## **Supporting Statement – Part B**

#### Collections of Information Employing Statistical Methods

1. The target universe is current Medicare beneficiaries entitled to hospital and/or supplementary medical insurance, living in the 50 states, the District of Columbia, and Puerto Rico. Both institutionalized and non-institutional beneficiaries are represented. Table B.1 summarizes the number of beneficiaries in the target universe based on CMS administrative records for the past six years. The seven age groups shown in the table correspond to sampling strata from which the samples for the MCBS are drawn. The age groups are defined by the beneficiaries' age as of July 1 of the given year.

Table B.1: Universe Counts Broken Down by MCBS Sampling Strata								
Age Interval	2005	2006	2007	2008	2009 (est.)	2010 (est.)		
			(in thousands)		, ,	` /		
Disabled								
0 - 44	1,714.8	1,710.4	1,734.8	1,748.7	1,755.6	1,762.7		
45 - 64	4,885.1	5,165.6	5,372.7	5,604.7	5,720.7	5,839.1		
Total	6,599.9	6,876.0	7,107.4	7,353.4	7,476.4	7,601.4		
Aged								
65 - 69	9,209.1	9,498.4	9,826.8	10,430.5	10,732.4	11,043.0		
70 - 74	8,382.3	8,451.6	8,578.8	8,805.3	8,918.5	9,033.2		
75 - 79	7,334.5	7,280.4	7,220.2	7,156.3	7,124.3	7,092.5		
80 - 84	5,602.8	5,608.7	5,677.6	5,700.6	5,712.0	5,723.5		
85+	5,064.5	5,225.5	5,430.7	5,574.1	5,645.8	5,718.4		
Total	35,593.3	36,094.6	36,734.1	37,666.7	38,133.0	38,605.1		
Total	42,193.2	42,970.6	43,841.6	45,020.1	45,609.4	46,206.5		

Source: Historical counts (2005-08) are based on CMS administrative records. Projections (2009-10) from the historical counts are based on the average annual rate of change from 2007-08. Distributions by age interval are estimated. Totals do not necessarily equal the sum of rounded components.

The target sample size of the MCBS is designed to yield 12,000 completed cases a year (approximately 1,000 disabled enrollees under the age of 65 in each of two age strata, and 2,000 enrollees in each of 5 age strata for enrollees 65 or older). To achieve the desired number of completed cases, the MCBS selects new sample persons each year to compensate for non-response, attrition, and retirement of sample people in the oldest panel, and to include the newly eligible population, while continuing to interview the non-retired portion of the continuing sample.

The MCBS usually adds approximately 6,450 - 6,600 beneficiaries to the sample in the September - December round each year to replace the existing panel and to offset sample losses due to non-response and attrition. However, this number can be lower or higher depending on available resources and the extent of non-response in the previous rounds. Approximately 4,000 sample

persons in the oldest panel are retired from the study in the May - August round each year, but this number varies from year to year. As a result, the sample size averages approximately 16,500 interviews per round, which yield approximately 12,000 cases with completed annual utilization and expenditure information.

Sample persons who refuse one or more rounds or who cannot be located for one of the scheduled interviews are not counted as completed cases. Proxy interviews are attempted for deceased sample persons. If data are collected through the date of death, then such cases are counted as completes. For sample persons who reside in both a community and a facility setting, the round is considered complete, if community and facility interviews are completed.

Sample persons remain in the survey when they are unavailable for an interview in a given round; that is they are carried forward into the next round. For these individuals the reference period for their next core interview covers the period since their last interview, so that there will not be a gap in coverage of utilization and expenditure data. Supplements are administered for the current round only. If a sample person is unavailable for two rounds in a row, they are not scheduled for any further follow-up because extension of the recall period beyond eight months is not feasible.

A broad range of statistics is produced from the MCBS. Robustness and generality have been stressed in sample design rather than customizing for specific goals. We anticipate that we will continue to over-sample the extreme elderly and the disabled. The methodology for drawing the samples is described later in this document. The number of cases to be selected each year (designated sample sizes) are larger than targeted completes to compensate for initial non-response and ineligibility. To see an illustration of the extent of the compensation necessary in Round 55 to achieve the desired number of cases providing annual data, see Table B.2. We anticipate that roughly the same or larger numbers will need to be selected in Rounds 58, 61, and 64.

