Department of Health and Human Services

OFFICE OF INSPECTOR GENERAL

MEDICARE HOSPICE CARE: A COMPARISON OF BENEFICIARIES IN NURSING FACILITIES AND BENEFICIARIES IN OTHER SETTINGS

Daniel R. Levinson
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EXECUTIVE SUMMARY

OBJECTIVE

1. To determine the percentage of Medicare hospice beneficiaries who reside in nursing facilities.
2. To describe the characteristics of Medicare hospice beneficiaries who reside in nursing facilities and compare these characteristics to those of hospice beneficiaries who reside in other settings.

BACKGROUND

The Medicare hospice benefit allows a beneficiary with a terminal illness to forgo curative treatment for the illness and instead receive palliative care. The number of beneficiaries receiving hospice care has increased significantly in recent years and some studies suggest that the use of hospice care is growing most rapidly in nursing facilities. However, little is known about the characteristics of hospice beneficiaries who reside in nursing facilities and the way in which this population compares to hospice beneficiaries in other settings.

This study describes the characteristics of Medicare hospice beneficiaries who resided in nursing facilities in 2005 and compares this population to Medicare hospice beneficiaries who resided in other settings. We used the Medicare Part A hospice claims from the National Claims History file to identify beneficiaries who received hospice care in 2005 and to obtain demographic information. We used the Minimum Data Set to identify the hospice beneficiaries who resided in nursing facilities. We also used the Online Survey and Certification Reporting System to identify hospice agencies that were for-profit and those that were not-for-profit.

This study is the first in a two-part series. The second study will determine the nature and extent of hospice services provided to beneficiaries residing in nursing facilities and assess the appropriateness of payments for their hospice care.

FINDINGS

Twenty-eight percent of Medicare hospice beneficiaries resided in nursing facilities in 2005. A total of 871,437 Medicare beneficiaries received hospice care in 2005. Twenty-eight percent of these beneficiaries resided in nursing facilities for at least some time while

they received hospice care. Medicare payments for hospice care for these beneficiaries amounted to $2.55 billion. Seventy-two percent of hospice beneficiaries resided in other settings. Medicare payments for hospice care for these beneficiaries totaled $5.37 billion.

Higher percentages of hospice beneficiaries residing in nursing facilities were older and female compared to their counterparts residing in other settings. Those in nursing facilities were also more likely to live in the Midwest. The two groups were similar, however, in terms of race, the reasons for Medicare eligibility, and their likelihood of living in urban areas. Of the four levels of hospice care, beneficiaries in both groups most commonly received routine home care, followed by general inpatient care, continuous home care, and respite care.

Hospice beneficiaries in nursing facilities were more than twice as likely as beneficiaries in other settings to have terminal diagnoses of ill-defined conditions, mental disorders, or Alzheimer's disease. The two groups of beneficiaries differed greatly in terms of their terminal diagnoses. Forty-eight percent of hospice beneficiaries in nursing facilities had terminal diagnoses of ill-defined conditions, mental disorders, or Alzheimer's disease, compared to 23 percent of hospice beneficiaries in other settings. Ill-defined conditions are diagnoses that are not easily classified in other diagnosis categories. Ill-defined conditions include debility, adult failure to thrive, and senility.

Hospice beneficiaries in nursing facilities were also half as likely to have terminal diagnoses of cancer as beneficiaries in other settings. In 2005, 20 percent of hospice beneficiaries in nursing facilities had cancer diagnoses, compared to 41 percent of beneficiaries in other settings.

On average, beneficiaries in nursing facilities spent more time in hospice care and were associated with higher Medicare reimbursements than beneficiaries in other settings. Hospice beneficiaries in nursing facilities spent an average of 80 days in hospice care in 2005. Beneficiaries in other settings spent an average of 62 days in hospice care. For 14 of the 15 diagnosis categories, beneficiaries in nursing facilities had longer average lengths of stay in hospice care than beneficiaries in other settings.

Additionally, average Medicare reimbursement for hospice care for beneficiaries in nursing facilities was 25 percent higher than for beneficiaries in other settings. On average, Medicare paid $10,631 per beneficiary for hospice care for beneficiaries in nursing facilities in 2005,

compared with the $8,500 per beneficiary paid for beneficiaries in other settings. Longer stays in hospice care by beneficiaries who resided in nursing facilities contributed to their higher average reimbursement.

CONCLUSION

In our comparison of Medicare hospice beneficiaries who reside in nursing facilities to hospice beneficiaries who reside in other settings, we found that beneficiaries in nursing facilities tended to be older and more likely to have ill-defined conditions. Also, their time in care was longer and more costly. A second study will assess the appropriateness of payments for hospice care for beneficiaries in nursing facilities. As the country's population ages, hospice use in general and hospice care by nursing facility residents is expected to grow. The information presented in this study and the follow-up study may help the Centers for Medicare & Medicaid Services (CMS) and other decisionmakers better understand the Medicare hospice care population.

AGENCY COMMENTS

CMS states that this report provides a helpful general description of the current utilization patterns. CMS notes the following limitations of the study: the cost per beneficiary includes only hospice payments and not other costs of care through Parts A, B, and D; the study does not reference the number of hospitalizations; the study does not discuss the number of hospice revocations or discharges that have occurred; and the study reflects only the length of stay and costs in 2005.

