

SECTION

12

Other services

Dialysis

Hospice

Clinical laboratory

Chart 12-1. Number of dialysis facilities is growing and share of for-profit and freestanding dialysis providers is increasing

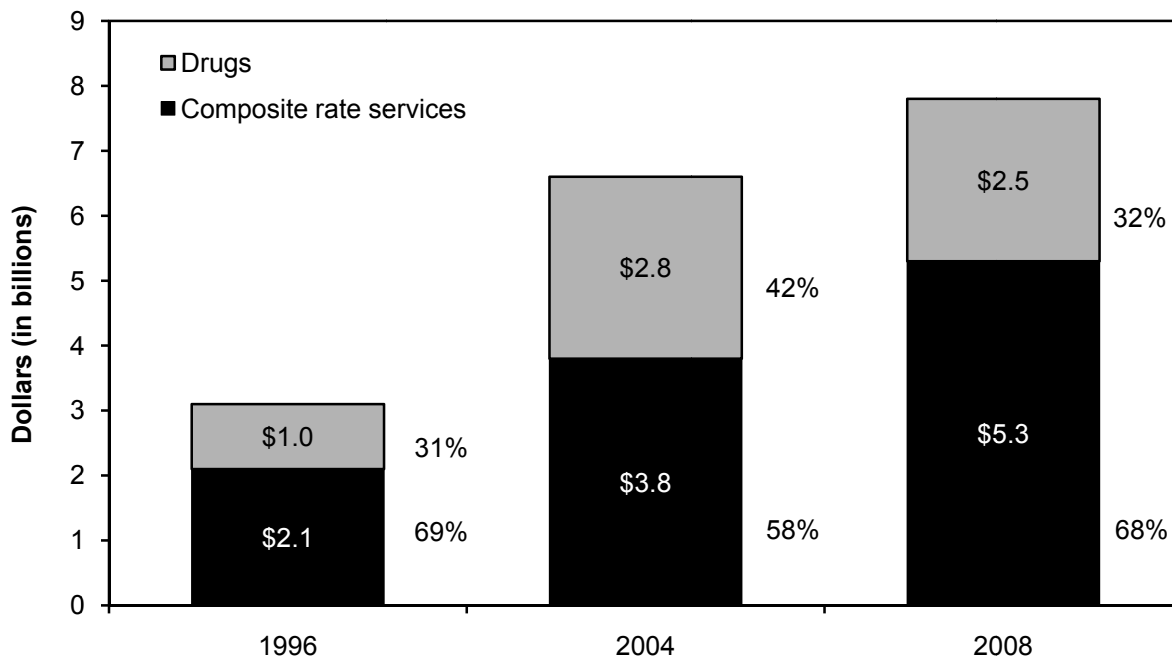
	1999	2004	2009	Average annual percent change	
				1999–2009	2004–2009
Total number of:					
Dialysis facilities	3,619	4,357	5,211	4%	4%
Hemodialysis stations	56,951	74,902	91,465	5	4
Mean number of hemodialysis stations	16	17	18	1	0.4
Percent of all facilities:					
Nonchain	N/A	27%	21%	N/A	-1
Affiliated with any chain	N/A	73	79	N/A	5
Affiliated with largest two chains	N/A	58	60	N/A	4
Hospital based	19%	15	11	-2	-3
Freestanding	81	85	89	5	4
Rural	25	25	25	3	3
Urban	75	75	75	4	4
For profit	77	77	81	4	5
Nonprofit	23	23	19	2	-0.2

Note: N/A (not available). Nonprofit includes facilities designated as either nonprofit or government.

Source: Compiled by MedPAC from the CMS facility survey file and Dialysis Compare file.

- Between 1999 and 2009, the number of freestanding and for-profit facilities increased, while hospital-based and nonprofit facilities decreased. Freestanding facilities increased from 81 percent to 89 percent of all facilities, and for-profit facilities increased from 77 percent to 81 percent of all facilities.
- Two national for-profit chains own about 60 percent of all facilities and 70 percent of all freestanding facilities.
- Between 1999 and 2009, the proportion of facilities located in rural areas has remained relatively constant.
- The number of facilities has increased 4 percent per year since 1999. The average size of a facility has increased slightly, as evidenced by the mean number of hemodialysis stations per facility, which increased from 16 in 1999 to 18 in 2009.

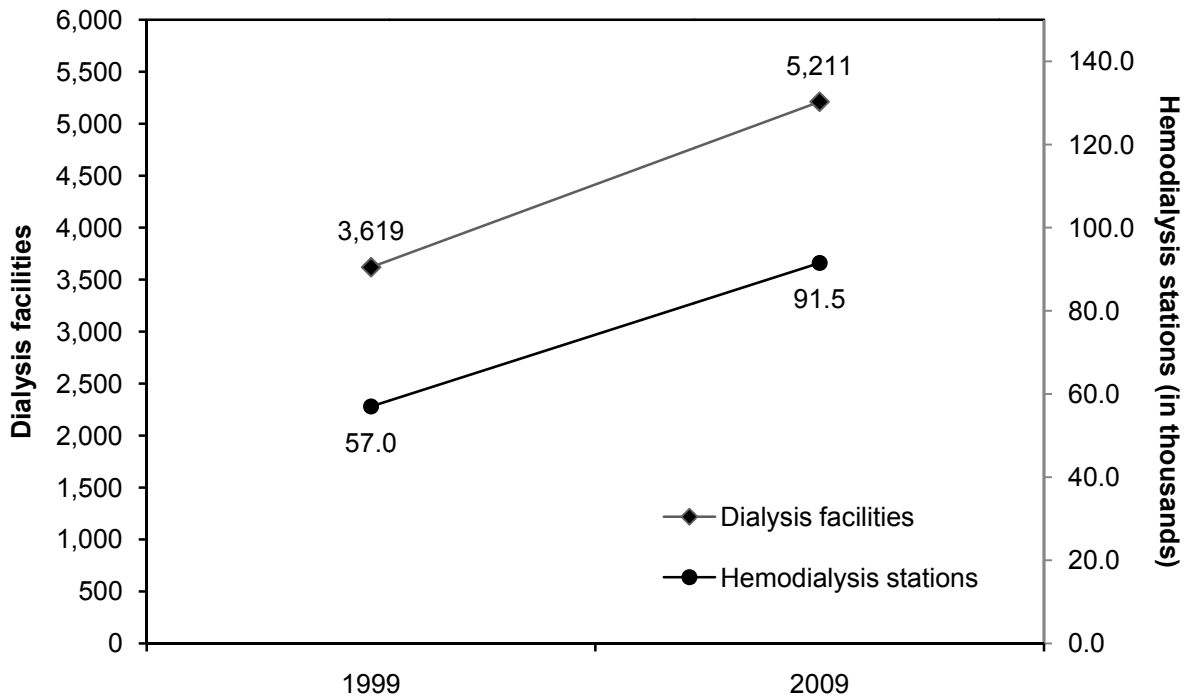
Chart 12-2. Medicare spending for outpatient dialysis services furnished by freestanding dialysis facilities, 1996, 2004, and 2008



