement. These have been increasing and are likely to continue to increase in the future. CMS is also concerned about the expected increase in 2008, where Medicare will pay ASCs approximately 65% of the payment made for the same procedure in a hospital or under arrangement with a hospital. Consequently, CMS has essentially stated that most of the existing under arrangements and per-click models would be deemed illegal under the new Stark III rules. The Stark Act previously defined "entity" as the person or entity that presented the claim to Medicare, not the person or entity actually performing the designated health service. This allowed physicians to have a financial relationship with the entity performing the service, such as a joint venture, but not with the entity billing for the service such as a hospital, without implicating the Stark Act. However, the proposed rules have expanded the definition of "entity" to include either the person or entity that presented the claim to Medicare or the person or entity actually performing the designated health service. Thus, it appears that any type of relationship will implicate the Stark Act prohibitions.

The new proposed rule also attacks percentage-based compensations. Percentage-based payments would not be acceptable for any type of exceptions under the Stark Act, except for percentage-based relations, which may still be acceptable to determine payments for direct physician services. Thus, percentage-based equipment and office space leases could potentially be considered as program abuse, along with other arrangements that go beyond direct physician services.

The proposed rule also provides limitations on per use or per-click space and equipment leases and such arrangements, which may have significant effects on ASCs. Based on the new language, per unit-of-service

rental charges are not allowed to the extent that such charges reflect services provided to patients referred by the lessor or lessor to the lessee. However ASCs are exempted from designated health services.

REVISED ASC CONDITIONS OF PARTICIPATION

The Centers of Medicare and Medicaid Services issued a proposed rule that would update the existing conditions of coverage that ASCs must meet in order to bill for Medicare services (24). CMS proposed the new requirements to reflect contemporary standards of practice in the ASC community, as well as recommendations from the HHS Inspector General ... [and] promote and protect patient access to quality services in ASCs,

The proposed new conditions of participation include the following:

1. Creating a more comprehensive quality assessment and performance improvement condition (QAPI) that enables ASCs to take tailored proactive steps to ensure quality care.
2. Requiring the ASC's governing body to be responsible for the oversight and accountability for the updated QAPI program.
3. Adding a disaster-preparedness plan standard to address emergency preparedness within the facil-

- ity and interaction with local and state officials.
4. Adding requirements for radiologic services provided in an ASC to ensure they are parallel to the requirements for furnishing laboratory services.
5. Adding a new patient rights condition to address disclosure of physician financial interests in the ASC, advance directives, the grievance process and confidentiality of clinical records.
6. Expanding the infection control requirement to the condition level.
7. Adding a comprehensive patient assessment requirement to ensure that accurate and thorough assessments are conducted to assure appropriate and safe surgery, and that patients would be able to tolerate a scheduled surgical procedure.

EFFECTS ON IPM SERVICES

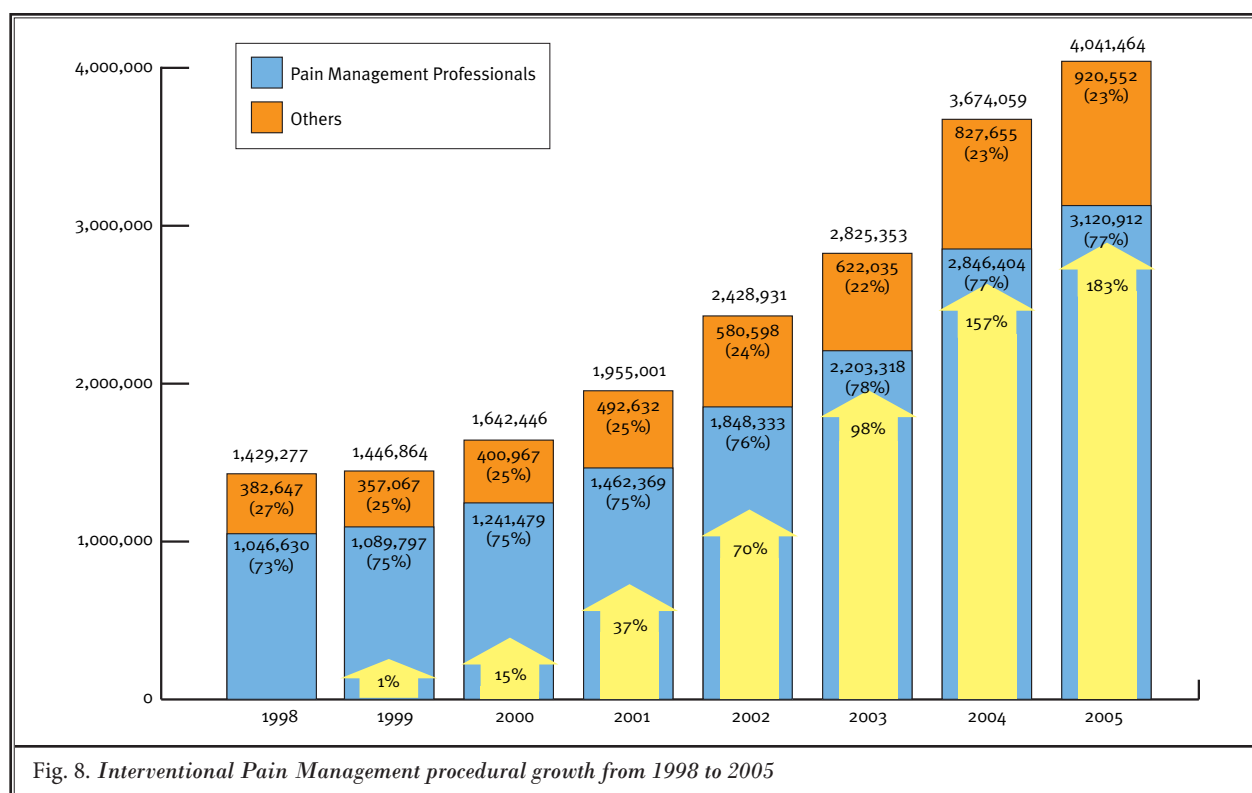
Interventional pain management (IPM) has been criticized because of reports of increasing use and increasing costs of care in all settings including ASCs (9,10,25-29). Table 4 and Fig. 8 illustrate rapid growth in interventional techniques.