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OBJECTIVES

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BACKGROUND

The Medicare hospice benefit allows a beneficiary with a terminal illness to forgo curative treatment for the illness and instead receive palliative care, which is the relief of pain and other uncomfortable symptoms. The number of beneficiaries receiving hospice care has increased significantly in recent years. In fiscal year (FY) 2001, 580,000 Medicare beneficiaries received hospice care. In FY 2006, this number increased by 61 percent to nearly 934,000 beneficiaries. At the same time, Medicare spending on hospice care increased from $3.6 billion in 2001 to $9.2 billion in 2006. [1]

Some studies suggest that the use of hospice care is growing most rapidly in nursing facilities.[2] However, little is known about the characteristics of hospice beneficiaries in nursing facilities and the way in which this population compares to hospice beneficiaries in other settings. Recent studies also note the need for comprehensive data about Medicare hospice beneficiaries and the services they receive.[3]

[1] Centers for Medicare & Medicaid Services, "Medicare Hospice Expenditures and Units of Care" (November 9, 2006). Available online at http://www.cms.hhs.gov/ProspMedicareFeeSvcPmtGen/downloads/FY05update_hospice_expenditures_and_units_of_care.pdf. Accessed on May 22, 2007; Office of Inspector General analysis of Medicare Health Care Information System data from the Centers for Medicare & Medicaid Services. Accessed on July 17, 2007.

[2] Office of the Assistant Secretary for Planning and Evaluation, "Use of Medicare's Hospice Benefit by Nursing Facility Residents" (March 2000) p. 2; Medicare Payment Advisory Commission, "Medicare Beneficiaries' Access to Hospice" (May 2002) p. 5. Available online at http://www.medpac.gov/publications/congressional_reports/may2002_HospiceAccess.pdf. Accessed on May 11, 2006.

[3] Medicare Payment Advisory Commission, "Medicare Beneficiaries' Access to Hospice" (May 2002) p. 8; Government Accountability Office, "Medicare Hospice Care: Modifications to Payment Methodology May Be Warranted" (GAO-05-42) (2004) p. 20; Office of the Assistant Secretary for Planning and Evaluation, "Synthesis and Analysis of Medicare's Hospice Benefit" (March 2000) p. 4.

This study determines the percentage of Medicare beneficiaries who received hospice care and resided in nursing facilities in 2005. It also describes the characteristics of these beneficiaries and compares them to those of Medicare beneficiaries who received hospice care and resided in other settings, such as private homes. This study is the first in a two-part series. The second study will determine the nature and extent of hospice services provided to beneficiaries residing in nursing facilities and assess the appropriateness of payments for their hospice care.

The Medicare Hospice Benefit

The Tax Equity and Fiscal Responsibility Act of 1982 created the Medicare hospice benefit for eligible beneficiaries under Medicare Part A.[4] The goal of hospice care is to assist terminally ill beneficiaries to continue life with minimal disruption while supporting families throughout the process. The care may be provided to individuals and their families in the home or other places of residence, such as a skilled or other nursing facility. The care provided to families includes counseling for caregivers, training to provide care for the individual, and bereavement counseling.

To be eligible for Medicare hospice care, a beneficiary must be entitled to Part A of Medicare and be certified as having a terminal prognosis with a life expectancy of 6 months or less, should the disease run its normal course. Certification is based on the attending physician's and/or hospice medical director's clinical judgment regarding the normal course of the disease.[5] Upon a beneficiary's election of hospice care, the hospice provider assumes the responsibility for medical care related to the beneficiary's terminal illness and related conditions. This care is palliative, rather than curative. The beneficiary waives Medicare coverage for services related to the treatment of the terminal condition or a related condition[6] but retains Medicare coverage for services to treat conditions unrelated to the terminal illness.

Beneficiaries are entitled to receive hospice care for two 90-day periods and unlimited[7] 60-day election periods.[8] The periods need not be

[4] Pub. L. No. 97-248, section 122, 96 Stat. 324, 356 (codified at 42 U.S.C. § 1395x(dd)).

[5] 42 CFR §§ 418.20 and 418.22.

[6] 42 CFR § 418.24.

[7] Before 1990, hospice beneficiaries who were in hospice care for more than 210 days and still required such care were provided care by the hospice without charge to Medicare or the beneficiary.

[8] 42 CFR § 418.21.

consecutive. At the start of each period of care, a physician must certify that the beneficiary is terminally ill and has a life expectancy of 6 months or less. The attending physician and the hospice medical director are required to make the initial certification. The hospice medical director is required to make each subsequent recertification.[9] Beneficiaries may revoke their election of hospice care and return to standard Medicare coverage at any time.[10]

Medicare coverage requirements for hospice services. Hospice care is provided by Medicare-certified hospice agencies. According to regulations, hospice services must meet the following requirements to be covered by Medicare: the services must be reasonable and necessary for the palliation or management of the terminal illness as well as related conditions; the individual must elect hospice care; a plan of care must be established by a physician and an interdisciplinary group comprising a physician, a registered nurse, social worker, and a pastoral or other counselor; the services must be consistent with the plan of care; and a certification that the individual is terminally ill must be completed by the medical director of the hospice and the individual's attending physician.[11]

Hospice services. As stated in Medicare statutes and regulations, the following are covered hospice services:

- nursing care provided by, or under the supervision of, a registered nurse;
- physical or occupational therapy or speech-language pathology services;
- medical social services under the direction of a physician;
- home health aide and homemaker services;
- medical supplies (including drugs and biologicals) and the use of medical appliances;
- physicians' services;
- short-term inpatient care (including both respite care and procedures necessary for pain control and acute and chronic symptom management);

[9] 42 CFR § 418.22.

