

S E C T I O N

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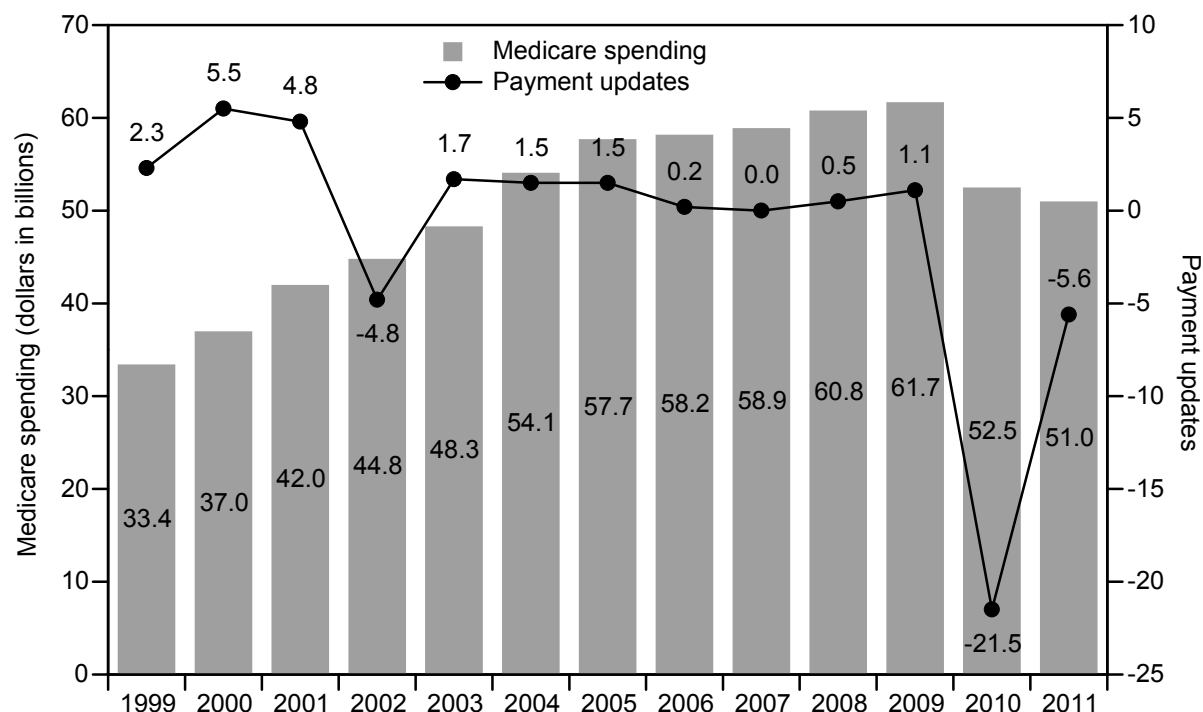
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**Ambulatory care**  
**Physicians**  
**Hospital outpatient services**  
**Ambulatory surgical centers**  
**Imaging services**

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**Chart 8-1. FFS Medicare spending and payment updates for physician services, 1999–2011**

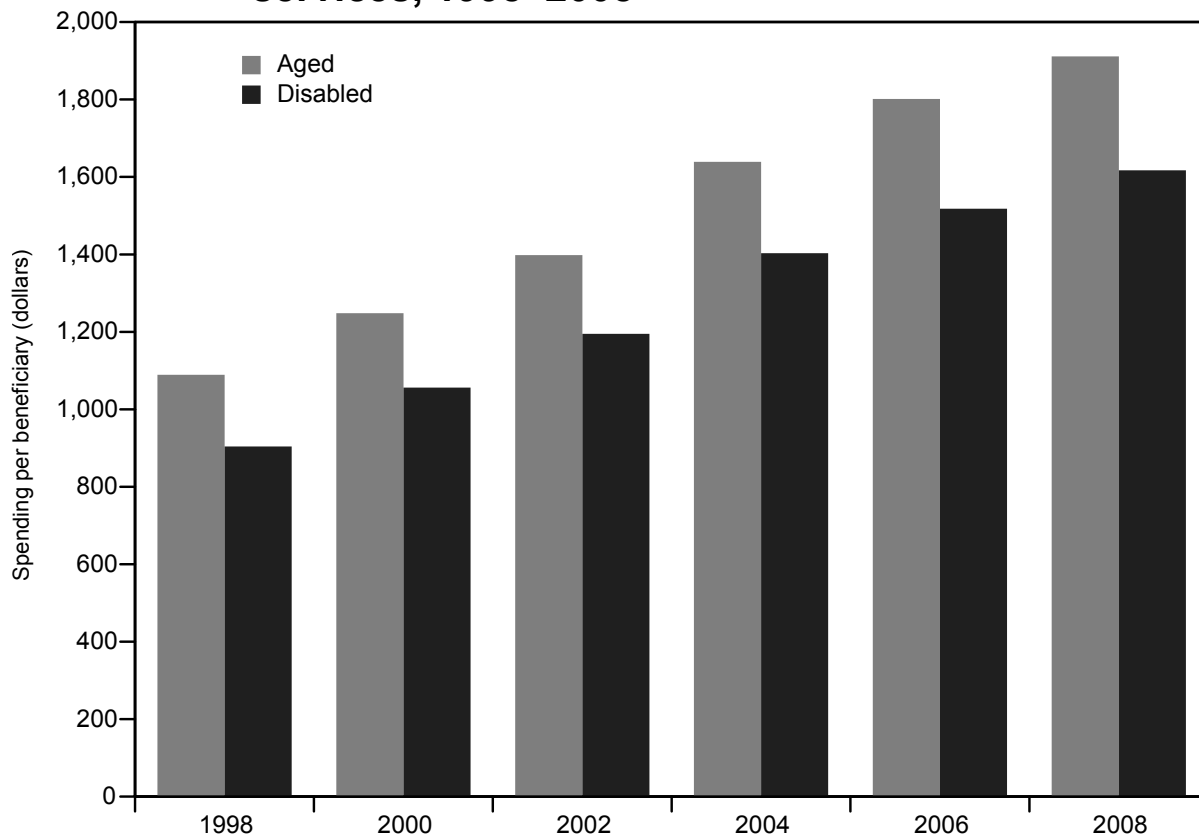


Note: FFS (fee-for-service). Dollars are Medicare spending only and do not include beneficiary coinsurance.

Source: 2008 and 2009 annual report of the Boards of Trustees of the Medicare trust funds.

- Rapid growth in total Medicare spending on physician fee schedule services occurred between 1999 and 2005—averaging almost 10 percent annually.
- The sustainable growth rate (SGR) system requires that future payment increases for physician services be adjusted for past actual physician spending relative to a target spending level. To avoid reductions in physician fee schedule rates due to the SGR, Congress has taken several actions. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 established minimum payment updates for physician services of 1.5 percent for 2004 and 2005. For 2006, the Deficit Reduction Act froze the physician fee schedule conversion factor. This freeze, combined with refinements to the relative value units, resulted in an update of 0.2 percent for 2006. The Tax Relief and Health Care Act effectively held 2007 payments at 2006 levels through a conversion factor bonus. The Medicare, Medicaid, and SCHIP Extension Act of 2007 updated physician services furnished January 1 through June 30, 2008, by 0.5 percent. Then the Medicare Improvements for Patients and Providers Act of 2008 maintained this level through the end of 2008 and increased the conversion factor by 1.1 percent in 2009.
- The SGR formula calls for payment rate cuts starting January 1, 2010 through 2015. Because the SGR has been overridden for several years, the cut in 2010 is scheduled to be at least 21 percent.

**Chart 8-2. Medicare spending per FFS beneficiary on physician services, 1998–2008**



Note: FFS (fee-for-service). Dollars are Medicare spending only and do not include beneficiary coinsurance. The category of “disabled” excludes beneficiaries who qualify for Medicare because they have end-stage renal disease. All beneficiaries age 65 and over are calculated within the aged category.

Source: 2008 and 2009 annual reports of the Boards of Trustees of the Medicare trust funds.

- Fee-for-service (FFS) spending per beneficiary for physician services has increased annually. In the decade between 1998 and 2008, Medicare spending per FFS beneficiary on physician services grew more than 75 percent.
- Growth in spending on physician services is one of several contributions to Part B premium increases over this time period.
- Per capita spending for disabled beneficiaries (under age 65) is lower than per capita spending for aged beneficiaries. In 2008, for example, per capita spending for disabled beneficiaries was \$1,617 compared with \$1,911 for aged beneficiaries.