Source: Compiled by MedPAC from the 1996, 2004, and 2008 institutional outpatient files from CMS.

- Between 1996 and 2004, expenditures for composite rate services and dialysis drugs increased by about 10 percent per year but then slowed between 2004 and 2008 to a 4 percent average annual increase.
- The slowdown in the growth in total spending is due to a decline in spending on dialysis drugs. Statutory and regulatory changes that CMS implemented beginning in 2005 reversed spending trends for dialysis drugs. In addition, the slowdown is linked to a Food and Drug Administration warning in 2007 about the use of a dialysis drug class prescribed to treat anemia resulting from the loss of kidney function. By contrast, before and after 2004, spending on composite rate services increased at about the same annual rate—8 percent.

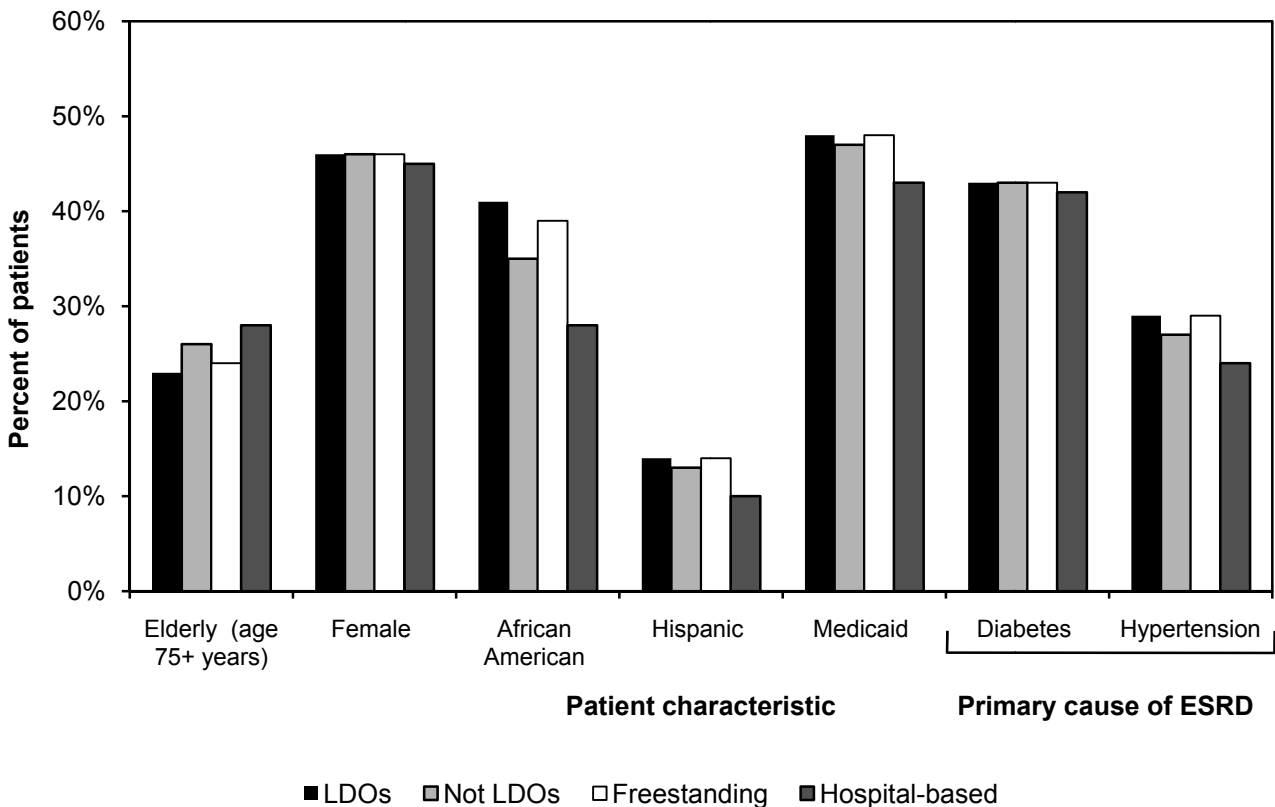
Chart 12-3. Dialysis facilities' capacity increased between 1999 and 2009



Source: Compiled by MedPAC from the 1999 Facility Survey file from CMS and the 2009 Dialysis Compare database from CMS.

- Providers have met the demand for furnishing care to an increasing number of dialysis patients by opening new facilities. In 2009, a facility had an average of about 18 hemodialysis stations.
- Between 1999 and 2009, the total number of dialysis facilities grew by about 4 percent annually, and the number of hemodialysis stations grew by 5 percent annually.

Chart 12-4. Characteristics of dialysis patients, by type of facility, 2008



Note: LDO (large dialysis organization), ESRD (end-stage renal disease). The facility types are not mutually exclusive (see text).

Source: MedPAC analysis of dialysis claims files, denominator files, Renal Management Information System files, and Dialysis Compare files from CMS.

- Across the different provider types, the proportion of patients who are elderly, female, African American, Hispanic, and dually eligible for Medicaid does not differ by more than 1 percentage point between 2007 and 2008 (data not shown for 2007).
- This analysis suggests that providers have not changed the mix of patients they care for between 2007 and 2008, including the large dialysis organizations, which account for about 60 percent of all facilities.
- In 2007 and 2008, freestanding facilities were more likely than hospital-based facilities to treat African Americans and dual eligibles. Freestanding facilities account for about 89 percent of all dialysis facilities.