[10] 42 CFR § 418.28.

[11] 42 CFR § 418.200; 42 CFR § 418.24; 42 CFR § 418.58; 42 CFR § 418.68; and 42 CFR § 418.22.

- counseling (including dietary counseling) with respect to care of the terminally ill individual and adjustment to the individual's death;[12] and
- any other service that is specified in the plan of care as reasonable and necessary for the palliation and management of the terminal illness and related conditions and for which payment may otherwise be made under Medicare.[13]

Payment rates. The Medicare hospice benefit has four levels of care and each level has an all-inclusive, prospectively determined daily rate. The rate is paid to the hospice for each day that a beneficiary is in hospice care, regardless of the amount of services furnished. The Centers for Medicare & Medicaid Services (CMS) publishes general hospice payment rates annually to be used for each level of care. The rates are adjusted based on the beneficiary's geographic location. The levels of care and the FY 2005 Medicare unadjusted daily rate for each are as follows:

- Routine Home Care ($121.98): The routine home care rate is paid to the hospice for each day the beneficiary is under the care of the hospice and not receiving one of the other categories of care. Routine home care includes, but is not limited to, nursing and home health aide services. Routine home care can be provided in the home or other places of residence, such as a nursing facility.
- Continuous Home Care ($711.92): Continuous home care is allowed only during periods of crisis in which a beneficiary requires continuous care to achieve palliation or management of acute medical symptoms. It is covered only as necessary to maintain the terminally ill beneficiary at home. The care must be predominantly nursing care. Continuous home care can be provided in the home or other places of residence, such as a nursing facility. The continuous home care rate is divided by 24 hours to determine an hourly rate. A minimum of eight hours must be provided.
- Respite Care ($126.18): Respite care is short-term inpatient care provided to the beneficiary when necessary to relieve the beneficiary's caregiver(s). Respite care may be provided only

[12] 42 U.S.C. § 1395x(dd)(1)(H); 42 CFR § 418.202.
[13] 42 CFR § 418.202.

on an occasional basis and is not reimbursed for more than 5 consecutive days. Inpatient care may be provided in a Medicare-certified or Medicaid-certified hospice inpatient facility, hospital, or skilled nursing facility.

- General Inpatient Care ($542.61): General inpatient care is inpatient care for pain control and symptom management that cannot feasibly be provided in other settings. Inpatient care may be provided in a Medicare-certified or Medicaid-certified hospice inpatient facility, hospital, or skilled nursing facility.

Hospice care in nursing facilities. When a beneficiary resides in a nursing facility, the hospice agency is responsible for providing all of the core hospice services (nursing, physician, medical social, and counseling) to the beneficiary.[14] The nursing facility provides room and board care and care unrelated to the terminal illness. Medicare reimburses the hospice provider according to the level of care provided and the beneficiary or a third party payer pays the nursing facility for room and board costs.[15]

METHODOLOGY

Scope

This study describes the characteristics of Medicare hospice beneficiaries who resided in nursing facilities in 2005 and compares this population to Medicare hospice beneficiaries who resided in other settings. Our analysis includes the universe of Medicare hospice beneficiaries who resided in nursing facilities and the universe of Medicare hospice beneficiaries who resided in other settings. We define Medicare hospice beneficiaries in nursing facilities as all beneficiaries who resided in nursing facilities for at least 1 day while in hospice care during 2005. We used a number of different data sources to identify this population and the comparison group because no single data source identifies the place of service for hospice care. We used 2005 claims data because 2005 was the most recent full year of complete claims data available at the time of our study.

[14] The hospice agency can contract with the nursing facility to provide noncore services as well as caregiver services such as meals and laundry.

[15] "Medicare Benefit Policy Manual," chapter 9, section 20.3 (December 3, 2004).

Beneficiaries Who Received Hospice Care in 2005

We identified all beneficiaries who received hospice care in 2005 using the Medicare Part A hospice claims from the National Claims History file for 2005. We also included claims from the 2006 file that covered days of service that occurred in 2005. Hospice agencies typically submit claims that cover a 1-month period. Therefore, some claims from the 2006 file included days from 2005. Similarly, some claims from the 2005 file included days from 2004. We determined Medicare reimbursement for the 2005 portion of these claims by multiplying the percentage of days that the beneficiary received hospice care in 2005 by the claim reimbursement amount.

We obtained demographic information about the beneficiaries from the claims data. We also matched the claims data to the Medicare Enrollment Database by Health Insurance Claim Number to identify the Social Security number for each beneficiary. We used the Social Security numbers to link this file to other databases.

Beneficiaries Who Received Hospice Care and Resided in Nursing Facilities

We identified the beneficiaries who received hospice care and resided in nursing facilities using the Minimum Data Set (MDS) from 2004, 2005, and 2006. The MDS includes assessments on all residents in Medicare-certified or Medicaid-certified long term care facilities, including skilled nursing facilities. For the purpose of this report, we refer to all such facilities as nursing facilities. We considered a beneficiary a resident of a nursing facility if the beneficiary had an MDS. Nursing facilities complete these assessments at scheduled intervals during a resident's time in a facility and when a resident's health status changes.

We used information from the MDS to create a record for each beneficiary that included the dates he or she resided in a nursing facility. We then matched these records, by Social Security number, to the claims data to identify the beneficiaries who received hospice care and resided in nursing facilities in 2005. These beneficiaries could have been in a nursing facility before electing hospice care or entered a facility after electing hospice care.