**Chart 8-3. Number of physicians billing Medicare increased steadily, 2001–2006**

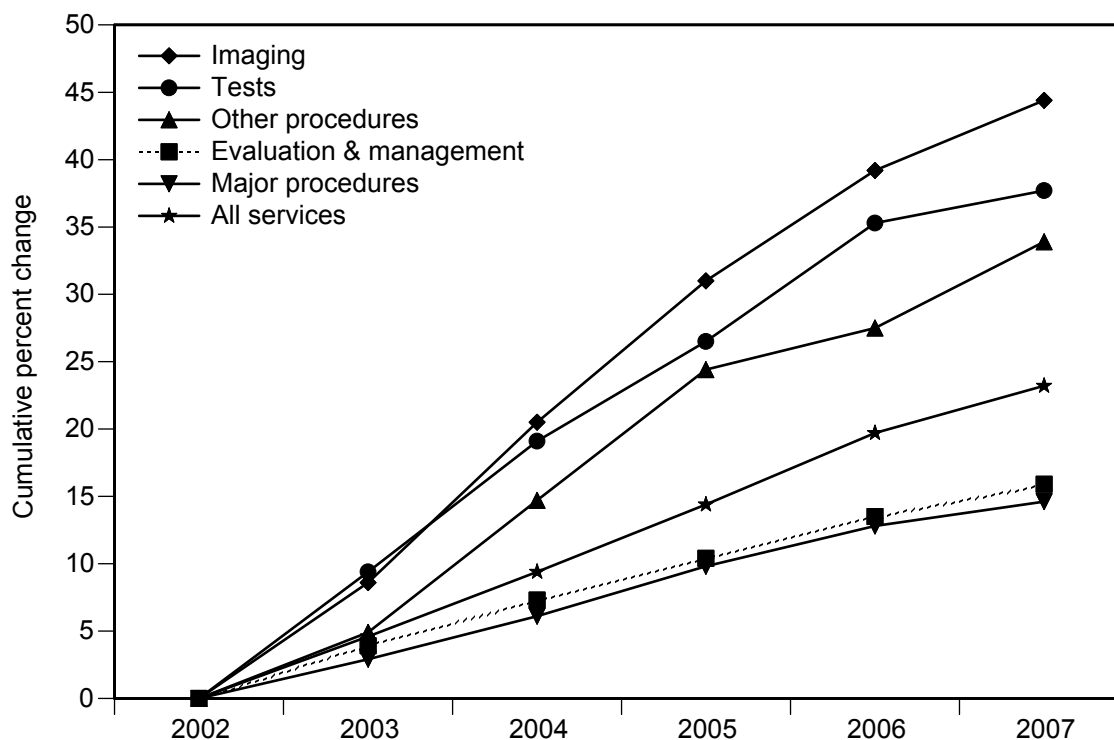
	Number of Medicare patients in caseload				
	≥1	≥15	≥50	≥100	≥200
<b>Number of physicians</b>					
2001	535,834	457,292	411,424	364,023	286,862
2002	544,615	466,299	419,269	370,144	291,593
2003	544,922	470,213	424,684	374,721	292,183
2004	561,514	483,945	440,462	393,730	315,398
2005	566,629	492,131	449,524	402,451	322,643
2006	569,461	497,072	453,822	405,504	323,877
Percent growth, 2001–2006	6.3%	8.7%	10.3%	11.4%	12.9%
<b>Physicians per 1,000 beneficiaries</b>					
2001	14.2	12.1	10.9	9.7	7.6
2002	14.3	12.3	11.0	9.7	7.7
2003	14.1	12.2	11.0	9.7	7.6
2004	14.4	12.4	11.3	10.1	8.1
2005	14.3	12.4	11.4	10.2	8.1
2006	14.1	12.3	11.3	10.1	8.0

Note: Calculations include physicians (allopathic and osteopathic). Nurse practitioners, physician assistants, psychologists, and other health care professionals are not included in these calculations. Medicare enrollment includes beneficiaries in fee-for-service Medicare and Medicare Advantage, on the assumption that physicians are providing services to both types of beneficiaries. Physicians are identified by their Unique Physician Identification Number (UPIN). UPINs with extraordinarily large caseload sizes (in the top 1 percent) are excluded because they may represent multiple providers billing under the same UPIN.

Source: MedPAC analysis of Health Care Information System, CMS.

- The number of physicians providing services to beneficiaries has kept pace with growth in the beneficiary population. From 2001 to 2006, the number of physicians per 1,000 beneficiaries was relatively steady at a little over 14.
- Growth rates are faster among physicians with higher Medicare caseloads. In fact, the fastest growth is seen for physicians with caseloads of 200 or more Medicare patients. This subset of physicians grew 12.9 percent between 2001 and 2006.
- Information on the number of physicians billing Medicare in 2007 is unavailable because of data complications stemming from the conversion to new provider identifier numbers in accordance with the Health Insurance Portability and Accountability Act.

**Chart 8-4. Continued growth in volume of physician services per beneficiary, 2002–2007**

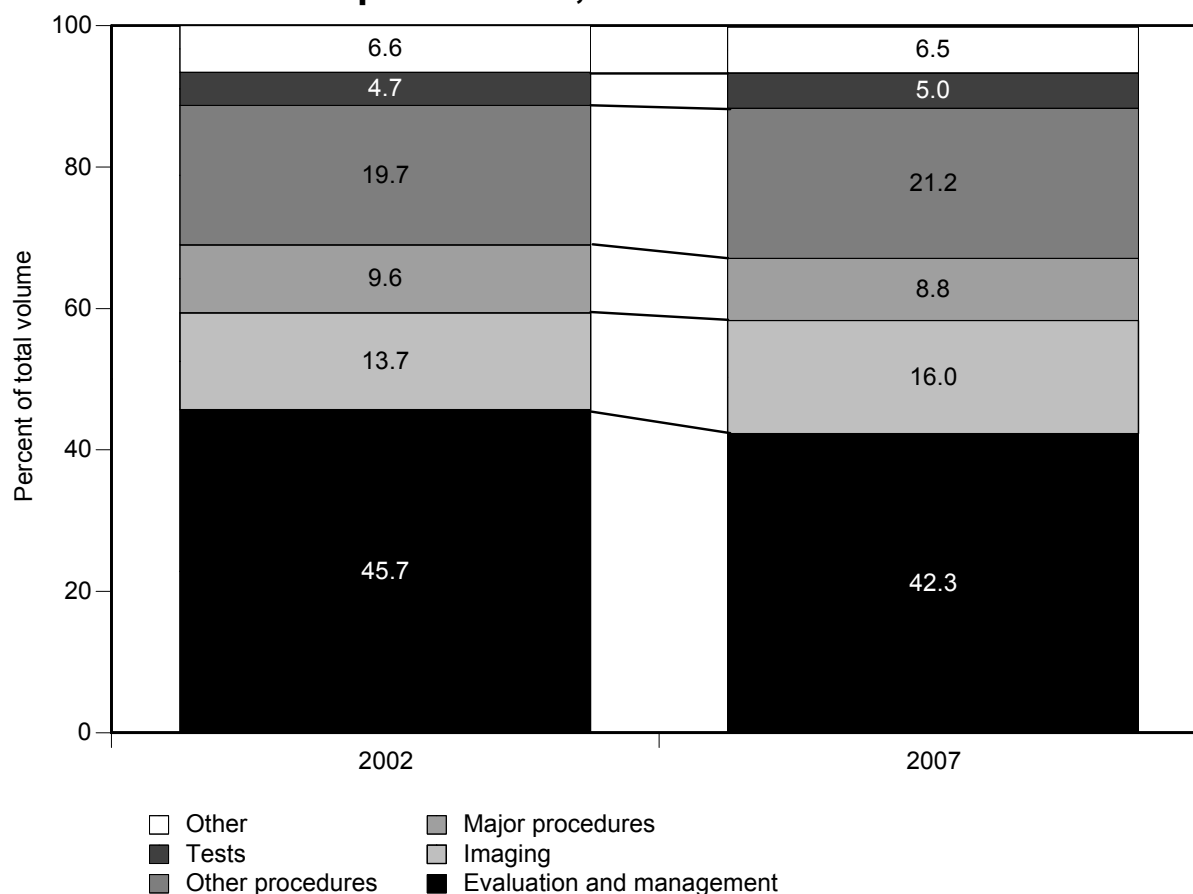


Note: Volume is units of service multiplied by relative value units from the physician fee schedule. Volume for all years is measured on a common scale, with relative value units for 2007.

