SECTION 9

Post-acute care

Skilled nursing facilities
Home health agencies
Long-term care hospitals
Inpatient rehabilitation facilities

Chart 9-1. Growth in post-acute care providers has moderated, but home health agencies continue to increase

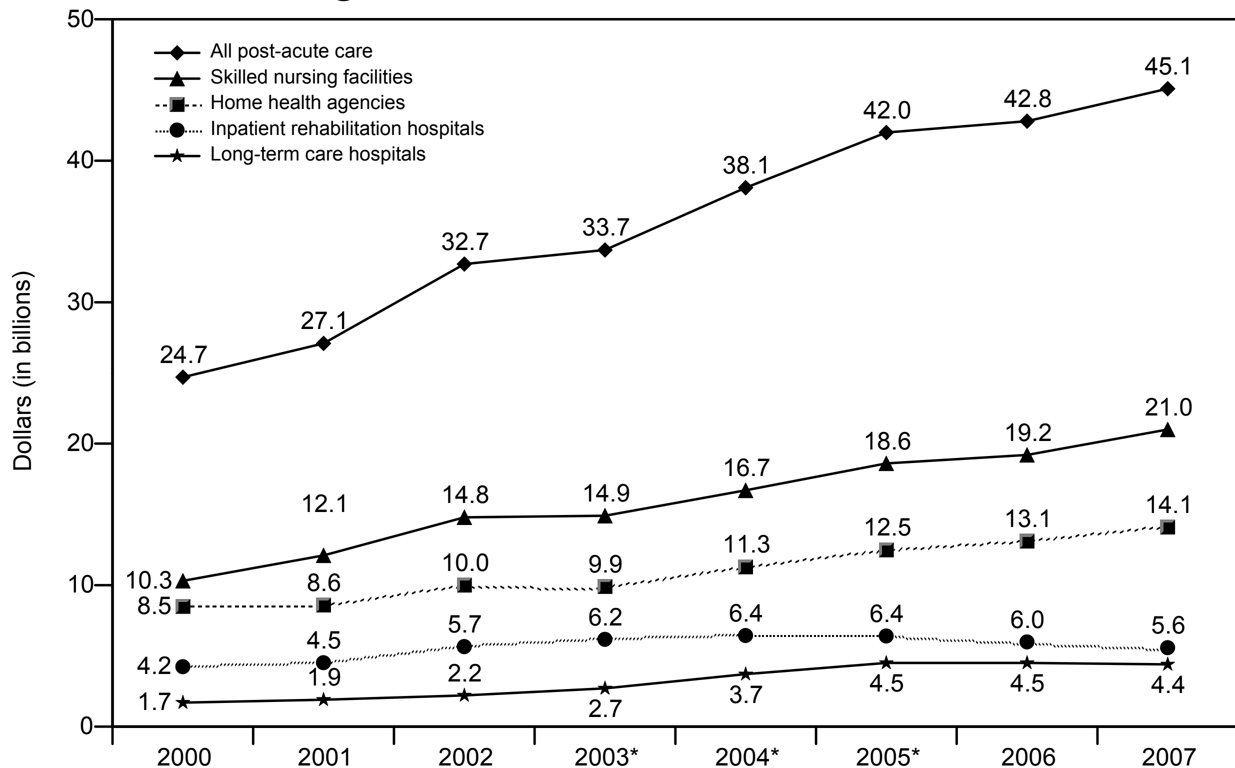
	2000	2003	2006	2007	Average annual percent change 2000–2006	Percent change 2006–2007
Home health agencies	6,881	7,223	8,880	9,227	4.3%	3.9%
Long-term care hospitals	263	334	394	394	7.0	0.0
Inpatient rehabilitation facilities	1,117	1,211	1,224	1,202	1.5	–0.6
Skilled nursing facilities	14,777	14,876	15,008	15,060	0.3	0.3

Note: The skilled nursing facility count does not include swing beds.

Source: MedPAC analysis of data from Certification and Survey Provider Enhanced Reporting on CMS's Survey and Certification's Providing Data Quickly system for 1996–2007 and CMS Provider of Service data.

- Growth in the number of all post-acute care provider types moderated in 2006–2007. In all cases, the increase between 2006 and 2007 is lower than the recent average annual rate of growth.
- Since 2006, the number of home health agencies has grown 3.9 percent per year.
- The number of long-term care hospitals has increased, on average, 5.9 percent per year since 2000, although the number did not grow between 2006 and 2007.
- The number of inpatient rehabilitation facilities (both rehabilitation hospitals and rehabilitation units) grew 1.5 percent annually between 2000 and 2006 but declined slightly in the last year.
- The total supply of skilled nursing facilities has remained relatively constant since 2000, growing at an average of 0.3 percent per year. The number of hospital-based units declined nearly 6 percent per year on average, while freestanding facilities grew annually about 1 percent.

Chart 9-2. Spending for post-acute care has risen in each setting between 2000 and 2007



Note: These numbers are program spending only and do not include beneficiary copayments.
*Estimated by CMS.

Source: Centers for Medicare & Medicaid Services, Office of the Actuary.

- Medicare has prospective payment systems (PPSs) for the four post-acute care settings. CMS implemented these PPSs at the following times: skilled nursing facilities, July 1998; home health agencies, October 2000; inpatient rehabilitation facilities, January 2002; and long-term care hospitals, October 2002. Although CMS intended to use these payment systems to control Medicare spending for post-acute care, spending has increased an average of 9 percent per year since 2000.

- From 2000 through 2007, Medicare spending for long-term care hospitals (LTCHs) increased the fastest—an average 14.7 percent per year. During the same period, spending for skilled nursing facilities increased an average 10.7 percent, spending for home health agencies increased an average 7.5 percent, and spending for inpatient rehabilitation facilities (IRFs) increased an average 4 percent per year. For 2007, CMS estimated that total spending for post-acute care was about $45 billion.

- Post-acute care currently makes up about 15 percent of Medicare's fee-for-service spending. Spending during 2006–2007 moderated for all post-acute care services except home health care. During this same period, spending for IRFs and LTCHs declined.

- The growth in spending was slowed in 2006 and 2007 by large increases in the number of Medicare Advantage enrollees, who are not included in these aggregate totals.

Chart 9-3. Use of post-acute care after discharge from acute care hospitals, 2006

PAC setting	Percent discharged from hospital to PAC setting	Percent rehospitalized after using PAC setting	Percent died in PAC setting	Percent discharged to a second PAC setting	Most common second PAC setting used
SNF	17.3%	22.0%	5.4%	29.3%	Home health
Home health	16.0	18.1	0.8	2.3	Hospice
Inpatient rehabilitation	3.2	9.4	0.4	56.8	Home health
Hospice	2.1	4.5	82.2	2.4	Home health
Long-term care hospital	1.0	10.0	15.5	53.4	SNF
Inpatient psychiatric	0.5	8.7	0.4	25.4	SNF
Total	40.0	18.0	6.2	19.8	Home health

Note: PAC (post-acute care), SNF (skilled nursing facility). Use of home health care and hospice is based on care that starts within three days of discharge. Other PAC care starts within one day of discharge. Home health use includes episodes that overlap an inpatient stay.

Source: MedPAC analysis of 2006 claims files from CMS.