Table B.2: Sample Size Needed to Compensate for Initial Non-
Response and Ineligibility

Age on July 1 of of reference year	Desired average number of cases providing annual data	Number sampled at Round 55
0-44	333	615
45-64	333	550
65-69	667	1,450
70-74	667	880
75-79	667	1,135
80-84	667	1,160
85+	667	1,125
Total	4,001	6,915

Cross-sectional sample sizes for other domains. There are multiple domains of interest in the MCBS, for example, respondents with end-stage renal disease, persons residing in nursing homes), managed care enrollees, beneficiaries of various race and ethnic backgrounds, and Medicaid recipients. The MCBS will continue to maintain a minimum target of 12,000 completed responses annually to help ensure that analysis can be performed on MCBS data for many domains of interest.

Sample sizes for longitudinal analyses. Under the rotating panel design specified for the MCBS, respondents remain in the sample for up to twelve rounds of data collection over a four year time period. The historical response rates and attrition rates observed in the MCBS are used to determine the rotational sample size and configuration of each new incoming panel. The rotational sample design attempts to achieve consistency in subgroup sample sizes across all panels comprising a particular calendar year.

Table B.3 presents the round-by-round conditional and cumulative response rates as of Round 52 (fall round of 2008) for the samples (referred to in the table as "panels") selected in 2001 through 2008. For example, from the bottom part of the table, it can be seen that by the 10th round of data collection for the 2005 panel, 60.4 percent of the 2005 panel were still in a formal responding status (that is, either the SP was alive and still participating in the study or had died but left behind a cooperative proxy for the collection of data on the last months of life) or had participated in the survey until death, leaving enough data to estimate the last months of life. For the 2006 and 2007 panels, the corresponding cumulative response rates as of Round 52 were 63.5 and 64.1 percent, respectively. The 2008 panel (the new panel selected in Round 52) ) had an initial response rate of 78 percent in its first round of data collection.

Round 52 (fall, 2008) is the latest round for which MCBS data have been processed. There were 3,133 interviews successfully completed at Round 52 with still-living members of the 2005 panel. For brevity, we refer to these 3,133 interviews as "live completes". For the 2006 and 2007 panels there were 3,562 and 3,801 live Round 52 completes, respectively. For the first round of data collection for the 2008 panel, there were 4,053 completes at Round 52.

The MCBS has used a variety of techniques to maintain respondents in the survey and reduce attrition. These will be continued and adapted to comply with the time frames for initiating and implementing the continuous sample.

- 2. This section describes the procedures used to select the samples for the national survey. It includes a general discussion of the statistical methodology for stratification and rotational panel selection, estimation procedures, and the degree of accuracy needed. This is followed by a presentation of how topical supplements are used to enhance the analytic potential of the MCBS data. The content of the continuous or core questionnaires is then summarized. Finally, there is a discussion of rules for allowing proxy response.
  - a. **Statistical methodology for stratification and sample selection.** This section opens with a description of the MCBS sample design. This is followed by a general discussion of the selection of the original and supplemental samples, and the use of different five percent

HISKEW samples each year to reduce problems associated with duplication of samples across the years.

Table B.3: Conditional Response Rates as of Round 52 for Medicare Current Beneficiary Survey by Interview Round

	2001 Panel (n = 6302)	2002 Panel (n = 6301)	2003 Panel (n = 6300)	2004 Panel (n = 6342)	2005 Panel (n = 6565)	2006 Panel (n = 6675)	2007 Panel (n = 6680)	2008 Panel (n = 5532)
Round 1	84.8%	84.3%	83.2%	82.2%	82.0%	82.8%	80.3%	78.0%
Round 2	93.1%	92.9%	92.9%	92.8%	91.6%	92.0%	90.3%	
Round 3	96.1%	96.6%	95.5%	95.9%	96.0%	95.5%	93.5%	
Round 4	96.1%	96.9%	96.1%	96.6%	96.3%	95.7%	94.7%	
Round 5	97.1%	97.8%	97.8%	97.4%	97.1%	96.6%		
Round 6	97.9%	97.9%	97.7%	98.3%	97.7%	96.8%		
Round 7	98.1%	97.1%	98.3%	98.0%	97.7%	97.7%		
Round 8	98.1%	98.3%	98.1%	98.2%	98.2%			
Round 9	98.6%	98.5%	98.8%	98.7%	97.3%			
Round 10	98.0%	98.7%	99.0%	98.5%	98.3%			
Round 11	99.0%	99.2%	99.3%	98.6%				
Round 12	99.8%	99.8%	99.9%	99.8%				