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

- Year after year, the volume of physician services has continued to grow, with some services growing much more than others. From 2002 to 2007, the volume per beneficiary of imaging, tests, and other procedures (procedures other than major procedures) grew at cumulative rates that ranged from 33.9 percent to 44.4 percent. Meanwhile, the comparable growth rates for major procedures and evaluation and management services were only 14.6 percent and 15.9 percent, respectively. The average for all services was 23.2 percent.
- Volume growth has slowed in recent years, but it has remained positive. From 2006 to 2007, services in the “other procedures” category grew the most: They increased 5.0 percent. Imaging was next, at 3.8 percent, followed by evaluation and management (2.1 percent), tests (1.8 percent), and major procedures (1.6 percent).
- Volume growth increases spending, squeezing other priorities in the federal budget and requiring taxpayers and beneficiaries to contribute ever greater amounts toward the Medicare program. Overall volume increases translate directly to growth in both Part B spending and premiums. They are also largely responsible for the negative updates required by the sustainable growth rate (SGR) formula. And volume growth may be a sign that some services in the physician fee schedule are mispriced.

**Chart 8-5. Shifts in physician services volume from major procedures and E&M and toward imaging, tests, and other procedures, 2002–2007**

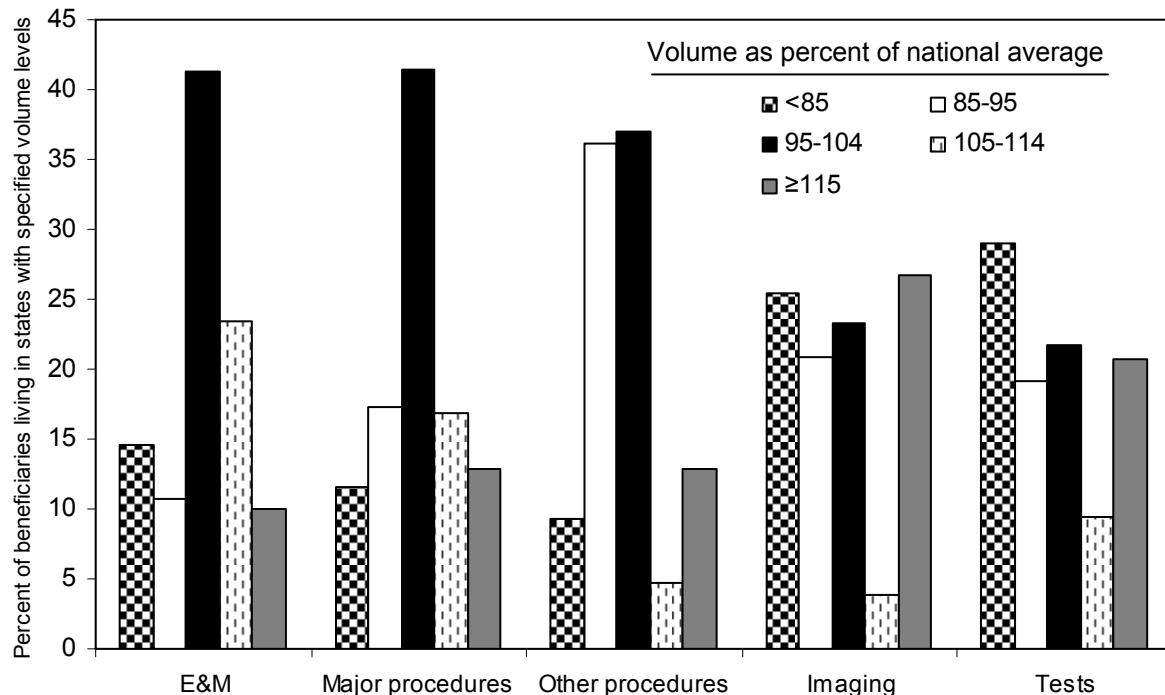


Note: E&M (evaluation and management). Volume is units of service multiplied by relative value units from the physician fee schedule. Volume for both years is measured on a common scale, with relative value units for 2007.

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

- Among broad categories of services, evaluation and management (E&M) services—including office visits and visits to hospital inpatients—account for the largest share of volume. In 2007, E&M was 42.3 percent of the total, followed by other procedures (21.2 percent), imaging (16.0 percent), major procedures (8.8 percent), and tests (5.0 percent). Services in other categories—such as chiropractic—accounted for the remaining 6.5 percent.
- With higher growth rates for some services and lower growth rates for others, the distribution of volume across the service categories has shifted. For instance, as a proportion of total volume, evaluation and management services fell between 2002 and 2007 from 45.7 percent to 42.3 percent. By contrast, imaging’s share of total volume for those years rose from 13.7 percent to 16.0 percent.

**Chart 8-6. State-level volume of physician services per beneficiary compared to national averages, 2006**



Note: E&M (evaluation and management). Volume is units of service multiplied by relative value units from the physician fee schedule. Volume is risk adjusted with hierarchical coexisting condition risk scores.

Source: MedPAC analysis of claims data for a 5 percent sample of Medicare beneficiaries.

- Depending on the type of service and the geographic area, the volume of physician services furnished to Medicare beneficiaries can vary widely. Imaging and tests vary the most. Fewer than 25 percent of beneficiaries live in a state with a volume per beneficiary of these services that is within 5 percent of the national average. By contrast, evaluation and management (E&M) and major procedures vary the least. More than 40 percent of beneficiaries live in a state with a volume per beneficiary of these services that is within 5 percent of the national average.
- In some states, the volume of services could be relatively low because beneficiaries receive services that are not billable under the physician fee schedule. Examples include imaging and tests furnished in hospital outpatient departments. Nonetheless, the high level of volume in other states suggests the potential for more efficient use of resources.

## Chart 8-7. Physicians' 2002 efficiency scores are high correlated with their 2003 scores, using either multilevel or Monte Carlo models

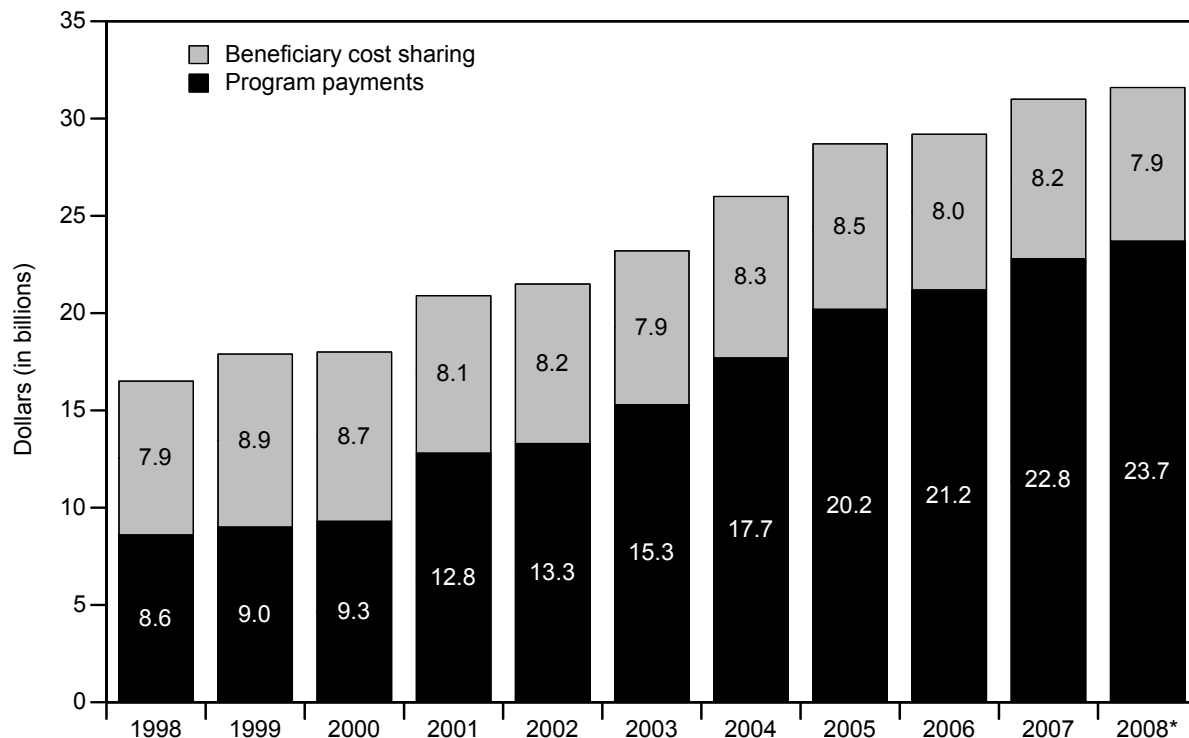
MSA	Multilevel	Monte Carlo
Boston, MA	0.90	0.87
Greenville, SC	0.91	0.89
Miami, FL	0.88	0.86
Minneapolis, MN	0.86	0.84
Orange County, CA	0.89	0.84
Phoenix, AZ	0.90	0.88
Total	0.89	0.87

Note: MSA (metropolitan statistical area). Physicians with fewer than 20 episodes were excluded from the analysis. Correlation coefficients measure how the ranks of items in two different lists compare. A perfect correlation of 1.00 means that the items are at exactly the same rank in both lists. A coefficient of 0 means that there is no relationship between the rank of items on the two lists.