As illustrated in Table 4, in the Medicare population, the utilization of various categories of interventional procedures, which excludes continuous epidurals, intraarticular injections, trigger point and ligament injections, have increased substantially from

Table 4. Summary of frequency of utilization of categories of interventional procedures in Medicare population from 1998 to 2005

	1998	1999	2000	2001	2002	2003	2004	2005
Epidural, spinal neurolysis, and adhesiolysis procedures	802,735 (76%)	803,078 (74%)	860,787 (79%)	1,013,552 (78%)	1,199,324 (74%)	1,370,862 (71%)	1,637,494 (65%)	1,776,153 (65%)
Facet joint interventions and Sacroiliac joint blocks	274,130 (73%)	304,564 (72%)	424,796 (67%)	543,509 (62%)	708,186 (58%)	884,035 (53%)	1,354,242 (46%)	1,501,222 (47%)
Disc Procedures (Discography & Disc Decompression)	10,484 (84%)	13,113 (84%)	14,983 (87%)	17,229 (87%)	20,194 (81%)	24,362 (80%)	24,263 (79%)	27,950 (78%)
Vertebroplasty/Kyphoplasty	0	0	3,825 (100)	20,593 (100)	25,060 (99%)	31,048 (99%)	42,882 (95%)	51,034 (95%)
Implantable and Stimulators	12,376 (100%)	12,694 (100%)	13,735 (100%)	16,840 (100%)	18,948 (100%)	24,709 (100%)	30,848 (96%)	37,013 (96%)
Other types of nerve blocks	329,552 (33%)	313,415 (33%)	324,320 (35%)	342,277 (35%)	457,219 (30%)	490,337 (28%)	583,970 (28%)	648,092 (28%)
Total	1,429,277 (65%)	1,446,864 (64%)	1,642,446 (67%)	1,955,001 (67%)	2,428,931 (62%)	2,825,353 (58%)	3,674,059 (52%)	4,041,464 (53%)

Source: Utilization data by Specialty from CMS
() shows percentage of procedures utilized in facility settings (HOPD and ASC)



1998 to 2005. In 1998, overall, 1,429,277 procedures were performed compared to 4,041,464 in 2005, an increase of 183% (Fig. 8). Further, 65% of the procedures were performed in a facility setting in 1998 compared to only 53% in 2005, a significant movement of procedures from facility settings to in-office settings.

Figure 8 also illustrates the procedures performed by interventionalists compared to non-interventionalists. While there was no increase in the proportion of procedures performed by non-interventionalists (physicians excluding anesthesiologists, physiatrists, neurologists, interventional pain physicians and pain management professionals), the procedures increased from 382,647 in 1999 to 920,552 in 2005 (Table 5 and Fig. 9). Table 5 further illustrates the differences for various techniques. Overall, interventional procedures have increased 183% from 1998 through 2005, whereas procedures performed by interventional pain management professionals have increased 198% compared to non-interventional physicians of 141%. There also have been changes in the types of the procedures performed by non-interventionalists. The increase for non-interventional pain physicians for facet joint interventions and sacroiliac joint interventions was 329% compared to 60% for epidural procedures and

113% for other types of nerve blocks. In fact, other types of nerve blocks increased for non-interventional physicians by 113% compared to interventional pain management professionals of 82%.

Interventional pain management procedures performed in office settings have increased at a much higher pace than the surgery center and hospital outpatient procedures, as shown in Table 6. Overall, IPM procedures in non-facility setting increased from 1998 to 2005 by 289%. The majority of the increases were seen after the site-of-service differential was enacted in 2000 with a 24% increase in 2001, 42% in 2002, 26% in 2003, 47% in 2004, and 24% in 2005. However, the procedures also have increased in facility settings from 940,346 in 1998 to 2,140,279 in 2005, at a net increase of 128%. Table 6 and Fig. 9 illustrate comparative utilization of interventional procedures in facility and non-facility settings in medicare population from 1998 to 2005.

Thus, the overall facility procedure increase which includes ASCs and hospital outpatient departments was 128% compared to 289% for in-office procedures. For epidural procedures facility increases were 89% compared to 223% in non-facility settings, for facet joint interventions and sacroiliac joint blocks in facil-

Table 5. Summary of frequency of utilization of categories of interventional procedures by specialty in Medicare population from 1998 to 2005

Year	Epidural, spinal neurolysis, and adhesiolysis procedures		Facet joint interventions and sacroiliac joint blocks		Other types of nerve blocks		Total	
	IPM speciality	Other speciality	IPM speciality	Other speciality	IPM speciality	Other speciality	IPM speciality	Other speciality
1998	654,516 (82%)	148,219 (18%)	209,272 (76%)	64,858 (24%)	172,106 (52%)	157,446 (48%)	1,046,630 (73%)	382,647 (27%)
1999	672,648 (84%)	130,430 (16%)	239,354 (79%)	65,210 (21%)	165,110 (53%)	148,305 (47%)	1,089,797 (75%)	357,067 (25%)
2000	720,332 (84%)	140,455 (16%)	333,647 (79%)	91,149 (21%)	172,827 (53%)	151,493 (47%)	1,241,479 (76%)	400,967 (24%)
2001	842,472 (83%)	171,080 (17%)	418,663 (77%)	124,846 (23%)	182,290 (53%)	160,987 (47%)	1,462,369 (75%)	492,632 (25%)
2002	1,023,741 (85%)	175,950 (15%)	575,164 (81%)	133,022 (19%)	226,167 (49%)	231,052 (51%)	1,848,333 (76%)	580,598 (24%)
2003	1,190,196 (87%)	180,666 (13%)	736,908 (83%)	147,127 (17%)	245,185 (50%)	245,152 (50%)	2,203,318 (78%)	622,035 (22%)
2004	1,420,996 (87%)	216,498 (13%)	1,105,421 (82%)	248,821 (18%)	280,957 (48%)	300,013 (52%)	2,846,404 (77%)	827,655 (23%)
2005	1,539,118 (87%)	237,035 (13%)	1,222,972 (82%)	278,250 (18%)	312,979 (48%)	335,113 (52%)	3,120,912 (77%)	920,552 (23%)
Overall increase from 1998	135%	60%	484%	329%	82%	113%	198%	141%

