Department of Health and Human Services

OFFICE OF INSPECTOR GENERAL

Operating Practices Of High-Cost And Low-Cost Home Health Agencies

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EXECUTIVE SUMMARY

PURPOSE

To determine how operating practices of home health agencies may influence the average number of visits per Medicare beneficiary.

BACKGROUND

Medicare expenditures for home health services have increased from $3.3 billion in 1990 to $15 billion in 1995 -- a nearly 5 fold increase in just 5 years. Expenditures vary drastically, however, among individual home health agencies (HHAs), as do average number of visits per beneficiary. The average number of visits per beneficiary for all Medicare-certified home health agencies increased from 50 in 1993 to 58 in 1994.

In previous OIG studies of home health, we determined that differences in characteristics of home health agencies, characteristics of beneficiaries served, diagnoses, and quality did not fully explain the wide variation in utilization among home health agencies. Agencies with a low average number of visits are providing appropriate, adequate care as well as those with a high average number of visits. Under Operation Restore Trust (ORT), the Department of Health and Human Services is examining the home health industry to identify and correct fraud, waste and abuse. This inspection is part of ORT.

METHODOLOGY

We sent a mail survey to 300 randomly-selected home health agencies throughout the nation to obtain data on their operating practices and philosophies. About 65 percent (194) of the 300 agencies we surveyed completed and returned the questionnaire. Eighty of the respondents were high-cost agencies, and the remaining 114 were low-cost. High-cost were those agencies whose average number of visits per beneficiary was above the national average and low-cost agencies were those whose average fell below the national average. We also performed an analysis of HCFA data to determine changes in the average number of visits between 1993 and 1994.

FINDINGS

Differences In The Average Number Of Visits Provided By High And Low-Cost Home Health Agencies Widened Considerably Between 1993 And 1994

In 1993, the high-cost home health agencies made 55 more visits (85 visits) per beneficiary, on average, than did low-cost agencies, which averaged 30 visits. In 1994, this difference had widened to 69 visits per beneficiary, which is the difference between 102 visits by high-cost agencies and 33 visits by low-cost agencies.

Operating Practices Do Not Explain Widening Variation In Number Of Visits

- Both high and low-cost agencies had written policies and procedures.
- High and low-cost agencies' mission or philosophy statements tended to be similar in content.
- High and low-cost agencies relied heavily on their own staff to make the initial determination that a person meets eligibility criteria for Medicare home health, rather than on physicians.
- High and low-cost agencies reported serving patients whose conditions were acute, chronic, and high-tech, in approximately the same proportion.
- Nearly all high and low-cost agencies had a formal quality assurance program.
- High and low-cost agencies provided a similar mix of services, e.g., skilled nursing, physical therapy, occupational therapy, speech pathology therapy, medical social services, and aide services.
- The major source of payment for high and low-cost home health agencies was Medicare fee-for-service.

High-Cost Home Health Agencies Tended To Be For-Profit And Freestanding Entities

Home health agencies at the higher end of the cost range tended to be for-profit and freestanding organizations. The percentage of high-cost agencies that were for-profit entities was almost five times that of low-cost agencies. The percentage of high-cost home health agencies that were freestanding was four times that for low-cost agencies.

CONCLUSION

The gap between high and low-cost home health agencies in average number of visits per Medicare beneficiary continues to widen. Generally, program operations are similar in both high and low-cost agencies and do not explain the variation.

Determining when it is appropriate and medically necessary to provide Medicare home health services is often ambiguous and largely discretionary. This inspection and other audits and inspections on home health continue to suggest a need for greater control over the provision of Medicare home health services. If control cannot be achieved through more effective management oversight, then statutory or regulatory changes may be needed to protect the Medicare program from excessive or inappropriate payments in this area.

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INTRODUCTION

PURPOSE

To determine how operating practices of home health agencies may influence the average number of visits per beneficiary.

BACKGROUND

Home health care is nursing, therapeutic, medical social, and aide services provided in a person's home. Home health care allows people with limited mobility to live independently while still receiving professional health care services. All home health services must be specified in a plan of care certified by a physician.

Title XVIII, Section 1861, of the Social Security Act authorized Medicare Part A payments for home health care. For beneficiaries who do not have Part A entitlement, home health services may be covered by Medicare Part B. To receive Medicare reimbursement, home health agencies (HHAs) must provide a skilled care service to a homebound beneficiary on a part-time or intermittent basis.