- Two out of five Medicare patients discharged alive from the hospital use post-acute care (PAC).
- Skilled nursing facilities are the most common PAC setting, used by 17 percent of beneficiaries after discharge, followed by home health care, which is used by 16 percent of beneficiaries. Close to half the beneficiaries that were using home health care after discharge (47 percent) were also using home health care before their admission to the hospital.
- A sizable share of SNF users (22 percent) and home health users (18 percent) are readmitted back to a hospital during their PAC episode. The rate of readmission back to the hospital is 10 percent or less for the other PAC settings.
- More than half of all inpatient rehabilitation facility (IRF) and long-term care hospital (LTCH) users go on to use a second PAC setting. The most common PAC setting used following IRF care is home health. The most common setting following LTCH care is the SNF. More than one-quarter of SNF patients are also discharged to a second PAC setting, the most common setting being home health care. The discharge destination of SNF patients can very greatly between hospital-based and freestanding facilities (see Chart 9-11).
- As would be expected, the vast majority of hospice patients die while in the hospice. A large share of long-term care hospital (LTCH) beneficiaries (15 percent) die while in a LTCH. The share of Medicare SNF patients that die in the SNF is 5 percent. Less than 1 percent of patients discharged to home health, inpatient rehabilitation, and inpatient psychiatric die during their PAC stay.

Chart 9-4. Ten most common diagnoses among Medicare SNF patients accounted for more than a third of SNF admissions in 2005

Diagnosis code from hospital stay	Diagnosis	Share of SNF admissions
209	Major joint and limb reattachment of lower extremity	5.6%
089	Simple pneumonia and pleurisy age >17, with CC	5.3
127	Heart failure and shock	4.9
210	Hip and femur procedures except major joint age >17, with CC	3.8
014	Intracranial hemorrhage and stroke with infarction	3.6
416	Septicemia, age >17	3.6
320	Kidney and urinary tract infections age >17, with CC	3.2
296	Nutritional and miscellaneous metabolic disorders age >17, with CC	2.6
079	Respiratory infections and inflammations age >17, with CC	2.4
316	Renal failure	2.2
	Total	37.2

Note: SNF (skilled nursing facility), CC (complication or comorbidity). The diagnosis code from hospital stay is the discharge diagnosis related group.

Source: MedPAC analysis of DataPRO files from CMS, 2005.

- The most common diagnosis for a skilled nursing facility (SNF) admission in 2005 was a major joint and limb reattachment procedure of the lower extremity, typically a hip or knee replacement.
- Ten conditions accounted for about 37 percent of all admissions to SNFs in 2005.
- All SNFs (hospital-based and freestanding facilities, and nonprofit and for-profit facilities) had the same top 10 diagnoses, although the rank orderings of the top 4 conditions differed slightly by SNF type.

Chart 9-5. SNF volume per fee-per-service enrollee continues to increase

	2004	2005	2006	Change 2005–2006
SNF users (unique count)	1,580,288	1,670,411	1,673,284	0.2%
Total SNF volume				
Covered admissions	2,419,943	2,549,408	2,543,133	–0.2
Covered days (in thousands)	62,364	66,002	67,143	1.7
Covered days per admission	25.8	25.9	26.4	1.9
Volume per 1,000 fee-for-service enrollees				
Covered admissions	67	70	72	2.9
Covered days	1,732	1,817	1,892	4.1

Note: SNF (skilled nursing facility).

Source: Beneficiary counts from MedPAC analysis of MedPAR data. Days and admissions data from CMS, Office of Research, Development and Information.

- Between 2005 and 2006, admissions declined slightly and the number of days increased, resulting in longer average stays. However, during this period more beneficiaries participated in Medicare Advantage plans (whose volume is not included in the measures); therefore, admissions and days per fee-for-service enrollee increased.

- Some of the growth in fee-for-service admissions and days may reflect a shift in site of care from inpatient rehabilitation facilities (IRFs) to skilled nursing facilities (SNFs). Of the top 10 hospital diagnosis related groups (DRGs) with IRF destinations, the share of patients going to SNFs increased for 8 of the 10 DRGs between 2003 and 2006.

Chart 9-6. A growing share of Medicare stays and payments go to freestanding and for-profit SNFs

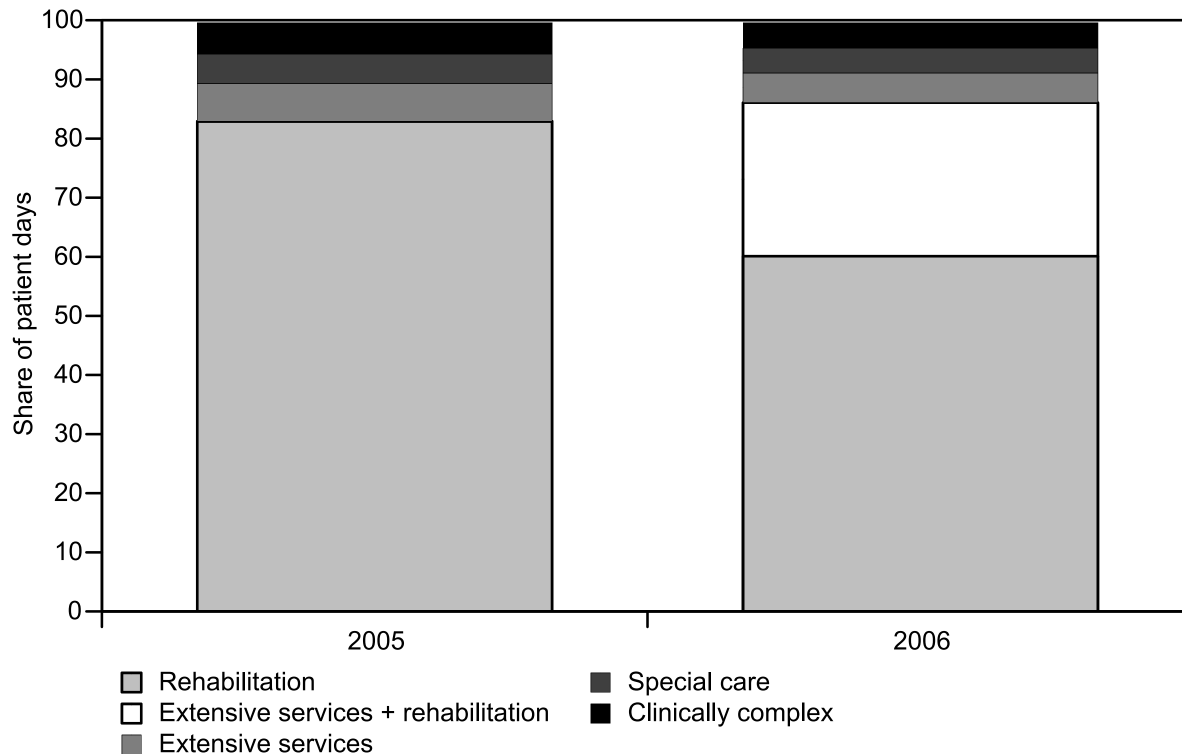
	Facilities			Medicare-covered stays			Medicare payments		
Type of SNF	2004	2005	2006	2004	2005	2006	2004	2005	2006
Freestanding	91%	92%	92%	85%	87%	89%	92%	93%	94%
Hospital based	9	8	8	15	13	11	8	7	6
Urban	67	67	67	79	79	79	81	81	81
Rural	33	33	33	21	21	21	19	19	19
For profit	67	68	68	65	66	67	71	72	73
Nonprofit	28	28	28	31	30	29	25	25	24
Government	5	5	5	4	4	4	3	3	3

Note: SNF (skilled nursing facility). Totals may not sum to 100 due to rounding.

Source: MedPAC analysis of the Provider of Services and Medicare Provider Analysis and Review files from CMS.