IPM - Official Pain Management includes: Anesthesiology, Physical medicine and rehabilitation, Neurology and Psychiatry, Pain Management, Interventional Pain Management

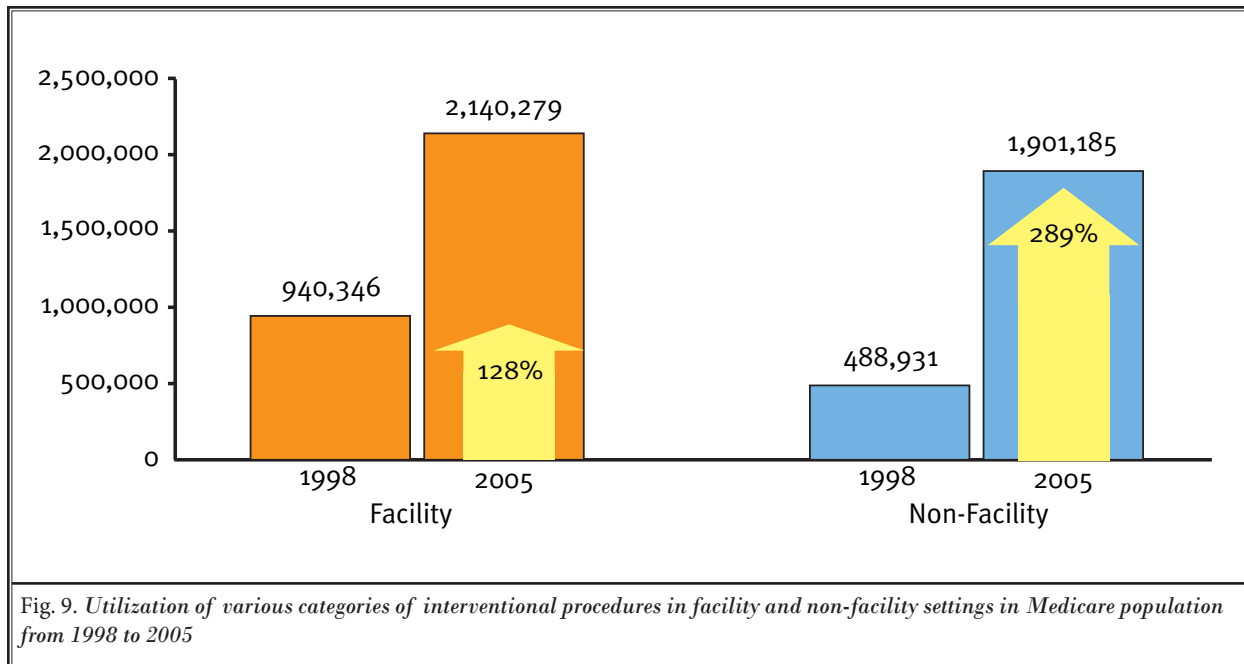


Fig. 9. Utilization of various categories of interventional procedures in facility and non-facility settings in Medicare population from 1998 to 2005

Interventional Techniques in ASCs: A Look at the New Payment System

Table 6. Utilization of common categories of interventional procedures in facility / non-facility settings in Medicare population from 1998 to 2005

Year	Epidural, spinal neurolysis, and adhesiolysis procedures		Facet joint interventions and sacroiliac joint blocks		Other types of nerve blocks		Total *	
	Facility	Non-Facility	Facility	Non-Facility	Facility	Non-Facility	Facility	Non-Facility
1998	611327 (76%)	191408 (24%)	199842 (73%)	74288 (27%)	108018 (33%)	221534 (67%)	940346 (65%)	488931 (35%)
1999	591077 (74%)	212001 (26%)	219076 (72%)	85488 (28%)	102014 (33%)	211401 (67%)	935836 (64%)	511028 (36%)
2000	683511 (79%)	177276 (21%)	285997 (67%)	138799 (33%)	112686 (35%)	211634 (65%)	1112844 (33%)	529602 (33%)
2001	790002 (78%)	223550 (22%)	336057 (62%)	207452 (38%)	121827 (35%)	221450 (65%)	1300329 (33%)	654672 (33%)
2002	888745 (74%)	310579 (26%)	412114 (58%)	296072 (42%)	139164 (30%)	318055 (70%)	1500324 (62%)	928607 (38%)
2003	968204 (71%)	402658 (29%)	470197 (53%)	413838 (47%)	137500 (28%)	352837 (72%)	1651015 (58%)	1174338 (42%)
2004	1064975 (65%)	572519 (35%)	627281 (46%)	726961 (54%)	161235 (28%)	422735 (72%)	1943019 (52%)	1731040 (48%)
2005	1156048 (65%)	620105 (35%)	698283 (47%)	802939 (53%)	180469 (28%)	467623 (72%)	2140279 (53%)	1901185 (47%)
Overall increase from 1998	89%	223%	249%	981%	67%	111%	128%	289%

F=Facility NF=Non-facility (office)
 Total also included Disc Procedures (Discography & Disc Decompression),
 Source: Utilization data by Specialty from CMS
 () shows percentage of procedures utilized

ity settings increases were 249% compared to 981% in non-facility settings, whereas increases were 67% for facility settings and 111% for other types of nerve blocks in non-facility settings.

The proposed ASC payment system based on OPPTS with a complicated formula as described in rule making, resulted in 65% of HOPD payments for ASCs. 2008 payments based on the proposed rule with a 4-year transition are shown in Table 7. As shown in Table 8, the services have increased, with in-office services approved for ASCs and payments equivalent to the office payments.