Chart 12-5. The ESRD population is growing, and most ESRD patients undergo dialysis

	1997		2002		2007	
	Patients (thousands)	Percent	Patients (thousands)	Percent	Patients (thousands)	Percent
Total	329.1	100%	430.7	100%	527.3	100%
Dialysis	239.3	73	308.7	72	368.5	70
In-center hemodialysis	207.4	63	280.6	65	338.3	64
Home hemodialysis	2.5	1	1.8	<1	3.0	1
Peritoneal dialysis	28.4	9	25.4	6	26.4	5
Unknown	1.0	<1	0.9	<1	0.9	<1
Functioning graft and kidney transplants	89.8	27	122.0	28	158.7	30

Note: ESRD (end-stage renal disease). Totals may not equal sum of components due to rounding.

Source: Compiled by MedPAC from the United States Renal Data System.

- Persons with ESRD require either dialysis or a kidney transplant to maintain life. The total number of ESRD patients increased by 5 percent annually between 1997 and 2007.
- In hemodialysis, a patient's blood flows through a machine with a special filter that removes wastes and extra fluids. In peritoneal dialysis, the patient's blood is cleaned by using the lining of his or her abdomen as a filter. Peritoneal dialysis is usually performed in a patient's home.
- Most ESRD patients undergo hemodialysis administered in dialysis facilities three times a week. Between 1997 and 2007, the total number of in-center hemodialysis patients increased by 5 percent annually while the number of patients using the predominant home modality—peritoneal dialysis—decreased 2 percent annually. Although only a small proportion of all dialysis patients undergo home hemodialysis, the number of these patients grew 2 percent annually during this time period.
- Functioning graft patients are patients who have had a successful kidney transplant. Patients undergoing kidney transplant may receive either a living or a cadaveric kidney donation. In 2007, 35 percent of the kidneys were from living donors and 65 percent were from cadaver donors.

Chart 12-6. Diabetics, the elderly, Asian Americans, and Hispanics are among the fastest growing segments of the ESRD population

	Percent of total in 2007	Average annual percent change 2002–2007
Total (<i>n</i> = 527,283)	100%	4%
Age		
0–19	1	2
20–44	19	1
45–64	44	5
65–74	20	4
75+	16	5
Sex		
Male	56	5
Female	44	4
Race/ethnicity		
White	61	4
African American	32	4
Native American	1	4
Asian American	5	7
Hispanic	15	7
Non-Hispanic	85	4
Underlying cause of ESRD		
Diabetes	37	5
Hypertension	24	4
Glomerulonephritis	15	2
Other causes	23	5

Note: ESRD (end-stage renal disease). Totals may not equal sum of the components due to rounding.

Source: Compiled by MedPAC from the United States Renal Data System.

- Among ESRD patients, 36 percent are over age 65. About 60 percent are white.
- Diabetes is the most common cause of renal failure.
- The number of ESRD patients increased by 4 percent annually between 2002 and 2007. Among the fastest growing groups of patients are those who are over age 75, Asian Americans, Hispanics, and with diabetes as the cause of kidney failure.

Chart 12-7. Aggregate margins vary by type of freestanding dialysis facility, 2008

Type of facility	Percentage of Medicare payments going to freestanding facilities	Aggregate margin
All facilities	100%	3.2%
Urban	83	3.9
Rural	17	-0.3
LDOs	68	4.0
Non-LDOs	32	1.6

Note: LDO (large dialysis organization). Margins include payments and costs for composite rate services and injectable drugs.

Source: Compiled by MedPAC from 2008 cost reports and the 2008 institutional outpatient file from CMS.

- For 2008, the aggregate Medicare margin for composite rate services and injectable drugs was 3.2 percent.
- As in earlier years, we continue to see higher margins for facilities affiliated with the largest two chains. This finding stems from differences in the composite rate cost per treatment and drug payment per treatment. Compared with their counterparts, the composite rate cost per treatment was lower and the drug payment per treatment was higher for the two largest chains.
- In 2008, the gap in the Medicare margin widened between urban and rural facilities because of changes in the wage index and differences in the volume of drugs furnished across providers. The Commission will continue to monitor the adequacy of Medicare's payments for rural and urban facilities in the upcoming years. Some rural facilities may benefit from the low-volume adjustment that will be included in the new end-stage renal disease payment method scheduled to begin in 2011.

Chart 12-8. Medicare hospice use and spending grew substantially from 2000 to 2008

	2000	2007	2008	Average annual percent change 2000–2007	Percent change 2007–2008
Beneficiaries in hospice	513,000	1,000,000	1,055,000	10.0%	5.5%
Average length of stay among decedents (in days)	54	80	83	5.8	3.8
Medicare payments (in billions)	\$2.9	\$10.3	\$11.2	19.8	8.7

Note: Average length of stay reflects the average number of days a Medicare decedent who used hospice was enrolled in the Medicare hospice benefit during his/her lifetime.

Source: 2000 data on number of beneficiaries and payments from CMS analysis of 100 percent hospice claims Standard Analytic File: http://www.cms.gov/ProspMedicareFeeSvcPmtGen/downloads/FY05update_hospice_expenditures_and_units_of_care.pdf. All other numbers are based on MedPAC analysis of the denominator file, the Medicare Beneficiary Database, and the 100 percent hospice claims Standard Analytic File from CMS.

- The number of Medicare beneficiaries receiving hospice services doubled between 2000 and 2008, suggesting that access to hospice care has grown.
- The average length of stay among Medicare decedents who used hospice grew substantially over the decade, from 54 days in 2000 to 83 days in 2008 (reflecting an increase in length of stay among hospice users with the longest stays (see Chart 12-13)).
- Total Medicare payments to hospices nearly quadrupled from 2000 to 2008 due to increased enrollment and longer lengths of stay.