Hospice Agencies

We identified the hospice agencies that provided care to beneficiaries in 2005 by using the Online Survey and Certification Reporting System (OSCAR). We matched the provider numbers in the claims file with the OSCAR data. We identified hospice agencies that were for-profit and

those that were not-for-profit using a variable that indicates the type of provider ownership.

Analysis of Beneficiary Characteristics

We analyzed the files described above to determine the characteristics of hospice beneficiaries who resided in nursing facilities in 2005 and those who resided in other settings. We determined the total number of beneficiaries in each of these groups, their demographic characteristics, their diagnosis categories,[16] and reimbursements for hospice care.

Standards

Our review was conducted in accordance with the "Quality Standards for Inspections" issued by the President's Council on Integrity and Efficiency and the Executive Council on Integrity and Efficiency.

[16] The diagnosis categories are from the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), which is the official system of assigning codes to diagnoses and procedures.

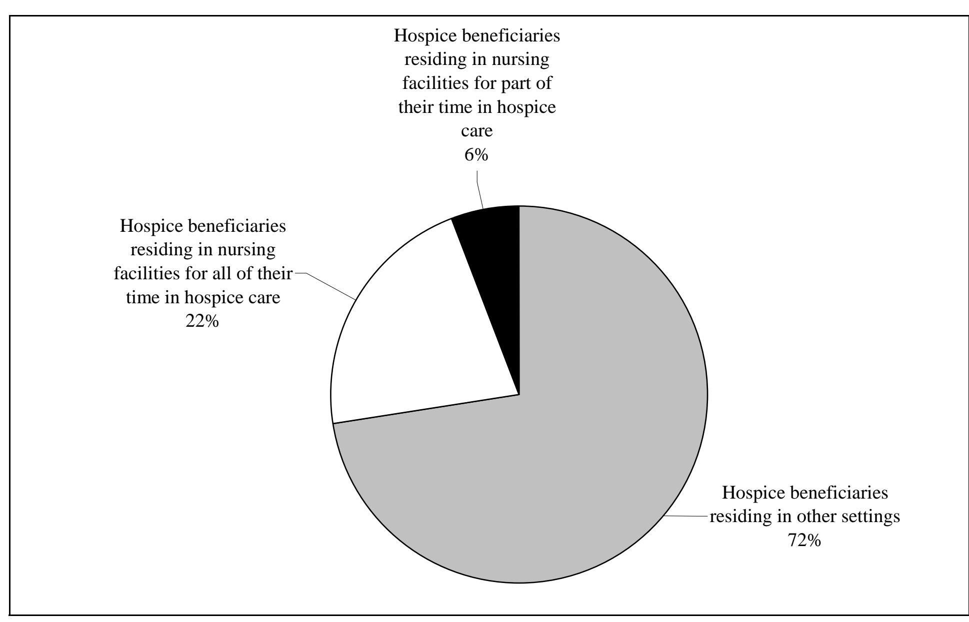
F I N D I N G S

Twenty-eight percent of Medicare hospice beneficiaries resided in nursing facilities in 2005

A total of 871,437 Medicare beneficiaries received hospice care in 2005. Twenty-eight percent of these beneficiaries resided in nursing facilities for at least some time while they received hospice care. As Figure 1 shows, 22 percent of beneficiaries resided in nursing facilities for all of their time in hospice care in 2005, and 6 percent resided in nursing facilities for part of their time in hospice care. These beneficiaries started hospice care before entering facilities and/or left the facilities for some time during their hospice care in 2005. The remaining 72 percent of hospice beneficiaries resided in other settings.

According to our analysis of hospice claims, Medicare paid a total of $7.92 billion for hospice care for all Medicare beneficiaries in 2005. Thirty-two percent of these Medicare payments were for beneficiaries who resided in nursing facilities, amounting to $2.55 billion. The remaining $5.37 billion was for beneficiaries who resided in other settings.

FIGURE 1: Medicare Hospice Beneficiaries, 2005



Source: Office of Inspector General analysis of Medicare claims and MDS data, 2007.

Age and Gender. Higher percentages of hospice beneficiaries residing in nursing facilities were older and female, compared to their counterparts residing in other settings. In 2005, the average age of hospice beneficiaries residing in nursing facilities was 84 years, while the average age for hospice beneficiaries residing in other settings was 81 years. Fifty-two percent of hospice beneficiaries in nursing facilities were 85 years or older, compared to 36 percent of beneficiaries in other settings. Females represented 68 percent of hospice beneficiaries in nursing facilities, as opposed to 56 percent of hospice beneficiaries in other settings. See Appendix A for a table of the demographic characteristics of the two groups.

Other Demographics. Hospice beneficiaries in nursing facilities were more likely than beneficiaries in other settings to live in the Midwest region of the United States and less likely to live in the South. Thirty percent of hospice beneficiaries in nursing facilities lived in the Midwest, compared to 21 percent of hospice beneficiaries in other settings. Thirty-four percent of the beneficiaries in nursing facilities lived in the South, as opposed to 40 percent of beneficiaries in other settings. The two groups were similar, however, in terms of race, the reasons for Medicare eligibility, and their likelihood of living in urban areas.