As illustrated in Figs. 6 and 7 hospital outpatient settings will enjoy an increase in reimbursements with annual updates, as well as increases in payment rates. In contrast, in-office procedures will be facing draconian cuts with an inordinately excessive reduction of reimbursement for interventional pain management proce-

dures performed in an office settings. Table 9 illustrates reimbursement per procedure for commonly performed interventional procedures in an office setting.

In ASC settings, the advantages of new rules are very few for interventional pain management, whereas for some specialties, they are substantial. While ASC payment system is based on a percent of hospital outpatient payments, it does not share annual increments in the same manner. Further, the GAO study has shown that for Medicare patients, the cost of ASCs is 84% rather than 65% (1). Addition of multiple minor procedures is a benefit and also increases the proportion of procedures performed by interventionalists in chronic pain management. Though small, even though not appropriately reimbursed, disc decompression and implantables can be performed in ASCs. Proponents of implantables consider the proposed rule as disastrous. CMS has not taken into consider-

Table 7. Proposed ASC fee schedule for 2008 for Medicare approved ASC procedures.

CPT / HCPCS	Short Description	Subject To Multiple Procedure Discounting	Payment Indicator	CY 2007 ASC Payment Rate	Proposed Fully Implemented Payment Weight	Proposed CY 2008 Fully Implemented Payment	Proposed CY 2008 1st Transition Year Payment
G0260	Inj for sacroiliac jt anesth	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
0027T	Endoscopic epidural lysis	Y	G2		18.5069	\$766.19	\$766.19
22520	Percut vertebroplasty thor	Y	A2	\$1,339.00	29.3263	\$1,214.11	\$1,307.78
22521	Percut vertebroplasty lumb	Y	A2	\$1,339.00	29.3263	\$1,214.11	\$1,307.78
22522	Percut vertebroplasty add on	Y	A2	\$1,339.00	29.3263	\$1,214.11	\$1,307.78
22523	Percut kyphoplasty, thor	Y	G2		78.6518	\$3,256.18	\$3,256.18
22524	Percut kyphoplasty, lumbar	Y	G2		78.6518	\$3,256.18	\$3,256.18
22525	Percut kyphoplasty, add-on	Y	G2		78.6518	\$3,256.18	\$3,256.18
62263	Epidural lysis - 2 or 3 day	Y	A2	\$333.00	15.5687	\$644.54	\$410.89
62264	Epidural lysis - single day	Y	A2	\$333.00	15.5687	\$644.54	\$410.89
62269	Needle biopsy, spinal cord	Y	A2	\$333.00	9.5741	\$396.37	\$348.84
62270	Spinal fluid tap, diagnostic	Y	A2	\$139.00	4.1589	\$172.18	\$147.30
62272	Drain cerebro spinal fluid	Y	A2	\$139.00	4.1589	\$172.18	\$147.30
62273	Inject epidural patch	Y	A2	\$333.00	4.1589	\$172.18	\$292.80
62280	Inj/infuse neurolytic subst; subarachnoid	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
62281	Inj/infuse neurolytic subst; epi - cer/thor	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
62282	Inj/infuse neurolytic subst; epi-lum/sacral	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
62287	Percutaneous discectomy	Y	A2	\$1,339.00	32.0518	\$1,326.94	\$1,335.99
62310	Inject spine cer/thor	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
62311	Inject spine lum/sacral (caudal)	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
62318	Inject spine w/cath, cer/thor	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
62319	Inject spine w/cath lum/sacral (caudal)	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
62350	Implant spinal canal cath	Y	A2	\$446.00	37.1117	\$1,536.42	\$718.61
62355	Remove spinal canal catheter	Y	A2	\$446.00	15.5687	\$644.54	\$495.64
62360	Insert spine infusion device	Y	A2	\$446.00	37.1117	\$1,536.42	\$718.61
62361	Implant spine infusion pump	Y	H8	\$446.00	255.4150	\$10,574.18	\$9,781.61
62362	Implant spine infusion pump	Y	H8	\$446.00	255.4150	\$10,574.18	\$9,781.61
62365	Remove spine infusion device	Y	A2	\$446.00	32.0518	\$1,326.94	\$666.24
63600	Remove spinal cord lesion	Y	A2	\$446.00	18.5069	\$766.19	\$526.05
63610	Stimulation of spinal cord	Y	A2	\$333.00	18.5069	\$766.19	\$441.30
63650	Perc implant neuro electrodes, epi	N	H8	\$446.00	82.9543	\$3,434.31	\$2,896.42
63655	Lam implant neuro electrodes, epi	N	J8		107.3027	\$4,442.33	\$4,442.33
63660	Revise/remove neuro electrode	Y	A2	\$333.00	24.1752	\$1,000.85	\$499.96
63685	Insert/replace spine neuro electrode receiver	Y	H8	\$446.00	280.0420	\$11,593.74	\$10,925.15
63688	Revise/remove neuro receiver	Y	A2	\$333.00	35.7248	\$1,479.01	\$619.50
63744	Revision lumbo subachnd shunt	Y	A2	\$510.00	37.1117	\$1,536.42	\$766.61
63746	Removal of spinal shunt	Y	A2	\$446.00	6.1077	\$252.86	\$397.72
64410	Nerve block inj, phrenic	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64415	Nerve block inj, brachial plexus, single	Y	A2	\$139.00	4.1589	\$172.18	\$147.30
64416	Nerve block cont infuse, brachial plexus	Y	G2		7.1370	\$295.47	\$295.47
64417	Nerve block inj, axillary	Y	A2	\$139.00	4.1589	\$172.18	\$147.30
64420	Nerve block inj, intercostal, single	Y	A2	\$139.00	4.1589	\$172.18	\$147.30
64421	Nerve block inj, intercostal, multiple	Y	A2	\$333.00	4.1589	\$172.18	\$292.80

Interventional Techniques in ASCs: A Look at the New Payment System

Table 7 (continued). *Proposed ASC fee schedule for 2008 for Medicare approved ASC procedures.*