Growth of Home Health Care

Medicare expenditures for home health care increased dramatically in recent years. To illustrate, between 1990 and 1995 Medicare expenditures for home health care grew from $3.3 billion to $15.1 billion -- a nearly 5 fold increase in just 5 years.

Between 1992 and 1993, Medicare expenditures for home health care increased by 78 percent. During this period, expenditures for home health care by all insurance sources in the United States increased by 23.8 percent. In contrast, HCFA's Office of the Actuary estimated that the cost of hospital care increased by 6.7 percent between 1992 and 1993. Likewise, expenditures for physician care increased by 5.8 percent between 1992 and 1993.

Variation in Cost of Care Among Home Health Agencies

Medicare expenditures for home health care per beneficiaries varied significantly among home health agencies[1] in recent years. Importantly, the variation in reimbursement was not explained by differences in diagnosis, cost per visit, quality of care, or beneficiary characteristics such as age, gender, and race. Home health agencies at both extremes of the spectrum of average reimbursement met Conditions

[1]Variation Among Home Health Agencies In Medicare Payments For Home Health Services: OEI-04-93-00260

of Participation, which suggests they are doing an adequate job of meeting beneficiaries' needs.

Most of the variation in reimbursement was explained by variations in the number of home health visits per beneficiary among home health agencies. Medicare regulations allow beneficiaries to receive an unlimited number of home health visits, and some home health agencies provided five times more visits per beneficiary on average than other home health agencies.

On average, about two thirds of 6803 home health agencies provided home health care with 33 visits per beneficiary in 1993. The remaining one third of the agencies averaged 81 visits per beneficiary. The high-visit home health agencies were more likely to be proprietary, for-profit and unaffiliated.

Concern About High-Cost Home Health Agencies

The wide variation among home health agencies in number of visits per beneficiary raised serious questions about possible differences in operating policies and practices of high and low-cost agencies. During a prior inspection, we looked at quality of care, among other things, of low-cost and high-cost home health agencies. We used the only available proxies for quality which were and are available from HCFA and other reliable sources -- complaints against an agency, survey deficiencies, and accreditation status. With respect to these measures, we found that low-cost home health agencies provided care that was comparable in quality to that provided by high-cost home health agencies, but they did so with fewer visits per beneficiary. If the high-cost agencies lowered the average number of visits per beneficiary to 33, we estimated that Medicare savings would have been approximately $5 billion in 1995.

This report describes the differences and similarities in operating practices of high and low-cost home health agencies. The operating practices used by low-cost agencies might provide examples that high-cost agencies could use to keep cost down without adversely affecting quality of care.

METHODOLOGY

Sample Selection

We randomly selected 300 Medicare certified home health agencies in the United States from HCFA's National Claims History Repository. Before sampling, we stratified the 1993 universe of 6803 home health agencies into two categories -- low-cost and high-cost agencies. We based the two categories on average number of visits made to beneficiaries. We considered home health agencies that made fewer than the national average of 50 visits per beneficiary in 1993 to be low-cost. We considered those that made more visits than the national average to be high-cost. We sampled 150 home health agencies from both the high and low groups.

A detailed description of our sampling method is contained in Appendix A.

In addition to the survey of home health agencies, we performed an analysis of data from the common working file maintained by HCFA to determine changes in the average number of visits from 1993 to 1994.

Data Collection And Analysis

We used a standardized questionnaire to collect data on operating practices of sampled high and low-cost home health agencies. We mailed our survey instrument to each of the 300 sampled agencies. About 65 percent (194) of the 300 home health agencies completed and returned our questionnaire. To assure that our analysis was based on the most current data, we used 1994 utilization data for all home health agencies appearing in our sample. Of the 194 agencies that responded, 114 (59 percent) were low-cost home health agencies. The remaining 80 respondents, (41 percent) were high-cost agencies.

In terms of average number of visits per beneficiary, the home health agencies that responded to our survey were representative of the home health agency universe in the United States. (See Table 1.)

TABLE 1

Comparison Of Sample HHAs To HHAs Nationally
Average Number Of Visits Per Beneficiary
1994 Data

	Universe		Sample	
	Number	%	Number	%
HHAs Below The National Average	4,720	59	114	59
HHAs Above The National Average	3,246	41	80	41
TOTAL HHAs	7,966	100	194	100

About 35 percent (106) of the 300 sampled home health agencies did not respond to our survey. An analysis of respondents and non-respondents showed that the possibility of bias due to non-response is limited, based on our sampling criteria. Our non-response analysis is in Appendix B.

