Supporting Statement B for Hospice Experience of Care Survey

RAND Project Director/Principal Investigator
Karl Lorenz

RAND Co-Project Director/Co-Principal Investigator
Rebecca Anhang Price

RAND Corporation
1776 Main St.
P.O. Box 2138
Santa Monica, CA 90407-2138

Contract/Task Order#:
HHSM-500-2012-00126G
March 11, 2013
Deliverable for Task 16

Prepared for CMS
Lori Teichman/Debra Dean-Whittaker,
Project Officers

RAND HEALTH

TABLE OF CONTENTS

SUPPORTING STATEMENT
HOSPICE EXPERIENCE OF CARE SURVEY

B. Collection of Information Employing Statistical Methods

B1. Respondent Universe and Respondent Selection

Field test data collection will occur in 2013.

Selecting and Recruiting Hospices

We will sample 30 hospices in total, 20 midsize-to-large ("larger") hospice organizations (targeting completed surveys for 30 decedents per larger organization) and 10 smaller hospice organizations (targeting completed surveys for 10 patients per smaller organization), targeting 730 total completed surveys. We will exclude hospices that care for fewer than 10 decedents per month, as these smaller hospices do not have enough volume to produce a sufficient sample size during the field test. In each larger hospice, we will sample an average of 105 and a minimum of 90 deaths over the course of the 12 to 14 week field period; in each smaller hospice, we will sample an average of 33 and a minimum of 30 eligible deaths during that time, for 2,430 total sampled deaths.

In addition to sampling hospices by size, we will aim to include a targeted number of hospices with the following characteristics in the final participating field test sample: a natural mix of hospices across 4 geographic regions in the U.S.; at least 1 hospice belonging to a national chain; 10 to 15 for-profit hospices; 1 government hospice; and at least 3 rural hospices, so as to establish feasibility of survey implementation and identify potential challenges (e.g., variation in response rates or rates of missingness) related to hospice characteristics. In addition, to ensure sufficient sample to test the Spanish survey, we will aim to include at least 1 hospice with a high proportion of Hispanic patients in the final participating sample.

To satisfy these targets, we will randomly select hospices proportionately with respect to region, and disproportionately with respect to hospice size, chain status, profit status, government ownership, and rural location. Because this design is not fully factorial, a simulation-based sampling approach will be employed to derive a sample draw that exactly adheres to the targets or is within a small prespecified tolerance.

To allow for empirical comparisons between any two of the four settings in which hospice care is delivered (i.e., home, nursing home, freestanding inpatient unit, and acute care hospital), we will sample within each of these settings. The acute care hospital is much less common than the other settings, comprising only 7.8 percent of all hospice deaths occurring in 2009 (Analysis of CMS claims data). To ensure robust empirical comparisons between each of the more common settings of care, 90 percent of our sample will be evenly split across caregivers whose family members or friends received hospice care at home (30 percent), in a nursing home (30 percent) and in freestanding

units (30 percent). The remaining 10 percent of the sample will consist of caregivers of those who received hospice care in acute care hospitals.

Tables 1 and 2 describe how the proposed sample of 2,430 will be distributed across hospice care settings and hospice size. We assume 25 percent of deaths will be deemed ineligible, resulting in 1,823 eligible deaths, 68 per larger hospice and 23 per smaller hospice. Assuming a 40 percent response rate from caregivers, an estimate that reflects prior experience on with the Family Evaluation of Hospice Care (FEHC), this will result in approximately 730 completes, including 630 from larger hospices and 100 from smaller hospices, and approximately 219 from each of the three more common settings of care (home, nursing home, and freestanding unit) and 73 from the least common setting of care, acute care hospitals.

Table 1. Sampling Plan by Hospice Care Setting

Hospice Setting	**Sample**	**Eligible*** ***(assumes 25-percent ineligibility rate)***	**Completes** ***(assumes 40-percent response rate)***
Home	729	547	219
Nursing home	729	547	219
Freestanding unit	729	547	219
Acute care hospital	243	182	73

* Eligibility criteria are described below.

Table 2. Sampling Plan by Hospice Care Size

Hospice Size	**Sample**	**Eligible** ***(assumes 25-percent ineligibility rate)***	**Completes** ***(assumes 40-percent response rate)***
Midsize/large	2,100	1575	630
Smaller	330	248	100

The sample design will allow us 80-percent power to detect differences of 8 to 12 percent in response rate when comparing any two of the hospice settings and when comparing organization size (larger vs. smaller) in 2-sided tests, alpha=0.05 (see Table 3). Similarly, when comparing responses to CAHPS items, we will be able to detect small - moderate differences (Cohen's d=0.3 to d=0.4 SD) between any two of the hospice settings or between larger and smaller hospices.