Levels of Hospice Care. Routine home care was the most common level of hospice care received by beneficiaries in both groups. As Table 1 shows, 94 percent of hospice beneficiaries in nursing facilities received routine home care at some time during the year, compared to 85 percent of beneficiaries in other settings. General inpatient care was the next most common level of care. Fifteen percent of hospice beneficiaries in nursing facilities received general inpatient care at some time during the year, in contrast to 24 percent of beneficiaries in other settings. Seven percent of beneficiaries in nursing facilities and 6 percent of beneficiaries in other settings had continuous home care. Respite care was the least common, received by 3 percent of those in nursing facilities and 2 percent of those in other settings.

Table 1: Levels of Hospice Care, 2005

Level of Hospice Care	Beneficiaries in Nursing Facilities	Beneficiaries in Other Settings
Routine Home Care	94%	85%
General Inpatient Care	15%	24%
Continuous Home Care	7%	6%
Respite Care	3%	2%

Source: Office of Inspector General analysis of Medicare claims and MDS data, 2007.
Note: Levels of care are not mutually exclusive.

<u>*Hospice Agencies*</u>. Both for-profit and not-for-profit hospice agencies provide care for beneficiaries who reside in nursing facilities. In 2005, for-profit hospice agencies had a higher percentage of their Medicare beneficiaries residing in nursing facilities than not-for-profit hospice agencies. For-profit hospice agencies had 30 percent of their Medicare beneficiaries residing in nursing facilities. In contrast, not-for-profit hospice agencies had 23 percent of their Medicare beneficiaries residing in nursing facilities. See Table 2.

Table 2: Medicare Hospice Beneficiaries by Type of Hospice Agency, 2005

	For-Profit	Not-for-Profit
Beneficiaries in Nursing Facilities	30%	23%
Beneficiaries in Other Settings	70%	77%
Total	**100%**	**100%**

Source: Office of Inspector General analysis of Medicare claims and MDS data, 2007.

Overall, the percentage of hospice agencies that are for-profit continues to grow. In 1992, 13 percent of hospice agencies were for-profit and this percentage grew to 28 percent by 2001.[17] In 2005, 45 percent of the 2,884 hospice agencies that provided care to the Medicare population were for-profit.

[17] Government Accountability Office, "Medicare Hospice Care: Modifications to Payment Methodology May Be Warranted" (GAO-05-42) (2004) p. 9.

Hospice beneficiaries in nursing facilities were more than twice as likely as beneficiaries in other settings to have terminal diagnoses of ill-defined conditions, mental disorders, or Alzheimer's disease

A beneficiary must be diagnosed with a terminal illness with a life expectancy of 6 months or less to be eligible for Medicare hospice care. In 2005, beneficiaries in nursing facilities were more than twice as likely as beneficiaries in other settings to have diagnoses in certain categories. These categories are: (1) symptoms, signs, and ill-defined conditions[18] (referred to as "ill-defined conditions"); (2) mental disorders; and (3) Alzheimer's disease.[19]

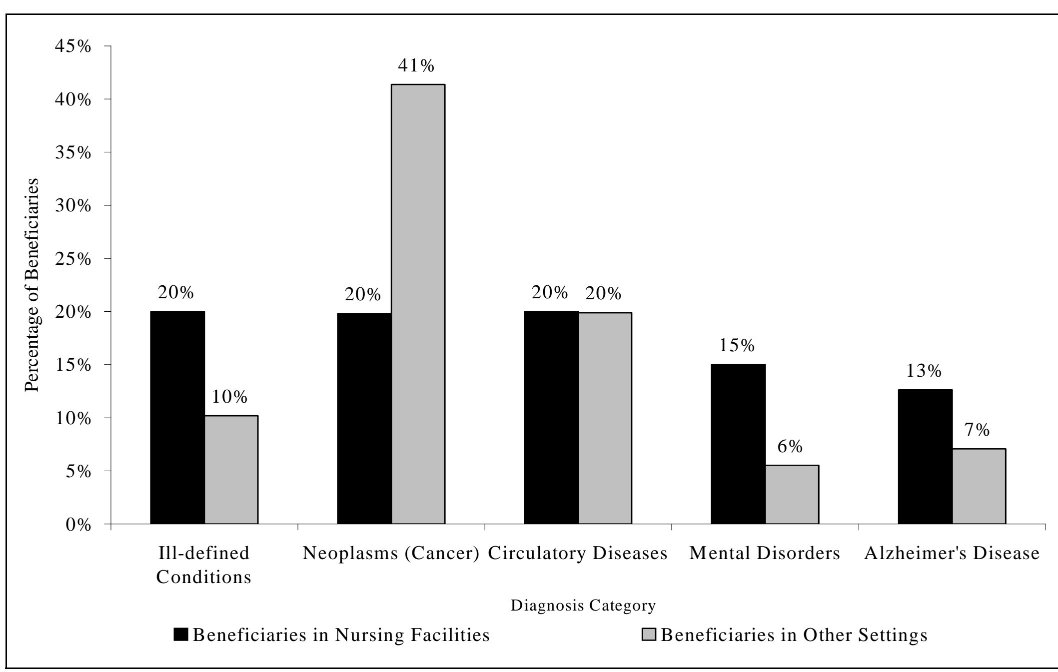
Forty-eight percent of hospice beneficiaries in nursing facilities had terminal diagnoses in one of these categories, compared to 23 percent of hospice beneficiaries in other settings. Specifically:

- Twenty percent of hospice beneficiaries in nursing facilities had terminal diagnoses of ill-defined conditions, as opposed to 10 percent of beneficiaries in other settings. See Figure 2. Within this category, almost all of the beneficiaries, regardless of where they resided, had diagnoses of debility, adult failure to thrive, or senility without mention of psychosis.
- Fifteen percent of hospice beneficiaries in nursing facilities had terminal diagnoses of mental disorders, compared to 6 percent of hospice beneficiaries in other settings. The most common mental disorders for these beneficiaries were "dementia in conditions classified elsewhere without behavior disturbances," "other specified organic brain syndromes," and "atherosclerotic dementia, uncomplicated."
- Thirteen percent of hospice beneficiaries in nursing facilities had diagnoses of Alzheimer's disease, as opposed to 7 percent of beneficiaries in other settings.