- Freestanding skilled nursing facilities (SNFs) treated 89 percent of stays (up 4 percentage points from 2004) and accounted for 94 percent of Medicare payments (up 2 percentage points from 2004).
- For-profit SNFs' share of Medicare-covered stays and payments each increased 2 percentage points between 2004 and 2006.
- Urban SNFs' share of facilities, Medicare-covered stays, and payments each remained the same between 2004 and 2006.

Chart 9-7. Case mix in freestanding SNFs shifted toward extensive services plus rehabilitation RUGs



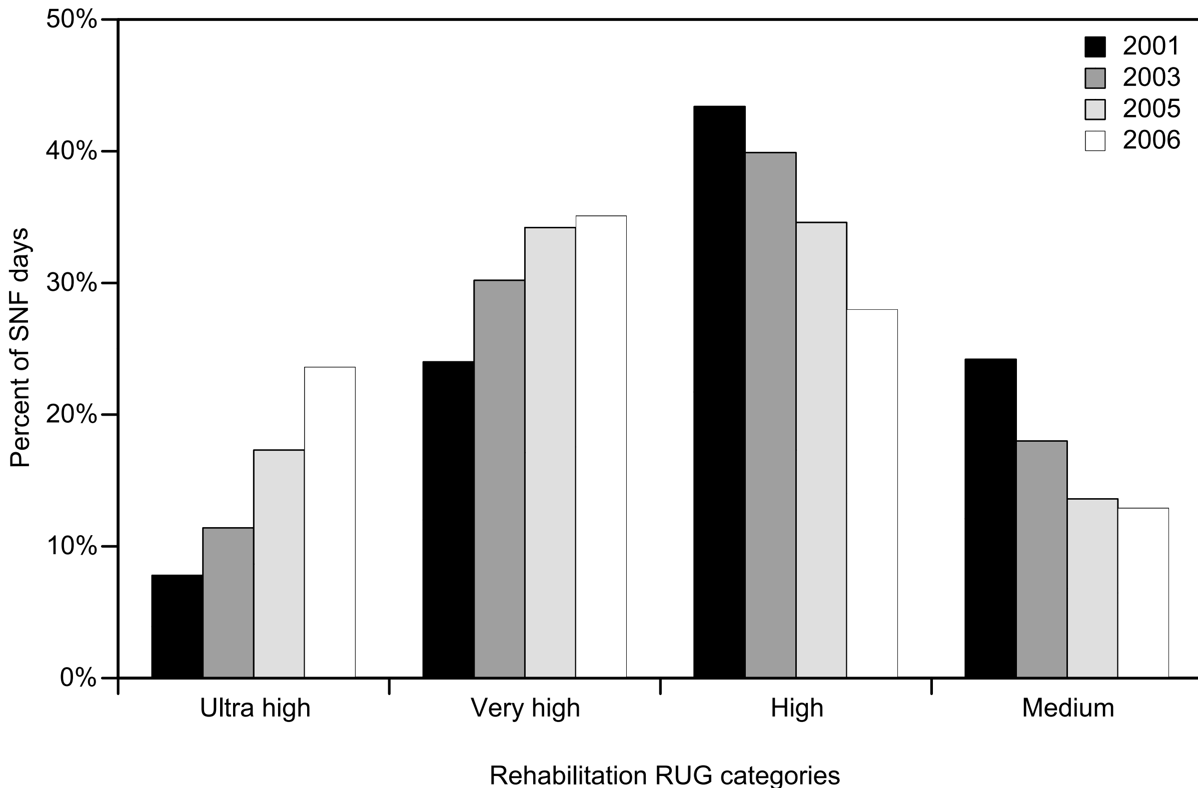
Note: SNF (skilled nursing facility), RUG (resource utilization group). The clinically complex category includes patients who are comatose; have burns, septicemia, pneumonia, internal bleeding, or dehydration; or receive dialysis or chemotherapy. The special care category includes patients with multiple sclerosis or cerebral palsy, those who receive respiratory services seven days per week, or are aphasic or tube fed. The extensive services category includes patients who have received intravenous medications or suctioning in the past 14 days, have required a ventilator or respiratory or tracheostomy care, or have received intravenous feeding within the past 7 days. Days are for freestanding skilled nursing facilities with valid cost reports.

Source: MedPAC analysis of freestanding SNF cost reports.

- The nine new rehabilitation plus extensive services resource utilization groups (RUGs) established in 2006 accounted for 26 percent of all freestanding skilled nursing facilities' (SNFs') RUG days in 2006.

- In 2005, rehabilitation RUGs accounted for 83 percent of freestanding SNFs' RUG days; in 2006 their share had declined to 60 percent. Rehabilitation and rehabilitation plus extensive service RUGs together accounted for 86 percent of all Medicare days in freestanding SNFs.

Chart 9-8. Rehabilitation stays in freestanding SNFs continue to shift toward high-intensity RUGs



Note: SNF (skilled nursing facility), RUG (resource utilization group). Days are for freestanding SNFs with valid cost reports.

Source: MedPAC analysis of freestanding SNF cost reports.

- The distribution of rehabilitation days in freestanding skilled nursing facilities (SNFs) continued to shift toward the highest therapy groups. The ultra high and very high groups made up 59 percent of the rehabilitation-only days in 2006, up 7 percentage points from the previous year.
- The shifts toward higher intensity resource utilization groups (RUGs) could be a function of shifts in site of service from other settings or could reflect the payment incentives to furnish the services necessary to classify patients into higher paying rehabilitation RUGs.

Chart 9-9. Freestanding SNF Medicare margins have exceeded 10 percent for six years

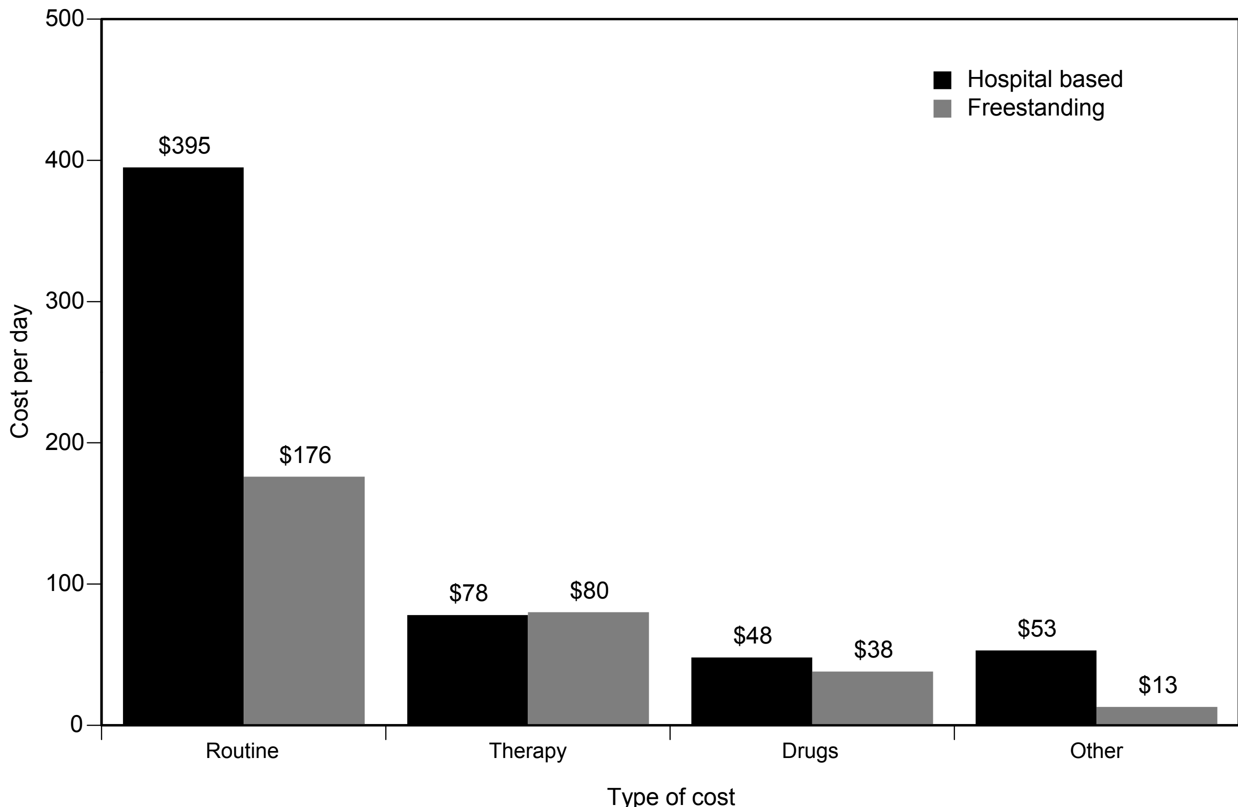
Type of SNF	2001	2002	2003	2004	2005	2006
All	17.6%	17.4%	10.8%	13.7%	12.9%	13.1%
Urban	17.4	16.8	10.0	13.0	12.4	12.7
Rural	18.4	20.0	14.1	16.5	15.3	14.5
For profit	19.9	20.0	13.9	16.6	15.7	16.0
Nonprofit	10.1	9.0	1.5	4.2	4.3	3.1
Government*	4.9	3.1	–7.1	–3.0	–5.0	–5.9