CPT / HCPCS	Short Description	Subject To Multiple Procedure Discounting	Payment Indicator	CY 2007 ASC Payment Rate	Proposed Fully Implemented Payment Weight	Proposed CY 2008 Fully Implemented Payment	Proposed CY 2008 1st Transition Year Payment
64430	Nerve block inj, pudendal	Y	A2	\$139.00	7.1370	\$295.47	\$178.12
64446	Nerve block inj, sciatic, cont inf	Y	G2		15.5687	\$644.54	\$644.54
64470	Inj paravertebral, cer/thor, single	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64472	Inj paravertebral cer/thor, add lev	Y	A2	\$333.00	4.1589	\$172.18	\$292.80
64475	Inj paravertebral lum/sac, single	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64476	Inj paravertebral lum/sac, add lev	Y	A2	\$333.00	4.1589	\$172.18	\$292.80
64479	Inj transforaminal epidural, cer/thor, single	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64480	Inj transforaminal epidural, cer/thor, add lev	Y	A2	\$333.00	4.1589	\$172.18	\$292.80
64483	Inj transforaminal epidural, lum/sac, single	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64484	Inj transforaminal epidural, lum/sac, add lev	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64510	Nerve block, stellate ganglion	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64517	Nerve block inj, hypogas plexus	Y	A2	\$139.00	7.1370	\$295.47	\$178.12
64520	Nerve block, lumbar/thoracic	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64530	Nerve block inj, celiac plexus	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64553	Perc implant neur oelectrodes, cranial nerve	N	H8	\$333.00	317.8027	\$13,157.03	\$12,089.52
64555	Perc implant neuro electrodes, periph nerve	N	J8		82.9543	\$3,434.31	\$3,434.31
64560	Perc implant neuro electrodes, auto nerve	N	J8		82.9543	\$3,434.31	\$3,434.31
64561	Perc implant neuro electrodes, sacral nerve	N	H8	\$510.00	82.9543	\$3,434.31	\$2,944.42
64565	Perc implant neuro electrodes, neuromusc	N	J8		82.9543	\$3,434.31	\$3,434.31
64573	Inc implant neuro electrodes, cranial nerve	N	H8	\$333.00	317.8027	\$13,157.03	\$12,089.52
64575	Inc implant neuro electrodes, periph nerve	N	H8	\$333.00	107.3027	\$4,442.33	\$3,664.85
64577	Inc implant neuro electrodes, auto nerve	N	H8	\$333.00	107.3027	\$4,442.33	\$3,664.85
64580	Inc implant neuro electrodes, neuromusc	N	H8	\$333.00	107.3027	\$4,442.33	\$3,664.85
64581	Inc implant neuro electrodes, sacral nerve	N	H8	\$510.00	107.3027	\$4,442.33	\$3,797.60
64585	Revise/remove neuroelectrode	Y	A2	\$333.00	24.1752	\$1,000.85	\$499.96
64595	Revise/rem periph or gastric	Y	A2	\$333.00	35.7248	\$1,479.01	\$619.50
64600	Destr neurolyt agt, trig ner, supra, infra, men, inf alveolar brch	Y	A2	\$333.00	15.5687	\$644.54	\$410.89
64605	Destr neurolyt agt, trig ner, supra, infra, men, 2 nd /3 rd div brch	Y	A2	\$333.00	15.5687	\$644.54	\$410.89
64610	Destr neurolyt agt, trig ner, supra, infra, men, 2 nd /3 rd div brch, radio monitor	Y	A2	\$333.00	15.5687	\$644.54	\$410.89
64620	Destr neurolyt agt, intercostal	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64622	Destr neurolyt agt, pv, lum/sac, single	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64623	Destr neurolyt agt, pv, lum/sac, add lev	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64626	Destr neurolyt agt, pv, cer/thor, single	Y	A2	\$333.00	7.1370	\$295.47	\$323.62
64627	Destr neurolyt agt; cer/thor add lev	Y	A2	\$333.00	2.3254	\$96.27	\$273.82
64630	Destr neurolytic agent; pudendal nerve	Y	A2	\$351.92	7.1370	\$295.47	\$337.81
64680	Destr neurolytic agent; celiac plexus	Y	A2	\$390.95	7.1370	\$295.47	\$367.08
64681	Destr neurolytic agent; hypogastric plexus	Y	A2	\$446.00	15.5687	\$644.54	\$495.64

A2 - Surgical procedure on ASC list in CY 2007; payment based on OPSS relative payment weight. G2 - Non office-based surgical procedure added in CY 2008 or later; payment based on OPSS relative payment weight. H8 - Device-intensive procedure on ASC list in CY 2007; paid at adjusted rate. J8 - Device-intensive procedure added to ASC list in CY 2008 or later; paid at adjusted rate