[18] This category includes diagnoses that are not easily classified in other ICD-9-CM categories such as debility, adult failure to thrive, and senility.

[19] Alzheimer's disease is listed under diseases of the nervous system and sense organ in the ICD-9-CM.

FIGURE 2: Common Diagnoses for Medicare Hospice Beneficiaries, 2005



Source: Office of Inspector General analysis of Medicare claims and MDS data, 2007.

Another major difference between the two groups of beneficiaries was the frequency of cancer. When the hospice benefit was introduced, cancer was by far the most prevalent terminal diagnosis among hospice beneficiaries. Although cancer is still prevalent, cancer diagnoses for hospice beneficiaries are now less common, particularly among beneficiaries in nursing facilities. In 2005, hospice beneficiaries in nursing facilities were half as likely to have terminal diagnoses of cancer as beneficiaries in other settings. Twenty percent of hospice beneficiaries in nursing facilities had cancer diagnoses, compared to 41 percent of beneficiaries in other settings.

In total, Medicare hospice beneficiaries had terminal diagnoses in 15 different diagnosis categories in 2005.[20] In addition to those discussed above, other common diagnosis categories were diseases of the circulatory system (referred to as circulatory diseases) and diseases of the respiratory system. See Appendix B for a complete list of diagnosis categories and the percentage of beneficiaries with diagnoses within each category.

[20] There are two additional diagnosis categories that we did not include in our analysis because together they accounted for 0.001 percent of the hospice population.

On average, beneficiaries in nursing facilities spent more time in hospice care and were associated with higher Medicare reimbursements than beneficiaries in other settings

Hospice beneficiaries in nursing facilities spent an average of 80 days in hospice care in 2005, compared to an average of 62 days for beneficiaries in other settings. Beneficiaries in nursing facilities were less likely than other beneficiaries to spend between 1 and 30 days in hospice care. Forty-nine percent of the beneficiaries in nursing facilities spent 30 days or fewer in hospice care in 2005, while 58 percent of beneficiaries in other settings spent that time in hospice care.

Beneficiaries in nursing facilities were more likely than other beneficiaries to spend more than 180 days in hospice care. Sixteen percent of beneficiaries in nursing facilities spent more than 180 days in hospice care in 2005, compared with 11 percent of beneficiaries in other settings. See Appendix C for more details on the lengths of stay for the two groups of beneficiaries.

For 14 of the 15 diagnosis categories, beneficiaries in nursing facilities had longer average lengths of stay in hospice care than beneficiaries in other settings. For example, beneficiaries in nursing facilities with terminal diagnoses of ill-defined conditions spent an average of 84 days in hospice care in 2005, whereas those in other settings spent 75 days in hospice care. Beneficiaries in nursing facilities who had terminal diagnoses of cancer spent an average of 64 days in hospice care in 2005, while beneficiaries in other settings spent 46 days. See Figure 3 for the average days in hospice care for the most common diagnosis categories. See Appendix D for the average days for all diagnosis categories.

In both groups, beneficiaries with terminal diagnoses of Alzheimer's disease, mental disorders, or ill-defined conditions had the longest average lengths of stay in hospice care in 2005.[21] As noted earlier, these diagnosis categories were more common for beneficiaries who resided in nursing facilities than for beneficiaries who resided in other settings. At the same time, cancer diagnoses were associated with shorter lengths of stay on average. These diagnoses were more common for beneficiaries who resided in other settings.

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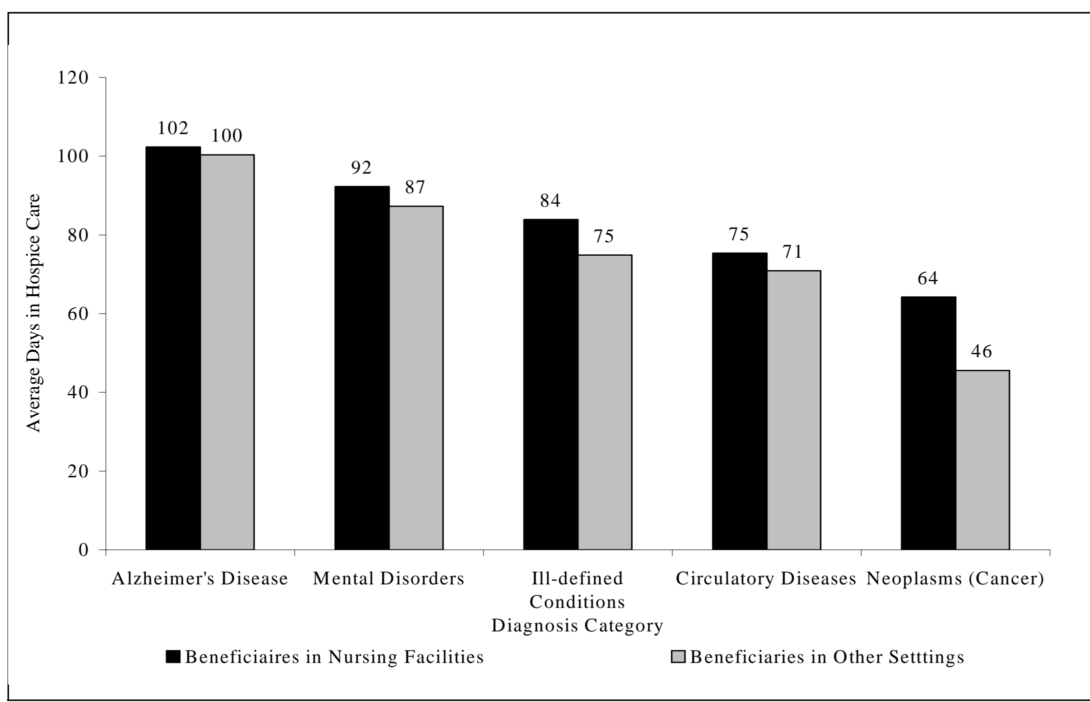
[21] Diseases of the musculoskeletal system and connective tissue are also associated with long lengths of stay but represented 0.1 percent of the hospice population in 2005.