#### Cumulative Response Rates for Medicare Current Beneficiary Survey by Interview Round

	2001 Panel (n = 6302)	2002 Panel (n = 6301)	2003 Panel (n = 6300)	2004 Panel (n = 6342)	2005 Panel (n = 6565)	2006 Panel (n = 6675)	2007 Panel (n = 6680)	2008 Panel (n = 5532)
Round 1	84.8%	84.3%	83.2%	82.2%	82.0%	82.8%	80.3%	78.0%
Round 2	79.0%	78.3%	77.3%	76.3%	75.1%	76.2%	72.5%	
Round 3	75.9%	75.6%	73.9%	73.2%	72.1%	72.8%	67.7%	
Round 4	72.9%	73.3%	71.0%	70.7%	69.5%	69.6%	64.1%	
Round 5	70.8%	71.6%	69.4%	68.8%	67.5%	67.2%		
Round 6	69.3%	70.1%	67.8%	67.7%	65.9%	65.1%		
Round 7	68.0%	68.0%	66.6%	66.3%	64.4%	63.5%		
Round 8	66.7%	66.9%	65.4%	65.2%	63.2%			
Round 9	65.8%	65.9%	64.6%	64.3%	61.5%			
Round 10	64.5%	65.0%	63.9%	63.3%	60.4%			
Round 11	63.8%	64.5%	63.4%	62.5%				
Round 12	63.7%	64.3%	63.4%	62.3%				

1) The MCBS employs a complex multistage probability sample design. At the first stage of selection, the sample consists of 107 primary sampling units (PSUs) defined to be metropolitan areas and clusters of non-metropolitan counties. At the second stage of selection, samples of ZIP code areas (5 digit) referred to as ZIP fragments are selected within the sampled PSUs. Prior to the Fall data collection round, new ZIP fragments are sampled within the PSUs each year to give recently created ZIP codes appropriate representation in the sample. At the third and final stage of selection, stratified samples of

beneficiaries within the selected ZIP fragments are sampled at rates that depend on age group.

PSU and ZIP code clustering. The MCBS is in the final phase of implementing its first PSU redesign. The original MCBS PSU sample was selected in 1991 and consisted of 107 primary sampling units (PSUs) defined to be either metropolitan areas or groups of non-metropolitan counties. Within the PSUs, the initial sample of second-stage units consisted of 1,163 clusters of ZIP code areas (5 digits). This number increased to about 1,500 ZIP clusters by 2000 as new ZIP codes were added to the sample.

As a result of the unequal growth of the Medicare population across different areas of the country, the workload distribution across the sampled PSUs became less efficient over time. Moreover, there was evidence that design effects (which reduce sampling precision) had also increased. For this reason, in 1999, CMS and Westat staff began an evaluation of the existing PSU structure. Following the analysis of the aging PSU structure, a decision was made to reselect the PSUs. Attachment 10 is the evaluation of alternative measures of size for PSU selection that led to this decision. The new PSUs were phased in over a four-year period in conjunction with the drawing of each new panel. The reselection of the PSUs did not involve increases in respondent sample size, nor increases in respondent burden.

The 2001 panel was the first panel in which the redesigned PSUs were used. Like the original sample, 107 PSUs were selected of which 63 were retained from the original sample. With the rotating panel design, the PSU redesign has been transparent to data users and no special processing has been required. The strata used for selection of the PSUs cover the 50 states, the District of Columbia and Puerto Rico. There are some states without any sample PSUs within their boundaries. Within major strata defined by region and metropolitan status, substrata defined to be internally homogeneous with respect to socio-economic data from the 1990 Census were created for sample selection. The sample PSUs are listed in Attachment 11.