Source: MedPAC analysis of 100 percent sample of 2001–2004 Medicare claims using the Thomson Reuters Medical Episode Grouper<sup>®</sup>.

- Physicians' efficiency scores were calculated by analyzing Medicare claims using the Medical Episode Grouper<sup>®</sup> (MEG<sup>®</sup>) to create clinically distinct episodes of care—a series of clinically related health care services over a defined time period, such as all claims related to a patient's diabetes condition. Episodes were then risk adjusted to account for patient health status and disease severity, and each was attributed to the physician who billed for the most (at least 35 percent) evaluation & management (E&M) dollars in the episode. Physicians' average resource use across episodes was compared to their peers' average resource use across similar episodes within the same specialty and metropolitan statistical area.
- Correlations between physicians' 2002 and 2003 efficiency scores, weighted by each physician's average number of episodes per year are high, indicating good year-to-year stability in the efficiency scores using two statistical methods—one based on a multilevel model and the other based on a Monte Carlo model.
- Physicians with high efficiency scores in 2002 tended to have high scores in 2003 and vice versa.

**Chart 8-8. Spending on all hospital outpatient services, 1998–2008**



Note: Spending amounts are for services covered by the Medicare outpatient prospective payment system and those paid on separate fee schedules (e.g., ambulance services or durable medical equipment) or those paid on a cost basis (e.g., organ acquisition or flu vaccines). They do not include payments for clinical laboratory services.  
\*Estimate.

Source: CMS, Office of the Actuary.

- Overall spending by Medicare and beneficiaries on hospital outpatient services (excluding clinical laboratory services) from calendar year 1998 to 2008 increased by 92 percent, reaching \$31.6 billion. The Office of the Actuary projects continued growth in total spending, averaging 4.3 percent per year from 2005 to 2010. However, projected spending growth per beneficiary is even higher—5.8 percent—because increased enrollment in Medicare Advantage is expected to reduce the number of beneficiaries in traditional Medicare.
- A prospective payment system (PPS) for hospital outpatient services was implemented in August 2000. Services paid under the outpatient PPS represent about 91 percent of spending on all hospital outpatient services.
- In 2001, the first full year of the outpatient PPS, spending under the PPS was \$19.2 billion, including \$11.4 billion by the program and \$7.7 billion in beneficiary cost sharing. The spending in the outpatient PPS represented 92 percent of the \$20.9 billion in spending on hospital outpatient services in 2001. By 2008, spending under the outpatient PPS is expected to rise to \$28.8 billion (\$21.4 billion program spending; \$7.3 billion beneficiary copayments). The outpatient PPS accounted for about 5 percent of total Medicare spending by the program in 2008.
- Beneficiary cost sharing under the outpatient PPS is generally higher than for other sectors, about 27 percent in 2007. Chart 8-12 provides more detail on coinsurance.

## Chart 8-9. Most hospitals provide outpatient services

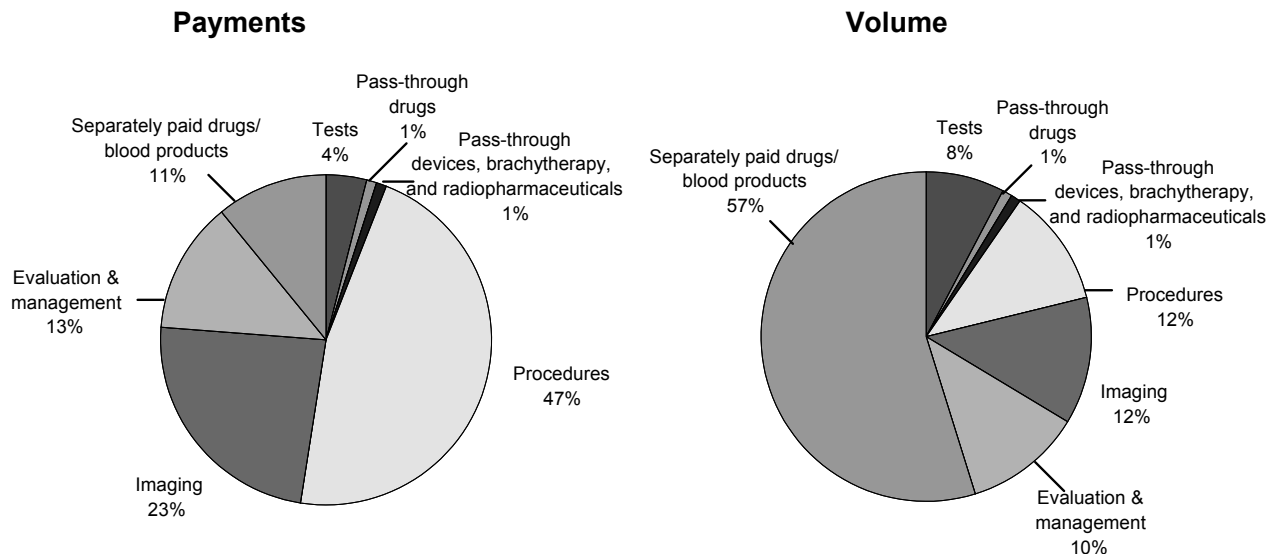
Year	Hospitals	Percent offering		
		Outpatient services	Outpatient surgery	Emergency services
2001	4,347	94%	84%	93%
2002	4,210	94	84	93
2004	3,882	94	86	92
2006	3,651	94	86	91
2008	3,607	94	87	91

Note: Includes services provided or arranged by short-term hospitals. Excludes long-term, Christian Science, psychiatric, rehabilitation, children's, critical access, and alcohol/drug hospitals.

Source: Medicare Provider of Services files from CMS.

- The number of hospitals that furnish services under Medicare's outpatient prospective payment system (PPS) declined from 2001 through 2006, largely due to growth in the number of hospitals converting to critical access hospital status, which allows payment on a cost basis. Since 2006, the number of outpatient PPS hospitals has been stable. In addition, the percent of hospitals providing outpatient services, outpatient surgery, and emergency services has remained stable.
- Almost all hospitals in 2008 provide outpatient (94 percent) and emergency (91 percent) services. The vast majority (87 percent) provide outpatient surgery.

**Chart 8-10. Payments and volume of services under the Medicare hospital outpatient PPS, by type of service, 2007**



Note: PPS (prospective payment system). Payments include both program spending and beneficiary cost sharing but do not include hold-harmless payments to rural hospitals (see Chart 8-13 for further information regarding these payments). Services are grouped into evaluation and management, procedures, imaging, and tests, according to the Berenson-Eggers Type of Service classification developed by CMS. Pass-through drugs, separately paid drugs and blood products, and pass-through devices, brachytherapy, and radiopharmaceuticals are classified by their payment status indicator. Percentages may not sum to 100 percent due to rounding.

Source: MedPAC analysis of the 100 percent special analytic file of outpatient PPS claims for 2007 from CMS.

- Hospitals provide many different types of services in their outpatient departments, including emergency and clinic visits, imaging and other diagnostic services, laboratory tests, and ambulatory surgery.
- The payments for services are distributed differently than volume. For example, procedures account for 47 percent of the payments, but 12 percent of the volume.
- Procedures (e.g., endoscopies, surgeries, skin and musculoskeletal procedures) account for the greatest share of payments for services (47 percent), followed by imaging services (23 percent) and evaluation and management services (13 percent).
- In 2007, separately paid drugs and blood products accounted for 11 percent of payments.