Chart 12-9. Hospice use increased across all beneficiary groups from 2000 to 2008

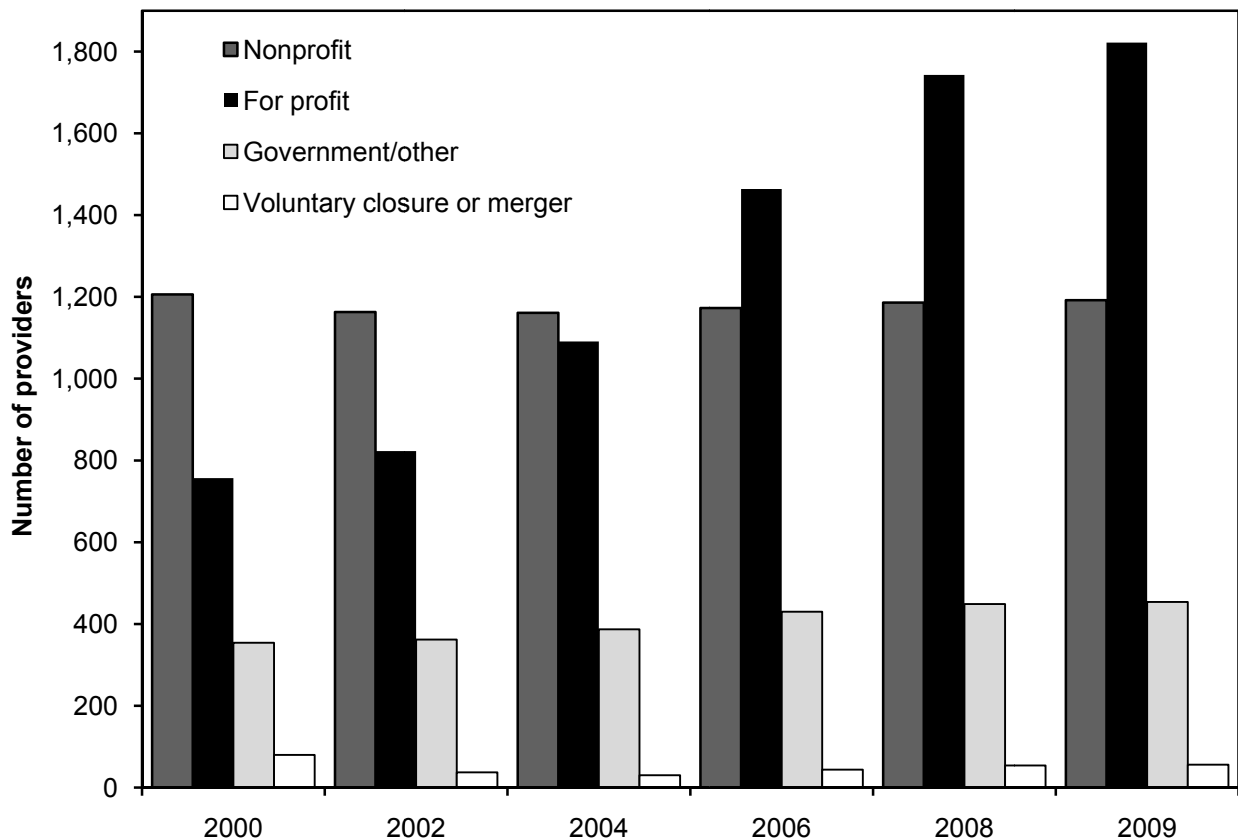
	Percent of decedents using hospice			Average annual percentage point change 2000–2007	Percentage point change 2007–2008
	2000	2007	2008		
All	22.9%	38.9%	40.1%	2.3	1.2
FFS beneficiaries	21.5	38.0	39.2	2.4	1.2
MA beneficiaries	30.9	42.9	43.9	1.7	1.0
Dual eligibles	17.5	34.5	35.8	2.4	1.3
Nondual eligibles	24.5	40.3	41.5	2.3	1.2
Age					
<65	17.0	24.5	25.0	1.1	0.5
65–84	24.7	38.5	39.3	2.0	0.8
85+	21.4	43.5	45.3	3.2	1.8
Race/ethnicity					
White	23.8	40.5	41.8	2.4	1.3
Minority	17.2	29.3	30.2	1.7	0.9
Gender					
Male	22.4	35.9	36.7	1.9	0.8
Female	23.3	41.5	43.0	2.6	1.5

Note: FFS (fee-for-service), MA (Medicare Advantage).

Source: MedPAC analysis of data from the denominator file and the Medicare Beneficiary Database from CMS.

- Hospice use grew substantially in all beneficiary groups from 2000 to 2007 and continued to grow in 2008.
- Despite this growth, hospice use continued to vary by demographic and beneficiary characteristics. Medicare decedents who were older, white, female, Medicare Advantage enrollees, or non–dual eligibles were more likely to use hospice than their counterparts.

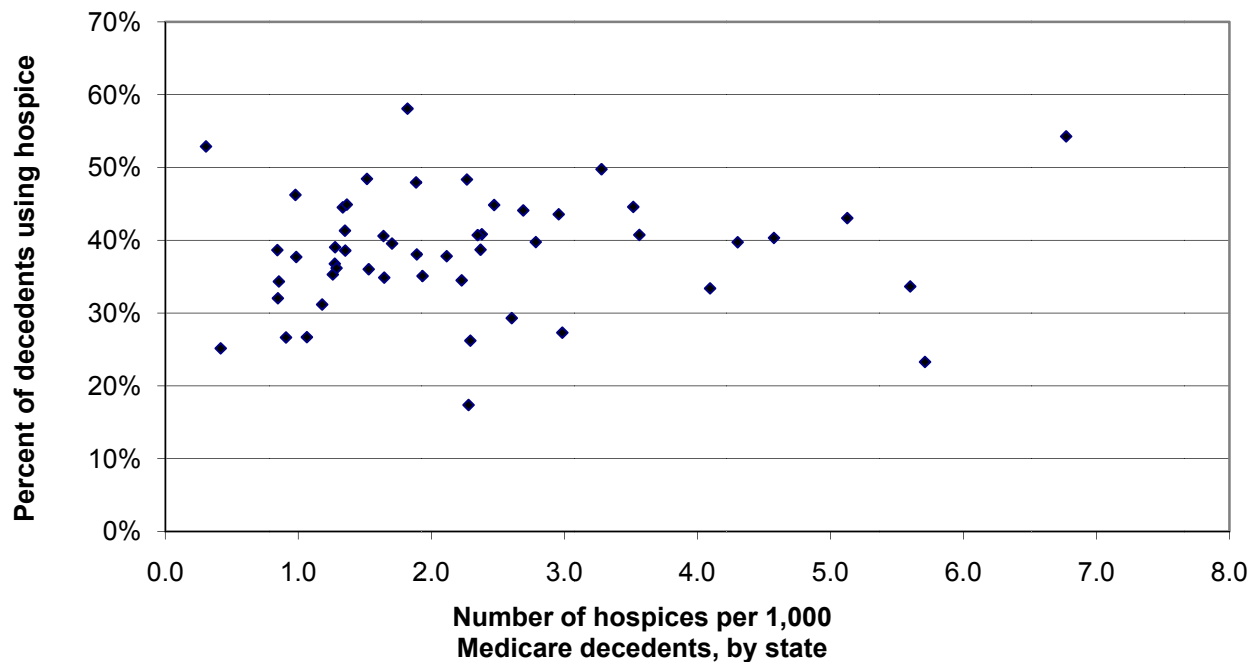
Chart 12-10. Number of Medicare-participating hospices has increased, largely driven by for-profit hospices