Within the PSUs, an initial sample of 1,209 second-stage units consisting of clusters of ZIP code areas was selected. All of the ZIP cluster samples were selected from CMS's master file of beneficiaries enrolled in Medicare, using the beneficiary's address recorded in that file as of March of the year the individual was selected for the sample There were several steps in this sampling process. The first was to form ZIP fragments (the intersections of ZIP code areas and counties in sample PSUs). The second was to assign a measure of size to each ZIP fragment. The measure of size was closely related to the total count of Medicare beneficiaries residing in the ZIP fragment, but beneficiaries in domains to be over-sampled (such as persons over age 84) were counted more heavily than persons to be under-sampled (such as persons aged 66 to 69). Some of the ZIP fragments had very small numbers of beneficiaries residing in them. These small ZIP fragments were collapsed with other ZIP fragments until the aggregate measure of size for each cluster was large enough to provide a reasonable cluster size for the sample. A sample of these ZIP clusters was then selected with probability proportionate to the measure of size, using systematic sampling

with a random start.

2) Selection of beneficiaries. At the inception of the MCBS, an initial sample of over 15,000 beneficiaries was selected from the 5-percent sample of the Health Insurance Master File (HIM), also referred to as a 5-percent HISKEW. This sample was clustered within the selected PSUs and ZIP fragments and was designed to effect uniform sampling weights within seven age domains at the national level. Beginning in Round 10, with the transition to a rotating panel design, samples of approximately 6,450 beneficiaries (eligible on January 1 of each year) have been selected from a 5-percent HISKEW each year. Nursing home residents are drawn into the sample in exactly the same manner as other beneficiaries residing in the community.

Each year, a new supplementary sample (referred to as a panel) is selected for the MCBS. To determine the appropriate sample sizes for the new panel, the MCBS sample sizes achieved in the prior year are reviewed in April of each year. New projections are made of the sample size necessary to obtain the targeted number of responding cases in subsequent cost-and-use data releases. For example, it was projected that roughly 6,900 sample beneficiaries would be needed for the 2009 panel (the latest panel selected for the MCBS) in order to meet sample size goals. This number is higher than for previous panels because of decreasing response rates.

b. Estimation procedure. To date, sampling weights have been calculated for Rounds 1, 4, 7...49 and 52 in the Access to Care Series. Both cross-sectional and longitudinal weights have been calculated. These weights reflect differential probabilities of selection and were adjusted for under-coverage and non-response. Replicate weights were also calculated so that users can calculate standard errors using replication methods. In addition to the replicate weights, stratum and unit codes exist on each weight file for users who prefer to use Taylor Series methods to estimate variances.

Besides standard weighting and replicate weighting, another part of the estimation program includes the full imputation of the data sets to compensate for item non-response (Attachment 9). Imputation of charges for non-covered services and sources of payment for covered services in the Cost and Use annual file have been developed. The weighting and imputation of data will continue.

c. Degree of accuracy needed for the purpose described in the justification. A broad range of statistics will be produced from the MCBS. There is no single attribute of beneficiaries and their medical expenses that stands out as the primary goal of the survey. Thus, there can be no simple criterion for the degree of reliability that statistics for each analytic domain should satisfy. Even with a minimum of 15,500 sample persons, there will be many small domains of interest for which it will be necessary to use modeling techniques or to wait several years for sufficient data to accumulate. Examples include people with specific medical conditions (e.g., hip fractures), institutionalized persons under age 65, Hispanic persons, and sample persons experiencing spend down.

The MCBS will maintain a stratified approach to the selection of the sample. The sample will continue to be clustered by PSU and ZIP Code and stratified by age domain. We anticipate maintaining a total of 2,000 annual cases allocated to the disabled. The two age categories were selected because they indirectly reflect the means by which the disabled person becomes eligible for Medicare. Since the number of disabled sample persons per PSU and ZIP code will be small, the effects of clustering on statistical precision should be mild. It is anticipated that post-stratification by characteristics in CMS databases will more than compensate for the effects of clustering. Thus, with an effective sample size of 1,000 or more for each age stratum, accuracy for each of the two age strata should not be much different from that commonly attained in public opinion surveys. Since many of the statistics may be heavily right-skewed, the accuracy may be lower in relative terms but still acceptable.