Note: SNF (skilled nursing facility). Margins are calculated as payments minus costs, divided by payments for each group.
* The results for government-owned providers are not necessarily comparable to other providers because they operate in a different context.

Source: MedPAC analysis of freestanding SNF cost reports.

- Aggregate Medicare margins for freestanding skilled nursing facilities (SNFs) have exceeded 10 percent every year since 2001.
- Aggregate Medicare margins increased from 2005 to 2006 due to slower cost growth and higher payments for the nine new resource utilization groups (RUGs) (rehabilitation plus extensive services).
- Examining the distribution of the 2006 margin, one-half of freestanding SNFs had margins of 14.7 percent or more, while one-quarter had Medicare margins at or below 4 percent.
- Freestanding SNFs in the top quartile of 2006 Medicare margins had costs per day that were one-third lower, a higher average daily census, and longer stays compared with SNFs in the bottom margin quartile. SNFs in the top quartile also treated a smaller share of patients in the clinical complex, special care, and extensive services RUGs than SNFs in the bottom margin quartile.

Chart 9-10. Costs per day are higher in hospital-based SNFs



Note: SNF (skilled nursing facility). Costs include associated overhead and capital expenses. Costs were not standardized for wages or case-mix differences.

Source: Analysis of 2004 Medicare Provider Analysis and Review file and cost report data from CMS.

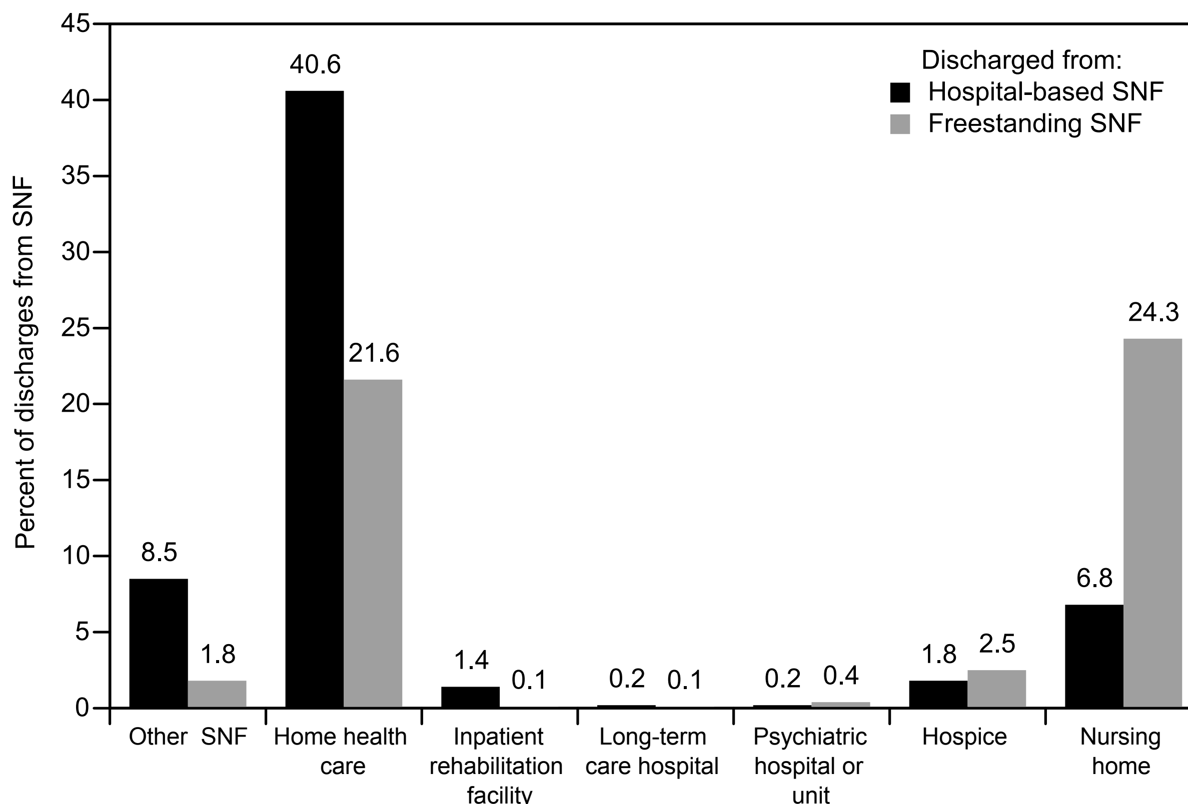
- Costs per day differ substantially between hospital-based and freestanding skilled nursing facilities (SNFs). Routine costs—which include room, board, and nursing costs—are more than twice as high in hospital-based SNFs ($395) than in freestanding SNFs ($176). Part of the difference in routine costs may be due to the higher staffing ratios and greater use of registered nurses and licensed practical nurses in hospital-based facilities.

- The average daily costs of therapy services, which are the second biggest category of SNF costs, are similar between hospital-based and freestanding facilities.

- Per diem drug costs are 26 percent higher in hospital-based SNFs ($48) than in freestanding SNFs ($38). This difference may be attributable to differences in patient mix, particularly for patients that might require high-cost intravenous medications.

- The average daily costs for other nontherapy ancillary services (supplies, lab, respiratory therapy, and other ancillary services) in total are four times as high in hospital-based SNFs ($53) as in freestanding SNFs ($13). The higher costs for the other nontherapy ancillary services may be due to differences in the complexity of some patients but also are likely due to easier access to these services and practice pattern differences in the hospital-based setting.

Chart 9-11. Percent of SNF cases discharged to different post-acute care settings, 2006



Note: SNF (skilled nursing facility). Subsequent use of a second post-acute care provider is determined using matched claims files for the different post-acute care services. Use of home health care and hospice is based on care that starts within 3 days of discharge from the SNF. Other PAC care starts within one day of discharge from the SNF. Discharge to a nursing home is based on the discharge destination field on the claim and not on a matched claim, and includes patients that end their Medicare covered SNF stay with the discharge designation "still a patient" and have no other Medicare post-acute care or hospital care services. Total percent of cases discharged from hospital-based SNFs to other post-acute care settings was 52.7 percent; total percent of cases discharged from freestanding SNFs to other post-acute care settings was 26.5 percent. Patient-level averages are shown.

