

Department of Health and Human Services

**OFFICE OF  
INSPECTOR GENERAL**

**MEDICARE BENEFICIARY  
ACCESS TO HOME HEALTH  
AGENCIES: 2004**



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Inspector General

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# *Office of Inspector General*

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## OBJECTIVE

To assess Medicare beneficiaries' access to home health care since the implementation of the prospective payment system.

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## BACKGROUND

This study is a followup to a series of earlier studies conducted by the Office of Inspector General (OIG) on access to home health for Medicare beneficiaries who are discharged from the hospital to home health care. In 1997, the Centers for Medicare & Medicaid Services (CMS) began implementing an interim payment system, which was replaced by a prospective payment system for home health care in 2000. In 1999, CMS asked OIG to identify any early effects the new payment system may be having on Medicare beneficiaries' access to home health care. This series is part of OIG's ongoing commitment to monitor beneficiaries' access to home health care.

The Balanced Budget Act of 1997 required payments for home health care to be made on a prospective basis. The prospective payment rates are determined by the Home Health Resource Group (HHRG), which is a score based on the complexity of a beneficiary's condition. There are 80 HHRGs. Each has a different payment rate that reflects the average cost of providing services to beneficiaries with specified conditions.

This inspection is based on data from two sources: structured interviews with 256 hospital discharge planners who have firsthand experience placing Medicare beneficiaries in home health care, and an analysis of 5 years of Medicare data on beneficiaries who were discharged from a hospital to home health care.

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## FINDINGS

**Most Medicare beneficiaries discharged from the hospital have access to home health care.** Seventy-nine percent of discharge planners report that they are able to place all of their Medicare beneficiaries who need home health care in a typical month. This is a statistically significant decrease from our 2001 study, in which 89 percent of discharge planners reported being able to place all of their Medicare beneficiaries who need home health care.

At the same time, Medicare data show no large changes that may indicate a decline in access for beneficiaries with certain medical

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conditions who were discharged from the hospital to home health care in the past 5 years. In our analyses, we define a large change to be 1 percentage point or greater or 1 day or longer. A decrease in the proportion of Medicare beneficiaries with certain medical conditions being placed in home health care might indicate that beneficiaries are experiencing a decline in access to home health care. We found no large decreases for 9 of the 10 most common Diagnosis Related Grouping (DRGs) over the past 5 years, and no large decreases for any the 10 most common HHRGs over the past 4 years. Similarly, an increase in the average length of stay in the hospital or an increase in the average length of time between hospital discharge and the start of home health services might indicate a decline in access. We found no large increases in either of these measures for any of the 10 most common DRGs or for any of the 10 most common HHRGs since the implementation of the prospective payment system.

**However, beneficiaries with certain medical conditions or service needs may experience delays.** Seventeen percent of discharge planners report having Medicare beneficiaries who experience delays at least sometimes before being placed in home health care. Discharge planners report that Medicare beneficiaries who need intravenous (IV) antibiotics and/or expensive drugs, those who have complex wound care needs, and those who need rehabilitation therapy most often experience delays before being placed in home health care. Discharge planners commonly explain that the cost of providing these services or Medicare reimbursement is the reason for placement delays.

**No differences in access between beneficiaries in urban and rural areas were detected; however, beneficiaries with certain medical conditions more frequently receive services from nonprofit agencies than from for-profit agencies.** We analyzed the proportion of Medicare beneficiaries with certain medical conditions in urban and rural areas to see if there were any large differences, compared to the proportion of all Medicare beneficiaries in home health care in urban and rural areas. We found no large differences between urban and rural beneficiaries for any of the measures we reviewed.

We conducted a similar analysis for beneficiaries who received services from nonprofit and for-profit agencies. This analysis showed that, for 5 of the 10 most common HHRGs, a greater proportion of beneficiaries received services from nonprofit agencies compared to the overall population. Further, we found that beneficiaries with 6 of the 10 most

common DRGs who received services from for-profit agencies had longer average times between hospital discharge and the start of home health services than those receiving services from nonprofit agencies.

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## CONCLUSION

We continue to find that Medicare beneficiaries discharged from hospitals generally have access to home health care, despite a significant decrease in the proportion of discharge planners who report that they are able to place all their beneficiaries in home health care. Additionally, we find that Medicare data show no large changes that may indicate a decline in access to care for beneficiaries with the most common medical conditions and/or service needs discharged to home health care in the past 5 years. At the same time, we find that discharge planners report that beneficiaries with certain medical conditions or service needs may experience placement delays.

These findings are similar to the findings in our prior three reports, suggesting that, overall, the prospective payment system has not resulted in reduced access to care. We encourage CMS to continue to monitor access to home health care. In particular, CMS might closely monitor beneficiaries who experience delays in accessing care, including those who need IV antibiotics and/or expensive drugs, those who need complex wound care, and those who need rehabilitation therapy.

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## OBJECTIVE

To assess Medicare beneficiaries' access to home health care since the implementation of the prospective payment system.

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## BACKGROUND

This study is a followup to a series of earlier studies conducted by the Office of Inspector General (OIG). In 1997, the Centers for Medicare & Medicaid Services (CMS) began implementing an interim payment system, which was replaced by a prospective payment system for home health care in 2000. In 1999, CMS asked OIG to identify any early effects the new payment system may be having on Medicare beneficiaries' access to home health care.

In response, OIG conducted a series of studies on access to home health care for Medicare beneficiaries who are discharged from the hospital. This series is part of OIG's ongoing commitment to monitor beneficiaries' access to home health care. The Medicare Payment Advisory Commission has also emphasized the importance of these reports and of continuing to monitor access to care for Medicare beneficiaries following hospitalization.<sup>1</sup>

### **Medicare Home Health Care**

Home health care consists of skilled nursing, therapy (physical, occupational, and speech), and certain related services, including social work and aide services, all furnished in a beneficiary's home. Home health agencies that deliver these services can be freestanding or hospital-based, and can be classified as nonprofit, for-profit, or governmental.

Medicare pays for home health care only if it is reasonable and necessary for the treatment of a beneficiary's illness or injury. To be eligible for care, a beneficiary must be homebound, under the care of a physician who has established a plan of care, and need therapy or skilled nursing on an intermittent basis. Occupational therapy alone does not constitute a skilled need. After care has begun and other skilled services are discontinued, however, continued occupational therapy is considered a skilled need. There are no limits on the number

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<sup>1</sup> Medicare Payment Advisory Commission (MedPAC), "Report to Congress: Medicare Payment Policy," March 2004.

of visits or length of coverage, and beneficiaries do not have copayments or deductibles.

### **Home Health Prospective Payment System**

The Balanced Budget Act of 1997 (BBA)<sup>2</sup> required payments for home health care to be made on a prospective basis. To allow time to develop the prospective payment system, the BBA mandated the implementation of an interim payment system. The interim payment system became effective for cost-reporting periods beginning October 1, 1997, and continued until the implementation of the prospective payment system, which began in October 2000.

The prospective payments are determined by assigning each beneficiary to a Home Health Resource Group (HHRG). The HHRG is a score that is based on three dimensions of a beneficiary's condition: his or her clinical condition, functional status, and expected use of services. There are four clinical severity categories (minimal, low, moderate, and high), five functional classifications (minimal, low, moderate, high, and maximum), and four levels of service use (minimal, low, moderate, and high), for a total of 80 possible combinations. Each HHRG has a different payment rate that reflects the average cost of providing services to a beneficiary in that group.<sup>3</sup> Appendix A provides a more detailed description of the HHRGs.

Under the prospective payment system, the home health agency is paid for a full 60-day episode, even if care is provided during a fewer number of days. If a beneficiary is still eligible for care at the end of the first episode, the agency can begin a second 60-day episode. There is no limit on the number of episodes that an eligible beneficiary can receive; however, an assessment must be completed for each episode of care a beneficiary receives. If the costs associated with treating a beneficiary are unusually large or small, episode payments may be adjusted. Appendix B describes the four types of payment adjustments.

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<sup>2</sup> Balanced Budget Act of 1997, Pub. L. No. 105-33, 111 Stat. 251.

<sup>3</sup> Upon receiving a referral, the home health agency performs an initial assessment using the Outcome and Assessment Information Set. This assessment is used to convert the beneficiary's condition into a numeric score for three areas: clinical severity, functional status, and service utilization. These scores are totaled and the total corresponds to an HHRG.