We used a dBase file to organize and analyze numerical data obtained from the 194 home health agencies. We aggregated the data to obtain comparisons of operating practices of low-cost agencies as a group to those of high-cost agencies as a group.

To compare the philosophy or mission statements of the home health agencies, we performed a content analysis of those statements. To perform the content analysis we first examined all of the statements and compiled a list of all major terms, phrases and concepts. We then grouped the terms, phrases, and concepts into four major categories. We then aggregated the number of terms, phrases, and concepts in each of the four major categories for both the high and low-cost groups. We then performed a statistical significance test on the total "scores" for both groups.

We conducted t-tests on all findings in the report.

To provide a greater sense of what low-cost home health agencies are doing with regard to operating practices, we performed a case study of seven low-cost home health agencies. Our findings are shown in a supplemental report, "Operating Practices Of Low-Cost Home Health Agencies: Seven Case Studies," OEI-04-93-00263.

OPERATION RESTORE TRUST

This inspection was part of the President's Operation Restore Trust initiative. The purpose of Operation Restore Trust (ORT) is to identify and prevent fraud, waste and abuse in the Medicare and Medicaid programs. ORT is a joint initiative involving the Health Care Financing Administration, Administration on Aging, Office of Inspector General, and various State agencies. In 1995, ORT began targeting home health agencies, nursing homes, hospices, and durable medical equipment suppliers in five States for evaluations, audits, and investigations. The five States are Florida, New York, Texas, Illinois, and California. These States account for about 40 percent of the nation's Medicare and Medicaid beneficiaries and program expenditures.

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We conducted this inspection in accordance with the *Quality Standards for Inspections* issued by the President's Council on Integrity and Efficiency.

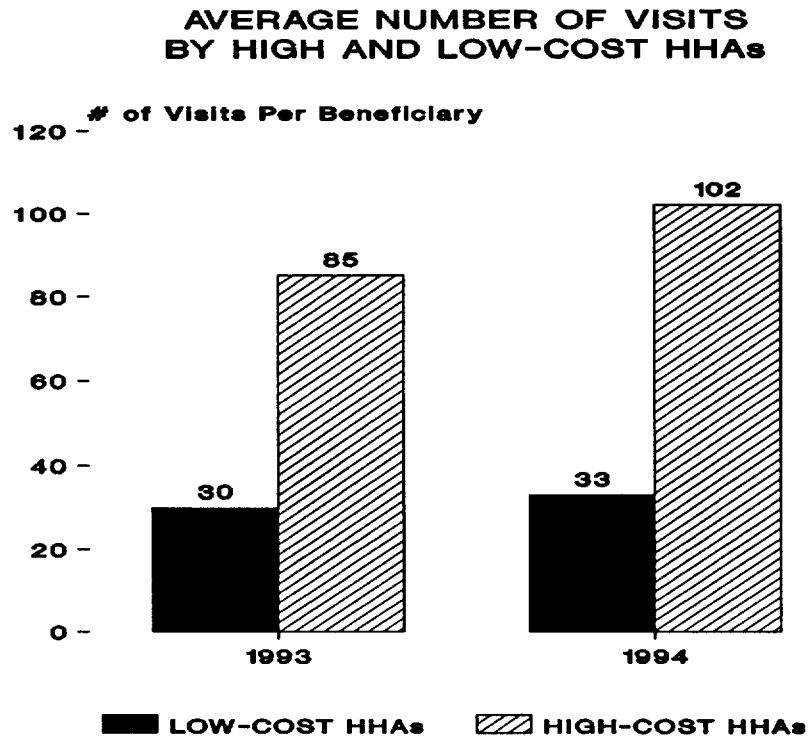
FINDINGS

DIFFERENCES IN THE AVERAGE NUMBER OF VISITS PROVIDED BY HIGH AND LOW-COST HOME HEALTH AGENCIES WIDENED CONSIDERABLY BETWEEN 1993 AND 1994

As reported in our prior report on variation in home health cost among home health agencies (OEI-04-93-00260),[2] the difference in cost per beneficiary is largely explained by the number of visits an agency makes to a beneficiary.