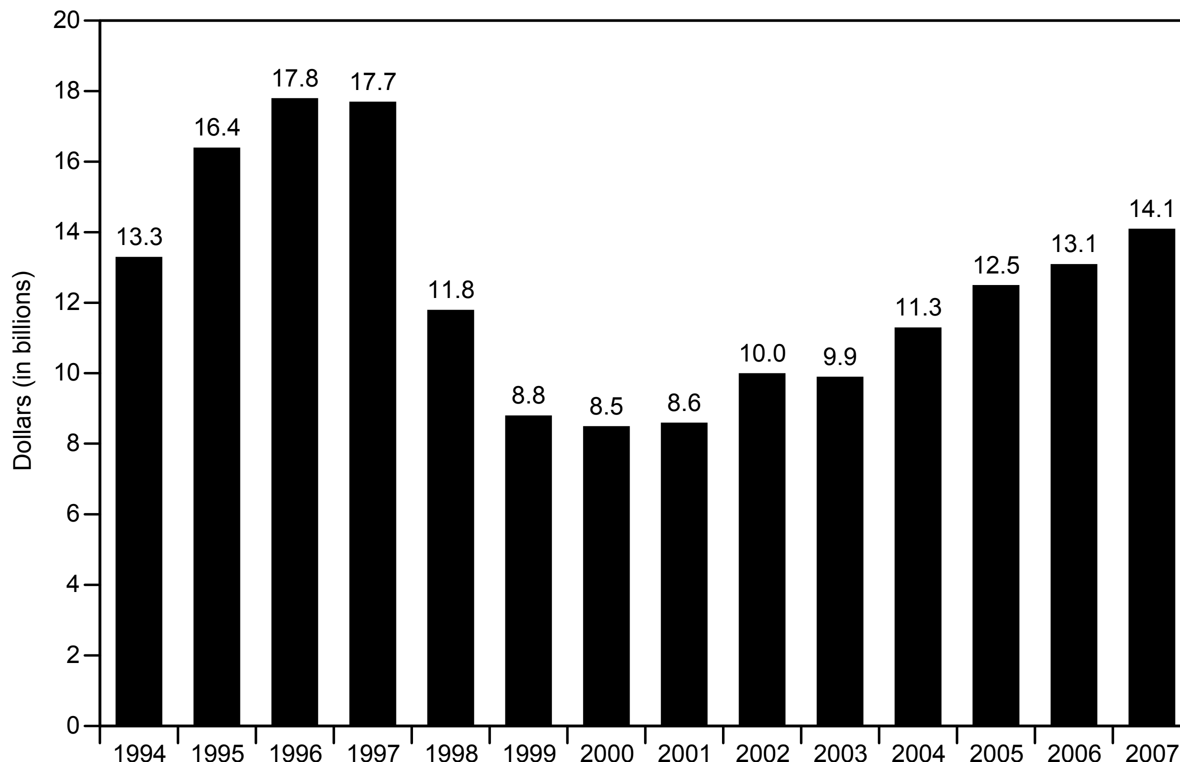
Source: MedPAC analysis of 2006 claims files from CMS.

- Patients using hospital-based skilled nursing facilities (SNFs) are more likely to use another post-acute care provider after discharge from the SNF than patients using freestanding SNFs. Overall, 9 percent of patients discharged from a hospital-based SNF are discharged to another SNF compared with fewer than 2 percent of patients using freestanding SNFs. Forty-one percent of patients from hospital-based SNFs are discharged to home health care, compared with 22 percent of patients discharged from freestanding SNFs.

- Compared to hospital-based SNFs, freestanding SNFs discharge more patients back to the hospital. Twenty-four percent of patients discharged to a freestanding SNF are readmitted to the hospital within 30 days, compared with 19 percent of inpatients discharged to a hospital-based SNF (not shown).

- Almost one-quarter of freestanding SNF patients continue receiving nursing home services after they have finished their Medicare-covered SNF stay either in the same facility or a different facility. This compares with just 7 percent of patients discharged from hospital-based SNFs. Some of these differences may reflect differences in patient selection rather than differences in practice patterns.

Chart 9-12. Spending for home health care, 1994–2007



Source: CMS, Office of the Actuary, 2008.

- Medicare home health care spending grew at an average annual rate of 20 percent from 1992 to 1997. During that period, the payment system was cost based. Eligibility had been loosened just before this period, and enforcing the program's standards became more difficult.

- Spending began to fall in 1997, concurrent with the introduction of the interim payment system (IPS) based upon costs with limits, tighter eligibility, and increased scrutiny from the Office of Inspector General.

- In October of 2000, the prospective payment system replaced the IPS. At the same time, eligibility for the benefit was broadened slightly. Enforcement of the Medicare program's integrity standards continues at the regional home health intermediaries and state survey and certification agencies.

- Home health has risen steadily under PPS. Spending has risen by 8.5 percent a year in 2001–2007. In 2003, payments declined slightly because of a payment adjustment required by the Balanced Budget Act of 1997, but in every other year in this period spending increased.

- Payments in 2006 grew at a lower rate because of a one-year freeze in payments and more beneficiaries opting to receive benefits from Medicare Advantage instead of Medicare fee-for-service. Despite these factors, spending still increased and the share of fee-for-service beneficiaries using home health increased slightly (see Chart 9-14).

Chart 9-13. Trends in the provision of home health care

	2002	2004	2006	Average annual percent change 2002–2006
Number of users (in millions)	2.5	2.8	2.9	4.0%
Percent of beneficiaries who used home health (percent)	7.1%	7.6%	8.1%	3.5
Episodes by type (in thousands)				
Less than 10 therapy visits	3,065	3,426	3,697	4.8
10 or more	951	1,229	1,426	10.6
Total	4,016	4,655	5,123	6.3
Episodes per user	1.62	1.68	1.76	2.1
Visits per user	31	31	34	2.5
Average payment per episode	$2,317	$2,361	$2,569	2.6

Source: MedPAC analysis of the home health Standard Analytic File.

- Under the prospective payment system (PPS), in effect since 2001, the number of users and the number of episodes has risen significantly. In 2006, almost 3 million beneficiaries used the home health benefit.
- The number of home health episodes increased rapidly from 2002 to 2006. The growth in episodes that were therapy intensive—those with 10 or more therapy visits—was more than double the growth rate of episodes that were not therapy intensive. The home health PPS in effect prior to 2008 provided a significant payment increase for these episodes.
- The number of episodes per user has increased since 2002, and as a result the growth in episodes has been greater than the growth in users of home health.

Chart 9-14. The home health product changed after the prospective payment system started

	1997	2000	2006	Percent change 1997–2000	Percent change 2000–2006
Users (in millions)	3.6	2.5	2.9	–31	18
Number of visits (in millions)	258	91	98	–65	8
Visit type (percent of total)					
Home health aide	48%	31%	20%	–37	–34
Skilled nursing	41	49	53	20	7
Therapy	10	19	26	101	37
Medical social services	1	1	1	1	–27
Visits per user	73	37	34	–49	–8
Percent of fee-for-service beneficiaries who used home health	10.5%	7.4%	8.1%	–30.1	10.7

Note: The prospective payment system began in October 2000.

Source: Home health Standard Analytic File; Health Care Financing Review, Medicare and Medicaid Statistical Supplement, 2002.