**Changes to the Home Health Prospective Payment System**

Congress and CMS have made a number of additional changes to eligibility requirements and payment rates. The key changes include:

- As of February 1998, a beneficiary's need for venipuncture no longer constitutes a qualifying skilled need. Prior to this change some beneficiaries, for whom this was their only skilled need, qualified for home health care.<sup>4</sup>
- In response to concerns over the ambiguity of the definition of "homebound," the Benefits Improvement and Protection Act of 2000 clarified that a person can leave his or her home for certain purposes, such as attending adult day care activities or religious services, and still qualify for Medicare home health care.<sup>5</sup>
- Finally, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 changed the home health prospective payment system's update cycle from a fiscal year to a calendar year, and increased payments to home health agencies in rural areas by 5 percent between April 2004 and April 2005.<sup>6</sup>

**Recent Trends in Home Health Services**

Since 1992, Medicare spending for home health care has varied greatly. From 1992 to 1996, expenditures rose from \$6.5 billion to a peak of \$14.4 billion, before falling to \$8.5 billion in 1999 and 2000. However, spending rose again to \$16.4 billion in 2004. See Chart 1 on the following page.

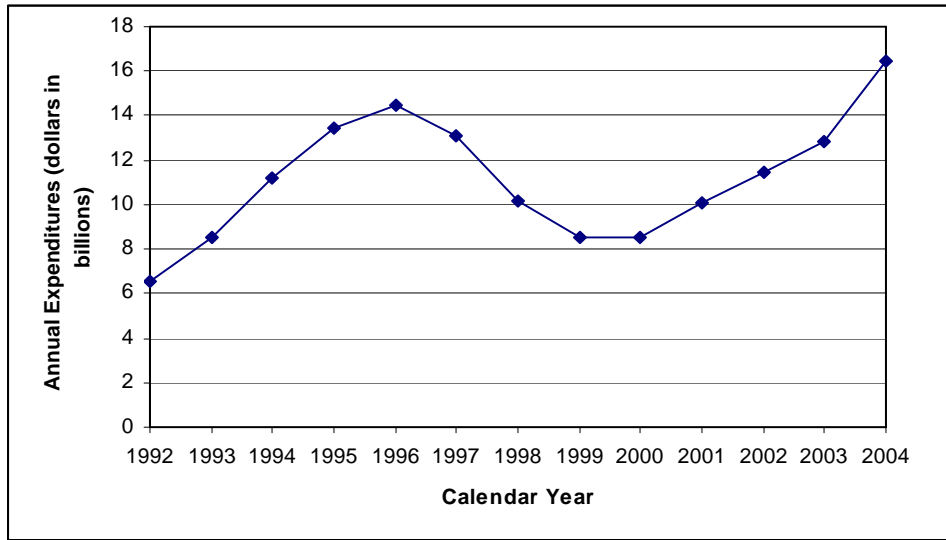
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<sup>4</sup> 42 U.S.C. 1395f(a)(2)(C), 1395n(a)(2)(A).

<sup>5</sup> Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000, Pub. L. No. 106-554, 114 Stat. 2763.

<sup>6</sup> Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Pub. L. No. 108-173, 117 Stat. 2066.

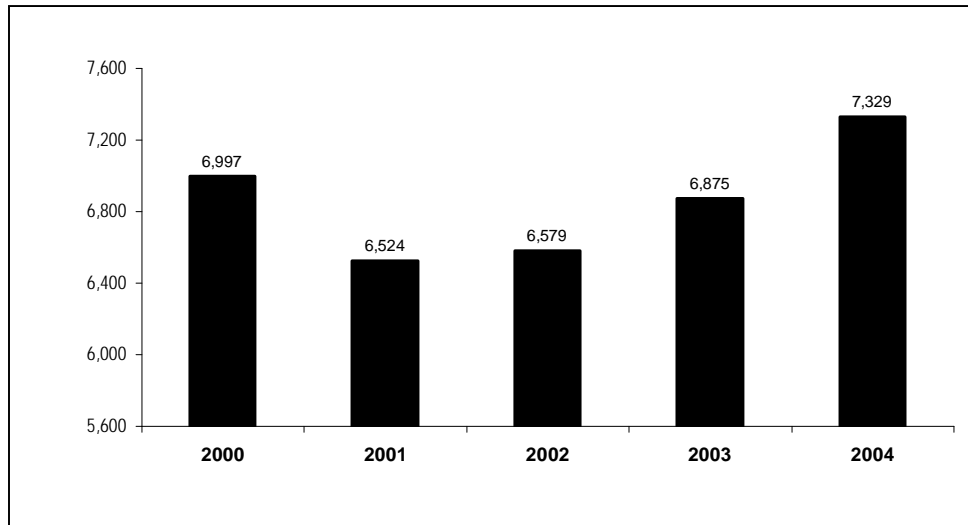
CHART 1  
Medicare Spending  
for Home Health  
Care  
1992-2004



Source: CMS, "Historical National Health Expenditures by Type of Service and Source of Funds: Calendar Years 1960-2004."

Medicare data further show that the number of home health agencies has increased since 2000. See Chart 2 below.

CHART 2  
Number of Home  
Health Agencies,  
1999-2004



Source: Health Care Information System.

Finally, Medicare data show that more than 2,839,000 beneficiaries received home health care in 2004—a 12-percent increase from 2000, when more than 2,544,000 beneficiaries received home health care.

**Discharge Planners**

Federal regulations require all hospitals to offer discharge planning services.<sup>7</sup> These services are developed by or under the supervision of a registered professional nurse, social worker, or other appropriately qualified personnel. In most hospitals, the social work, case management, or utilization review department has primary responsibility for discharge planning. Discharge planners conduct a patient assessment and meet with utilization review staff, the patient's nurses and physicians, and other relevant interdisciplinary team members to identify patients who are likely to suffer adverse health consequences in the absence of adequate discharge planning. Discharge planners then evaluate these patients' likely need for posthospital services and the availability of these services.

**Prior Work on Access to Home Health Care**

OIG released three reports between 1999 and 2001 on access to home health care for Medicare beneficiaries who were discharged from the hospital.<sup>8</sup> The most recent report, completed after the prospective payment system had been in place for about 6 months, found that beneficiaries generally had access to home health care. However, discharge planners commonly reported that beneficiaries who use expensive drugs not covered under Medicare and/or those needing wound care that required frequent visits by home health staff experienced more delays being placed in home health care. These findings were consistent with those from the earlier studies.

OIG also completed a report in 2001 on access to home health care for Medicare beneficiaries entering home health care from nonhospital settings (i.e., "from the community") under the interim payment system.<sup>9</sup> This report found that generally home health care was accessible and that these beneficiaries had experiences similar to those of beneficiaries entering home health care following hospitalization.

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<sup>7</sup> 42 CFR § 482.43.

<sup>8</sup> OIG, "Medicare Beneficiary Access to Home Health Agencies," OEI-02-99-00530, October 1999; "Medicare Beneficiary Access to Home Health Agencies: 2000," OEI-02-00-00320, September 2000; and "Access to Home Health Care After Hospital Discharge 2001," OEI-02-01-00180, July 2001.

<sup>9</sup> OIG, "Home Health Community Beneficiaries," OEI-02-01-00070, October 2001.

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## SCOPE AND METHODOLOGY

We based our study on data from two sources: structured interviews with hospital discharge planners who have firsthand experience placing Medicare beneficiaries in home health care, and an analysis of Medicare data for beneficiaries who were discharged from the hospital to home health care.

### **Structured Interviews**

We selected a random sample of 300 acute care hospitals with 30 or more beds from the 50 States and the District of Columbia. We found that 15 of these hospitals were in fact not acute care hospitals, were pediatric, psychiatric, or cancer care centers, or hospitals that were bankrupt or no longer qualified to meet the minimum bed standard.

Of the remaining 285 hospitals, we received responses from 256, which resulted in a 90-percent response rate. We conducted structured interviews with the discharge planner or his or her designee from each hospital. We asked discharge planners about their experiences with placing Medicare beneficiaries in home health care and the types of medical conditions and/or service needs of beneficiaries they are never able to place or who experience delays. We conducted these interviews between December 2004 and March 2005. Note that this is the same sample of hospitals used in the OIG study “Medicare Beneficiary Access to Skilled Nursing Facilities: 2004” (OEI-02-04-00270). Appendix C provides confidence intervals for key findings.