Figure 1 below shows that the difference in average visits made by high-cost and low-cost agencies has widened considerably between 1993 and 1994. To illustrate, in 1993 the high-cost agencies made 55 more visits per beneficiary, on average, than did low-cost agencies. In 1994, this difference had widened to 69 visits per beneficiary.

FIGURE 1



[2] Ibid., Page 16

Nationally, the average cost per beneficiary for home health service was $3,495 in 1994. The 80 high-cost home health agencies served 72,351 Medicare beneficiaries at an average cost of $5,407 in 1994. Conversely, the 114 low-cost agencies served 112,996 Medicare beneficiaries at an average cost of $2,270.

OPERATING PRACTICES DO NOT EXPLAIN WIDENING VARIATION IN NUMBER OF VISITS

High And Low-Cost Home Health Agencies Had Written Policies And Procedures

All of the home health agencies in both the high and low-cost groups had written policies and procedures. The policies and procedures, which were generally similar in content and scope, provided guidance on important operating practices such as determining eligibility for Medicare home health services and other important aspects of program operations. We observed that the written guidance included criteria for determining the homebound status of a beneficiary. Further, the eligibility criteria of the agencies generally mirrored the criteria contained in the Health Care Financing Administration's manual for Medicare home health services, the HIM-11 (Health Insurance Manual), now called the HCFA PUB. 11.

Likewise, 77 of 80 home health agencies in the high-cost group, and all 114 agencies in the low-cost group had written policies and procedures on monitoring patient services and progress, and on discharging beneficiaries.

High And Low-Cost Home Health Agencies' Mission Or Philosophy Statements Tended To Be Similar In Content

All home health agencies responding to our survey had written statements on their mission or philosophy for providing home health care. The statements of both high and low-cost groups of agencies were essentially the same. To illustrate, both groups emphasized such things as the importance of providing quality care, preventing or shortening institutionalization, providing a continuum of care after a hospital stay, and collaborating with other health care providers in the service area or community.

High And Low-Cost Home Health Agencies Relied Heavily On Their Own Staff To Make The Initial Determination That A Person Meets Eligibility Criteria For Medicare Home Health Services

In making the initial determination that a beneficiary is eligible to receive Medicare home health services, both high and low-cost agencies used essentially the same approach. Table 2 shows that both groups of agencies relied most heavily on their own personnel to make the initial determination that a beneficiary was eligible, rather than on physicians or others. However, Medicare regulations require that a physician certify that home health services are appropriate and necessary by signing a Plan of Care for a beneficiary. A home health agency cannot provide home health services without a signed Plan of Care.

TABLE 2				
Initial Determination of Patient Eligibility				
Who Initially Determines Eligibility For Home Health Services	Low-Cost HHAs		High-Cost HHAs	
	Number	%	Number	%
Physicians	1	1	3	4
HHA Personnel	96	84	66	83
Both Physicians & HHA Personnel	14	12	10	13
Other (e.g., hospital staff)	3	3	0	0
TOTAL	114	100	79	100
No Response To Question	0		1	

High And Low-Cost Home Health Agencies Reported Serving Patients With Similar Conditions

Both high and low-cost home health agencies reported that they served patients who needed acute, chronic, and high-tech home health service. The agencies which responded to our survey defined acute, chronic and high-tech care as follows. The definitions of these three categories incorporated length of time a beneficiary is to be served, stability of a beneficiary's condition, level of services a beneficiary needs, or a combination of those factors.

> **Acute care:** In general, the agencies defined acute care patients as those needing short-term, yet intensive services. Such care could be both skilled and non-skilled to obtain a stable condition for a patient. Such care typically follows a hospital stay or exacerbation of a condition.
>
> **Chronic care:** Generally, the agencies defined chronic care patients as those needing long-term, less frequent services than acute care to prevent exacerbation for a patient whose condition is generally stable.
>
> **High-tech care:** The agencies defined high-tech care patients as those needing specialized treatments and services. Such care includes intravenous therapy, complex wound care, chemotherapy, ventilators, and procedures and services carrying a higher risk and requiring sophisticated skills and training.

The mix of such patients served by the high and low-cost groups of home health agencies we surveyed was about the same (see Table 3). We did not determine whether or not the patient mix differences between high and low-cost home health agencies were statistically significant.