**Chart 8-11. Hospital outpatient services with the highest Medicare expenditures, 2007**

APC title	Share of payments	Volume (thousands)	Payment rate
Total	46%		
All emergency visits	7	11,274	\$156
All clinic visits	4	16,046	65
Cataract procedures with IOL insert	3	586	1,453
Computerized axial tomography with contrast material	3	3,395	251
Diagnostic cardiac catheterization	3	384	2,278
Computerized axial tomography without contrast material	3	4,185	190
Level I plain film except teeth	3	16,129	44
Lower gastrointestinal endoscopy	2	1,252	539
MRI and magnetic resonance angiography without contrast material	2	1,291	349
MRI and magnetic resonance angiography without contrast material followed by contrast material	2	862	499
IMRT treatment delivery	1	1,130	336
Level I upper gastrointestinal procedures	1	865	511
Level II radiation therapy	1	2,492	137
Level III angiography and venography except extremity	1	266	1,280
Level II laparoscopy	1	188	2,677
Level V drug administration*	1	2,665	111
Level III hospital clinic visits	1	3,262	84
Level III drug administration*	1	5,917	49
Level III nerve injections	1	802	391
Rituximab cancer treatment	1	541	496
Computerized axial tomography without contrast material followed by contrast material	1	904	298
Insertion/Replacement of a permanent dual chamber pacemaker*	1	38	6,932
Non-coronary angioplasty or atherectomy	1	120	2,639
Average APC		441	77

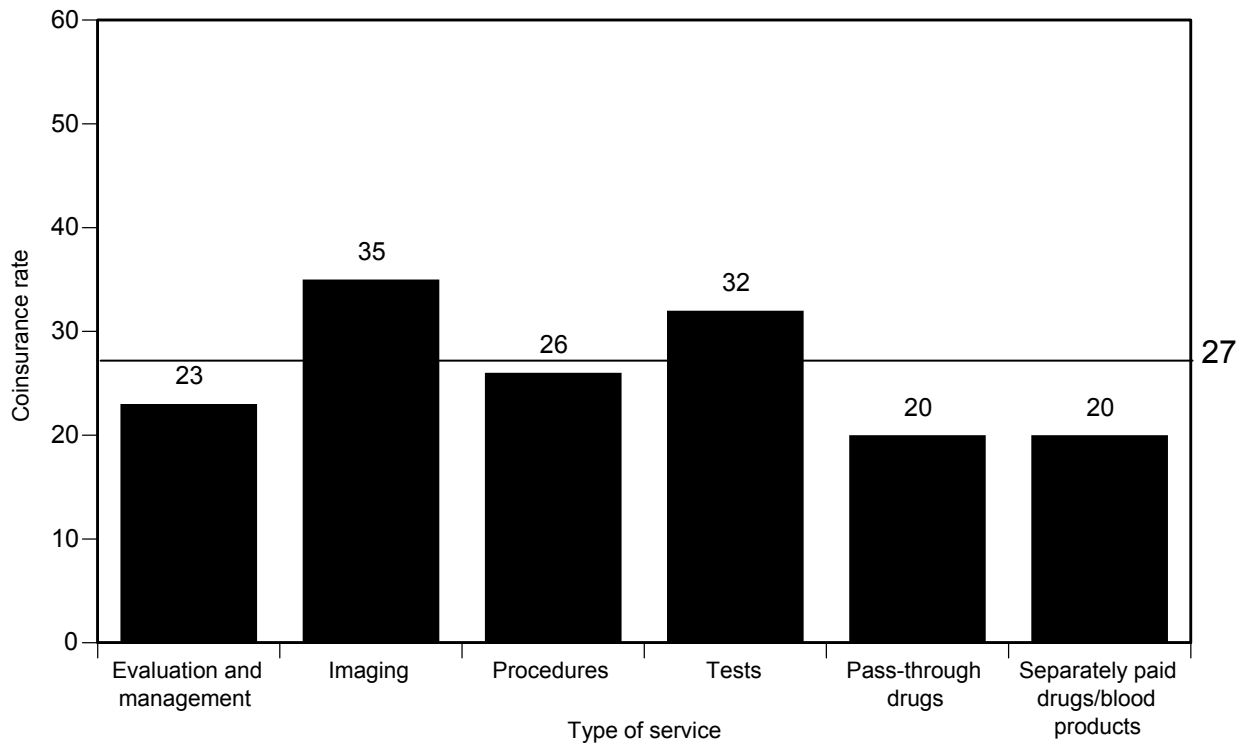
Note: APC (ambulatory payment classification), IOL (intraocular lens), IMRT (intensity-modulated radiation therapy), MRI (magnetic resonance imaging). The payment rates for "All emergency visits" and "All clinic visits" are weighted averages of payment rates from five APCs.

\*Did not appear on the list for 2006.

Source: MedPAC analysis of 100 percent analytic file of outpatient prospective payment system claims for calendar year 2007.

- Although the outpatient prospective payment system covers thousands of services, expenditures are concentrated in a handful of categories that have high volume, high payment rates, or both.

**Chart 8-12. Medicare coinsurance rates, by type of hospital outpatient service, 2007**



Note: Services were grouped into categories of evaluation and management, imaging, procedures, and tests according to the Berenson-Eggers Type of Service classification developed by CMS. Pass-through drugs and separately paid drugs and blood products are classified by their payment status indicators.

Source: MedPAC analysis of 2007 outpatient prospective payment system claims that CMS used to set payment rates for 2009.

- Historically, beneficiary coinsurance payments for hospital outpatient services were based on hospital charges, while Medicare payments were based on hospital costs. As hospital charges grew faster than costs, coinsurance represented a large share of total payments over time.
- In adopting the outpatient prospective payment system, the Congress froze the dollar amounts for coinsurance. Consequently, beneficiaries' share of total payments will decline over time.
- The coinsurance rate is different for each service. Some services, such as imaging, have very high rates of coinsurance—35 percent. Other services, such as evaluation and management services, have coinsurance rates of 23 percent.
- In 2007, the average coinsurance rate was about 27 percent.

**Chart 8-13. Effects of hold-harmless and SCH transfer payments on hospitals' outpatient revenue, 2005–2007**

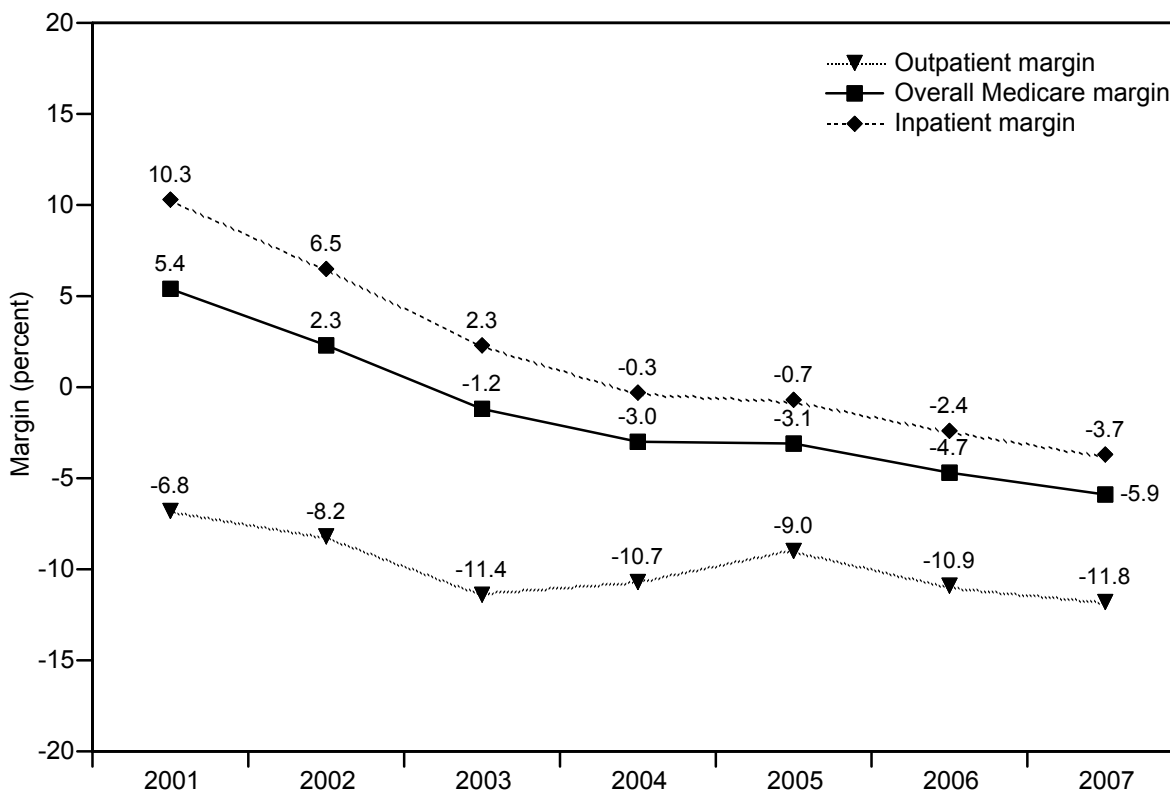
Hospital group	2005		2006		2007	
	Number of hospitals	Share of payments from hold harmless and SCH transfer	Number of hospitals	Share of payments from hold harmless and SCH transfer	Number of hospitals	Share of payments from hold harmless and SCH transfer
All hospitals	3,369	0.4%	3,323	0.3%	3,275	0.2%
Urban	2,395	0.1	2,360	−0.3	2,330	−0.4
Rural SCHs	421	3.8	414	5.3	400	5.8
Rural ≤ 100 beds	385	3.1	385	3.2	380	2.9
Other rural	168	0.1	164	−0.3	165	−0.4
Major teaching	284	0.0	283	−0.2	279	−0.3
Other teaching	754	0.1	735	−0.1	726	−0.2
Nonteaching	2,331	0.9	2,305	0.7	2,270	0.6

Note: SCH (sole-community hospital). A small number of hospitals could not be classified due to missing data. SCH transfer payments began in 2006.