Source: CMS Providing Data Quickly Query, May 10, 2010, <https://pdq.cms.hhs.gov/index.jsp>.

- There were more than 3,400 Medicare-participating hospices in 2009. A majority of them were for-profit hospices.
- Between 2000 and 2009, the number Medicare-participating hospices grew by more than 1,000. For-profit hospices accounted for more than 90 percent of that growth.
- From 2007 to 2009, fewer than 60 hospices per year voluntarily exited the Medicare program due to a closure or merger.

Chart 12-11. Medicare hospice enrollment rates are unrelated to the number of hospices in a state, 2008



Note: Each data point represents one state or the District of Columbia.

Source: MedPAC analysis of the denominator file and the Medicare Beneficiary Database from CMS and data from CMS Providing Data Quickly system, <https://pdq.cms.hhs.gov/index.jsp>.

- The supply of hospices (number of hospices per 1,000 Medicare decedents) is unrelated to hospice enrollment rates among Medicare decedents across states. This fact suggests that greater numbers of hospice providers do not necessarily result in more access to care.

Chart 12-12. Hospice length of stay by diagnosis, 2007

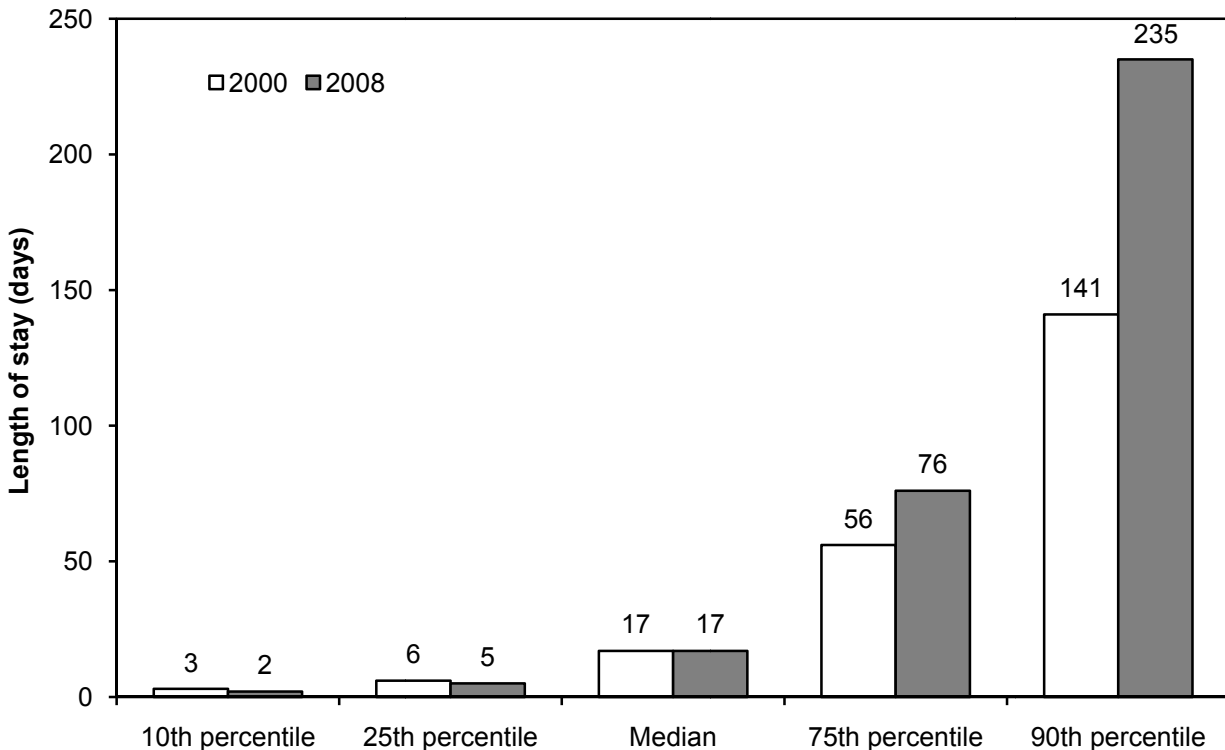
	Diagnosis share of total cases	Percent of cases with length of stay greater than 180 days
Cancer (except lung cancer)	23%	10%
Circulatory, except heart failure	11	19
Lung cancer	9	8
Debility, NOS	9	23
Heart failure	8	22
Alzheimer's and similar disease	6	33
Unspecific symptoms/signs	6	23
Chronic airway obstruction, NOS	6	26
Dementia	5	29
Organic psychoses	4	29
Genitourinary disease	3	5
Nervous system, except Alzheimer's	3	31
Respiratory disease	3	12
Other	2	12
Digestive disease	1	9
All	100	19

Note: NOS (not otherwise specified). Percent of cases by diagnosis does not sum to 100 due to the exclusion of patients with multiple diagnoses.

Source: MedPAC analysis of 100 percent hospice claims Standard Analytical File from CMS.

- In 2007, the most common terminal diagnosis among Medicare hospice patients was cancer, accounting for nearly one-third of cases. The next most common diagnoses were heart failure and other circulatory conditions (19 percent of cases) and Alzheimer's disease, dementia, organic psychoses, and other neurological conditions (17 percent of cases).
- Length of stay varies by diagnosis. At least one-quarter of hospice patients with Alzheimer's disease, chronic airway obstruction, dementia, organic psychoses, and other neurological conditions had lengths of stay exceeding 180 days. Long hospice stays were least common among beneficiaries with cancer, genitourinary disease, and digestive disease.