For relevant questions, we determined whether there were any statistical differences between responses to our current interviews and responses to similar questions from our 2001 study. Additionally, we compared key characteristics of the hospitals in our current sample with those in our 2001 sample. Specifically, we compared the number and type of beds, facility ownership, and whether the hospital was in an urban or rural area. The differences between the samples are within statistical sampling variation.

### **Analysis of Medicare Data**

We used the most up-to-date Medicare data from CMS’s National Claims History File that were available at the start of the study. We identified all beneficiaries who: (1) had a paid home health care claim between April 1, 2003, and March 31, 2004; and (2) had a hospital

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discharge within 30 days prior to their home health care claim.<sup>10</sup> We identified all beneficiaries who met these criteria for each year starting with April 1, 1999.

Based on these data, we analyzed several measures to determine whether there have been any large changes in beneficiaries' access to home health care since the implementation of the prospective payment system. We define a large change to be 1 percentage point or greater or 1 day or longer in these analyses. We analyzed the following measures for a 4-year or 5-year period:

1. the proportion of Medicare beneficiaries who were discharged from the hospital to home health care for the 10 most common Diagnosis Related Grouping (DRGs)<sup>11</sup> and the 10 most common HHRGs to assess whether beneficiaries with certain medical conditions are being placed in home health care since the implementation of the prospective payment system,<sup>12</sup>
2. beneficiaries' average length of stay in the hospital for the 10 most common DRGs and the 10 most common HHRGs to assess whether certain beneficiaries are experiencing longer delays before being discharged to home health since the implementation of the prospective payment system, and
3. beneficiaries' average length of time in days between hospital discharge and the start of home health care for the 10 most common DRGs and the 10 most common HHRGs to assess whether certain beneficiaries are experiencing longer average times before obtaining

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<sup>10</sup> Note that we refer to this year of data as 2004 and that each year starts with April 1 of the prior year and ends with March 31 of that year. The timeframe used in this study (April 1 to March 31) differs from the timeframe used in the previous OIG studies on access to home health care. Those studies were based on data from the first quarter of each year, whereas this study is based on an entire year of data.

<sup>11</sup> Most hospitals are paid a fixed amount for each beneficiary depending on the DRG to which the beneficiary is assigned. A DRG is assigned based on a beneficiary's diagnosis, surgery, age, discharge destination, and sex. Each DRG has a weight that reflects the relative cost, across all hospitals, of treating cases classified in that DRG.

<sup>12</sup> We found little change in the 10 most common DRGs and HHRGs in each year. The 10 most common DRGs represent approximately 35 percent of all beneficiaries each year and the 10 most common HHRGs represent approximately 60 percent of all beneficiaries each year.

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home health services since the implementation of the prospective payment system.<sup>13</sup>

We then analyzed these measures to determine whether there are large differences between beneficiaries in urban and rural areas and between beneficiaries who receive services from nonprofit and for-profit home health agencies. Using the Urban Influence Codes developed by the U.S. Department of Agriculture, we divided the beneficiaries, based on their addresses, into urban areas and rural areas. Appendix D provides a more detailed description of the Urban Influence Codes. Using data from CMS's Online Survey Certification and Reporting system, we determined which beneficiaries received home health services from nonprofit and for-profit home health agencies.

Specifically, we analyzed the proportion of Medicare beneficiaries with certain medical conditions receiving home health care in urban and rural areas to see if there were any large differences compared to the proportion of all Medicare beneficiaries receiving home health care in urban and rural areas. If the proportion of beneficiaries with a certain DRG or HHRG differed from the proportion of all beneficiaries in urban and rural areas by 5 or more percentage points, we considered it to be a large difference. We conducted a similar analysis of the proportion of Medicare beneficiaries who received services from nonprofit and for-profit agencies. We conducted these analyses for 2004.

### **Scope**

This study focuses on Medicare beneficiaries who are discharged from acute care hospitals to home health care. It does not include Medicare beneficiaries who enter home health care from the community or from other postacute settings. Medicare data show that, between April 1, 2003, and March 31, 2004, beneficiaries discharged from hospitals to home health care accounted for 56 percent of all beneficiaries receiving home health 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.

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<sup>13</sup> Medicare beneficiaries may have had an intervening postacute stay between hospital discharge and the start of home health care.

## ► FINDINGS

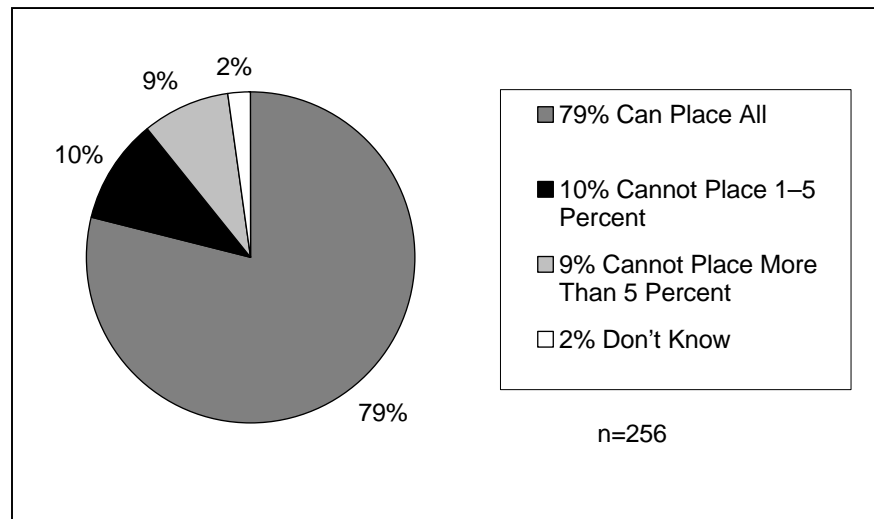
### Most Medicare beneficiaries discharged from the hospital have access to home health care

### Seventy-nine percent of discharge planners report that all beneficiaries can be placed

As shown in Chart 3, 79 percent of discharge planners report that they are able to place all of their Medicare beneficiaries who need home health care in a typical month. This is a statistically significant decrease from our 2001 study, in which 89 percent of discharge planners reported being able to place all of their Medicare beneficiaries who need care in home health.<sup>14</sup>

Additionally, 10 percent of discharge planners report not being able to place up to 5 percent of their Medicare beneficiaries, while another 9 percent report not being able to place more than 5 percent of their Medicare beneficiaries in a typical month. In total, discharge planners in our sample are not able to place about 0.7 percent of all their Medicare beneficiaries (174 of 24,528) who need home health care in a typical month. Discharge planners most commonly explain that these beneficiaries are typically sent home without home health care services, go to a nursing home, or stay in the hospital.

CHART 3  
Proportion of  
Discharge Planners  
Placing Medicare  
Beneficiaries in  
Home Health Care



<sup>14</sup> In a 2-tailed t-test, this difference was significant at the 95-percent confidence level.

## F I N D I N G S

Most discharge planners also report that the supply of home health services in their area is adequate. Specifically, 78 percent of discharge planners report there are enough home health services available in their area for Medicare beneficiaries. Seventy percent of discharge planners report they have to contact an average of 1 agency to place a Medicare beneficiary in home health care. An additional 21 percent report they have to contact an average of 2 home health agencies, 7 percent report they have to contact 3 facilities, and 3 percent report they have to contact 4 or more agencies.

### **Medicare data show no large changes that may indicate a decline in access**

Medicare data show no large changes that may indicate a decline in access to care for beneficiaries with certain medical conditions who were discharged to home health care in the past 5 years. Again, we define a large change in these analyses to be 1 percentage point or greater or 1 day or longer.

*Diagnosis Related Groups.* A decrease in the proportion of Medicare beneficiaries with a specific DRG who are discharged from the hospital to home health care might indicate that beneficiaries with certain medical conditions are experiencing a decline in access to home health care. However, we found no large decreases in the proportion of Medicare beneficiaries who were discharged from the hospital to home health care for 9 of the 10 most common DRGs over the past 5 years. See Table 1 on the following page. One exception was DRG 014 (intracranial hemorrhage or cerebral infarction), which has decreased by more than 1 percentage point since 2000. This decrease may be explained by a change in the definition of DRG 014, or possible miscoding of this particular DRG.<sup>15</sup>

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<sup>15</sup> DRG 014 was designated a postacute transfer DRG in 2001. The purpose of the transfer policy is to avoid providing an incentive for a hospital to transfer a beneficiary to another hospital early in the beneficiary's stay in order to minimize costs while still receiving the full DRG payment. A recent OIG audit report (A-04-04-03000) found that hospitals did not always comply with Medicare's postacute transfer policy, and improperly coded transfers to postacute care as discharges to home. Additionally, DRG 014 was redefined in October 2000, when the diagnosis for transient ischemia was removed from the DRG.