Each of the age strata for the aged Medicare sample will be allocated 2,000 cases. A major reason for over sampling the very old is to obtain an adequate sample of nursing home stays, while minimizing design effects. Variations in sampling weights across the age strata and clustering should result in an effective sample size of approximately 1000 cases annually per stratum.

- d. Interview content for periodic data collection cycles to reduce burden.
  - 1) Content and timing of the continuous or core interview. The primary variables of interest for the MCBS are the use and cost of medical care services and associated sources and amounts of payment. While Medicare claims files supply information on billed amounts and Medicare payments for covered services, the survey provides information on use of services not covered by Medicare and on payment sources and amounts for costs not reimbursed by Medicare. For both the household and facility core components, the primary focus of the data collection is on use of services (dental, hospital, physician, medical providers, prescription medication and other medical services), sources and amounts of payment, and health insurance coverage. The "core" MCBS interview collects continuous information on these items through thrice-yearly interviews. The community component also contains summary components, which update the household enumeration and health insurance status and follow-up on cost and sources of payment information for "open items" from the previous interview.

Continuous data on utilization and expenditures are required for a number of reasons. First, several of the distinct expenditure categories involve relatively rare medical events (inpatient hospital stays, use of home health care, purchase of durable medical equipment), so limiting the reference period would mean insufficient observations for national estimates. Second, episodes of medical care often consist of a series of services over weeks or months; continuous data will allow examination of the grouping of services around particular episodes of care. This is particularly important when a number of medical services are included in a global fee. Third, payment for medical services often occurs considerably later than the utilization, so collection of complete

information about a particular event can often only be obtained some time after the event occurs. In addition, this emphasis on utilization and expenditures will formulate an excellent baseline to monitor both Medicare reform and CMS' program management effectiveness.

The administration of the instruments will continue to follow the established pattern of data collection, i.e., baseline information will be collected in the initial interview. This will be followed in all subsequent interviews with the core component. The core community and facility components are administered in the second interview (January through April) to maintain a consistent reporting period for utilization and expenditure data. Since the initial interview always occurs in the last four months of a calendar year, collection of utilization and expenditure data in the second interview means the reference period will always begin prior to January 1st. This creates use and expenditure estimates on a calendar year basis.

The access, enumeration and demographic series (i.e., baseline information) will be asked and reference dates established in Rounds 58, 61 and 64 for those individuals new to the MCBS. The core components are administered in every round thereafter. For those continuing sample persons, we administer the core questionnaire in addition to the baseline instrument in Rounds 58, 61 and 64.

The literature (initially reported by Neter and Waksberg in 1964, and confirmed in subsequent research by other analysts) indicates that collection of behavioral information in an unbounded recall period can result in large recall errors. A part of the initial interview (Rounds 58, 61 and 64) prepares the respondent for the collection of utilization and expenditure information in subsequent rounds, thus "bounding" the recall period for the next interview. In addition, at the conclusion of the initial interview, the sample person (new rotational sample only) is provided with a calendar. This calendar marks the recall period for the respondent, serves as the means to record utilization, and as a prompt to retain statements and bills.

2) Content of the core/continuous questionnaire, Rounds 58-66. We are proposing no change in content in the core questionnaire for Rounds 58-66.

Community Questionnaire.

<u>Introduction and enumeration section.</u> In the initial interview, the MCBS collects information on the household composition, including descriptive data on the household members such as age, gender and relationship to the sample person. We also verify the address and telephone number of the sample person. This information is updated in each subsequent round.

<u>Health insurance.</u> In the initial interview, we collected information on all sources of secondary health insurance, both public and private, which cover the sample person. Included are questions about premium, coverage, primary insured, source of the policy

(i.e., private purchase, employer sponsored, etc.) and managed care status. This information is updated in each subsequent round.