Table 8. Facility payments for in-office procedures when performed in an ASC

Facility CPT / HCPCS	Short Description	Subject To Multiple Procedure Discounting	Payment Indicator	Proposed Fully Implemented Payment Weight	Proposed CY 2008 Fully Implemented Payment	Proposed CY 2008 First Transition Year Payment
20526	Ther injection, carp tunnel	Y	P3	0.7338	\$30.38	\$30.38
20550	Inj tendon sheath/ligament	Y	P3	0.5524	\$22.87	\$22.87
20551	Inj tendon origin/insertion	Y	P3	0.5442	\$22.53	\$22.53
20552	Inj trigger point, 1/2 muscl	Y	P3	0.5360	\$22.19	\$22.19
20553	Inject trigger points, =/> 3	Y	P3	0.6019	\$24.92	\$24.92
20600	Drain/inject, joint/bursa	Y	P3	0.5442	\$22.53	\$22.53
20605	Drain/inject, joint/bursa	Y	P3	0.6184	\$25.60	\$25.60
20610	Drain/inject, joint/bursa	Y	P3	0.8329	\$34.48	\$34.48
62367	Analyze spine infusion pump	N	P3	0.4205	\$17.41	\$17.41
62368	Analyze spine infusion pump	N	P3	0.5278	\$21.85	\$21.85
64400	Nblock inj, trigeminal	Y	P3	1.3604	\$56.32	\$56.32
64402	Nblock inj, facial	Y	P3	1.2449	\$51.54	\$51.54
64405	Nblock inj, occipital	Y	P3	1.0802	\$44.72	\$44.72
64408	Nblock inj, vagus	Y	P3	1.2449	\$51.54	\$51.54
64412	Nblock inj, spinal accessor	Y	P3	1.9541	\$80.90	\$80.90
64413	Nblock inj, cervical plexus	Y	P3	1.2944	\$53.59	\$53.59
64418	Nblock inj, suprascapular	Y	P3	1.8551	\$76.80	\$76.80
64425	Nblock inj, ilio-ing/hypogi	Y	P3	1.2203	\$50.52	\$50.52
64435	Nblock inj, paracervical	Y	P3	1.8551	\$76.80	\$76.80
64445	Nblock inj, sciatic, sng	Y	P3	1.7727	\$73.39	\$73.39
64450	Nblock, other peripheral	Y	P3	1.0307	\$42.67	\$42.67
64505	Nblock, spenopalatine gangl	Y	P3	0.9729	\$40.28	\$40.28
64612	Destroy nerve, face muscle	Y	P3	1.6821	\$69.64	\$69.64
64613	Destroy nerve, neck muscle	Y	P3	1.7727	\$73.39	\$73.39
64614	Destroy nerve, extrem musc	Y	P3	1.9954	\$82.61	\$82.61
64640	Injection treatment of nerve	Y	P3	2.7126	\$112.30	\$112.30
62292	Injection into disk lesion	Y	R2	8.6797	\$359.34	\$359.34
63615	Remove lesion of spinal cord	Y	R2	18.5069	\$766.19	\$766.19
64447	Nblock inj fem, single	Y	R2	4.1589	\$172.18	\$172.18

Payment Indicator:

P3 - Office-based surgical procedure added to ASC list in CY 2008 or later with MPFS non-facility PE RVUs; payment based on MPFS non-facility PE RVUs.

R2 - Office-based surgical procedure added to ASC list in CY 2008 or later without MPFS non-facility PE RVUs; payment based on OPFS relative payment weight.

NOTE: The Medicare program payment is 80 percent of the total payment amount and beneficiary coinsurance is 20 percent of the total payment amount, except for screening flexible sigmoidoscopies and screening colonoscopies for which the program payment is 75 percent and the beneficiary coinsurance is 25 percent.

Interventional Techniques in ASCs: A Look at the New Payment System

Table 9. Payment schedule for top 30 interventional procedures for outpatient reimbursement in-office settings

CPT	Description	2006		2007		2008 Proposed (with cut)		2008 Proposed (without cut)	
		Office or Overhead	Professional Or Physician Fee(\$)	Office or Overhead	Professional Or Physician Fee(\$)	Office or Overhead	Professional Or Physician Fee(\$)	Office or Overhead	Professional Or Physician Fee(\$)
27093	Injection procedure for hip arthrography – without anesthesia	\$144.34	\$69.10	\$137.18	\$72.01	\$112.64	\$64.86	\$125.06	\$72.01
27096	(G0260) Injection procedure for Sacroiliac joint, arthrography	\$145.79	\$65.48	\$134.54	\$68.59	\$105.48	\$61.78	\$117.11	\$68.59
62263	Percutaneous epidural adhesiolysis – 2 or 3 days	\$344.77	\$352.36	\$328.57	\$376.32	\$270.35	\$337.60	\$300.14	\$374.81
62264	Percutaneous epidural adhesiolysis – 1 day	\$229.00	\$221.04	\$220.56	\$230.04	\$181.94	\$205.84	\$202.00	\$228.52
62282	Neurolytic epidural, L/S	\$269.88	\$123.73	\$238.37	\$131.13	\$176.82	\$119.81	\$196.31	\$133.02
62290	Injection procedure for diskography each level: lumbar	\$208.74	\$166.78	\$194.04	\$172.05	\$154.29	\$153.27	\$171.30	\$170.16
62310	Cervical epidural injection, single	\$150.86	\$96.95	\$140.98	\$100.81	\$111.96	\$90.12	\$124.30	\$100.05
62311	Lumbar epidural, injection, single	\$157.01	\$80.31	\$142.12	\$83.75	\$109.91	\$74.76	\$122.03	\$83.00
62367	Electronic analysis of programmable pump	\$18.45	\$22.07	\$17.43	\$23.12	\$13.66	\$21.16	\$15.16	\$23.50
62368	Electronic analysis of programmable pump with reprogramming	\$18.82	\$35.45	\$18.95	\$37.14	\$16.05	\$33.45	\$17.81	\$37.14
64400	Injection, anesthetic agent; Trigeminal nerve, any division or branch	\$53.19	\$58.24	\$50.41	\$61.39	\$41.30	\$55.30	\$45.86	\$61.39
64405	Greater occipital nerve	\$36.18	\$67.29	\$34.86	\$70.87	\$28.34	\$64.17	\$31.45	\$71.25
64418	Suprascapular nerve	\$79.23	\$66.20	\$74.66	\$70.11	\$60.42	\$63.83	\$67.08	\$70.87
64421	Intercostal, multiple, nerve blocks	\$201.87	\$83.57	\$186.08	\$87.54	\$146.10	\$78.85	\$162.20	\$87.54
64450	Other peripheral nerve or branch	\$27.50	\$68.01	\$28.80	\$71.63	\$25.94	\$64.52	\$28.80	\$71.63
64470	cervical and thoracic facet joint injections	\$236.60	\$96.59	\$213.36	\$101.19	\$163.85	\$91.14	\$181.90	\$101.19

Table 9 (continued). *Payment schedule for top 30 interventional procedures for outpatient reimbursement in-office settings*

