

RESPONSE RATES FROM A SURVEY OF HOSPICES AND HOME HEALTH AGENCIES

Esther Hing
National Center for Health Statistics,
6525 Belcrest Road, Hyattsville, MD 20782

I. INTRODUCTION

The 1992 National Home and Hospice Care Survey (NHHCS) will provide the first national estimates on use and availability of hospice and home health care services in the nation. The survey will be conducted by the Bureau of the Census on behalf of the National Center for Health Statistics (NCHS) and is scheduled to be fielded from September to November of 1992. The NHHCS represents an expansion of NCHS's surveys of health care providers. NCHS previously only collected patient data from hospitals (National Hospital Discharge Survey), nursing homes (National Nursing Home Survey), and office-based physicians (National Ambulatory Medical Care Survey). These surveys as well as the National Health Provider Inventory, a census of health facilities maintained by NCHS, are being expanded over time into an ongoing integrated National Health Care Survey. The National Health Care Survey will survey not only hospitals, nursing and related care homes, and office-based physicians, but also emergency and out-patient departments of hospitals, ambulatory surgery centers, hospices, and home health agencies.

The Pretest of the 1992 NHHCS was conducted by the Bureau of the Census from August to September 1991. The purpose of the Pretest was to test and evaluate all aspects of the survey design. This paper will examine NHHCS Pretest questionnaire response rates for both hospices and home health agencies. These response rates provide a first look at what may be expected from the full survey this fall.

II. SOURCES AND QUALIFICATIONS OF DATA

The NHHCS Pretest included a sample of hospices and home health agencies, as well as samples of patients served by these facilities. The sampling frame for the Pretest sample was the mailing list for the 1991 National Health Provider Inventory (NHPI), a comprehensive census of nursing and related care homes, residential homes, facilities for the mentally retarded and mentally ill, home health agencies, and hospices (Bureau of the Census, 1992). The Pretest sample was selected from the NHPI mailing list rather than the completed survey because the NHPI survey was still in progress at the time the Pretest sample was selected.

The 1991 NHHCS Pretest included 100 facilities (31 hospices and 69 home health agencies) purposively selected from facilities located in and around five Census regional offices. The five regional offices were: Boston, Atlanta, Kansas City, Denver, and Seattle.

The survey began with a letter to sampled home health agencies and hospices

informing them of the survey. After arranging an appointment with the administrator, the interviewer conducted a personal interview with the administrator about the hospice or home health agency using the Facility Questionnaire (FQ).

After securing permission from the administrator, the interviewer worked with a staff member to compile lists of two types of patients: patients currently served by the agency (as of the night before the survey) and patients who were discharged from the hospice or home health agency in the last 12 months. The list of patients currently served by the agency was compiled on the Current Patient Sampling List (CPSL). A sample of 5 current patients was then randomly selected from the CPSL. The listing of all patients discharged live or dead by the hospice or home health agency in the last 12 months was compiled on the Discharged Patient Sampling List (DPSL). A random sample of 5 discharged patients was then selected from the DPSL.

Once sample patients were selected, the interviewer conducted personal interviews about the patients with a staff member who referred to patient records when necessary. No patient was ever contacted personally. Current patient information was collected using the Current Patient Questionnaire (CPQ), while the Discharged Patient Questionnaire (DPQ) was used to collect information about discharged patients.

The 1992 NHHCS was designed to provide separate estimates of hospices and home health agencies and their patients. In order to sample enough hospices and home health agencies to provide reliable estimates in the final survey, the sampling frame (1991 NHPI) was divided into two major strata: hospices or home health agencies. Assignment to strata for facilities providing both types of services was based on an algorithm which assigned facilities by the type of service received by the majority of patients (Hoffman, 1992). In this paper, the same classification used to select the 1992 NHHCS sample is also used to classify Pretest sample facilities as either hospices or home health agencies, so that Pretest response rates are comparable with those expected from the national study. To identify characteristics of Facility Questionnaire (FQ) responders and nonresponders, FQ response rates are compared by 1991 NHPI characteristics.

For the purposes of this paper, current and discharged patients included in the sample were assumed to receive the same type of care by which the agency was classified.

III. RESULTS

Table 1 shows the disposition of the 100 hospices and home health agencies in the Pretest. Overall, 29 percent were ineligible for the survey either because the facility was out of business (24 percent) or because it was out of scope (5 percent). Twenty three percent of hospices and 25 percent of home health agencies were out of business at the time of the survey; no hospices were out of scope, compared with 7 percent of home health agencies. Because fewer hospices were out of scope or out of business than home health agencies were, a larger percent of hospices (77 percent) than home health agencies (68 percent) were eligible for the survey.

The relatively large percentage of ineligible facilities in the NHHCS Pretest was due to use of the 1991 NHPI mailing list, rather than the completed survey, as the sampling frame. A smaller proportion of ineligibles is anticipated in the National survey this fall because out of scope and out of business agencies will have been excluded from the sampling frame prior to sample selection.