- The types and amount of home health care services that beneficiaries receive have changed. In 1997 home health aide services were the most frequently provided visit type, and beneficiaries who used home health received an average of 73 visits.
- CMS began to phase in the interim payment system in October of 1997 to stem the rise in spending for home health services (see Chart 9-12). By 2000, total visits had dropped by 65 percent, total users had dropped by 31 percent, and average visits per user had dropped to 37. The mix of services changed as well, with skilled nursing and therapy visits now accounting for about two-thirds of all services.
- Medicare shifted to a prospective payment system (PPS) in October of 2000. The PPS makes a single payment for all services provided in a 60-day episode, ending the per visit payment systems in effect for previous years. The number of beneficiaries using home health and total visits has increased under PPS. The growth in users has been more rapid than the growth in visits, and the number of average visits per user in 2006 is slightly below 2000.
- Under PPS the mix of visits has continued to shift toward therapy (physical therapy, occupational therapy, and speech pathology) and away from home health aide services. During 2000–2007, the payment system made substantially higher payments for episodes with 10 or more therapy visits.
- Concerns about the growth in therapy have led CMS to revise the payments for these services in 2008. The new system increases payment for therapy services more gradually than the previous approach, but it will still base payments on the amount of services provided and not the patient characteristics.

Chart 9-15. Margins for freestanding home health agencies

	2005	2006	Percent of agencies 2006
All	17.3%	15.4%	100%
Geography			
Urban	16.5	14.6	62
Rural	18.7	17.2	21
Mixed	14.1	14.3	17
Type of control			
For profit	19.2	17.4	77
Non profit	13.8	11.6	15
Government*	8.5	3.6	8
Volume quintile			
First	12.7	9.2	20
Second	13.5	11.0	20
Third	13.3	10.6	20
Fourth	17.4	15.4	20
Fifth	18.6	16.7	20

Note: Analysis includes 4,290 agencies for 2005 and 4,078 agencies for 2006.
* The results for government-owned providers are not necessarily comparable to other providers because they operate in a different context.

Source: MedPAC analysis of 2005–2006 Cost Report files.

- In 2006, about 80 percent of agencies had positive margins. These estimated margins indicate that Medicare's payments are above the costs of providing services to Medicare beneficiaries, for both rural and urban home health agencies (HHAs).
- These margins are for freestanding HHAs, which composed about 85 percent of all HHAs in 2006. HHAs are also based in hospitals and other facilities.
- These margins are consistent with the historically high margins the home health industry has experienced under the PPS. The average margin in 2001–2006 was 16 percent, indicating that most agencies have been paid well in excess of cost under prospective payment.

Chart 9-16. The top 15 LTC–DRGs made up more than 60 percent of cases in LTCHs in 2006

LTC–DRG	Description	Discharges	Percentage
475	Respiratory system diagnosis with ventilator support	15,698	12.1%
271	Skin ulcers	7,056	5.4
416	Septicemia age >17	6,676	5.1
87	Pulmonary edema and respiratory failure	6,540	5.0
79	Respiratory infections and inflammation age >17 with CC	6,061	4.7
466	Aftercare, without history of malignancy	4,835	3.7
89	Simple pneumonia and pleurisy age >17 with CC	4,717	3.6
249	Aftercare, musculoskeletal system and connective tissue	4,613	3.5
88	Chronic obstructive pulmonary disease	4,594	3.5
12	Degenerative nervous system disorders	4,193	3.2
263	Skin graft and/or debridement for skin ulcer with CC	3,921	3.0
127	Heart failure and shock	3,531	2.7
462	Rehabilitation	2,977	2.3
418	Postoperative and post-traumatic infections	2,663	2.0
316	Renal failure	2,500	1.9
	Top 15 LTC–DRGs	80,575	61.9
	Total	130,164	100.0

Note: LTC–DRG (long-term care diagnosis related group), LTCH (long-term care hospital), CC (complication or comorbidity). LTC–DRGs are the case-mix system for these facilities. Columns may not sum due to rounding.

Source: MedPAC analysis of MedPAR data from CMS.

- Long-term care hospitals (LTCHs) treat beneficiaries with diverse diagnoses. Five of the top 15 diagnoses in LTCHs are related to respiratory conditions.
- The most frequent diagnosis for LTCHs is respiratory system diagnosis with ventilator support. These beneficiaries make up 12 percent of all Medicare LTCH patients.

Chart 9-17. Spending for long-term care hospital services increased rapidly under PPS

	TEFRA		Change 2001–2002	PPS				Average annual change 2003–2005	Change 2005–2006
	2001	2002		2003	2004	2005	2006		
Spending (in billions)	$1.9	$2.2	15.8	$2.7	$3.7	$4.5	$4.5	29.1	0.0
Cases	85,229	98,896	16.0%	110,396	121,955	134,003	130,164	10.2%	–2.9%
Cases per 10,000 FFS beneficiaries	25.1	28.3	12.7	30.8	33.6	36.6	36.5	9.0	–0.4
Spending per FFS beneficiary	$56.0	$63.0	12.5	$75.4	$101.9	$123.0	$126.1	27.7	2.5
Payment per case	$22,009	$22,486	2.2	$24,758	$30,059	$33,658	$34,859	16.6	3.4
Length of stay (in days)	31.3	30.7	–1.9	28.8	28.5	28.2	27.9	–1.0	–1.1

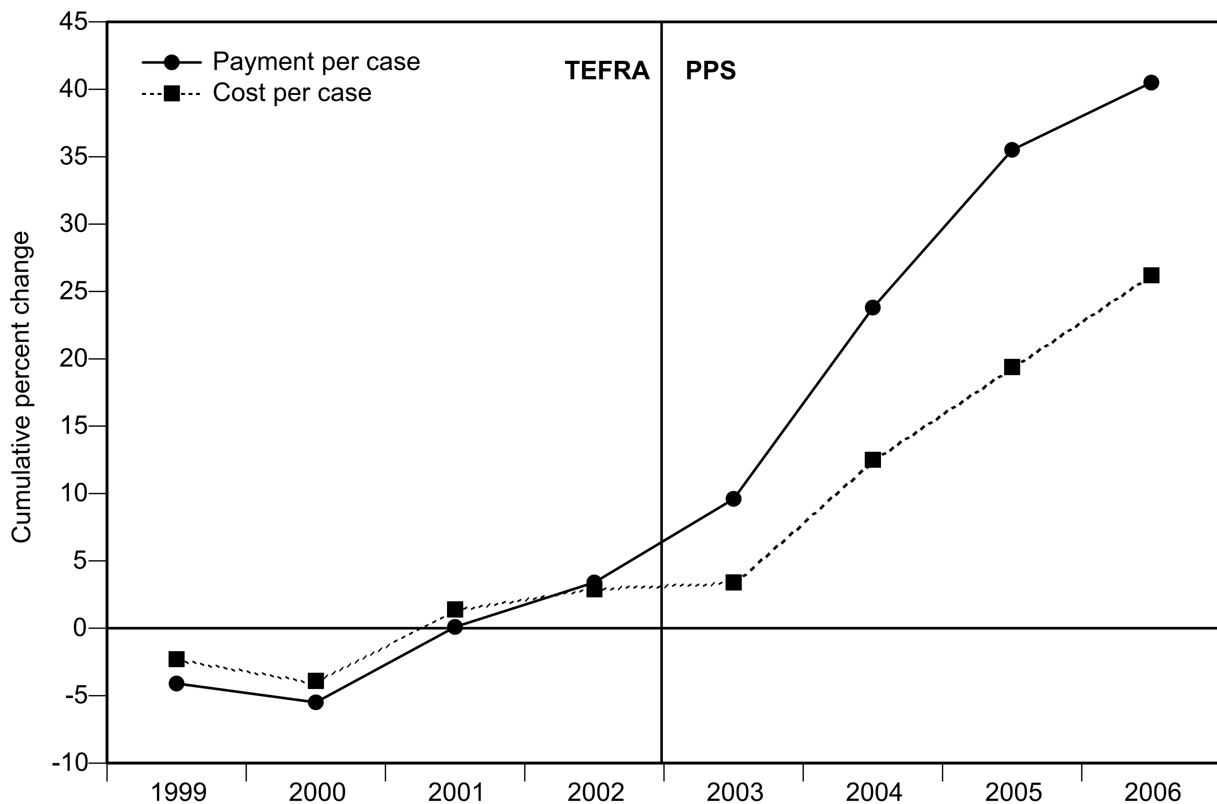
Note: PPS (prospective payment system), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), FFS (fee for service). The growth in spending was slowed in 2006 by large increases in the number of Medicare Advantage enrollees, who are not included in these aggregate totals.