TABLE 3		
Patient Condition Mix Served By High And Low-Cost HHAs		
Condition Category	Low-Cost HHAs (Avg. % of Patients)	High-Cost HHAs (Avg. % of Patients)
Acute	62	59
Chronic	33	33
High-Tech	5	8
TOTAL	100	100

Nearly All High And Low-Cost Home Health Agencies Had A Formal Quality Assurance Program

About 98 percent of the 80 high-cost agencies, and 99 percent of the 114 low-cost agencies that responded to our survey told us they have a quality assurance program.

High And Low-Cost Home Health Agencies Provided A Similar Mix Of Services

The percentage of high and low-cost home health agencies providing different types of home health service was about the same (see Table 4), except for hospice care and a catch-all category called "other". A smaller percentage of agencies in the high-cost group provided hospice care and "other" services than did low-cost agencies.

TABLE 4		
Percentage Of HHAs Providing Each Type Of Service		
	Low-Cost HHAs	High-Cost HHAs
Nursing	100	100
Physical Therapy	96	96
Occupational Therapy	82	80
Speech Pathology Therapy	86	89
Medical Social Services	87	90
Aide Services	100	100
Hospice	29	8
Other (e.g., DME, nutrition counseling)	35	10

The Major Source Of Payment For Patients Served By Both High And Low-Cost Home Health Agencies Was Medicare Fee-For-Service.

Table 5 summarizes the source of payment for patients served by high and low-cost home health agencies. Essentially, all operated under a fee-for-service system. Notably, none of the 80 high-cost agencies said they served Medicare managed care patients, as compared to 15 percent of the low-cost agencies that do service such patients.

TABLE 5		
Percentage Of HHAs That Reported Patient Populations In Each Common Payment Category		
SOURCE OF PAYMENT	114 Low-Cost HHAs	80 High-Cost HHAs
Medicare Fee-For-Service	100	100
Medicaid	89	83
Medicare Managed Care	15	0
Other (e.g., private insurance)	91	89

A HIGHER PERCENTAGE OF HIGH-COST HOME HEALTH AGENCIES THAN LOW-COST HOME HEALTH AGENCIES OPERATED AS FOR-PROFIT AND FREESTANDING ENTITIES

We previously reported that home health agencies at the higher levels of the range of average reimbursement per beneficiary tended to be for-profit, freestanding organizations.[3] The 194 home health agencies that responded to our survey confirmed that finding.

The percentage of high-cost home health agencies that were for-profit entities was almost five times that of low-cost home health agencies (58 percent as compared to 12 percent). This is illustrated in Figure 2.