Chart 12-13. Long hospice stays are getting longer, while short stays remain virtually unchanged



Note: Data reflect hospice length of stay for Medicare decedents who used hospice at the time of death or before death. Length of stay reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his/her lifetime.

Source: MedPAC analysis of the denominator file and the Medicare Beneficiary Database from CMS.

- Long hospice stays have grown longer. For example, hospice length of stay at the 90th percentile grew from 141 days in 2000 to 235 days in 2008, an increase of more than 50 percent.
- Short stays in hospice have changed little since 2000. The median length of stay in hospice held steady at 17 days from 2000 to 2008. Hospice length of stay at the 25th percentile was 5 days in 2008, down slightly from 6 days in 2000.

Chart 12-14. Hospice aggregate Medicare margins, 2001–2007

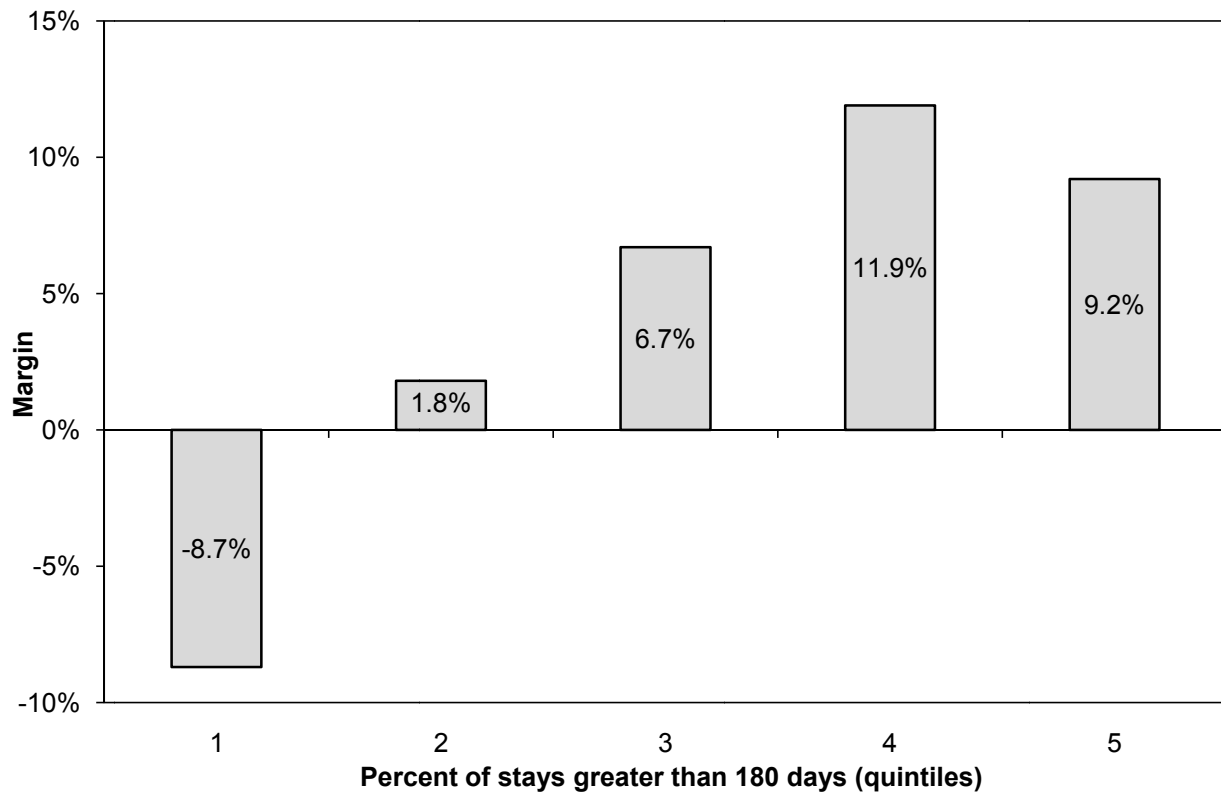
	Percent of hospices (2007)	2001	2003	2005	2006	2007
All	100%	4.4%	6.6%	4.5%	6.4%	5.9%
Freestanding	64	9.1	11.0	7.2	9.7	8.8
Home health based	18	0.2	3.9	3.0	3.8	2.3
Hospital based	17	-11.6	-13.7	-9.1	-12.7	-10.0
For profit	50	13.7	15.8	9.8	12.0	10.5
Nonprofit	36	0.1	1.1	0.9	1.5	1.8
Urban	69	4.7	7.5	5.1	7.1	6.5
Rural	31	2.7	0.3	0.0	0.6	1.2
Below cap	90	N/A	6.8	5.0	7.1	6.2
Above cap	10	N/A	3.5	-0.8	0.4	2.6
Above cap (including cap overpayments)	10	N/A	23.9	20.7	20.8	20.4

Note: N/A (not available). Margins for all provider categories exclude overpayments to above-cap hospices, except where specifically indicated. Margins are calculated based on Medicare-allowable, reimbursable costs. Percent of hospices does not sum to 100 by freestanding/provider-based categories and ownership categories because skilled nursing facility-based hospices and government hospices are not broken out separately.

Source: MedPAC analysis of Medicare hospice cost reports, 100 percent hospice claims Standard Analytic File, and Medicare Provider of Services data from CMS.

- The aggregate Medicare margin remained relatively steady from 2001 to 2007, ranging from 4.4 percent to 6.6 percent during the period. In 2007, the margin was 5.9 percent.
- Margin estimates do not include Medicare nonreimbursable costs, such as bereavement and volunteer costs (about 1.5 percent and 0.3 percent of total costs, respectively). Margins also do not include the costs and revenues associated with fundraising.
- Freestanding hospices had higher margins than provider-based (home health– and hospital-based) hospices, in part due to differences in their indirect costs. Provider-based hospices' indirect costs are higher than those of freestanding providers and are likely inflated due to the allocation of overhead from the parent provider.
- In 2007, for-profit hospice margins were strongly positive at 10.5 percent. The aggregate margin for nonprofit hospices was 1.8 percent. The subset of nonprofit hospices that were freestanding had a higher margin of 5.6 percent (not shown in table).
- Hospices that exceeded the cap (Medicare's aggregate average per beneficiary payment limit) had a 20 percent margin before the return of the cap overpayments.