Source: MedPAC analysis of Medicare Cost Report files from CMS.

- Medicare implemented the hospital outpatient prospective payment system (PPS) in 2000. Previously, Medicare paid for hospital outpatient services on the basis of hospital costs.
- Recognizing that some hospitals might receive lower payments under the outpatient PPS than they had under the earlier system, the Congress established transitional corridor payments. The corridors were designed to make up part of the difference between payments that hospitals would have received under the old payment system and those under the new outpatient PPS.
- Transitional corridor payments expired for most hospitals at the end of 2003. However, some rural hospitals continue to receive a special category of transitional corridor payments called “hold-harmless.” Qualifying hospitals receive the greater of the payments they would have received from the previous system or the actual outpatient PPS payments.
- Hospitals that qualified for hold-harmless payments in 2004 and 2005 included sole-community hospitals (SCHs) located in rural areas and other small rural hospitals (100 or fewer beds). After 2005, small rural hospitals continued to be eligible for hold-harmless payments but SCHs were no longer qualified. However, in 2006, CMS implemented a policy (the “SCH transfer”) that increased outpatient payments to rural SCHs by 7.1 percent above the standard rates. This policy is budget neutral by reducing payments to all other hospitals by 0.4 percent.
- Hold-harmless payments represented 0.4 percent of total outpatient PPS payments for all hospitals in 2005. However, the percentage of total outpatient payments from the hold-harmless policy was 3.8 percent for rural SCHs and 3.1 percent for small rural hospitals. Data from 2006 and 2007 indicate rural SCHs have benefited more from the SCH transfer policy than they did from hold-harmless payments. SCH transfer payments were 5.3 percent of SCH outpatient revenue in 2006 and 5.8 percent in 2007. Small rural hospitals continued to benefit from hold-harmless payments in 2006 and 2007. These payments were 3.2 percent of their total outpatient payments in 2006 and 2.9 percent in 2007.

**Chart 8-14. Medicare hospital outpatient, inpatient, and overall Medicare margins, 2001–2007**

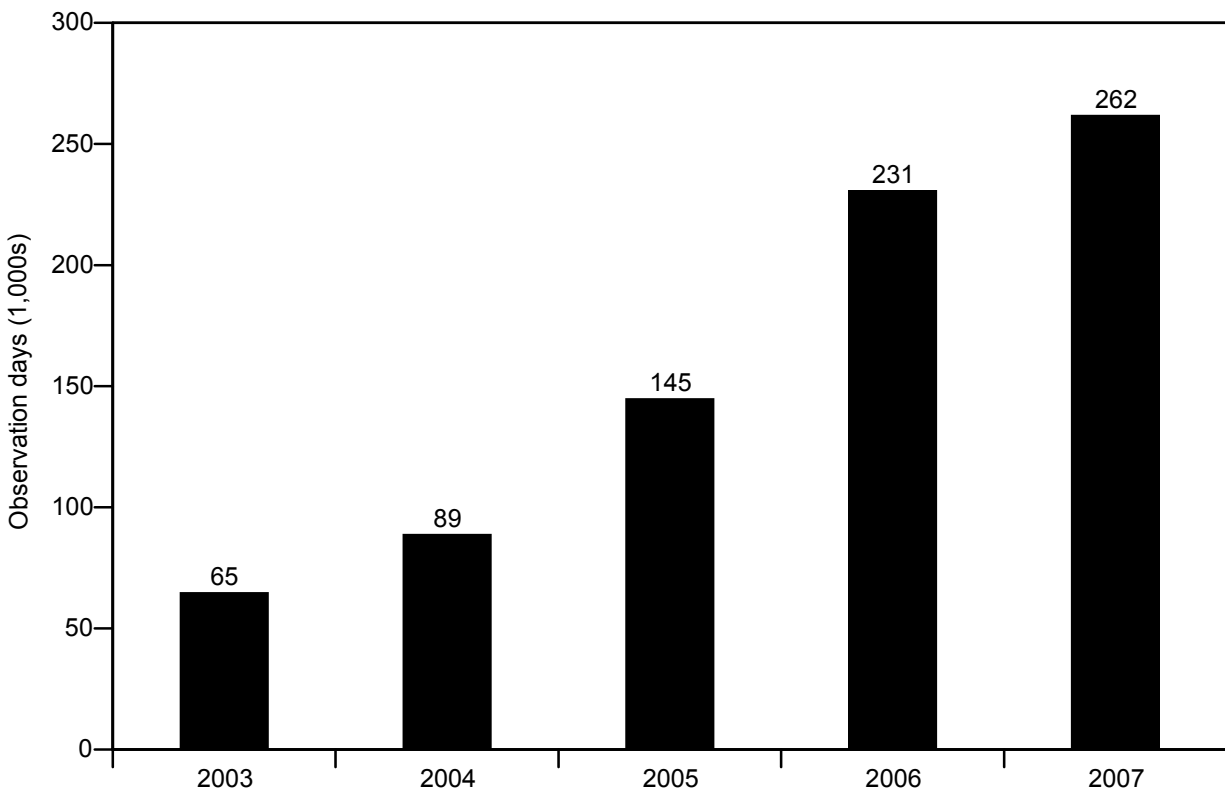


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs. Analysis excludes critical access hospitals. Overall Medicare margins cover the costs and payments of hospital inpatient, outpatient, psychiatric and rehabilitation (not paid under the prospective payment system), skilled nursing facilities, and home health services, as well as graduate medical education.

Source: MedPAC analysis of Medicare cost report data from CMS.

- Hospital outpatient margins vary. In 2007, while the aggregate margin was –11.8 percent, 25 percent of hospitals had margins of –22.7 percent or lower, and 25 percent had margins of –0.5 percent or higher.
- Given hospital accounting practices, margins for hospital outpatient services must be considered in the context of Medicare payments and hospital costs for the full range of services provided to Medicare beneficiaries. Hospitals allocate overhead to all services, so we generally consider costs and payments overall.
- The decline in outpatient margins from 2001 to 2003 may reflect the decline in the number of drugs and devices eligible for pass-through payments. The margin improved in 2004 and 2005, which was fueled, at least in part, by many drugs becoming specified covered outpatient drugs. In 2004 and 2005, these drugs were paid on the basis of average wholesale price, which increased their payment rates. These additional payments were not budget neutral, so aggregate outpatient payments increased. The margin declined in 2006, reflecting a change that paid for these drugs on the basis of average sales price rather than average wholesale price and an end to hold-harmless payments to sole-community hospitals. Finally, the margin declined again in 2007, which may be partly due to lower hold-harmless payments for hospitals that still qualify for them.

**Chart 8-15. Number of separately paid observation days has increased, 2003–2007**



Note: Observation services are paid on a per diem basis.

Source: MedPAC analysis of outpatient prospective payment system claims that CMS uses to set payment rates, 2003–2007.

- Hospitals use observation care to determine whether a patient should be hospitalized for inpatient care or sent home.
- Medicare began providing separate payments to hospitals for observation services on April 1, 2002. Previously, the observation services were packaged into the payments for the emergency room or clinic visits that occur with the observation care.
- The number of separately paid observation days has increased substantially from 65,000 in 2003 to 262,000 in 2007.