FIGURE 3: Average Number of Days in Hospice Care by Diagnosis Category, 2005



Source: Office of Inspector General analysis of Medicare claims and MDS data, 2007.

Average Medicare reimbursement for hospice care for beneficiaries in nursing facilities was 25 percent higher than for beneficiaries in other settings

On average, Medicare paid $10,631 per beneficiary for hospice care for beneficiaries in nursing facilities in 2005.[22] This amount is 25 percent higher than the $8,500 per beneficiary paid for beneficiaries in other settings. Longer stays in hospice care by beneficiaries who resided in nursing facilities contributed to their higher average reimbursement.

Additionally, average Medicare reimbursement was higher for every level of hospice care for beneficiaries in nursing facilities, compared to reimbursement for beneficiaries in other settings. See Table 3. The biggest percentage difference was in general inpatient care. Although proportionately fewer beneficiaries in nursing facilities received general inpatient care, the average Medicare reimbursement in 2005 for these beneficiaries was 33 percent higher than the average reimbursement for beneficiaries in other settings.

[22] This amount includes hospice services only. It does not include reimbursement for other Medicare Part A services or Medicare Part B services that the beneficiary may have received in 2005.

Table 3: Average Medicare Reimbursement by Level of Hospice Care, 2005

Level of Hospice Care	Beneficiaries in Nursing Facilities	Beneficiaries in Other Settings
Routine Home Care	$10,174	$8,664
Continuous Home Care	$2,956	$2,814
Respite Care	$806	$663
General Inpatient Care	$4,836	$3,634

Source: Office of Inspector General analysis of Medicare claims and MDS data, 2007.

Specifically, Medicare paid on average $4,836 for beneficiaries residing in nursing facilities, compared to $3,634 for beneficiaries residing in other settings.

C O N C L U S I O N

In our comparison of Medicare hospice beneficiaries who reside in nursing facilities to hospice beneficiaries who reside in other settings, we found that beneficiaries in nursing facilities tended to be older and more likely to have ill-defined conditions. Also, their time in care was longer and more costly. A second study will assess the appropriateness of payments for hospice care for beneficiaries in nursing facilities. As the country's population ages, hospice use in general and hospice care by nursing facility residents is expected to grow. The information presented in this study and the follow-up study may help CMS and other decisionmakers better understand the Medicare hospice care population.

AGENCY COMMENTS

CMS states that this report provides a helpful general description of the current utilization patterns. CMS notes the following limitations of the study: the cost per beneficiary includes only hospice payments and not other costs of care through Parts A, B, and D; the study does not reference the number of hospitalizations; the study does not discuss the number of hospice revocations or discharges that have occurred; and the study reflects only the length of stay and costs in 2005. See Appendix E for the full text of CMS's comments.

APPENDIX ~ A

Demographic Characteristics of Medicare Hospice Beneficiaries Who Resided in Nursing Facilities and Other Settings, 2005

Variable	Beneficiaries in Nursing Facilities (n=240,217)	Beneficiaries in Other Settings (n=631,220)
Age		
Less than 65 years	4%	6%
65-84 years	44%	58%
85 years and older	52%	36%
Gender		
Female	68%	56%
Male	32%	44%
Region		
Northeast	19%	16%
Midwest	30%	21%
South	34%	40%
West	16%	21%
Unknown	0%	1%
Race		
White	89%	88%
Black	8%	8%
Hispanic	1%	2%
Unknown	2%	0%
Medicare Eligibility		
Aged	96%	94%
Disabled	3%	6%
Other	0%	0%
Location		
Urban	81%	79%
Rural	16%	18%
Unknown	3%	3%

Source: Office of Inspector General analysis of Medicare claims and MDS data, 2007.