<u>Utilization series.</u> This section collects information on the sample person's use of medical services. We specifically probe for use of: dental services, emergency room services, in-patient hospital services, outpatient hospital services, institutional services (skilled nursing home services, intermediate care facility services, etc.), home health services, medical provider services (medical doctors, chiropractors, physical therapist, etc.), prescribed medicines and other medical services. For each type of service reported, we collect information on the source of care, type of provider, date that the service was provided, and if medications were prescribed as a part of the event. This episodic information is collected for all services since the date of the last interview.

Charge questions: statement and no statement series. These sections collect information on costs, charges, reimbursements and sources of payment for the health care services reported in the utilization series. If a respondent has an insurance statement (Medicare Summary Notice or private health insurance statement) for a reported medical service, then the statement series is administered. For reported medical utilization, if a respondent indicates that a statement has not been received, but they expect to receive a statement, we defer asking about this service until the statement is received. If the respondent doesn't have and doesn't expect to receive a statement, the no-statement series is asked. Questions are asked about the cost of the services, charges, expected reimbursement, and potential or actual sources of payment (including other family members).

<u>Summary Information</u>. Updates and corrections are collected through the summaries. For the enumeration, insurance and utilization sections, the respondent is handed a hard copy of the information reported or updated in the previous round. The respondent is asked to review this and make any corrections or modifications. For medical events, the respondent is handed a hardcopy of the calendar. This replicates the reporting by month from the previous round and reinforces utilizing a calendar for reporting events. These summary sheets are prepared monthly so that the respondent can rapidly scan the reported events and modify, add or delete episodes of health care. In addition, updates to prescribed medication use can be made at this time.

In addition, information for events that remain open in the previous round (i.e., the respondent expects to receive a statement, but had not received a statement at the time of the last interview), is collected in the charge and payment summary. Information is collected through this summary in a manner that is consistent with the statement or no-statement series.

Facility Questionnaire.

The facility component collects information that is similar in content to the household interview. Sections of the institutional instrument parallel the household instrument, i.e., residence history parallels the household enumeration section. The provider probes capture information that is similar to the community utilization section and the institutional charge series parallels the household charge series (statement and no statement series). Differences in the facilities and community components result from differences in the setting of the interview and the types of respondents. The facility questionnaire is administered by the interviewer to one or more proxy respondents designated by the facility director. The household instrument is administered to the sample person or their designated proxy. Both the household and facility interviews are record driven. However, the facility respondents refer to formal medical care records, while in the household, the respondent is dependent their own record keeping. The core facilities instrument contains the following sections:

<u>Residence History.</u> This section collects continuous information on the residence status of the sample person, including current residence status, discharge and readmission.

<u>Health Services.</u> This section collects information on medical use by type of service. Type of providers and setting used are identified for reported medical events. In addition information is collected on the number of times or volume of care received.

<u>Prescribed Medicines.</u> All medications administered in a facility are prescribed. Information is collected on the name, form, strength, and dispensing frequency of the medication.

<u>Inpatient Hospital Stays.</u> Information is collected on any inpatient hospital stays reported in the Residence History.

<u>Institutional charges.</u> This section collects information from the institutions on the charges, reimbursement levels and sources of payment for the sample person. Information on bad debt and other sources of differences between bills and payments.

3) Content of topical supplements. The MCBS interview consists of core items and one or more topical supplements. The content of the supplements is determined by the research needs of CMS, the Department, and other interested agencies, including the Medicare Payment Advisory Commission. Topics for the community component include: income, assets, program knowledge and participation, demographic information, health and functional status, satisfaction with care, and usual source of care. For the facility instrument topical supplements include the eligibility screener and the baseline instrument (contains questions on demographics and income, residential history, health status and functioning, type of housing and health insurance).

For the community interview we are requesting clearance to continue to field the Overlap series (i.e. Usual Source of Care, Access to Care, Satisfaction with Care, Health Status and Functioning, Health Insurance, Household Enumeration, Housing Characteristics, Demographics and Income, and Provider Probes), Income and Assets,

## **Table B.4: Supplements for Clearance**

#### 2010

Round 58
Core interview
Overlap Series
Facility: Baseline and Screener

2011

Round 59Round 60Round 61Core InterviewCore InterviewCore InterviewKnowledge and Information NeedsIncome and AssetsOverlap Series