F I N D I N G S

**Table 1: Proportion of Medicare Beneficiaries Discharged to Home Health Care for the 10 Most Common DRGs (2000–2004)\***

Initial Hospital DRG	2000	2001	2002	2003	2004	Difference 2000–2004
DRG 462—Rehabilitation	7.4%	7.9%	8.1%	8.6%	8.7%	1.3
DRG 209—Major Joint and Limb Reattachment Procedures of Lower Extremity	7.0	7.3	7.6	7.9	8.2	1.2
DRG 127—Heart Failure and Shock	6.1	6.0	5.7	5.6	5.6	-0.5
DRG 089—Simple Pneumonia and Pleurisy	4.3	3.7	4.1	3.8	4.2	-0.1
DRG 088—Chronic Obstructive Pulmonary Disease	3.4	3.1	3.1	2.9	3.1	-0.3
DRG 148—Major Small and Large Bowel Procedures	2.1	2.0	2.0	2.0	1.9	-0.2
DRG 014—Intracranial Hemorrhage or Cerebral Infarction	3.1	3.1	3.0	2.4	1.9	-1.2
DRG 296—Nutrition and Miscellaneous Metabolic Disorders	1.7	1.7	1.8	1.8	1.7	0
DRG 107—Coronary Bypass With Cardiac Catheterization	2.0	2.0	1.8	1.8	1.5	-0.5
DRG 121—Circulatory Disorders with Acute Myocardial Infarction and Major Complications	1.6	1.6	1.5	1.4	1.4	-0.2

\*Note that the year starts with April 1 of the prior year and ends with March 31 of that year.

Source: OIG analysis of CMS's National Claims History File, 2005.

*Home Health Resource Groups.* Similar to our analysis of DRGs, a decrease in the proportion of Medicare beneficiaries in an HHRG might indicate that beneficiaries with certain service needs are experiencing a decline in access to home health care. Again, we found no substantial decreases in the proportion of Medicare beneficiaries who were

F I N D I N G S

discharged from the hospital to home health care for the 10 most common HHRGs over the past 4 years.<sup>16</sup> In fact, the proportion of beneficiaries discharged to home health care increased in all but one of the most common HHRGs. See Table 2 below.

**Table 2: Proportion of Medicare Beneficiaries Discharged to Home Health Care for the 10 Most Common HHRGs (2000–2004)\***

HHRG	2001	2002	2003	2004	Difference 2001–2004**
HBGJ (Clinical=low, Functional=mod, Service=min)	8.5%	9.1%	9.2%	9.0%	0.5
HCGL (Clinical=mod, Functional=mod, Service=mod)	7.0	6.6	6.6	8.2	1.2
HBGL (Clinical=low, Functional=mod, Service=mod)	7.7	7.4	7.3	7.6	0.2
HCGJ (Clinical=mod, Functional=mod, Service=min)	5.9	6.0	6.1	6.8	0.8
HAFJ (Clinical=min, Functional=low, Service=min)	6.0	6.6	7.0	6.4	0.3
HBFJ (Clinical=low, Functional=low, Service=min)	5.7	6.3	6.6	6.3	0.6
HAGJ (Clinical=min, Functional=mod, Service=min)	5.2	5.8	5.8	5.4	0.1
HCFJ (Clinical=mod, Functional=low, Service=min)	3.5	3.6	3.7	3.7	0.2
HAGL (Clinical=min, Functional=mod, Service=mod)	4.0	3.9	3.6	3.4	-0.7
HAEJ (Clinical=min, Functional=min, Service=min)	2.9	3.2	3.5	3.1	0.2

\*Note that the year starts with April 1 of the prior year and ends with March 31 of that year.

\*\*Note that data on the HHRGs were first available in 2001.

Source: OIG analysis of CMS's National Claims History File, 2005.

*Average length of stay in the hospital.* An increase in the average length of stay in the hospital might indicate that beneficiaries with certain medical conditions or service needs are staying in the hospital longer because they are experiencing a decline in access to home health care.

<sup>16</sup> Data on the HHRGs were first available in 2001.

## F I N D I N G S

However, we found no large increases in average length of stay in the hospital for any of the 10 most common DRGs or for any of the 10 most common HHRGs. In fact, the average length of stay for all of the 10 most common HHRGs and all but 2 of the DRGs either decreased or stayed the same since the implementation of the prospective payment system. See Appendix E, Tables 6 and 7.

*Average length of time between hospital discharge and the start of home health care.* Similarly, an increase in the average length of time between hospital discharge and the start of home health care might indicate that beneficiaries with certain medical conditions or service needs may be experiencing a decline in access to home health care. Again, we found no large increases in the average length of time between hospital discharge and the start of home health services for any of the 10 most common DRGs or for any of the 10 most common HHRGs. The average length of time in days between hospital discharge and the start of home health care for all but 2 DRGs and all 10 HHRGs either decreased or stayed the same since the implementation of the prospective payment system. See Appendix E, Tables 8 and 9.

**However, beneficiaries with certain medical conditions or service needs may experience delays**

**Discharge planners report delays placing certain beneficiaries**

Seventeen percent of discharge planners report having Medicare

beneficiaries who experience delays at least sometimes before being placed in home health care.<sup>17</sup> This is not a statistically significant decrease from the 2001 estimate, when 23 percent of discharge planners reported having Medicare beneficiaries who experienced delays at least sometimes.

Sixty-one percent (156 of 256) of discharge planners report ever having Medicare beneficiaries who experience delays. Of those discharge planners, most (98 of 156) say that delays are associated with certain medical conditions or service needs. See Table 3 on the following page. Specifically, discharge planners report that Medicare beneficiaries who need intravenous (IV) antibiotics and/or expensive drugs, those with complex wound care needs, and those who need

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<sup>17</sup> A placement delay occurs when a beneficiary is medically cleared by a doctor for discharge, but no home health services have been secured.

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rehabilitation therapy most often experience delays before being placed in home health care. These medical conditions and service needs are the same as the ones that discharge planners report are associated with Medicare beneficiaries they can never place in home health care.

<b>Table 3: Medical Conditions/Service Needs Associated With Placement Delays</b>	
	n= 98
IV Antibiotics/Infusion/Drug Needs	52
Wound Care/Decubitus Ulcer	31
Rehabilitation/Therapy Needs	26
Medically Complex/High Acuity	14
Total Parenteral Nutrition/IV Feeding	11

Note: Responses are not mutually exclusive.

Source: OIG analysis of discharge planner interviews, 2005.

Discharge planners who report delays placing Medicare beneficiaries in home health care commonly explain that the cost of providing these services or Medicare reimbursement (44 of 98) is the reason for placement delays. Specifically, they report that Medicare does not always cover certain medical needs, such as IV antibiotics, and that Medicare does not always cover all the costs associated with beneficiaries who need high levels of care.<sup>18</sup> Discharge planners also explain that staffing needs (22 of 98), such as a shortage of qualified physical therapists, and difficulty obtaining supplies (12 of 98), such as wheelchairs and respiratory equipment, may cause delays in placing beneficiaries.

<sup>18</sup> Home infusion therapy is not covered unless it is administered by durable medical equipment (42 USC 1395y).

The medical conditions and service needs that discharge planners associate with beneficiaries whose placement is delayed, as well as the reasons for delays, are similar to the ones that discharge planners reported in previous studies. In 2001, discharge planners reported that Medicare beneficiaries who needed IV therapy or expensive drugs and those with complex wound care needs most often experienced placement delays. In 2001, some discharge planners also attributed placement delays to medical conditions requiring several visits per day.