Source: MedPAC analysis of MedPAR data from CMS.

- From 2003 to 2005, Medicare spending for long-term care hospitals (LTCHs) increased about 29 percent per year. In 2006 spending for LTCHs was virtually the same as in 2005 ($4.5 billion). However, because of growth in the number of beneficiaries enrolling in Medicare Advantage plans, Medicare spending per fee-for-service (FFS) beneficiary continued to rise, growing 2.5 percent between 2005 and 2006.

- The number of LTCH cases increased about 10 percent annually between 2003, when the prospective payment system was implemented, and 2005. Between 2005 and 2006, cases declined almost 3 percent; most of this was due to a drop in the number of FFS beneficiaries.

Chart 9-18. LTCHs’ payments have risen faster than their costs under the PPS



Note: LTCH (long-term care hospital), PPS (prospective payment system), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982). Data are from consistent two-year cohorts of LTCHs.

Source: MedPAC analysis of cost reports from CMS.

- Under the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) and before the prospective payment system (PPS) was implemented in fiscal year 2003, long-term care hospitals’ (LTCHs’) Medicare per case costs and payments changed at similar rates. Since the PPS, LTCHs’ Medicare per case payments have increased much faster than their per case costs.

- These similarities and differences are reflected in LTCHs’ Medicare margins, shown in Chart 9-19.

Chart 9-19. All types of LTCHs' Medicare margins increased under PPS

	TEFRA		PPS			
Type of LTCH	2001	2002	2003	2004	2005	2006
All LTCHs	–1.6%	–0.2%	5.4%	9.0%	11.9%	9.4%
Freestanding	–1.2	0.1	5.6	8.1	11.0	8.3
HWH	–2.2	–0.5	5.1	9.8	12.7	10.5
Urban	–1.6	–0.1	5.5	9.1	11.9	9.6
Rural	–3.2	–1.6	1.3	5.0	11.3	2.9
Nonprofit	–1.8	0.1	2.3	6.6	9.9	5.7
For profit	–1.4	–0.1	6.5	10.1	13.0	10.8
Government*	–4.8	–2.0	0.4	–2.5	–3.1	–1.7

Note: LTCH (long–term care hospital), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system), HWH (hospital within hospital).
*Government-owned LTCHs are relatively few in number, have few Medicare patients, and operate under different budget and economic constraints than other LTCHs.

Source: MedPAC analysis of cost report data from CMS.

- Under the Tax Equity and Fiscal Responsibility Act of 1982 and before the long-term care hospital (LTCH) prospective payment system (PPS) was implemented, these facilities' Medicare margins were generally negative. Under PPS, margins increased rapidly, from 5.4 percent in 2003 to 11.9 percent in 2005. In 2006, margins declined to 9.4 percent.

- In 2006, urban LTCHs had much higher margins than their rural counterparts. For-profit LTCHs and hospitals within hospitals were also more likely than other types of LTCHs to have higher margins.

Chart 9-20. Most common types of cases in inpatient rehabilitation facilities, 2007

Impairment group description	Share of cases
Stroke	20.5%
Hip fracture	16.4
Major joint replacement	15.5
Debility	7.9
Neurological	7.5
Brain injury	6.4
Other orthopedic	5.5
Spinal cord injury	4.3
Cardiac	4.3
Other	11.7

Note: Other includes conditions such as major medical trauma, amputations, and pain syndrome.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS (January 1 through June 30, 2007).

- In 2007, the most frequent diagnosis for Medicare patients in inpatient rehabilitation facilities (IRFs) was stroke, representing just over 20 percent of cases, a significant change from 2004, when stroke represented 11.5 percent of cases.

- Major joint replacement represented 15.5 percent of IRF admissions, down from over 30 percent of cases in 2004, when major joint replacement was the most common IRF Medicare case type.

Chart 9-21. The number of IRFs has remained generally stable under the PPS, but has declined in recent years

Type of IRF	TEFRA 2001	Prospective payment system 2002	2003	2004	2005	2006	2007	Average annual change 2002–2005	Average annual change 2005–2007
All IRFs	1,157	1,188	1,211	1,227	1,231	1,224	1,202	1.2%	-1.2%
Urban	971	988	1,001	1,009	1,000	969	953	0.4	-2.4
Rural	186	200	210	218	231	255	249	4.9	3.8
Freestanding	214	215	215	217	217	217	219	0.3	0.5
Hospital-based	943	973	996	1,010	1,014	1,007	983	1.4	-1.5
Nonprofit	733	755	765	772	765	757	740	0.4	-1.6
For profit	271	277	290	294	305	299	288	3.3	-2.8
Government	153	156	156	161	161	168	174	1.1	4.0

Note: IRF (inpatient rehabilitation facility), PPS (prospective payment system), TEFRA (Tax Equity and Fiscal Responsibility Act of 1983).

Source: MedPAC analysis of Provider of Service files from CMS.

- The number of inpatient rehabilitation facilities (IRFs) in 2007 declined slightly from the prior year.
- The number of rural IRFs grew at a higher rate than other types, perhaps fueled by the 20 percent rural payment adjustment under the prospective payment system. Critical access hospitals (CAHs)—generally rural providers—were also allowed to operate IRF units beginning in 2004.
- Small increases in the number of rural IRFs and for-profit IRFs slightly more than offset small declines in urban and non-profit facilities through 2006, but the number of most types of IRFs declined in 2007.
- These changes may reflect changes in IRFs' capacity predicated by the 75 percent rule.