[3] Ibid., Page 11

FIGURE 2

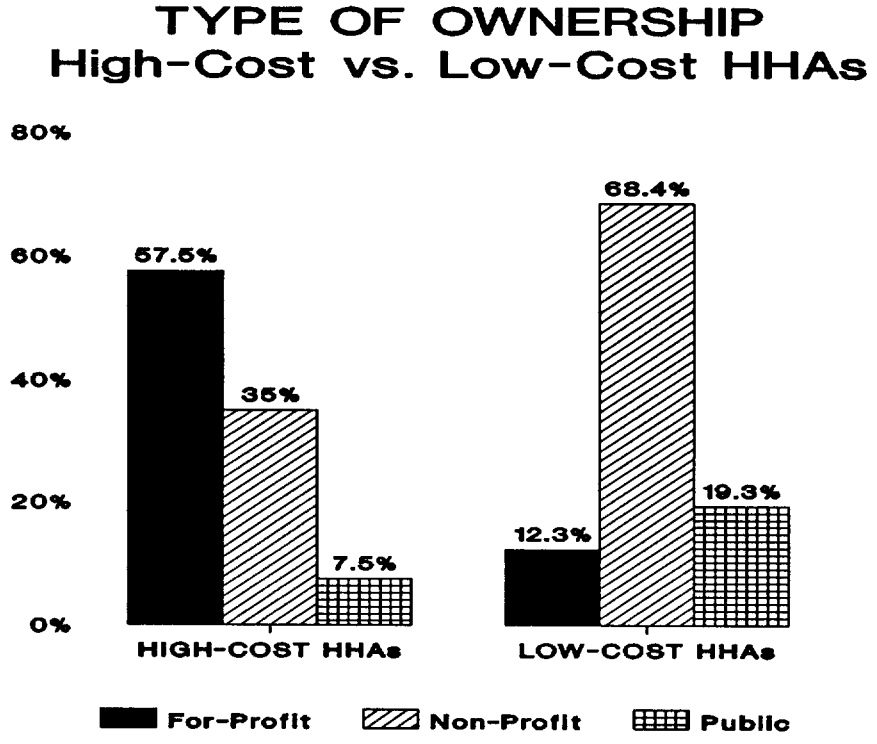
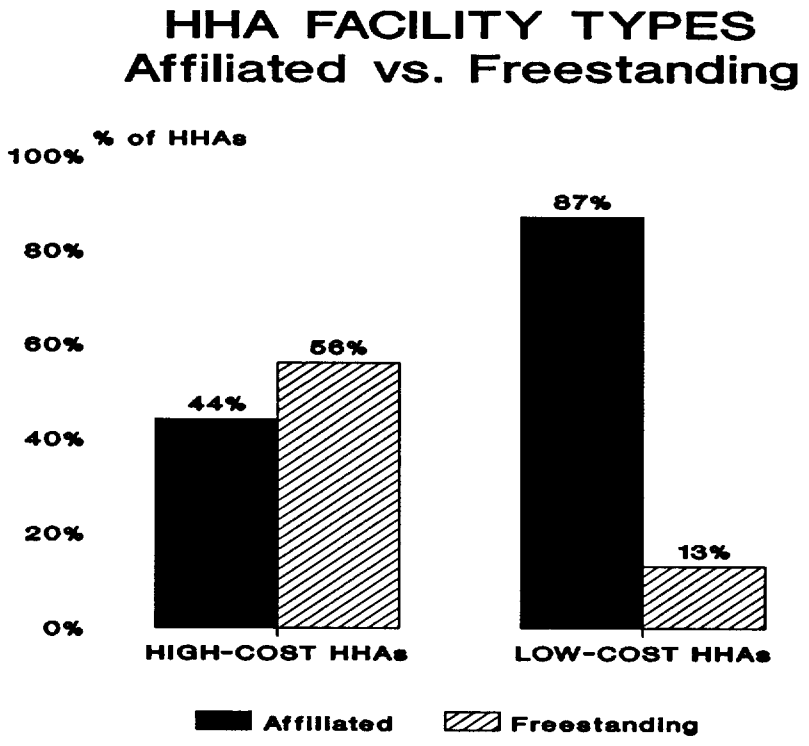


Figure 3 shows that the percentage of high-cost home health agencies that were freestanding was four times that for low-cost home health agencies (56 percent as compared to 13 percent). Freestanding agencies are those that are not affiliated with or part of another health-care entity, such as a visiting nurses association, a government or voluntary agency, a rehabilitation facility, a hospital, or a skilled nursing facility.

FIGURE 3



For-profit and freestanding home health agencies accounted for much of the increasing gap in average visits per Medicare beneficiary between high and low-cost agencies.

Our sample of 194 home health agencies included 60 that operated on a for-profit basis. In 1994, the 60 for-profit home health agencies averaged 94 visits per beneficiary while the 134 non-profit and public home health agencies averaged 47.

Likewise, our sample included 60 home health agencies that operated as a freestanding entity. These agencies averaged 93 visits per beneficiary as compared to an average of 47 visits per beneficiary for affiliated home health agencies.

CONCLUSION

The gap between high-cost and low-cost home health agencies in average number of visits per Medicare beneficiary continues to widen. In our previous inspections, we found that factors such as beneficiary characteristics, agency characteristics, primary diagnoses, and proxies for quality did not explain the wide variation in average number of visits per beneficiary made by home health agencies. We have continued to look for other explanations.

In this inspection, we examined operating policies, procedures, and practices as a possible explanation for the difference. We found, however, that generally program operations are similar in high-cost and low-cost agencies. Where we observed minor differences in operations, they did not explain the differences in average number of visits per Medicare beneficiary among home health agencies. We have not found an explanation for the variation in average number of visits. Despite this, we will continue to analyze this variation in other inspections and to look for explanations.

Determining when it is appropriate and medically necessary to provide Medicare home health services is often ambiguous and largely discretionary. This inspection and other audits and inspections on home health services continue to suggest a need for greater control over the provision of Medicare home health services. If control cannot be achieved through more effective management oversight, then statutory or regulatory changes may be needed to protect the Medicare program from excessive or inappropriate payments in this area.