CPT	Description	2006		2007		2008 Proposed (with cut)		2008 Proposed (without cut)	
		Office or Overhead	Professional Or Physician Fee(\$)	Office or Overhead	Professional Or Physician Fee(\$)	Office or Overhead	Professional Or Physician Fee(\$)	Office or Overhead	Professional Or Physician Fee(\$)
64472	cervical and thoracic facet joint injections – add-on	\$72.36	\$61.86	\$64.81	\$64.80	\$48.81	\$58.37	\$54.20	\$64.80
64475	Paravertebral facet joint or facet joint nerve; lumbar/sacral, single	\$226.83	\$77.42	\$206.54	\$80.72	\$158.38	\$72.37	\$175.85	\$80.34
64476	Paravertebral facet joint or facet joint nerve; lumbar/sacral - add-on	\$68.37	\$46.67	\$61.39	\$48.89	\$46.77	\$44.03	\$51.92	\$48.89
64479	Cervical transforaminal epidural injections	\$239.49	\$116.13	\$215.26	\$120.89	\$162.48	\$108.21	\$180.39	\$120.14
64480	Cervical transforaminal epidural injections - add-on	\$86.10	\$76.33	\$77.69	\$79.21	\$59.74	\$70.66	\$66.32	\$78.45
64483	Lumbar/sacral transforaminal epidural injections	\$256.14	\$102.74	\$229.28	\$106.87	\$172.38	\$95.58	\$191.39	\$106.11
64484	Lumbar/sacral transforaminal epidural injections - add-on	\$105.63	\$64.40	\$94.74	\$67.08	\$71.68	\$60.08	\$79.58	\$66.70
64510	Injection for nerve block	\$106.72	\$65.12	\$97.39	\$67.46	\$75.10	\$60.08	\$83.37	\$66.70
64520	Injection for nerve block	\$166.41	\$71.63	\$150.07	\$74.66	\$113.33	\$66.90	\$125.82	\$74.28
64612	Destroy nerve, spine muscle	\$42.33	\$122.64	\$35.24	\$129.99	\$23.90	\$117.08	\$26.53	\$129.99
64622	Destroy paravertebral nerve l/s	\$231.89	\$164.61	\$207.68	\$172.05	\$156.34	\$153.95	\$173.57	\$170.92
64623	Destroy paravertebral n - add-on	\$99.49	\$45.94	\$90.95	\$48.13	\$71.00	\$43.35	\$78.83	\$48.13
64626	Cervical and thoracic facet neurolysis	\$210.92	\$197.16	\$191.76	\$225.49	\$147.47	\$202.42	\$163.72	\$224.73
64627	Cervical and thoracic facet neurolysis - add-on	\$154.47	\$54.27	\$140.98	\$56.47	\$108.55	\$50.86	\$120.51	\$56.47

ation 2 different varieties of spinal cord stimulators (rechargeable and non-rechargeable), with significant differences in costs for the actual equipment. Current proposed reimbursement would be less than the actual cost of equipment. Unfortunately, the same issue is a problem in the HOPD system thus, CMS may be effectively eliminating patient access for stimulators.

Apart from reductions in Medicare, private plans and Medicare Advantage plans (30) may also have a significant effect on the payment system as these plans either pay at the same level or may pay at a lower level than Medicare. The proportion of cuts reflected in the Medicare payment schedule for ASCs will also be reflected in other federally controlled programs and state programs funded by federal assistance and most of the third party payors. However, there is some hope with regards to the Medicare Advantage plans as their marketing has been suspended due to many inaccuracies (31). As third party payors continue to coattail on Medicare, stagnant payments or cuts which are only threatened by CMS but are enacted by third party payors, will create a grave situation for patient care in the United States (29).

POTENTIAL SOLUTIONS

CMS has graciously altered the proposed schedule from 2006 to 2007 by increasing the payment portion to 65% of the hospital outpatient payment system and by establishing a 4-year phase in. However, this still continues to provide a disproportionate effect, and continues to balance the budget and pay for Part D program from savings from of ASCs. While this proposed rule is disastrous to ASCs specializing in gastroenterology, it also significantly affects interventional pain management, while rewarding some specialties such as orthopedic surgery. At the present time, colonoscopy, which is a high-volume service, gets paid about \$446 per procedure, lumbar epidural steroid injection \$333, a shoulder arthroscopy \$510. With the planned reduction payments will be \$359 for colonoscopies, \$324 for lumbar epidural steroid injections and \$1978 for shoulder arthroscopies.

One of the solutions is to increase ASC payments to 75% of the HOPD payment rate across the board, which will cost Medicare \$5-10 billion over a period of 5 years. With budget neutrality, the opportunities for this type of solution are low. In addition, this will only increase payments for procedures such as orthopedic

surgery disproportionately, while achieving a status quo for some, and for others it may still mean cuts. Thus, a feasible alternative option is to provide payments at 65% of the HOPD rate, with ASC payment rates maintained at least at the present level, and with annual increases similar to those of HOPD rates, rather than using a separate formula.

CONCLUSION

Concern over the financial solvency of ASCs specializing in interventional pain management is dependent in general on Medicare reform and, in particular on how all other payors will react. With third party payors following Medicare, with most of them paying at the same level as Medicare, and very few above, and some paying below Medicare, in the face of an increasing Medicare population, interventional pain management is at a critical juncture. Although a multitude of issues apply to ASCs, interventional pain management is one of the two most negatively affected specialties, whereas others are beneficiaries. Consequently, increasing payments to hospitals, nursing homes, and Medicare Advantage plans, while decreasing payments to ASCs, and attempting to balance the budget on physician payments and ASC payments, will be disastrous to access and quality of care. Such an approach may increase Medicare expenses and will not contribute to savings as these segments constitute less than 25% of total payments.

The present problems faced by interventional pain management ASCs may occur in any type of healthcare system, whether it is a universal healthcare system or some modification of a universal healthcare system. CMS leads and functions as a benchmark, resulting in a ripple effect (29). Beyond reduction in payments, CMS and the entire healthcare system in the United States may benefit from savings derived from other avenues, including regulatory cost savings, medical tort reform, quality-oriented health facilities regulations, effective pay-for-performance regulations, and cost-effectiveness as a price control. Further, CMS and the payor community, public, Congress, the administration, and physicians must consider potential health and economic consequences of misplaced priorities. To maximize the health of Americans, we should pursue interventions in proportion to the ability of those interventions to improve outcomes.