The response rate for the Facility Questionnaire among eligible facilities was quite high (89 percent) overall. Participation rates among eligible hospices (88 percent) and home health agencies (89 percent) were similar.

Facility Questionnaire response rates for hospices and home health agencies are compared by preliminary 1991 NHPI characteristics in Table 2. In general, response was lower in proprietary home health agencies (73 percent) and hospices (50 percent), than nonprofit or government operated facilities (86-100 percent). Response varied by certification among home health agencies. Lower response was associated with uncertified home health agencies (75 percent) than among certified agencies (87-92 percent). There was less of an effect on response rates by certification among hospices. Finally, hospices and home health agencies with larger active patient loads in 1990 tended to have lower response. The FQ response rate for home health agencies with 300 or more active patients according to the 1991 NHPI was 75 percent compared with 86-100 percent among the remaining size categories. Similarly, the FQ response among hospices with 300 or more active patients was 33 percent compared with 93-100 percent among hospices with smaller patient loads.

Completion rates for the Current Patient Sampling List (CPSL) and Current Patient Questionnaires among participating agencies were even higher than those for the Facility Questionnaire (Table 3). The response rate for the Current Patient Sampling List (CPSL) was 98 percent among home health agencies and 100 percent among hospices. Similarly, response for the Current Patient Questionnaire was 97 percent among home health agencies and 100 percent among hospices.

Completion of the Discharged Patient

Sampling List (DPSL) was more problematic for home health agencies than for hospices (Table 4). The response rate for the DPSL was 83 percent for home health agencies, compared with 95 percent for hospices. Home health agencies may have experienced more difficulty than hospices in compiling lists of discharged persons during the prior year because they had a higher volume of patients. The number of patients discharged from home health agencies averaged 287 discharges per year, compared with 239 discharges per year from hospices.

Other problems associated with compiling the DPSL were access to the records and the need to modify existing lists to reflect discharges during the year prior to the survey. Generally there was better access to current patient records than discharged patient records. Hospices and home health agencies were able to provide computer lists for current patients (47 percent) more often than for discharged patients (40 percent) - (Haupt, 1992). In addition, existing lists provided by the facility often required modification to reflect the time period needed for the survey. This involved adding discharges that were not included on the list provided by the facility and deleting discharges that occurred outside the reference period. The majority of refusals to the DPSL were because the agency felt it required too much time to compile it (Haupt, 1992).

Among facilities completing the DPSL, the response rate for the Discharged Patient Questionnaire among sampled patients was high for both provider types; 96 percent among home health agencies and 99 percent among hospices. Thus, participation was high for both patient samples once the sampling list was completed.

IV. CONCLUSIONS

The National Hospice and Home Care Survey was developed in response to changes in the delivery of health care in the last decade. Between 1974 and 1988, the rate of Medicare home health use increased over three-fold; from 16 per 1,000 enrollees in 1974 to 49 per 1,000 enrollees in 1988 (Silverman, 1988). This figure represents a majority of home health users, but not all users. Even less is known nationally about hospice care patients, who also receive care primarily in their homes. The NHHCS was designed to close this data gap.

This paper addresses the quality of data to be expected from the NHHCS in terms of Pretest questionnaire response rates. These expected response rates should be quite high. Survey participation was 88 percent for hospices and 89 percent for home health agencies. Among both types of agencies, response to the patient questionnaires was also high, ranging from 83-100 percent. The lowest response rate found was that for the Discharged Patient Sampling List among home health agencies (83 percent). To improve response for this sampling list,

the reference period for discharges was changed from the last year prior to the survey date (Pretest) to the 12 full months prior to the survey date (final survey). Based on Pretest experience, this time reference should reduce the need to modify existing lists of discharges.

This paper also examined patterns of questionnaire nonresponse. Lower FQ response was found among proprietary hospices and home health agencies and among agencies with larger patient loads. The response pattern by ownership was similar to that found among nursing homes (Hing, 1987; Potter, 1988). Certification status had inconsistent effects on response. If similar response rates are obtained in the national study, it is likely that nonresponse weighting adjustments will be included in the weighting specifications to take these nonresponse patterns into account.

Pretest response rates presented in this paper are subject to several major caveats. First, the data are not reflective of a representative sample, since the sample was purposively selected from facilities located around five Census Bureau Regional Offices. The final sample will be a three-stage probability design. The first stage will be a selection of Primary Sampling Units, the second stage will be a selection of agencies within the primary subdomains of hospices and home health agencies, and the final stage is a selection of patients within the agency (Hoffman, 1992). Although overall questionnaire response rates may be similar to those found in the Pretest (the Pretest is basically a "dress rehearsal" for the full survey), response rates by individual characteristics may vary in the full survey.