Table 3. *Power Analysis of Proposed Sample Design*

Comparison	Detectable Difference in Response Rate	Detectable Difference in CAHPS Measure (standard deviations)
Comparison between any two of the three more common settings (i.e., home, nursing home, freestanding unit)	8.3 percent	0.27
Comparison between acute care hospital and any other setting	11.8 percent	0.38
Large vs. small hospice organizations	9.1 percent	0.30

Determining Eligibility

Eligibility criteria for hospice patients and their primary caregivers have been determined in consultation with CMS and with input from the Technical Expert Panel, and closely parallel HCAHPS and FEHC survey eligibility criteria. The following groups of hospice patients and the primary caregivers noted in their hospice's administrative records are eligible for inclusion in the sampling universe:

- Patients over the age of 18
- Patients with death at least 48 hours following admission to hospice care
- Patients for whom a caregiver is listed or available and for whom caregiver contact information is known
- Patients whose primary caregiver is someone other than a non-familial legal guardian
- Patients for whom the primary caregiver has a U.S. or U.S. Territory home address

Patients or caregivers of patients who request that they not be contacted (those who sign "no publicity" requests while under the care of hospice or otherwise directly request not to be contacted) will be excluded.

B2. Data Collection Procedures

We propose to use the mixed mode approach: prenotification letter followed by mail as the primary mode (one survey mailing), with telephone as the secondary or nonresponse mode. Three weeks after the first survey mailing, individuals who have not responded by mail will be called for a period of three weeks with up to five call attempts at varied days and times. In keeping with HCAHPS guidelines, the entirety of the field period from survey mailing to cessation of calling will be no longer than 42 days (six weeks). There will be three versions of the mailed survey and three versions of the telephone survey – one version for those whose decedent died while in home based care, one for those whose decedent died while in nursing home care, and one for those whose decedent died while in an inpatient setting (either acute care hospital or freestanding inpatient unit).

The timing of survey administration and duration of the field period were informed by the literature review, focus groups, and cognitive interviews. Based on consensus and experiences from other hospice experience of care surveys, the survey will be

administered between 2 and 5 months following the death of the hospice patient. All three versions of the survey will be available in English and Spanish. We assume that 5 percent of the sample will need a Spanish survey. The low estimated proportion of Spanish surveys reflects the low representation of Hispanics among hospice patients.

B3. Response Rates and Non-Response

We anticipate a response rate of 40 percent, an estimate that reflects experience with administration of the FEHC to bereaved family members and friends of hospice patients in recent years. We will pursue several strategies to minimize non-response. First, we will request that hospices suspend other survey data collection during our field test period. For those hospices that decline to suspend other survey data collection, we will coordinate to try to ensure that the field test survey is administered first, before the other survey, and to maximize the amount of time between administration of the field test survey and the other survey. Our survey cover letter will explain that the respondent will receive our survey and possibly another one, and encourage completion of them both. In addition, we will mail a pre-notification letter to all respondents one week before mailing our survey, a strategy that has been shown to increase response rates. We will also plan for survey and item non response analysis. We will compute these statistics overall, and by hospice setting: home vs. nursing home vs. acute care hospital vs. freestanding unit.

B4. Tests of Procedures or Methods

This data collection effort includes:

1. A test of the three versions of the newly designed hospice care experience survey, one for each of the following settings: home, nursing home and inpatient (including freestanding unit and acute care hospital). These survey versions are being fielded for the first time under this data collection effort.
2. A test of care experiences across hospice setting: This involves empirical comparisons of responses across the four settings of hospice care (i.e., home, nursing home, or inpatient in either a freestanding unit or an acute care hospital).

B5. Statistical and Data Collection Consultants

The survey, sampling approach, and data collection procedures were designed by the RAND Corporation under the leadership of:

Karl Lorenz, MD MSHS
RAND Corporation
1776 Main Street
Santa Monica, CA 90407

Rebecca Anhang Price, PhD
RAND Corporation
1200 South Hayes Street
Arlington, VA 22202

ATTACHMENTS

Attachment A: Hospice experience of care survey – home
Attachment B: Hospice experience of care survey – nursing home
Attachment C: Hospice experience of care survey – inpatient