**No differences in access between beneficiaries in urban and rural areas were detected; however, beneficiaries with certain medical conditions more frequently receive services from nonprofit agencies than from for-profit agencies**

**No differences in beneficiaries with certain medical conditions in urban and rural areas were detected**

We analyzed the proportion of Medicare beneficiaries with certain medical conditions in urban and

rural areas to see if there were any large differences compared to the proportion of all Medicare beneficiaries in home health care in urban and rural areas. In 2004, 79 percent of all beneficiaries in home health care were in urban areas and 21 percent were in rural areas. If the proportion of beneficiaries with a certain DRG or HHRG differed from these proportions by 5 or more percentage points, we considered it to be a large difference. We found no large differences in the proportion of Medicare beneficiaries in urban and rural areas with the 10 most common DRGs and the 10 most common HHRGs, compared to the proportion of all beneficiaries in urban and rural areas. See Appendix E, Tables 10 and 11.

We also found no large differences between beneficiaries in urban and rural areas in the average length of stay in the hospital and the average length of time before the start of home health services. Beneficiaries in urban and rural areas had similar average lengths of hospital stays and average times between hospital discharge and the start of home health services for all of the 10 most common DRGs and all of the 10 most common HHRGs. See Appendix E, Tables 12, 13, 14, and 15.

In our interviews, 54 percent of discharge planners report no difference between placing Medicare beneficiaries in urban and rural areas,

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whereas 34 percent of discharge planners report some differences.<sup>19</sup> Those who say that placing Medicare beneficiaries in urban areas is easier commonly explain that urban agencies are more accessible and staffing is adequate. Those who report that placing Medicare beneficiaries in rural areas is easier say that there is often less waiting time to receive services from these agencies and that patients are more often familiar with the agencies.

### **Beneficiaries with certain medical conditions receive services more frequently from nonprofit agencies than from for-profit agencies**

We conducted a similar analysis of Medicare beneficiaries with certain medical conditions who received services from nonprofit and for-profit agencies to see if there were any large differences (i.e., 5 or more percentage points) compared to the proportion of all Medicare beneficiaries receiving services from nonprofit and for-profit agencies. In 2004, 58 percent of beneficiaries received services from nonprofit agencies and 36 percent received services from for-profit agencies.<sup>20</sup>

We found that beneficiaries with certain HHRGs receive services more frequently from nonprofit agencies than from for-profit agencies, compared to all beneficiaries. Specifically, for 5 of the 10 most common HHRGs, a greater proportion of beneficiaries received services from nonprofit agencies compared to the overall population. At the same time, for another one of these HHRGs, a greater proportion of beneficiaries received services from for-profit agencies compared to the overall population.<sup>21</sup> See Appendix E, Table 17.

Further, some beneficiaries who received services from for-profit agencies experienced a longer time between hospital discharge and the start of home health care compared to beneficiaries placed in nonprofit agencies. Specifically, beneficiaries with 6 of the 10 most common DRGs who received services from for-profit agencies had longer average

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<sup>19</sup> The remaining 12 percent of discharge planners report having no experience placing Medicare beneficiaries in both urban and rural areas or report that they “don’t know.”

<sup>20</sup> The remaining 7 percent of beneficiaries received services from government home health agencies. Note that the total does not equal 100 percent due to rounding.

<sup>21</sup> In addition, the proportion of beneficiaries with DRG 107 who received services from nonprofit agencies was at least 5 percentage points greater than all beneficiaries who received services from nonprofit agencies. Also, the proportion of beneficiaries with DRG 462 who received services from for-profit agencies was at least 5 percentage points greater than all beneficiaries who received services from for-profit agencies. See Appendix D, Table 16.

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times between hospital discharge and the start of home health services than those receiving services from nonprofit agencies. See Appendix E, Table 20. Note that there may be several reasons for this distribution that may not necessarily indicate a difference in access.

## ► C O N C L U S I O N

We continue to find that Medicare beneficiaries discharged from hospitals generally have access to home health care, despite a significant decrease in the proportion of discharge planners who report that they are able to place all their beneficiaries in home health care. Additionally, we find that Medicare data show no large changes that may indicate a decline in access to care for beneficiaries with the most common medical conditions and/or service needs discharged to home health care in the past 5 years. At the same time, discharge planners report that beneficiaries with certain medical conditions or service needs may experience placement delays.

These findings are similar to the findings in our prior three reports, suggesting that, overall, the prospective payment system has not resulted in reduced access to home health care. We encourage CMS to continue to monitor access to home health care. In particular, CMS might closely monitor beneficiaries who experience delays in accessing care, including those who need IV antibiotics and/or expensive drugs, those who need complex wound care, and those who need rehabilitation therapy.



## ▶ A P P E N D I X ~ A

### Home Health Resource Groupings

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Each Home Health Resource Grouping (HHRG) is composed of three domains or dimensions—clinical, functional, and service. The clinical dimension is based on factors such as selected diagnoses, sensory impairments, pressure ulcers, incontinence, and behavioral problems. The functional domain is based on six activities of daily living, such as dressing, bathing, and ambulation/locomotion. The service dimension is based on the patient's institutional setting in the 2-week period prior to the start of the home health episode and the amount of therapy received during the home health episode. The service measures are intended as proxy indicators of patient case mix and need for services. The combined four clinical, five functional, and four service levels are denoted, respectively, C0 to C3, F0 to F4, and S0 to S3. The 80 HHRGs are formed by taking all combinations of one level from each dimension (e.g., C0-F0-S0).

## Payment Adjustments for Home Health Claims

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Generally, Medicare makes payment under the home health prospective payment system on the basis of a national standardized 60-day episode payment, adjusted for case mix and wage index. Additionally, there are four types of payment adjustments for unusually large or small costs:

*Partial Episode Payment.* This adjustment occurs when (1) a beneficiary elects to transfer to another home health agency, or (2) a beneficiary is discharged and returns to the same home health agency. The original episode payment is proportionally adjusted to reflect the length of time the beneficiary remains under the agency's care before the intervening event.

*Significant Change in Condition.* This is the proportional payment adjustment that occurs when a beneficiary experiences a significant change in condition that was not envisioned in the original plan of care. To receive a new case-mix assignment for purposes of this payment, the home health agency must complete an assessment and obtain the necessary physician orders reflecting the significant change in treatment approach.

*Low Utilization Payment Adjustment.* The home health agency receives less than the full 60-day episode rate if it provides four or fewer visits to a beneficiary. For these episodes, the home health agency is paid the standardized, service-specific, per-visit amount multiplied by the number of visits actually provided during the episode.

*Outlier Payment.* Outlier payments are made for episodes for which the imputed cost exceeds a threshold amount for each case-mix group. The amount of the outlier payment is a proportion of the amount of imputed costs beyond the threshold. For each episode reported on the claim, CMS imputes the cost for each episode by multiplying the national per-visit amount of each discipline (i.e., skilled nursing services, home health aide services, physical therapy services, occupational therapy services, speech-language pathology services, and medical services) by the number of visits in the discipline and computing the total imputed cost for all disciplines.

Confidence Intervals for Key Findings

**Table 4: Point Estimates and Confidence Intervals for Key Findings**

<b>Key Findings</b>	<b>n</b>	<b>Point Estimate</b>	<b>Confidence Interval*</b>
Seventy-nine percent of discharge planners report they are able to place all of their Medicare beneficiaries who need home health care in a typical month.	256	79%	+/-4.99
Seventy-eight percent of discharge planners report there are enough home health services available in their area for Medicare beneficiaries.	256	78%	+/-5.07
Sixty-nine percent of discharge planners report they have to contact an average of 1 agency to place a Medicare beneficiary in home health care.	256	69%	+/-5.67
Seventeen percent of discharge planners report having Medicare beneficiaries who experience delays at least sometimes before being placed in home health care.	256	17%	+/-4.60
Most discharge planners who report ever having Medicare beneficiaries who experience delays (98 of 156)** say that delays are associated with certain medical conditions or service needs.	156	63%	+/-7.58
Fifty-four percent of discharge planners report no difference between placing beneficiaries in urban areas and rural areas.	256	54%	+/-6.11

\*95-Percent confidence interval.

\*\* The denominator (i.e., 156) includes discharge planners who report having Medicare beneficiaries who experience delays at least sometimes and discharge planners who report rarely having Medicare beneficiaries who experience delays.

Source: OIG analysis of discharge planner interviews, 2005.