APPENDIX A

METHODOLOGY

Sample Selection

We randomly selected 300 Medicare certified home health agencies in the United States from HCFA's National Claims History Repository. Before sampling, we stratified the 1993 universe of 6803 HHAs into two categories -- low-cost and high-cost HHAs. We based the two categories on average number of visits made to beneficiaries. We considered HHAs that made fewer than the national average of 50 visits per beneficiary in 1993 to be low-cost. We considered those that made more visits than the national average to be high-cost. We randomly sampled 150 HHAs from both the high and low strata.

Data Collection And Analysis

We used a standardized questionnaire to collect data on operating practices of sampled high and low-cost HHAs. We mailed our survey instrument to each of the 300 sampled HHAs. About 65 percent (194) of the 300 HHAs completed and returned our questionnaire. To assure that our analysis was based on the most current data, we used 1994 utilization data for all HHAs appearing in our sample. Of the 194 HHAs that responded, 114 (59 percent) were low-cost HHAs. The remaining 80 respondents, (41 percent) were high-cost agencies. In terms of average number of visits per beneficiary, the HHAs that responded to our survey were representative of the HHA universe in the United States. We did not independently verify the data reported by the respondents.

We used a dBase file to organize and analyze numerical data obtained from the 194 HHAs. We aggregated the data to obtain comparisons of operating practices of low-cost HHAs as a group to those of high-cost HHAs as a group.

To compare the philosophy or mission statements of the HHAs, we performed a content analysis of those statements. To perform the content analysis we first examined all of the statements and compiled a list of all major terms, phrases and concepts. We then grouped these terms, phrases, and concepts into four major categories. We then aggregated the number of terms, phrases, and concepts in each of the four major categories for both the groups, and performed a statistical significance test on the total "scores" for both the high and low-cost groups.

We conducted t-tests on all findings in the report.

APPENDIX B

AN ANALYSIS OF RESPONDENTS VS. NON-RESPONDENTS

A consideration in surveys of this type is whether the results may be biased by significant differences between non-respondents and respondents. To determine whether significant differences exist in this survey, we compared average number of visits per beneficiary by HHA and size of HHAs. Our analysis revealed no significant difference. Therefore, the possibility of bias due to non-response is limited.

To test for bias in respondents versus non-respondents, we used a Two-way Contingency Table Analysis with the Chi-Square Test. We calculated the expected values for respondent HHAs and non-respondent HHAs assuming that respondent HHAs and non-respondent HHAs are independent.

For our test of bias by average number of visits per beneficiary and size of HHAs, we chose an alpha value of .05 with 1 degree of freedom. That produced a Chi-Square value of 3.84146.

Our test statistic was .049 for our analysis by average number of visits per beneficiary by HHA. This leads us to a conclusion that classification of respondent and non-respondent HHAs are independent by average number of visits per beneficiary.

NON-RESPONDENT ANALYSIS

BY AVERAGE NUMBER OF VISITS PER BENEFICIARY
BY HOME HEALTH AGENCY

	Sample	# of Respondents	# of Non-Respondents
HHAs Above the National Mean of 58 Visits per Beneficiary	125 (41.7%)	80 (41.2%)	45 (42.5%)
HHAs Below the National Mean of 58 Visits per Beneficiary	175 (58.3%)	114 (58.8%)	61 (57.5%)
TOTALS	300 (100%)	194 (100%)	106 (100%)

Our test statistic for our analysis by size of HHA was 0.642. This also leads us to a conclusion that classification of respondents and non-respondents are independent.

NON-RESPONDENT ANALYSIS BY SIZE OF HOME HEALTH AGENCY			
	Sample	**# of Respondents**	**# of Non-Respondents**
HHAs That Served 500 or Less Medicare Beneficiaries in 1994	102 (34.0%)	64 (33%)	38 (35.8%)
HHAs That Served 501 to 999 Medicare Beneficiaries in 1994	98 (32.6%)	66 (34%)	32 (30.2%)
HHAs That Served 1000 or More Medicare Beneficiaries in 1994	100 (33.3%)	64 (33%)	36 (34.0%)
TOTALS	300 (100%)	194 (100%)	106 (100%)

Our non-response analysis showed, however, that our survey results contained no significant bias in terms of average number of visits per beneficiary, and size of HHA.