Chart 12-15. Medicare margins are higher among hospices with more long stays, 2007



Note: Margins exclude overpayments to hospices that exceed the cap on the average annual Medicare payment per beneficiary. Margins are calculated based on Medicare allowable, reimbursable costs.

Source: MedPAC analysis of Medicare hospice cost reports and 100 percent hospice claims Standard Analytic File from CMS.

- Medicare's per-diem-based payment system for hospice provides an incentive for longer lengths of stay.
- Hospices with more long-stay patients generally have higher margins.

Chart 12-16. Hospices that exceeded Medicare’s annual payment cap, 2002–2007

	2002	2003	2004	2005	2006	2007
Percent of hospices exceeding the cap	2.6%	4.1%	5.8%	7.8%	9.4%	10.4%
Average payments over the cap per hospice exceeding the cap (in thousands)	\$470	\$664	\$749	\$755	\$731	\$612
Payments over the cap as a percent of overall Medicare hospice spending	0.6%	1.2%	1.7%	2.2%	2.4%	2.0%

Note: The cap year is defined as the period beginning November 1 and ending October 31 of the following year.

Source: MedPAC analysis of 100 percent hospice claims Standard Analytic File data, Medicare hospice cost reports, Provider of Services file data from CMS, and CMS Providing Data Quickly system. Data on total spending for each fiscal year from the CMS Office of the Actuary.

- The percent of hospices exceeding Medicare’s aggregate average per beneficiary payment limit, or “cap,” increased in recent years to 10.4 percent in 2007.
- The average cap overpayment per above-cap hospice declined from \$755,000 in 2005 to \$612,000 in 2007.
- Medicare payments over the cap represented 2.0 percent of total Medicare hospice spending in 2007, down from 2.4 percent in 2006. Total cap overpayments fell slightly from \$211 million in 2006 to \$208 million in 2007.

Chart 12-17. Length of stay and live discharge rates for above- and below-cap hospices, 2007

Diagnosis	Percent of hospice users with stays exceeding 180 days		Live discharges as a percent of all discharges	
	Above-cap hospices	Below-cap hospices	Above-cap hospices	Below-cap hospices
All	41%	18%	46%	16%
Cancer	19	9	24	10
Neurological conditions	50	29	41	18
Heart/circulatory	44	18	55	15
Debility	38	22	47	20
COPD	47	24	54	19
Other	46	20	54	21

Note: COPD (chronic obstructive pulmonary disease). Length-of-stay data reflect the percent of hospice users in 2007 whose hospice length of stay was beyond 180 days.

Source: MedPAC analysis of 100 percent hospice claims Standard Analytic File and denominator file from CMS.

- Above-cap hospices have substantially more patients with very long stays and more live discharges than below-cap hospices for all diagnoses.
- Between 44 percent and 50 percent of above-cap hospices' patients with neurological conditions, heart or circulatory conditions, or chronic obstructive pulmonary disease had stays exceeding 180 days compared with 18 percent to 29 percent at below-cap hospices.
- For all diagnoses, the live discharge rates at above-cap hospices were at least double and in some cases more than triple the rates at below-cap hospices. For example, among patients with heart or circulatory conditions, 55 percent of discharges at above-cap hospices were live discharges compared with 15 percent at below-cap hospices.

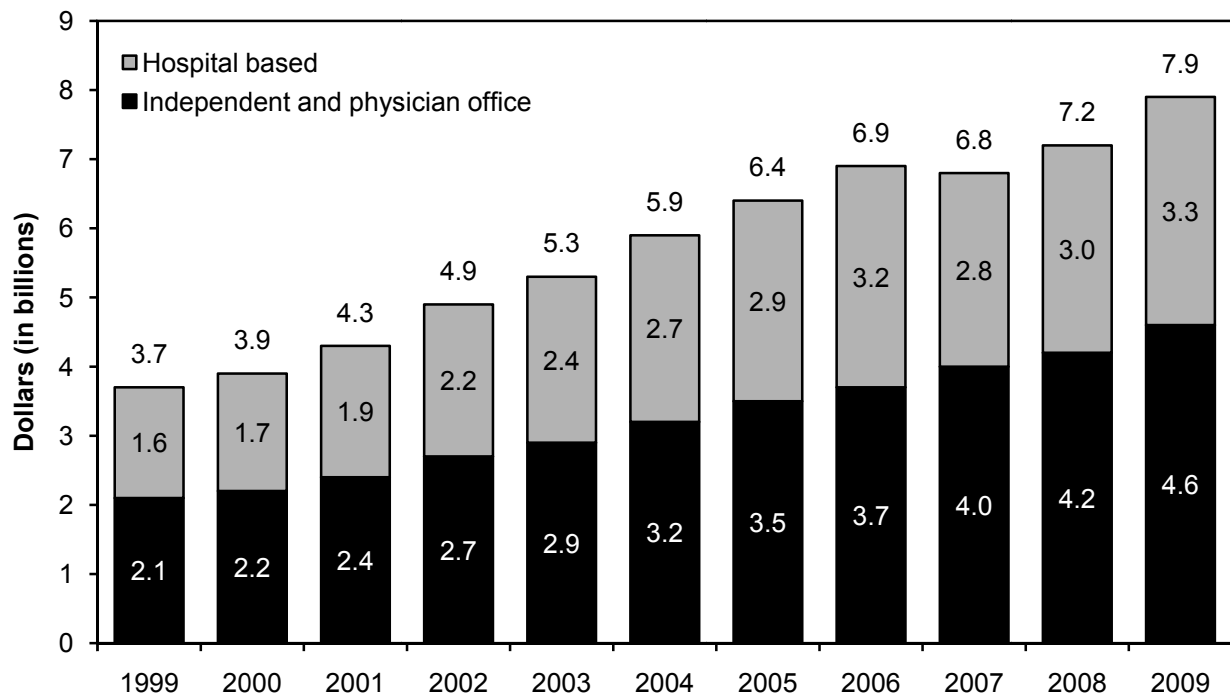
Chart 12-18. The hospice cap is unrelated to the use of hospice services across states, 2007

Top 10 states with highest hospice use rates	Percent of:	
	Decedents using hospice	Hospices exceeding the cap
Arizona	57%	32%
Utah	52	21
Florida	52	5
Colorado	48	2
Iowa	48	1
Oregon	47	2
Delaware	46	0
New Mexico	44	9
Texas	44	10
Michigan	44	3

Source: MedPAC analysis of the denominator file, the Medicare Beneficiary Database, 100 percent hospice claims Standard Analytic File data, Medicare hospice cost reports from CMS and CMS Providing Data Quickly system.