Drug Coverage Patient Activation Facility: Baseline and Screener

Facility: Baseline and Screener

2012

Round 62Round 63Round 64Core InterviewCore InterviewCore InterviewKnowledge and Information NeedsIncome and AssetsOverlap Series

Drug Coverage Patient Activation Facility: Baseline and Screener

Facility: Baseline and Screener

2013

Round 65Round 66Core InterviewCore InterviewKnowledge and Information NeedsIncome and Assets

Prescription Drug Choice Prescription Drug Awareness

Drug Coverage Patient Activation

Knowledge and Information Needs, Prescription Drug (to complement the change in the enrollment period, content will be split between Jan – Apr and May – Aug rounds), and Patient Activation supplements. For the facility interview, we are requesting clearance for the eligibility screener and the baseline instrument.

Table B.4 presents the supplements that we are seeking clearance for at this time. If additional supplements are planned, separate clearance packages will be developed.

Household Core Interview = Household Composition, Health Insurance, and Utilization and Charge Series (statement/no-statement series)

<sup>-</sup> Facility Core Interview = Residence History, Provider Probes, Prescription Medications, Hospital Stay and Institutional Charges.

Overlap Series = Access to Care, Satisfaction with Care, Usual Source of Care, Health Status and Functioning, Housing Characteristics, Demographics and Income.

<sup>-</sup> Facility Baseline = Demographics and Income, Residence History, Health Status and Functioning, and Health Insurance.

- e. Rounds 58 through 66 data collection procedures.
  - 1) Interviews with sample persons in community. In Round 58, 61 and 64 all newly selected sample persons will be sent an advance letter (Attachment 3) from the Centers for Medicare and Medicaid Services. Interviewers will carry copies of the advance letter for sample persons who do not recall receiving one in the mail, as well as a copy of the MCBS brochure and question-and-answer sheet (Attachment 3). This process was and will continue to remain effective.

The household component interview (Rounds 58-66) will be administered to the sample person or a proxy using a computer-assisted personal interviewing (CAPI) program on a laptop computer. A hard-copy representation of the continuous core for Rounds 58-66 CAPI interview for persons living in the community is shown in Attachment 4. Attachment 4 includes a copy of the instrument that is administered in the initial interview, the ongoing interview, and the Show Cards, used by the interviewer to assist in the interviewing process.

At the completion of the initial interview i.e., Rounds 58, 61 and 64 interview, each new sample person is given a MCBS calendar, on which he or she is encouraged to record health care events. The same calendar is provided to all continuous community respondents on a calendar year basis.

2) Interviews with sample persons in institutions. All new facility admissions during Rounds 48-57, will be traced to the institution where they reside. For the initial facility interview the Eligibility Screener, Baseline and Core Questionnaires are administered. All facility interviews are administered to facility staff using a CAPI program on a laptop computer. For all facility residents, the facility screener is administered during the Fall of each year (Attachment 5). The facility core institutional questionnaire to be used in Rounds 58-66 is shown in Attachment 6.

Some administrators will require consent of the sample person or a next of kin before releasing any information. The data collection contractor will offer to obtain such written consent, using the consent form and letter included as Attachment 7.

- 3) Verification Interviews. A brief verification re-interview (Attachment 8) will be conducted for 10 percent of the interviews.
- f. Proxy rules. For community sample persons, the preferred mode is self-response. During the initial interview (with subsequent updates), sample persons are asked to designate proxy respondents. These are individuals who are knowledgeable about the respondent's health care and costs and expenditures for this care. In the MCBS, only those individuals who are designated by the sample persons can serve as proxy respondents.

The facility setting presents a different and changing set of circumstances for the MCBS. In the past the MCBS used the policy of making no attempt to directly interview residents in a facility. But, changes in elderly care have interviewers encountering facilities, which provide a wider range of services that fall outside the scope of traditional Medicare certified facilities. In some cases, such as custodial care and assisted living communities, the best person for answering our questions is the beneficiary, rather than facility staff. MCBS interviewers are now trained to determine and seek out the appropriate source for interviewing. While we feel that the majority of facility interviews will continue being conducted with facility staff, having no contact with the beneficiary, there will be cases for self-response in the facility setting. For persons who move in and out of long-term care facilities, standard procedures will be used to determine the best respondent to provide data about the period spent outside of such facilities. Self-response will be used in prisons if permitted. Other institutions will be treated on a case-by-case basis.