Diagnosis Categories for Hospice Beneficiaries, 2005		
Diagnosis Category	**Beneficiaries in Nursing Facilities (n=240,217)**	**Beneficiaries in Other Settings (n=631,220)**
Ill-defined Conditions	20%	10%
Neoplasms (Cancer)	20%	41%
Circulatory Diseases	20%	20%
Mental Disorders	15%	6%
Alzheimer's Disease	13%	7%
Diseases of the Respiratory System	7%	9%
Diseases of the Genitourinary System	3%	3%
Diseases of the Digestive System	1%	2%
Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders	1%	0.4%
Injury and Poisoning	0.2%	0.2%
Infectious and Parasitic Diseases	0.2%	0.2%
Diseases of the Blood and Blood-Forming Organs	0.1%	0.2%
Congenital Anomalies	0.1%	0.2%
Diseases of the Musculoskeletal System and Connective Tissue	0.1%	0.1%
Diseases of the Skin and Subcutaneous Tissue	0.0%	0.0%

Source: Office of Inspector General analysis of Medicare claims and MDS data, 2007.

APPENDIX ~ C

Length of Stay in Hospice Care, 2005		
	Beneficiaries in Nursing Facilities (n=240,217)	**Beneficiaries in Other Settings (n=631,220)**
0-30 days	49%	58%
31-60 days	13%	13%
61-90 days	8%	8%
91-180 days	14%	11%
181-270 days	7%	5%
271-364 days	5%	3%
365 days and more	4%	3%

Source: Office of Inspector General analysis of Medicare claims and MDS data, 2007.

APPENDIX ~ D

Average Number of Days Spent in Hospice Care by Diagnosis Category, 2005		
Diagnosis Category	**Beneficiaries in Nursing Facilities (n=240,217)**	**Beneficiaries in Other Settings (n=631,220)**
Alzheimer's Disease	102	100
Mental Disorders	92	87
Ill-defined Conditions	84	75
Diseases of the Respiratory System	80	73
Congenital Anomalies	78	75
Infectious and Parasitic Diseases	76	52
Circulatory Diseases	75	71
Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders	73	60
Diseases of the Musculoskeletal System and Connective Tissue	71	81
Diseases of the Blood and Blood-Forming Organs	67	46
Neoplasms (Cancer)	64	46
Diseases of the Skin and Subcutaneous Tissue	54	53
Diseases of the Digestive System	51	40
Injuries and Poisoning	42	23
Diseases of the Genitourinary System	34	24

Source: Office of Inspector General analysis of Medicare claims and MDS data, 2007.

A P P E N D I X ~ E

Agency Comments

DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

DATE: NOV 6 2007

TO: Daniel R. Levinson
Inspector General

FROM: Kerry Weems
Acting Administrator

SUBJECT: Office of Inspector General's Draft Report: "Medicare Hospice Care: A Comparison of Beneficiaries in Nursing Facilities and Beneficiaries in Other Settings" (OEI-02-06-00220).

Thank you for the opportunity to review and comment on the Office of Inspector General's (OIG) draft report entitled "Medicare Hospice Care: A Comparison of Beneficiaries in Nursing Facilities and Beneficiaries in Other Settings."

The OIG draft report, which is the first in a two-part series, describes the characteristics of Medicare hospice beneficiaries who resided in nursing facilities in 2005 and compares this population to Medicare hospice beneficiaries who resided in other settings. The second study will determine the nature and extent of hospice services provided to beneficiaries residing in nursing facilities and assess the appropriateness of payments for their hospice care. The draft report does not purport to discuss the merits or advantages of the use of hospice in nursing homes. The report, however, does provide a description of the characteristics of the beneficiaries, the type of diagnoses as well as utilization patterns.

The Medicare hospice benefit is designed to allow terminally ill beneficiaries the opportunity to forgo curative treatment and elect to receive palliative care while remaining in their home. Eligibility for the Medicare hospice benefit requires a beneficiary election to receive hospice care and a physician certification that the beneficiary is terminally ill with a prognosis of 6 months or less to live, if the illness runs its normal course. The term "home" is not defined within the Medicare hospice benefit; therefore, an individual who is residing in a nursing home may elect to receive Medicare hospice services.

Utilization of the Medicare hospice benefit and Medicare expenditures is rapidly growing. The number of beneficiaries receiving hospice care, as well as the average length of stay on the Medicare hospice benefit, has increased significantly in recent years. This report provides a helpful general description of the current utilization patterns.

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Some limitations to the study that may need to be noted include:

- The cost per beneficiary represents only payment through the hospice benefit. The costs of care provided concurrently through parts A, B, and D are not included nor are the costs for hospitalizations for "unrelated conditions" or costs during revocations included.
- The study does not include any reference to the number of hospitalizations for "unrelated" conditions that occur during the period that hospice care is provided.
- The study does not discuss the number of revocations or discharges that have occurred.

The study reflects only the length of stay and costs in fiscal year 2005. It does not include findings for the entire length of the patient's stay or costs across the entire spectrum of hospice care over multiple years.

The Centers for Medicare & Medicaid Services anticipates that the research undertaken by the OIG, Medicare Payment Advisory Commission and others will illuminate various patterns of care for persons facing a terminal illness. The descriptive elements given in the current report will provide a useful platform for that work.

We thank the OIG for their comprehensive report that provides a general description of the current pattern of use and look forward to the findings in the next phase of the study.

ACKNOWLEDGMENTS

This report was prepared under the direction of Jodi Nudelman, Regional Inspector General for Evaluation and Inspections in the New York regional office, and Meridith Seife, Deputy Regional Inspector General.

Nancy Harrison served as team leader for this study. Other principal Office of Evaluation and Inspections staff from the New York regional office who contributed to this report include Michelle McInnis; other regional and central office staff who contributed include Robert Gibbons, Scott Horning, Elizabeth Jones, Sandy Khoury, and Barbara Tedesco.