- Six of the 10 states with the highest use of hospice among Medicare decedents have a very small percentage (0 percent to 5 percent) of hospices exceeding the cap. This finding demonstrates that high rates of hospice use can be achieved without hospices exceeding the cap.

Chart 12-19. Medicare spending for clinical laboratory services, fiscal years 1999–2009



Note: Spending is for services paid under the clinical laboratory fee schedule. Hospital-based services are furnished in labs owned or operated by hospitals. Total spending appears on top of each bar. The segments of each bar may not sum to the totals on top of each bar due to rounding.

Source: CMS, Office of the Actuary.

- Medicare spending for clinical laboratory services grew by an average of 9.3 percent per year between 1999 and 2006. This growth was driven by rising volume, as there was only one increase in lab payment rates during those years. Spending declined by 0.5 percent in 2007 due to a drop in hospital-based lab spending and increased by 4.4 percent in 2008 and by 11.2 percent in 2009.
- In 2009, Medicare spent \$7.9 billion (1.6 percent of total program spending) on clinical lab services.
- Hospital-based labs' share of total clinical lab spending increased from 43 percent in 1999 to 46 percent in 2006 but fell to 41 percent in 2009.

Web links. Other services

Dialysis

- More information on Medicare's payment system for outpatient dialysis services can be found in MedPAC's Payment Basics series.

http://www.medpac.gov/documents/MedPAC_Payment_Basics_09_dialysis.pdf

- The U.S. Renal Data System provides information about the incidence and prevalence of patients with renal disease, their demographic and clinical characteristics, and their spending patterns.

<http://www.usrds.org>

- The National Institute of Diabetes and Digestive and Kidney Diseases and the National Kidney Foundation provide health information about kidney disease for consumers.

<http://www.niddk.nih.gov/>
<http://www.kidney.org/>

- CMS provides specific information about each dialysis facility.

<http://www.medicare.gov/Dialysis/Home.asp>

- Chapter 2D of the MedPAC March 2010 Report to the Congress provides information about the financial performance of dialysis facilities.

http://www.medpac.gov/chapters/Mar10_Ch02D.pdf

- MedPAC's June 2005 Report to the Congress recommends changes to how Medicare pays for composite rate services and injectable drugs.

http://www.medpac.gov/publications%5Ccongressional_reports%5CJune05_ch4.pdf

- MedPAC's October 2003 report describes how Medicare could modernize the outpatient dialysis payment system.

http://www.medpac.gov/publications/congressional_reports/oct2003_Dialysis.pdf

- MedPAC's comment on revisions to payment policies under the physician fee schedule for calendar year 2004 includes changes in how to pay for services furnished by nephrologists.

http://www.medpac.gov/publications/other_reports/100603_RevPhysFeeSched_CB_comment.pdf

- MedPAC's comment on CMS's proposed rule to implement provisions of the Medicare Improvements for Patients and Providers Act of 2008 that modernize the outpatient dialysis payment system by broadening the payment bundle in 2011 and implementing a quality incentive program in 2012.

<http://medpac.gov/documents/End%20Stage%20Renal%20Disease.pdf>

Hospice

- More information on Medicare's payment system for hospice services can be found in MedPAC's Payment Basics series.

http://www.medpac.gov/documents/MedPAC_Payment_Basics_09_hospice.pdf

- Additional information and analysis related to the Medicare hospice benefit and the financial performance of hospice providers can be found in Chapter 2E of MedPAC's March 2010 Report to the Congress.

http://www.medpac.gov/chapters/Mar10_Ch02E.pdf

- Additional analyses of Medicare hospice visit patterns can be found in the online appendix to Chapter 2E of MedPAC's March 2010 Report to the Congress.

http://www.medpac.gov/chapters/Mar10_Ch02E_APPENDIX.pdf

- Recommendations for reforms to the hospice payment system and steps to improve accountability and oversight of the benefit can be found in Chapter 6 of MedPAC's June 2009 Report to the Congress.

http://www.medpac.gov/chapters/Mar09_ch06.pdf

- Information and analysis related to the Medicare hospice benefit, with a specific focus on the hospice cap, can be found in Chapter 8 of MedPAC's June 2008 Report to the Congress.

http://www.medpac.gov/chapters/Jun08_Ch08.pdf

- General analysis and information related to the Medicare hospice benefit can be found in Chapter 3 of MedPAC's June 2006 Report to the Congress.

http://www.medpac.gov/publications/congressional_reports/Jun06_Ch03.pdf

- Chapter 6 of MedPAC's June 2004 Report to the Congress reviews trends and policy issues for the Medicare hospice benefit.

http://www.medpac.gov/publications/congressional_reports/June04_ch6.pdf

- The MedPAC May 2002 *Report to the Congress: Medicare Beneficiaries' Access to Hospice* provides useful benchmark information on hospice utilization early in this decade.

http://www.medpac.gov/publications/congressional_reports/may2002_HospiceAccess.pdf

- CMS maintains a variety of information related to the hospice benefit.

<http://www.cms.gov/center/hospice.asp>

- CMS also provides information on hospice for its beneficiaries.

<http://www.medicare.gov/Publications/Pubs/pdf/02154.pdf>

Clinical laboratory

- More information on Medicare's payment system for clinical lab services can be found in MedPAC's Payment Basics series.

http://medpac.gov/documents/MedPAC_briefs_Payment_Basics_09_clinical_lab.pdf

- Information about CMS's regulation of clinical laboratories, including the number and type of certified labs in the United States, can be found on the CMS website.

<http://www.cms.gov/CLIA>