Second, the Pretest sample was small; many of the response rates presented in this paper are based on a small number of cases. For example, DRSL response rates for eligible home health agencies by ownership were based on 15 proprietary agencies, 24 nonprofit agencies, and 3 agencies with other ownership type.

Finally, pretest results for patient questionnaires may differ from the final survey because some facilities in the NHHCS sample frame provide both hospice and home health services, but the type of care actually received was not identified in the Pretest patient questionnaires. In this paper, patients were assumed to receive the same type of care as that by which the facility was classified. In the final survey, a question has been added to the NHHCS patient questionnaires identifying the type of care received by patients in facilities providing both types of services.

Despite the qualifications noted above, the NHHCS Pretest response rates were comparable to or better than those obtained in several previous studies of hospices and home health agencies. Table 5 shows that response rates from previous studies of home health agencies ranged from 18-88 percent; while response rates

from hospice studies ranged from 31-100 percent. In general, lower response rates were obtained from mail surveys than from surveys that used personal interviews. Thus, the response rates obtained in the NHHCS Pretest were largely due to use of personal interview as the method of data collection.

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Table 1. Number of home health agencies and hospices in the 1991 National Home and Hospice Care Survey Pretest sample by disposition.

Disposition	Total	Home health agencies	Hospices
1. Total in sample	100	69	31
2. Not eligible for survey	29	22	7
Out of business	24	17	7
Out of scope	5	5	0
3. Eligible for survey	71	47	24
4. Percent of sample eligible for survey (3 divided by 1)	71	68.1	77.4
5. Responded	63	42	21
6. Refused	8	5	3
7. Response rate (5 divided by 3)	88.7	89.4	87.5

Table 2. Facility Questionnaire response rates for home health agencies and hospices by selected facility characteristics: NEHCS Pretest.

Selected facility characteristics from 1991 NHPI	Home health agencies	Hospices
All facilities	89.4	87.5
OWNERSHIP		
For profit	73.3	50.0
Nonprofit	100.0	88.2
Other	100.0	100.0
Unknown	85.7	100.0
MEDICARE OR MEDICAID CERTIFICATION		
Certified by both	91.7	86.7
Not certified by either	75.0	83.3
Unknown	85.7	100.0
ACTIVE PATIENTS		
Less than 100	85.7	92.9
100-199	100.0	100.0
200-299	100.0	100.0
300 or more	75.0	33.3
Unknown	85.7	100.0
DISCHARGED PATIENTS IN 1990		
Less than 100	75.0	100.0
100-199	100.0	100.0
200-299	100.0	100.0
300-399	80.0	-
400-499	100.0	-
500-999	100.0	66.7
1000 or more	87.5	-
Unknown	90.0	80.0
REGION		
Boston	100.0	100.0
Atlanta	85.7	83.3
Kansas City	70.0	100.0
Denver	100.0	66.7
Seattle	90.0	100.0

- Indicates no cases in this cell.

Table 3. Disposition of current patient sample in the 1991 National Home and Hospice Care Survey Pretest.

Disposition	Total	Home health agencies	Hospices
1. Number of responding agencies	63	42	21
2. Completed Current patient sampling list (CPSL)	62	41	21
3. CPSL response rate (2 divided by 1)	98.4	97.6	100.0
4. Total Current patients sampled on CPSL	304	204	100
5. Number of Current patient questionnaires completed	297	197	100
6. Current Patient Questionnaire response rate (5 divided by 4)	97.7	96.6	100.0

Table 4. Disposition of discharged patient sample in the 1991 National Home and Hospice Care Survey Pretest.

Disposition	Total	Home health agencies	Hospices
1. Number of responding agencies	63	42	21
2. Completed Discharged patient sampling list (DPSL)	55	35	20
3. DPSL response rate (2 divided by 1)	87.3	83.3	95.2
4. Total Discharged patients sampled on DPSL	271	175	96
5. Number of Discharged patient questionnaires completed	263	168	95
6. Discharged Patient Questionnaire response rate (5 divided by 4)	97.0	96.0	99.0

Table 5. Response rates from previous studies of hospices and home health agencies.

Study	Scope	Response rate	Method of data collection
Evaluation of long-term care minimum data set (1982)	Long-term care providers	81% - home health agencies 86% - hospices (Pretest and Main Study combined)	Record abstraction by facility staff and by interviewers
Joint Commission Accreditation of Health Organizations (1981-86)	Hospices	77% - 1981 31% - 1982 51% - 1983 100% - 1984 1985-86 79% - Certified 65% - Noncertified	Mail survey
Select Committee on Aging, House of Representatives (1985)	Medicare certified home health agencies	18%	Mail survey
Non-certified hospice cost analysis (1987)	Non-certified hospices	59%	Personal interview by site visit team (accountant and researcher)
National Medical Expenditure Survey,	All health providers	88% - home health providers	Mixed mail and personal interview