**Chart 8-16. Number of Medicare-certified ASCs increased by over 50 percent, 2001–2008**

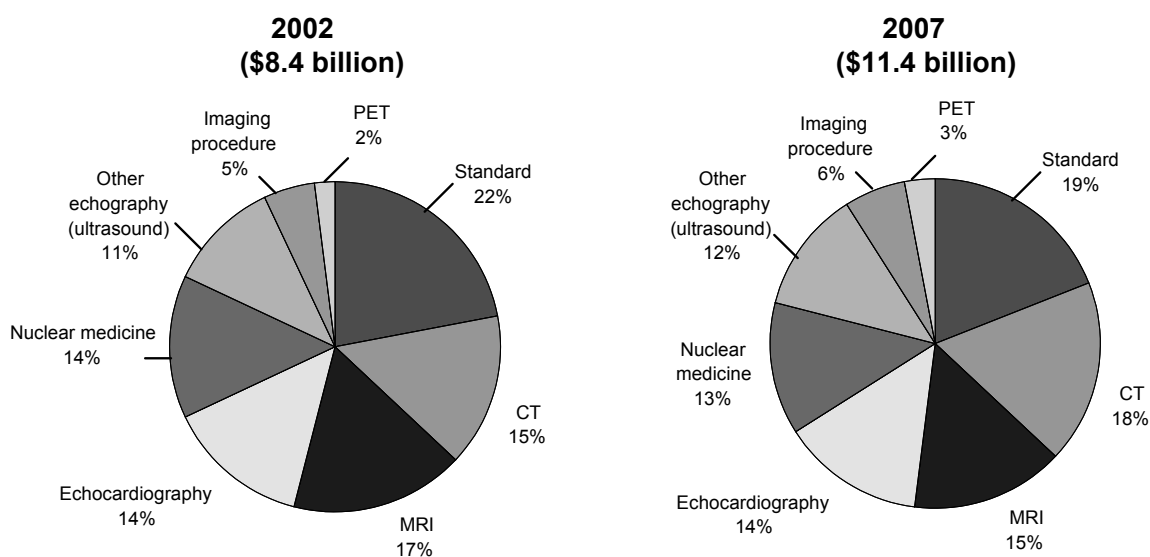
	2001	2002	2003	2004	2005	2006	2007	2008
Medicare payments (billions of dollars)	\$1.6	\$1.9	\$2.2	\$2.5	\$2.7	\$2.8	\$2.9	\$3.0
Number of centers	3,302	3,545	3,848	4,140	4,441	4,700	4,991	5,174
New centers	286	306	368	366	355	331	346	219
Exiting centers	53	63	65	74	54	72	55	36
Net percent growth in number of centers from previous year	9.0%	7.4%	8.5%	7.6%	7.3%	5.8%	6.2%	3.7%
Percent of all centers that are:								
For profit	94	95	95	96	96	96	96	96
Nonprofit	5	5	5	4	4	4	4	4
Urban	88	87	87	87	87	88	88	88
Rural	12	13	13	13	13	12	12	12

Note: ASC (ambulatory surgical center). Medicare payments include program spending and beneficiary cost sharing for ASC facility services. Payments for 2008 are preliminary and subject to change. Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of provider of services file from CMS, 2008. Payment data are from CMS, Office of the Actuary.

- Ambulatory surgical centers (ASCs) are entities that only furnish outpatient surgical services not requiring an overnight stay. To receive payments from Medicare, ASCs must meet Medicare’s conditions of coverage, which specify minimum facility standards.
- In 2008, Medicare began using a new payment system for ASC services that is based on the hospital outpatient prospective payment system (PPS). ASC rates are less than hospital outpatient rates. In contrast to the old ASC system, which had only nine procedure groups, the new system has several hundred procedure groups. The new system will be phased in over four years.
- Total Medicare payments for ASC services increased by 9.7 percent per year, on average, from 2001 through 2008. Payments per fee-for-service beneficiary grew by 9.4 percent per year during this period. Between 2007 and 2008, total payments rose by 4.6 percent and payments per beneficiary grew by 6.9 percent. The growth in total spending was slowed in 2006, 2007, and 2008 by large increases in the number of Medicare Advantage enrollees, who are not included in these aggregate totals. Spending growth was also slowed in 2007 by a provision in the Deficit Reduction Act of 2005, which capped the ASC rate for each service at the outpatient PPS rate.
- The number of Medicare-certified ASCs grew at an average annual rate of 6.6 percent from 2001 through 2008. Each year from 2001 through 2008, an average of 322 new Medicare-certified facilities entered the market, while an average of 59 closed or merged with other facilities.

**Chart 8-17. Medicare spending for imaging services, by type of service, 2002 and 2007**

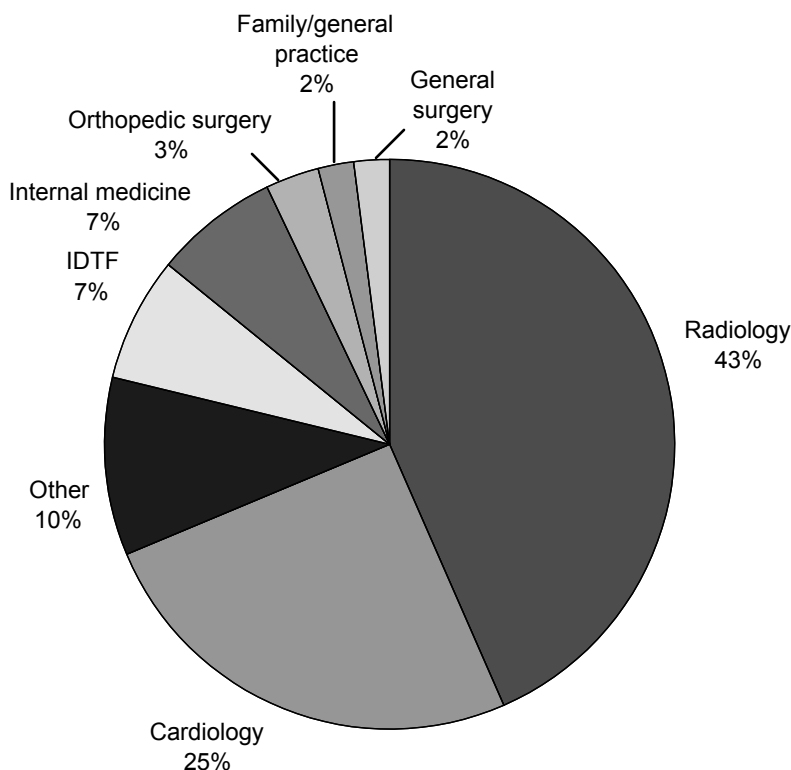


Note: CT (computed tomography), MRI (magnetic resonance imaging), PET (positron emission tomography). Imaging procedure includes cardiac catheterization and angiography. Medicare payments include program spending and beneficiary cost sharing for physician fee schedule imaging services. Payments include carrier-priced codes but exclude radiopharmaceuticals. Totals may not sum to 100 percent due to rounding.

Source: MedPAC analysis of 100 percent physician/supplier procedure summary file from CMS, 2002 and 2007.

- One-third of Medicare spending in 2007 for imaging under the physician fee schedule was for computed tomography (CT) and magnetic resonance imaging (MRI) studies. Ultrasound services (echocardiography and other echography) accounted for about one-quarter of imaging spending.
- Medicare spending for imaging services under the physician fee schedule grew by 12.1 percent per year between 2002 and 2006, from \$8.4 billion to \$13.2 billion. Spending per fee-for-service (FFS) beneficiary grew by 11.1 percent per year.
- In 2007, CMS implemented a provision from the Deficit Reduction Act of 2005 (DRA) that capped physician fee schedule rates for the technical component of imaging services at the level of hospital outpatient rates. Although the number of imaging studies continued to grow, spending declined from \$13.2 billion in 2006 to \$11.4 billion in 2007, largely as a result of the DRA provision. Overall imaging spending dropped by 13.9 percent and imaging spending per FFS beneficiary fell by 12.2 percent. However, the number and intensity of imaging services per FFS beneficiary increased by 3.8 percent from 2006 to 2007.

**Chart 8-18. Radiologists received about 40 percent of physician fee schedule payments for imaging services, 2007**

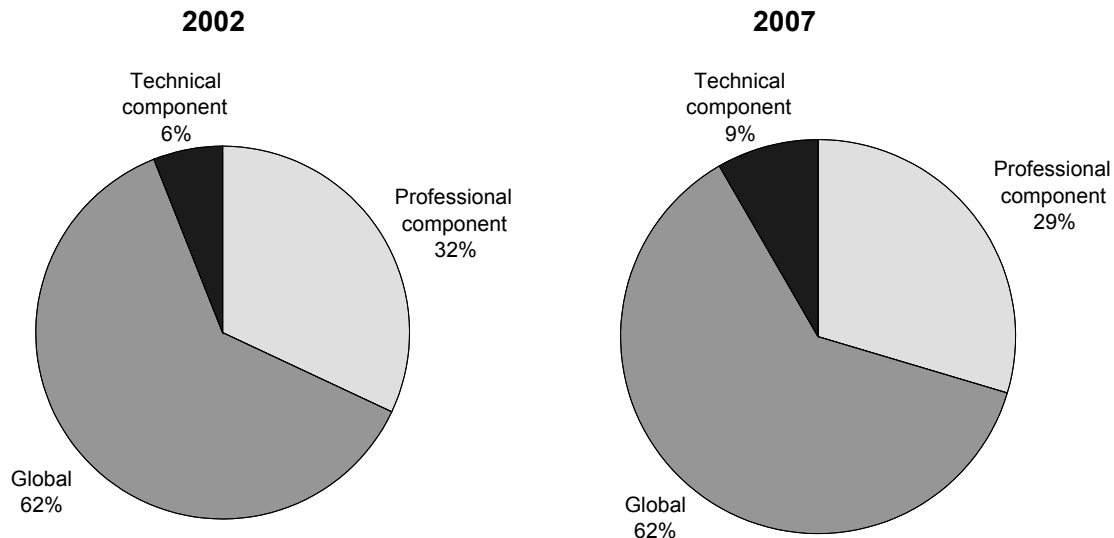


Note: IDTF (independent diagnostic testing facility). Medicare payments include program spending and beneficiary cost sharing for physician fee schedule imaging services. Payments include carrier-priced codes but exclude radiopharmaceuticals. Total fee schedule imaging spending was \$11.4 billion in 2007. IDTFs are independent of a hospital and physician's office and provide only outpatient diagnostic services. Other includes other medical, urology, ophthalmology, other surgical, gastroenterology, anesthesiology, and thoracic surgery.