Department of Agriculture’s Urban Influence Codes

The Urban Influence Codes were developed by the Department of Agriculture Economic Research Service to take into account the geographic relationship of rural areas to larger urban economies. The Urban Influence Codes divide U.S. counties, county equivalents, and independent cities into 12 categories as described in the table below. In our analysis, we considered the first 2 categories as urban areas and the remaining 10 categories as rural areas. This is similar to the method used by the Medicare Payment Advisory Commission in its June 2001 “Report to Congress: Medicare in Rural America.”

<b>Table 5: Urban Influence Codes</b>		
<b>Code</b>	<b>2003 Description</b>	<b>Designation</b>
1	In large metro area of 1+ million residents	Urban
2	In small metro area of less than 1 million residents	Urban
3	Micropolitan adjacent to large metro	Rural
4	Noncore adjacent to large metro	Rural
5	Micropolitan adjacent to small metro	Rural
6	Noncore adjacent to small metro with own town	Rural
7	Noncore adjacent to small metro no own town	Rural
8	Micropolitan not adjacent to a metro area	Rural
9	Noncore adjacent to micro with own town	Rural
10	Noncore adjacent to micro with no own town	Rural
11	Noncore not adjacent to metro or micro with own town	Rural
12	Noncore not adjacent to metro or micro with no own town	Rural

Source: Economic Research Service, U.S. Department of Agriculture.

Analysis of Most Common DRGs and HHRGs

**Table 6: Average Length of Hospital Stay in Days for the 10 Most Common DRGs (2000–2004)\***

<b>DRG</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>Difference 2000–2004</b>
DRG 462—Rehabilitation	13.3	12.8	12.5	12.4	12.3	-1.0
DRG 209—Major Joint and Limb Reattachment Procedures of Lower Extremity	4.9	4.8	4.7	4.5	4.4	-0.5
DRG 127—Heart Failure and Shock	6.4	6.4	6.4	6.3	6.3	-0.1
DRG 089—Simple Pneumonia and Pleurisy, Age Greater Than 17, With Complications or Comorbidities	7.0	7.0	7.0	6.9	6.9	-0.1
DRG 088—Chronic Obstructive Pulmonary Disease	6.5	6.5	6.5	6.6	6.6	0.1
DRG 148—Major Small and Large Bowel Procedures, With Complications or Comorbidities	13.0	13.1	13.1	13.1	12.9	-0.1
DRG 014—Intracranial Hemorrhage or Cerebral Infarction	7.0	6.9	7.0	7.3	7.1	0.1
DRG 296—Nutrition and Miscellaneous Metabolic Disorders, Age Greater Than 17, With Complications or Comorbidities	6.0	6.0	5.9	5.8	5.7	-0.3
DRG 107—Coronary Bypass With Cardiac Catheterization	10.4	10.4	10.3	10.4	10.3	-0.1
DRG 121—Circulatory Disorders With Acute Myocardial Infarction and Major Complications, Discharged Alive	8.0	7.9	7.8	7.8	7.6	-0.4

Source: OIG analysis of CMS’s National Claims History File, 2005.

\*Note that the year starts with April 1 of the prior year and ends with March 31 of that year.

**Table 7: Average Length of Hospital Stay in Days for the 10 Most Common HHRGs (2001–2004)\***

<b>HHRG</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>Difference 2000–2004</b>
HBGJ (Clinical=low, Functional=mod, Service=min)	6.9	6.8	6.8	6.6	-0.3
HCGL (Clinical=mod, Functional=mod, Service=mod)	7.8	7.7	7.6	7.3	-0.5
HBGL (Clinical=low, Functional=mod, Service=mod)	7.3	7.2	7.2	7.2	-0.1
HCGJ (Clinical=mod, Functional=mod, Service=min)	7.5	7.4	7.3	7.0	-0.5
HAFJ (Clinical=min, Functional=low, Service=min)	6.6	6.5	6.4	6.3	-0.3
HBFJ (Clinical=low, Functional=low, Service=min)	6.7	6.7	6.6	6.5	-0.2
HAGJ (Clinical=min, Functional=mod, Service=min)	7.1	7.1	6.9	6.8	-0.3
HCFJ (Clinical=mod, Functional=low, Service=min)	7.1	7.1	6.9	6.8	-0.3
HAGL (Clinical=min, Functional=mod, Service=mod)	7.8	7.8	7.7	7.8	0
HAEJ (Clinical=min, Functional=min, Service=min)	6.3	6.2	6.1	6.0	-0.3

Source: OIG analysis of CMS's National Claims History File, 2005.

Note that data on the HHRGs were first available in 2001.

\*Note that the year starts with April 1 of the prior year and ends with March 31 of that year.

**Table 8: Average Length of Time Between Hospital Discharge and the Start of Home Health Care in Days, for the 10 Most Common DRGs (2000–2004)\***

<b>DRG</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>Difference 2000–2004</b>
DRG 462—Rehabilitation	3.1	2.9	2.8	2.7	2.7	-0.4
DRG 209—Major Joint and Limb Reattachment Procedures of Lower Extremity	7.4	7.3	7.1	7.0	6.7	-0.7
DRG 127—Heart Failure and Shock	4.7	4.5	4.6	4.6	4.7	0
DRG 089—Simple Pneumonia and Pleurisy, Age Greater Than 17, With Complications or Comorbidities	5.0	4.8	4.8	4.9	5.0	0
DRG 088—Chronic Obstructive Pulmonary Disease	4.5	4.2	4.3	4.4	4.4	-0.1
DRG 148—Major Small and Large Bowel Procedures, With Complications or Comorbidities	5.0	4.8	4.7	4.8	4.9	-0.1
DRG 014—Intracranial Hemorrhage or Cerebral Infarction	6.5	6.3	6.3	6.4	6.4	-0.1
DRG 296—Nutrition and Miscellaneous Metabolic Disorders, Age Greater Than 17, With Complications or Comorbidities	5.9	5.6	5.8	5.8	6.0	0.1
DRG 107—Coronary Bypass With Cardiac Catherization	3.6	3.4	3.4	3.4	3.4	-0.2
DRG 121—Circulatory Disorders With Acute Myocardial Infarction and Major Complications, Discharged Alive	5.0	4.9	5.0	5.1	5.3	0.3

Source: OIG analysis of CMS's National Claims History File, 2005.

\*Note that the year starts with April 1 of the prior year and ends with March 31 of that year.

**Table 9: Average Length of Time Between Hospital Discharge and the Start of Home Health Care in Days, for the 10 Most Common HHRGs (2001–2004)\***

<b>HHRG</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>Difference 2001–2004**</b>
HBGJ (Clinical=low, Functional=mod, Service=min)	3.6	3.4	3.3	3.3	-0.3
HCGL (Clinical=mod, Functional=mod, Service=mod)	4.9	4.4	4.2	4.0	-0.9
HBGL (Clinical=low, Functional=mod, Service=mod)	4.5	4.2	4.1	4.1	-0.4
HCGJ (Clinical=mod, Functional=mod, Service=min)	4.1	3.8	3.7	3.5	-0.6
HAFJ (Clinical=min, Functional=low, Service=min)	3.1	2.9	2.9	2.9	-0.2
HBFJ (Clinical=low, Functional=low, Service=min)	3.3	3.1	3.1	3.1	-0.2
HAGJ (Clinical=min, Functional=mod, Service=min)	3.4	3.3	3.2	3.2	-0.2
HCFJ (Clinical=mod, Functional=low, Service=min)	3.8	3.5	3.4	3.4	-0.4
HAGL (Clinical=min, Functional=mod, Service=mod)	4.4	4.1	4.0	3.9	-0.5
HAEJ (Clinical=min, Functional=min, Service=min)	2.8	2.7	2.7	2.8	0

Source: OIG analysis of CMS's National Claims History File, 2005.

Note that data on the HHRGs were first available in 2001.

\*Note that the year starts with April 1 of the prior year and ends with March 31 of that year.