3. MCBS is sampling a heterogeneous population that presents a unique challenge for maximizing response rates. The household survey will be approaching two groups--aged and disabled Medicare beneficiaries—who have characteristics that often lead to refusals on surveys. Increasing age, poor health or poor health of a family member are prevalent reasons for refusal. On the other hand, older persons are the least mobile segment of the population and thus less likely to be lost due to failure to locate. The disabled population tends to have a slightly higher response rate than the aged population. While the percentage of non-response do to death is comparable to that of the 70-74, 75-79 and 80-84 age brackets, refusal rates are the lowest of all age categories.

Because this is a longitudinal survey it is essential that we maximize the response rates. In order to do so, survey staff undertakes an extensive outreach effort annually. This includes the notification of government entities (CMS regional offices and hotline, carriers and fiscal intermediaries, and Social Security Offices), national organizations including the American Association of Retired Persons, the Association for Retarded Citizens and various community groups (e.g., mayor's offices, police, social service and health departments, home health agencies, state advocates for the elderly and area agencies on aging). These efforts are undertaken to increase the likelihood that respondents would answer the MCBS questions and remain in the survey panel by: 1) informing authoritative sources to whom SPs are likely to turn if they suspect the legitimacy of the MCBS; 2) giving interviewers resources to which they can refer to reassure respondents of the legitimacy/importance of the survey; and 3) generally making information about MCBS available through senior centers, other networks to which SPs are likely to belong and through the CMS website.

In addition to the outreach efforts, the following efforts remain in place to maintain a sense of validity and relevance among the survey participants.

- a. An advance letter is sent to both potential sample persons and facility administrators from CMS with the Administrator's signature. This includes an informational brochure answering anticipated questions.
- b. A handout with Privacy Act information and an appeal to participate is given to the SP at

- the door by the interviewer.
- c. Interviewer training emphasizes the difficulties in communicating with the older population and ways to overcome these difficulties.
- d. Individualized non-response letters are sent to SPs who refuse to participate. These letters are used when deemed appropriate by the field management staff. CMS staff follows up with respondents who refused because of concerns about privacy and federal sponsorship of the survey.
- e. Proxy respondents are sought for SPs unable to participate for themselves.
- f. Non-respondents are re-contacted by a refusal conversion specialist.
- g. A toll-free number is available at Westat to answer respondent's questions.
- h. An E-mail address and website are available at CMS to answer respondent's questions.
- i. The sample person is paired with the same interviewer throughout the survey. This maintains rapport and establishes continuity of process in the interview.
- j. Periodic feedback mechanisms have been established. These include describing the availability of data, types of publications presenting MCBS data and preliminary findings presented in the form of data summaries.
- k. We encourage personal touches, including interviewer notes and birthday cards.
- 1. Personal letters of appreciation have been sent from the Federal Project Officer. These letters include information on recent publications from the MCBS and status of the project. In addition, information on selected supplements (e.g., Income and Assets) has been mailed to sample persons prior to the interview.

In contrast to most surveys, the MCBS has a large amount of information to characterize non-respondents. This information, including Medicare claims data, can be used for imputation if necessary. To minimize the risk of bias from non-response the most up-to-date non-response adjustment techniques are used. Models predicting the propensity not to respond are built based upon the extensive administrative databases available and upon data from earlier rounds. We then use propensity to respond to form cells to adjust respondent weights. Simultaneously, the substantive characteristics of non-respondents will continue to be tracked in the administrative databases to monitor the risk of bias.

4. At this time there are no plans to conduct field testing of the currently established procedures or methods. From time to time various parts of the questionnaire are modified or augmented to reflect changes to the Medicare program, capture information on emerging areas of interest, reduce unnecessary burden or to improve the quality of the data. If field testing becomes desirable in the future, it will be submitted for approval separately or in combination with the next main collection of information.

# 5. Person responsible for statistical aspects of design

Adam Chu Senior Statistician Westat, Inc. (301) 251-4326

Westat, Inc., of Rockville, Maryland conducts the MCBS.