Source: MedPAC analysis of 100 percent physician/supplier procedure summary file from CMS, 2007.

- Imaging services paid under Medicare's physician fee schedule involve two parts: the technical component, which covers the cost of the equipment, supplies, and nonphysician staff, and the professional component, which covers the physician's work in interpreting the study and writing a report. A physician who both performs and interprets the study submits a global bill, which includes the technical and professional components.
- Although radiologists received three-quarters of total physician fee schedule payments for professional component services in 2007, they accounted for much smaller shares of spending for global bills (32 percent) and technical component services (13 percent).
- Between 2002 and 2007, radiologists' share of total imaging payments declined by 1.5 percent per year while the shares for other providers increased. For example, general surgery's share of payments grew by 5.5 percent per year, internal medicine by 2.0 percent per year, and cardiology by 1.9 percent per year.

## Chart 8-19. Physician fee schedule spending for imaging has shifted from professional component to technical component services, 2002 to 2007



Note: Medicare spending includes program spending and beneficiary cost sharing for physician fee schedule imaging services. Spending includes carrier-priced codes but excludes radiopharmaceuticals.

Source: MedPAC analysis of 100 percent physician/supplier procedure summary file from CMS, 2002 and 2007.

- Imaging services paid under Medicare's physician fee schedule involve two parts: the technical component, which covers the cost of the equipment, supplies, and nonphysician staff, and the professional component, which covers the physician's work in interpreting the study and writing a report. Technical component claims are billed for imaging studies performed in physician offices and freestanding centers, while professional component claims may be billed for studies performed in any setting. A physician who both performs and interprets a study submits a global bill, which includes the technical and professional components. The technical portion of imaging services performed in hospital outpatient departments is paid under the hospital outpatient prospective payment system.
- Spending for technical component services doubled from \$500 million in 2002 to \$1 billion in 2007, and their share of imaging spending increased from 6 percent to 9 percent. Part of this growth reflects a shift of imaging from hospitals to physician offices and freestanding centers.
- Spending for professional component services increased from \$2.7 billion in 2002 to \$3.2 billion in 2007, but declined as a share of total imaging spending from 32 percent to 29 percent.
- Spending on global services increased from \$5.2 billion in 2002 to \$7.1 billion in 2007.

## Web links. Ambulatory care

### Physicians

- For more information on Medicare's payment system for physician services, see MedPAC's Payment Basics series.

[http://medpac.gov/documents/MedPAC\\_Payment\\_Basics\\_08\\_Physician.pdf](http://medpac.gov/documents/MedPAC_Payment_Basics_08_Physician.pdf)

- Chapter 2B of the MedPAC March 2009 Report to the Congress and Appendix A of the June 2009 Report to the Congress provide additional information on physician services.

[http://www.medpac.gov/chapters/Mar09\\_Ch02b.pdf](http://www.medpac.gov/chapters/Mar09_Ch02b.pdf)  
[http://www.medpac.gov/chapters/Jun09\\_AppA.pdf](http://www.medpac.gov/chapters/Jun09_AppA.pdf)

- MedPAC's congressionally mandated report, *Assessing Alternatives to the Sustainable Growth Rate (SGR) System*, examines the SGR and analyzes alternative mechanisms for controlling physician expenditures under Medicare.

[http://www.medpac.gov/documents/Mar07\\_SGR\\_mandated\\_report.pdf](http://www.medpac.gov/documents/Mar07_SGR_mandated_report.pdf)

- Congressional testimony by the Chairman and Executive Director of MedPAC discusses payment for physician services in the Medicare program. This includes:

Payments to selected fee-for-service providers (May 15, 2007)  
[http://www.medpac.gov/documents/051507\\_WandM\\_Testimony\\_MedPAC\\_FFS.pdf](http://www.medpac.gov/documents/051507_WandM_Testimony_MedPAC_FFS.pdf)

Options to improve Medicare's payments to physicians (May 10, 2007)  
[http://www.medpac.gov/documents/051007\\_Testimony\\_MedPAC\\_physician\\_payment.pdf](http://www.medpac.gov/documents/051007_Testimony_MedPAC_physician_payment.pdf)

Assessing alternatives to the Sustainable Growth Rate System (March 6, 2007)  
[http://www.medpac.gov/documents/030607\\_W\\_M\\_testimony\\_SGR.pdf](http://www.medpac.gov/documents/030607_W_M_testimony_SGR.pdf)

Assessing alternatives to the Sustainable Growth Rate System (March 6, 2007)  
[http://www.medpac.gov/documents/030607\\_E\\_C\\_testimony\\_SGR.pdf](http://www.medpac.gov/documents/030607_E_C_testimony_SGR.pdf)

Assessing alternatives to the Sustainable Growth Rate System (March 1, 2007)  
[http://www.medpac.gov/documents/030107\\_Finance\\_testimony\\_SGR.pdf](http://www.medpac.gov/documents/030107_Finance_testimony_SGR.pdf)

MedPAC recommendations on imaging services (July 18, 2006)  
[http://medpac.gov/publications/congressional\\_testimony/071806\\_Testimony\\_imaging.pdf](http://medpac.gov/publications/congressional_testimony/071806_Testimony_imaging.pdf)

Medicare payment to physicians (July 25, 2006)  
[http://www.medpac.gov/publications/congressional\\_testimony/072506\\_Testimony\\_physician.pdf](http://www.medpac.gov/publications/congressional_testimony/072506_Testimony_physician.pdf)

- The 2008 Annual Report of the Boards of Trustees of the Hospital Insurance and Supplementary Medical Insurance Trust Funds provides details on historical and projected spending on physician services.

<http://www.cms.hhs.gov/ReportsTrustFunds/downloads/tr2009.pdf>

## Hospital outpatient services

- For more information on Medicare's payment system for hospital outpatient services, see MedPAC's Payment Basics series.

[http://www.medpac.gov/documents/MEDPAC\\_Payment\\_Basics\\_08\\_opd.pdf](http://www.medpac.gov/documents/MEDPAC_Payment_Basics_08_opd.pdf)

- Section 2A of the MedPAC 2009 Report to the Congress provides information on the status of hospital outpatient departments including supply, volume, profitability, and cost growth.

[http://www.medpac.gov/chapters/Mar09\\_Ch02a.pdf](http://www.medpac.gov/chapters/Mar09_Ch02a.pdf)

- Section 2A of the MedPAC 2006 Report to the Congress provides information on the current status of "hold-harmless" payments and other special payments for rural hospitals.

[http://www.medpac.gov/publications/congressional\\_reports/Mar06\\_Ch02a.pdf](http://www.medpac.gov/publications/congressional_reports/Mar06_Ch02a.pdf)

- Chapter 3A of the MedPAC March 2004 Report to the Congress provides additional information on hospital outpatient services, including outlier and transitional corridor payments.

[http://www.medpac.gov/publications/congressional\\_reports/Mar04\\_Ch3A.pdf](http://www.medpac.gov/publications/congressional_reports/Mar04_Ch3A.pdf)

- More information on new technology and pass-through payments can be found in Chapter 4 of the MedPAC March 2003 Report to the Congress.

[http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch4.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch4.pdf)

## Ambulatory surgical centers

- For more information on Medicare's payment system for ambulatory surgical centers, see MedPAC's Payment Basics series.

[http://medpac.gov/documents/MedPAC\\_Payment\\_Basics\\_08\\_ASC.pdf](http://medpac.gov/documents/MedPAC_Payment_Basics_08_ASC.pdf)

- Chapter 2B of the MedPAC March 2009 Report to the Congress provides additional information on ambulatory surgical centers.

[http://www.medpac.gov/chapters/Mar09\\_Ch02B.pdf](http://www.medpac.gov/chapters/Mar09_Ch02B.pdf)