<b>Table 10: Beneficiaries in Urban and Rural Areas for the 10 Most Common DRGs, Compared to All Beneficiaries, 2004*</b>		
<b>DRG</b>	<b>Urban</b>	<b>Rural</b>
DRG 462—Rehabilitation	81.2%	18.8%
DRG 209—Major Joint and Limb Reattachment Procedures of Lower Extremity	74.3%	25.7%
DRG 127—Heart Failure and Shock	79.8%	20.2%
DRG 089—Simple Pneumonia and Pleurisy, Age Greater Than 17, With Complications or Comorbidities	76.4%	23.6%
DRG 088—Chronic Obstructive Pulmonary Disease	78.5%	21.6%
DRG 148—Major Small and Large Bowel Procedures, With Complications or Comorbidities	77.5%	22.5%
DRG 014—Intracranial Hemorrhage or Cerebral Infarction	79.4%	20.6%
DRG 296—Nutrition and Miscellaneous Metabolic Disorders, Age Greater Than 17, With Complications or Comorbidities	77.7%	22.3%
DRG 107—Coronary Bypass With Cardiac Catherization	76.2%	23.8%
DRG 121—Circulatory Disorders With Acute Myocardial Infarction and Major Complications, Discharged Alive	78.5%	21.5%
<b>All Beneficiaries</b>	<b>79.1%</b>	<b>20.9%</b>

\*Note that in this analysis the year is April 1, 2003, to March 31, 2004.

Source: OIG analysis of CMS's National Claims History File, 2005.

**Table 11: Beneficiaries in Urban and Rural Areas for the 10 Most Common HHRGs, Compared to All HHRGs, 2004\***

<b>HHRG</b>	<b>Urban</b>	<b>Rural</b>
HBGJ (Clinical=low, Functional=mod, Service=min)	76.1%	23.9%
HCGL (Clinical=mod, Functional=mod, Service=mod)	77.5%	22.5%
HBGL (Clinical=low, Functional=mod, Service=mod)	79.3%	20.7%
HCGJ (Clinical=mod, Functional=mod, Service=min)	74.9%	25.2%
HAFJ (Clinical=min, Functional=low, Service=min)	82.0%	18.0%
HBFJ (Clinical=low, Functional=low, Service=min)	78.0%	22.1%
HAGJ (Clinical=min, Functional=mod, Service=min)	80.3%	19.7%
HCFJ (Clinical=mod, Functional=low, Service=min)	77.2%	22.8%
HAGL (Clinical=min, Functional=mod, Service=mod)	82.2%	17.8%
HAEJ (Clinical=min, Functional=min, Service=min)	83.6%	16.4%
<b>All Beneficiaries</b>	<b>79.1%</b>	<b>20.9%</b>

\*Note that in this analysis the year is April 1, 2003, to March 31, 2004.

Source: OIG analysis of CMS's National Claims History File, 2005.

<b>Table 12: Urban and Rural Differences in the Average Length of Hospital Stay in Days for the 10 Most Common DRGs, 2004*</b>		
<b>DRG</b>	<b>Urban</b>	<b>Rural</b>
DRG 462—Rehabilitation	12.3	12.5
DRG 209—Major Joint and Limb Reattachment Procedures of Lower Extremity	4.3	4.5
DRG 127—Heart Failure and Shock	6.4	5.7
DRG 089—Simple Pneumonia and Pleurisy, Age Greater Than 17, With Complications or Comorbidities	7.0	6.4
DRG 088—Chronic Obstructive Pulmonary Disease	6.8	5.9
DRG 148—Major Small and Large Bowel Procedures, With Complications or Comorbidities	12.9	12.7
DRG 014—Intracranial Hemorrhage or Cerebral Infarction	7.2	6.5
DRG 296—Nutrition and Miscellaneous Metabolic Disorders, Age Greater Than 17, With Complications or Comorbidities	5.8	5.3
DRG 107—Coronary Bypass With Cardiac Catherization	10.4	10.1
DRG 121—Circulatory Disorders With Acute Myocardial Infarction and Major Complications, Discharged Alive	7.7	7.1

\*Note that in this analysis the year is April 1, 2003, to March 31, 2004.

Source: OIG analysis of CMS's National Claims History File, 2005.

<b>Table 13: Urban and Rural Differences in the Average Length of Hospital Stay in Days for the 10 Most Common HHRGs, 2004*</b>		
<b>HHRG</b>	<b>Urban</b>	<b>Rural</b>
HBGJ (Clinical=low, Functional=mod, Service=min)	6.8	6.3
HCGL (Clinical=mod, Functional=mod, Service=mod)	7.5	6.8
HBGL (Clinical=low, Functional=mod, Service=mod)	7.3	6.7
HCGJ (Clinical=mod, Functional=mod, Service=min)	7.1	6.7
HAFJ (Clinical=min, Functional=low, Service=min)	6.3	5.9
HBFJ (Clinical=low, Functional=low, Service=min)	6.6	6.1
HAGJ (Clinical=min, Functional=mod, Service=min)	6.9	6.4
HCFJ (Clinical=mod, Functional=low, Service=min)	6.9	6.5
HAGL (Clinical=min, Functional=mod, Service=mod)	7.9	7.3
HAEJ (Clinical=min, Functional=min, Service=min)	6.1	5.7

\*Note that in this analysis the year is April 1, 2003, to March 31, 2004.

Source: OIG analysis of CMS's National Claims History File, 2005.

**Table 14: Urban and Rural Differences in the Average Length of Time Between Hospital Discharge and the Start of Home Health Care in Days, for the 10 Most Common DRGs, 2004\***

<b>DRG</b>	<b>Urban</b>	<b>Rural</b>
DRG 462—Rehabilitation	2.6	2.7
DRG 209—Major Joint and Limb Reattachment Procedures of Lower Extremity	6.9	6.1
DRG 127—Heart Failure and Shock	4.7	4.7
DRG 089—Simple Pneumonia and Pleurisy, Age Greater Than 17, With Complications or Comorbidities	5.1	4.9
DRG 088—Chronic Obstructive Pulmonary Disease	4.3	4.5
DRG 148—Major Small and Large Bowel Procedures, With Complications or Comorbidities	5.0	4.6
DRG 014—Intracranial Hemorrhage or Cerebral Infarction	6.3	6.5
DRG 296—Nutrition and Miscellaneous Metabolic Disorders, Age Greater Than 17, With Complications or Comorbidities	6.1	5.8
DRG 107—Coronary Bypass With Cardiac Catherization	3.5	3.1
DRG 121—Circulatory Disorders With Acute Myocardial Infarction and Major Complications, Discharged Alive	5.3	5.4

\*Note that in this analysis the year is April 1, 2003, to March 31, 2004.

Source: OIG analysis of CMS's National Claims History File, 2005.

**Table 15: Urban and Rural Differences in the Average Length of Time Between Hospital Discharge and the Start of Home Health Care in Days, for the 10 Most Common HHRGs, 2004\***

<b>HHRG</b>	<b>Urban</b>	<b>Rural</b>
HBGJ (Clinical=low, Functional=mod, Service=min)	3.2	3.5
HCGL (Clinical=mod, Functional=mod, Service=mod)	3.9	4.3
HBGL (Clinical=low, Functional=mod, Service=mod)	4.0	4.3
HCGJ (Clinical=mod, Functional=mod, Service=min)	3.4	3.7
HAFJ (Clinical=min, Functional=low, Service=min)	2.9	3.1
HBFJ (Clinical=low, Functional=low, Service=min)	3.1	3.3
HAGJ (Clinical=min, Functional=mod, Service=min)	3.1	3.5
HCFJ (Clinical=mod, Functional=low, Service=min)	3.3	3.7
HAGL (Clinical=min, Functional=mod, Service=mod)	3.8	4.4
HAEJ (Clinical=min, Functional=min, Service=min)	2.7	3.0

\*Note that in this analysis the year is April 1, 2003, to March 31, 2004.

Source: OIG analysis of CMS's National Claims History File, 2005.

**Table 16: Beneficiaries in Nonprofit and For-Profit Agencies for the 10 Most Common DRGs, Compared to All Beneficiaries, 2004\***

<b>DRG</b>	<b>Nonprofit</b>	<b>For-Profit</b>
DRG 462—Rehabilitation	52.8%	41.8%†
DRG 209—Major Joint and Limb Reattachment Procedures of Lower Extremity	58.0%	34.4%
DRG 127—Heart Failure and Shock	59.2%	34.1%
DRG 089—Simple Pneumonia and Pleurisy, Age Greater Than 17, With Complications or Comorbidities	58.5%	33.7%
DRG 088—Chronic Obstructive Pulmonary Disease	57.7%	35.1%
DRG 148—Major Small and Large Bowel Procedures, With Complications or Comorbidities	61.6%	31.1%
DRG 014—Intracranial Hemorrhage or Cerebral Infarction	57.7%	35.7%
DRG 296—Nutrition and Miscellaneous Metabolic Disorders, Age Greater Than 17, With Complications or Comorbidities	56.6%	36.2%
DRG 107—Coronary Bypass With Cardiac Catherization	62.9%†	31.1%
DRG 121—Circulatory Disorders With Acute Myocardial Infarction and Major Complications, Discharged Alive	61.5%	31.6%
<b>All Beneficiaries**</b>	<b>57.6%</b>	<b>35.8%</b>

\*Note that in this analysis the year is April 1, 2003, to March 31, 2004.