REFERENCES

1. GAO Report. United States General Accounting Office. *Payment for Ambulatory Surgical Centers Should be Based on the Hospital Outpatient Payment System*. GAO Publication No. GAO-07-86, November 2006.
2. Department of Health and Human Services, Centers for Medicare and Medicaid Services. Medicare Program; Hospital Outpatient Prospective Payment System and CY 2007 Payment Rates; CY 2007 Update to the Ambulatory Surgical Center Covered Procedures List; Medicare Administrative Contractors; and Reporting Hospital Quality Data for FY 2008 Inpatient Prospective Payment System Annual Payment Update Program—HCAHPS Survey, SCHIP, and Mortality, GAO-07-249R, December 6, 2006
3. A Data Book: Healthcare Spending and the Medicare Program (June 2007), MedPAC report 2007.
4. Department of Health and Human Services, Health Care Financing Administration. 42 CFR Parts 416 and 488. Medicare Program; Update of Ratesetting Methodology, Payment Rates, Payment Policies, and the List of Covered Surgical Procedures for Ambulatory Surgical Centers, Effective October 1, 1998; Proposed Rule; Federal Register, June 12, 1998.
5. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003, P.L. 108-173, Enacted December 8, 2003.
6. Department of Health and Human Services, Health Care Financing Administration. 42 CFR Parts 410,411,414, 415, and 485. Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule for Calendar Year 2000; Final Rule; Federal Register, November 2, 1999.
7. SMG Marketing Group, Inc, 2002. <http://www.aaasc.org/features/documents/ASCTrendReport118061.pdf>; accessed 8/10/2007
8. American Hospital Association. The migration of care to non-hospital settings: Have regulatory structures kept pace with care delivery? Trendwatch July 2006; 1-12. www.aha.org/aha/trendwatch/2006/twJuly2006migration.pdf; accessed 8/10/2007
9. Verispan's Diagnostic Imaging Center Profiling Solution, 2004.
10. Specialty Utilization data files from CMS: <http://www.cms.hhs.gov/physicians/pfs/>
11. Department of Health and Human Services, Centers for Medicare & Medicaid Services. 42 CFR Parts 410, 414, and 485. Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule for Calendar Year 2003 and Inclusion of Registered Nurses in the Personnel Provision of the Critical Access Hospital Emergency Services Requirement for Frontier Areas and Remote Locations; Final Rule; Federal Register, December 31, 2002.
12. Department of Health and Human Services, Centers for Medicare & Medicaid Services. 42 CFR Part 416. Medicare Program; Update of Ambulatory Surgical Center List of Covered Procedures; Interim Final Rule; Federal Register, May 4, 2005.
13. Department of Health and Human Services, Centers for Medicare & Medicaid Services. 42 CFR Parts 410, 414, et al. Medicare: Hospital Outpatient Prospective Payment System and CY 2007 Payment Rates; Proposed Rule; Federal Register, August 23, 2006.
14. The Omnibus Reconciliation Act of 1980, P.L. 96-499, December 5, 1980.
15. Deficit Reduction Act (DRA) of 2005, P.L. 109-171, December 21, 2005.
16. Tax Relief and Health Care Act of 2006. P.L. 109-432, December 20, 2006.
17. CMS Office of the Actuary, 2007
18. Balanced Budget Act of 1997. P.L. 105-33, August 5, 1997.
19. Balanced Budget Refinement Act of 1999. P.L. 106-113, November 18, 1999.
20. Medicare, Medicaid and SCHIP Benefits, Improvement and Protection Act (BIPA) of 2000. P.L. 106-554, December 21, 2000.
21. Medicare Improvements and Extension Act under Division B, Title I of the Tax Relief Health Care Act of 2006, P. L. 109432; MMA Medicare Prescription Drug, Improvement, and Modernization Act of 2003, P.L. 108173, December 20, 2006.
22. Department of Health and Human Services, Centers for Medicare & Medicaid Services. 42 CFR Parts 411, 424. Medicare Program; Physicians' Referrals to Health Care Entities with Which They have Financial Relationships (Phase III); Final Rule; Federal Register, Aug 27, 2007.
23. Department of Health and Human Services, Centers for Medicare & Medicaid Services. 42 CFR Parts 409, 410, et al. Medicare Program; Proposed Revisions to Payment Policies Under the Physician Fee Schedule, and Other Part B Payment Policies for CY 2008; Proposed Revisions to the Payment Policies of Ambulance Services Under the Ambulance Fee Schedule for CY 2008; and the Proposed Elimination of the E-Prescribing Exemption for Computer-Generated Facsimile Transmissions; Proposed Rule; Proposed Rule; Federal Register, July 12, 2007.
24. Department of Health and Human Services, Centers for Medicare & Medicaid Services. Medicare and Medicaid Programs; Ambulatory Surgical Centers; coverage conditions, 07-4148; Proposed Rule; Filed August 24, 2007 at 4:00 pm; Publication Date: August 31, 2007.
25. Manchikanti L, Hirsch JA. Issues in Health Care: Interventional pain management at the crossroads. *Pain Physician* 2007; 10:261-284.
26. Manchikanti L. Medicare in interventional pain management: A critical analysis. *Pain Physician* 2006; 9:171-197.
27. Friedly J, Chan L, Deyo R. Increases in lumbosacral injections in the Medicare population. *Spine* 2007; 32:1754-60.
28. Manchikanti L. The growth of interventional pain management in the new millennium: A critical analysis of utilization in the Medicare population. *Pain Physician* 2004; 7:465-482.
29. Manchikanti L, Giordano J. Physician payment 2008 for interventionalists: Current state of health care policy. *Pain Physician* 2007; 10:607-626.
30. Medicare Payment Advisory Commission, Report to the Congress: Medicare Payment Policy: Update on Medicare Private Plans (March 2007).
31. Glendinning D. Complaints force suspension of marketing for some Medicare plans. *Am Med News* 2007; 50(26):1, 4.