Chart 9-22. Prior trend in volume of IRF cases reversed between 2004 and 2006

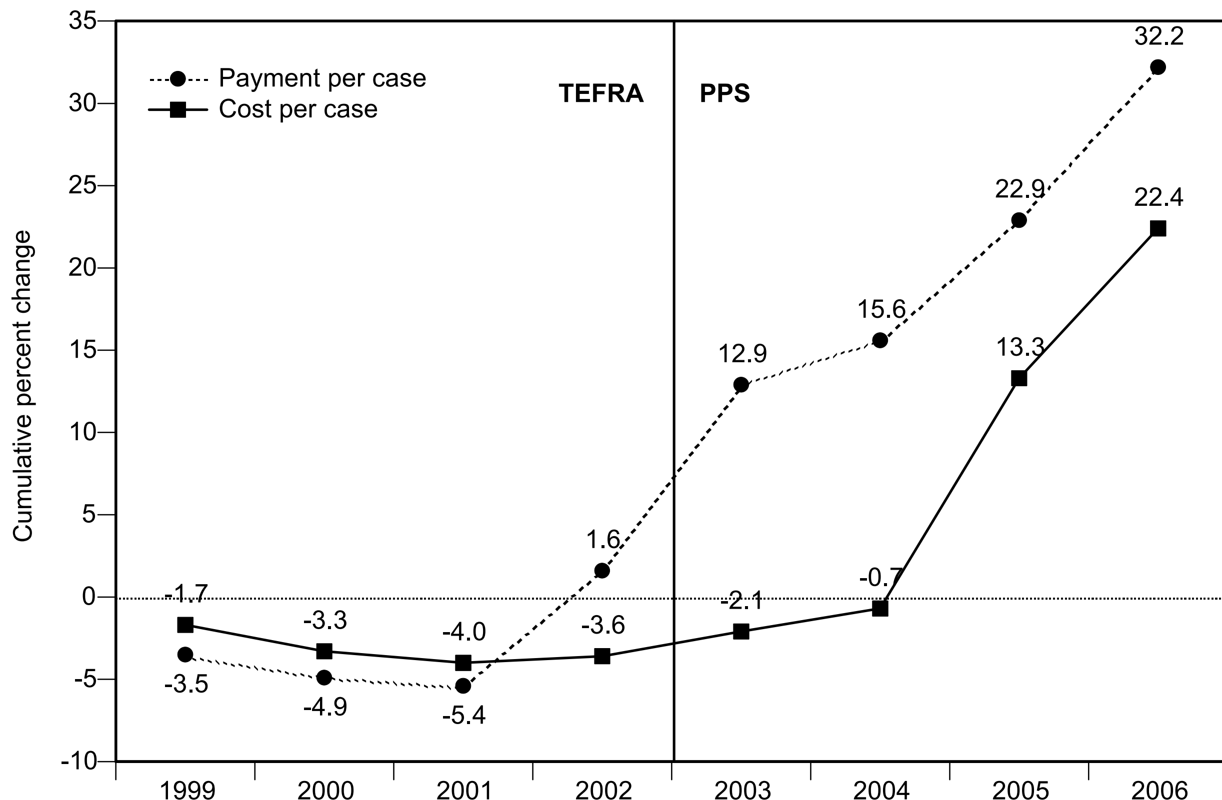
	2002	2003	2004	2005	2006	Average annual change 2002–2004	Average annual change 2004–2006
Number of cases	439,631	478,723	496,695	449,321	404,255	6.3%	–9.8%
Medicare spending (in billions)	$5.7	$6.2	$6.4	$6.4	$6.0	6.0	–3.2
Payment per case	$11,152	$12,952	$13,275	$14,248	$15,354	9.1	7.5
Average length of stay (in days)	13.3	12.8	12.7	13.1	13.0	–2.3	1.2

Note: IRF (inpatient rehabilitation facility). Numbers of cases reflect Medicare fee-for-service utilization only.

Source: MedPAC analysis of MedPAR data from CMS.

- The number of Medicare admissions to inpatient rehabilitation facilities (IRFs) increased rapidly under the prospective payment system, rising to nearly 500,000 cases in 2004.
- The number of Medicare IRF admissions decreased by nearly 10 percent annually between 2004 and 2006, reflecting CMS's renewed enforcement of the 75% rule.
- Medicare payments per discharge increased by over 7 percent annually over this period, following average annual increases of 9 percent between 2002 and 2004.
- Overall Medicare spending on IRF services declined by about 6 percent from 2004 to 2006.
- Theses trends are not inconsistent with expectations under the more rigorously enforced 75 percent rule, but may also reflect declining enrollment in fee-for-service Medicare as enrollment in Medicare Advantage plans has increased.

Chart 9-23 Per case payments for IRFs have risen faster than costs, post-PPS



Note: IRF (inpatient rehabilitation facility), PPS (prospective payment system), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982). Data are from consistent two-year cohorts of IRFs.

Source: MedPAC analysis of cost report data from CMS.

- Under the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) and before the prospective payment system (PPS) was implemented in 2002, inpatient rehabilitation facilities' Medicare per case costs and payments increased at similar rates. Under PPS, IRFs' Medicare per case payments have increased much faster than their per case costs.
- These similarities and differences are reflected in IRFs' Medicare margins, shown in Chart 9-24.

Chart 9-24. Inpatient rehabilitation facilities' Medicare margin by type, 2000–2006

	TEFRA		PPS				
	2000	2001	2002	2003	2004	2005	2006
All IRFs	1.3%	1.5%	11.0%	17.8%	16.2%	13.2%	12.4%
Hospital based	1.3	1.4	6.4	14.9	12.0	9.4	9.5
Freestanding	1.2	1.4	18.5	23.0	24.3	20.5	17.9
Urban	1.3	1.5	11.6	18.5	16.8	13.7	13.0
Rural	0.9	1.1	5.0	10.4	10.5	9.2	7.8
Nonprofit	1.5	1.6	6.8	14.5	12.7	10.0	10.7
For profit	0.9	1.3	18.8	24.3	24.1	19.5	16.6
Government*	1.1	1.4	2.4	10.2	9.1	8.2	6.2

Note: IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system).
* Margins reported for government providers are not necessarily comparable to other providers because they operate in a different context.

Source: MedPAC analysis of cost report data from CMS.

- From 2002 to 2003, the aggregate Medicare margin increased rapidly, from 11 percent to almost 18 percent. From 2003 to 2006, margins declined for all inpatient rehabilitation facility (IRF) types.
- Freestanding and for-profit IRFs had substantially higher margins than hospital-based and nonprofit IRFs, continuing a trend that began with implementation of the IRF prospective payment system.

Web links. Post-acute care

Skilled nursing facilities

- Chapter 2D of MedPAC's March 2008 Report to the Congress provides information about the supply, quality, service use, and Medicare margins for skilled nursing facilities. Chapter 7 of MedPAC's June 2008 Report to the Congress provides information about alternative designs for Medicare's prospective payment system that would more accurately pay providers for their SNF services. Medicare payment basics: Skilled nursing facility payment system provides a description of how Medicare pays for skilled nursing facility care.

  http://www.medpac.gov/chapters/Jun08_Ch07.pdf

  http://www.medpac.gov/chapters/Mar08_Ch02d.pdf

  http://www.medpac.gov/documents/MedPAC_Payment_Basics_07_SNF.pdf

- The official Medicare website provides information on SNFs, including the payment system and other related issues.

  http://www.cms.hhs.gov/SNFPPS/

Home health services

- Chapter 2E of MedPAC's March 2008 Report to the Congress, Chapter 4 of MedPAC's June 2007 Report to the Congress, and Chapter 5 of MedPAC's June 2006 Report to the Congress provide information on home health services.

  http://www.medpac.gov/chapters/Mar08_Ch02e.pdf

  http://www.medpac.gov/chapters/Jun07_Ch04.pdf

  http://www.medpac.gov/publications/congressional_reports/Jun06_Ch05.pdf

- The official Medicare website provides information on the quality of home health care, and additional information on new policies, statistics, and research, as well as information on home health spending and use of services.

  http://www.cms.hhs.gov/HomeHealthPPS/

Long-term care hospitals

- Chapter 2G of MedPAC's March 2008 Report to the Congress provides information on long-term care hospitals.

  http://www.medpac.gov/chapters/Mar08_Ch02g.pdf

- CMS also provides information on long-term care hospitals, including the long-term care hospital prospective payment system.

  http://www.cms.hhs.gov/LongTermCareHospitalPPS/

Inpatient rehabilitation facilities

- Chapter 2F of MedPAC's March 2008 Report to the Congress provides information on inpatient rehabilitation facilities.

  http://www.medpac.gov/chapters/Mar08_Ch02F.pdf

- CMS provides information on the inpatient rehabilitation facility prospective payment system.

  http://www.cms.hhs.gov/InpatientRehabFacPPS/