\*\*Note that 6.6 percent of beneficiaries were admitted to government home health agencies (HHA).

†The proportion of beneficiaries with this DRG differed from the proportion of all beneficiaries by at least 5 percentage points, which we considered to be a large difference.

Source: OIG analysis of CMS's National Claims History File, 2005.

**Table 17: Beneficiaries in Nonprofit and For-Profit Agencies for the 10 Most Common HHRGs, Compared to All Beneficiaries, 2004\***

<b>HHRG</b>	<b>Nonprofit</b>	<b>For-Profit</b>
HBGJ (Clinical=low, Functional=mod, Service=min)	63.6%†	28.9%†
HCGL (Clinical=mod, Functional=mod, Service=mod)	47.8%†	45.9%†
HBGL (Clinical=low, Functional=mod, Service=mod)	54.5%	38.4%
HCGJ (Clinical=mod, Functional=mod, Service=min)	60.0%	33.4%
HAFJ (Clinical=min, Functional=low, Service=min)	69.0%†	24.2%†
HBFJ (Clinical=low, Functional=low, Service=min)	64.2%†	28.8%†
HAGJ (Clinical=min, Functional=mod, Service=min)	68.6%†	23.9%†
HCFJ (Clinical=mod, Functional=low, Service=min)	60.2%	33.2%
HAGL (Clinical=min, Functional=mod, Service=mod)	62.1%	31.2%
HAEJ (Clinical=min, Functional=min, Service=min)	68.7%†	25.0%†
<b>All Beneficiaries**</b>	<b>57.6%</b>	<b>35.8%</b>

\*Note that in this analysis the year is April 1, 2003, to March 31, 2004.

\*\*Note that 6.6 percent of beneficiaries were admitted to government HHAs.

†The proportion of beneficiaries with this HHRG differed from the proportion of all beneficiaries by at least 5 percentage points, which we considered to be a large difference.

Source: OIG analysis of CMS's National Claims History File, 2005.



Note that this table is for informational purposes only. It is not referenced in the report.

<b>Table 18: Nonprofit and For-Profit Differences in the Average Length of Hospital Stay in Days for the 10 Most Common DRGs, 2004*</b>		
<b>DRG</b>	<b>Nonprofit</b>	<b>For-Profit</b>
DRG 462—Rehabilitation	12.2	12.4
DRG 209—Major Joint and Limb Reattachment Procedures of Lower Extremity	4.3	4.5
DRG 127—Heart Failure and Shock	6.2	6.5
DRG 089—Simple Pneumonia and Pleurisy, Age Greater Than 17, With Complications or Comorbidities	6.7	7.2
DRG 088—Chronic Obstructive Pulmonary Disease	6.4	7.0
DRG 148—Major Small and Large Bowel Procedures, With Complications or Comorbidities	12.8	13.1
DRG 014—Intracranial Hemorrhage or Cerebral Infarction	7.0	7.2
DRG 296—Nutrition and Miscellaneous Metabolic Disorders, Age Greater Than 17, With Complications or Comorbidities	5.5	5.9
DRG 107—Coronary Bypass With Cardiac Catherization	10.2	10.6
DRG 121—Circulatory Disorders With Acute Myocardial Infarction and Major Complications, Discharged Alive	7.5	7.8

\*Note that in this analysis the year is April 1, 2003, to March 31, 2004.

Source: OIG analysis of CMS's National Claims History File, 2005.

Note that this table is for informational purposes only. It is not referenced in the report.

<b>Table 19: Nonprofit and For-Profit Differences in the Average Length of Hospital Stay in Days for the 10 Most Common HHRGs, 2004*</b>		
<b>HHRG</b>	<b>Nonprofit</b>	<b>For-Profit</b>
HBGJ (Clinical=low, Functional=mod, Service=min)	6.6	6.7
HCGJ (Clinical=mod, Functional=mod, Service=min)	7.4	7.3
HBGL (Clinical=low, Functional=mod, Service=mod)	7.2	7.3
HCGJ (Clinical=mod, Functional=mod, Service=min)	7.0	7.1
HAFJ (Clinical=min, Functional=low, Service=min)	6.3	6.2
HBFJ (Clinical=low, Functional=low, Service=min)	6.5	6.5
HAGJ (Clinical=min, Functional=mod, Service=min)	6.8	6.8
HCFJ (Clinical=mod, Functional=low, Service=min)	6.8	6.8
HAGL (Clinical=min, Functional=mod, Service=mod)	7.8	7.7
HAEJ (Clinical=min, Functional=min, Service=min)	6.0	6.2

\*Note that in this analysis the year is April 1, 2003, to March 31, 2004.

Source: OIG analysis of CMS's National Claims History File, 2005.

**Table 20: Nonprofit and For-Profit Differences in the Average Length of Time Between Hospital Discharge and the Start of Home Health Care in Days, for the 10 Most Common DRGs, 2004\***

<b>DRG</b>	<b>Nonprofit</b>	<b>For-Profit</b>
DRG 462—Rehabilitation	2.5	2.9
DRG 209—Major Joint and Limb Reattachment Procedures of Lower Extremity	6.5	7.0
DRG 127—Heart Failure and Shock	4.2 <sup>†</sup>	5.5 <sup>†</sup>
DRG 089—Simple Pneumonia and Pleurisy, Age Greater Than 17, With Complications or Comorbidities	4.7 <sup>†</sup>	5.7 <sup>†</sup>
DRG 088—Chronic Obstructive Pulmonary Disease	4.0 <sup>†</sup>	5.1 <sup>†</sup>
DRG 148—Major Small and Large Bowel Procedures, With Complications or Comorbidities	4.7	5.4
DRG 014—Intracranial Hemorrhage or Cerebral Infarction	5.9 <sup>†</sup>	7.2 <sup>†</sup>
DRG 296—Nutrition and Miscellaneous Metabolic Disorders, Age Greater Than 17, With Complications or Comorbidities	5.5 <sup>†</sup>	6.9 <sup>†</sup>
DRG 107—Coronary Bypass With Cardiac Catherization	3.2	3.9
DRG 121—Circulatory Disorders With Acute Myocardial Infarction and Major Complications, Discharged Alive	4.9 <sup>†</sup>	6.2 <sup>†</sup>

\*Note that in this analysis the year is April 1, 2003, to March 31, 2004.

<sup>†</sup>Note that these DRGs differed by 1 day or more.

Source: OIG analysis of CMS's National Claims History File, 2005.

Note that this table is for informational purposes only. It is not referenced in the report.

<b>Table 21: Nonprofit and For-Profit Differences in the Average Length of Time Between Hospital Discharge and the Start of Home Health Care in Days, for the 10 Most Common HHRGs, 2004*</b>		
<b>HHRG</b>	<b>Nonprofit</b>	<b>For-Profit</b>
HBGJ (Clinical=low, Functional=mod, Service=min)	3.1	3.6
HCGL (Clinical=mod, Functional=mod, Service=mod)	3.8	4.1
HBGL (Clinical=low, Functional=mod, Service=mod)	3.9	4.2
HCGJ (Clinical=mod, Functional=mod, Service=min)	3.2	3.9
HAFJ (Clinical=min, Functional=low, Service=min)	2.8	3.3
HBFJ (Clinical=low, Functional=low, Service=min)	2.9	3.6
HAGJ (Clinical=min, Functional=mod, Service=min)	3.1	3.5
HCFJ (Clinical=mod, Functional=low, Service=min)	3.1	4.0
HAGL (Clinical=min, Functional=mod, Service=mod)	3.8	4.1
HAEJ (Clinical=min, Functional=min, Service=min)	2.5	3.3

\*Note that in this analysis the year is April 1, 2003, to March 31, 2004.

Source: OIG analysis of CMS's National Claims History File, 2005.



## A C K N O W L E D G M E N T S

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