Dear Sir/Madam:

The AHRQ is currently seeking information on the possibility of re-programming the Medical Expenditure Panel Survey (MEPS) instrument, currently in a DOS operating system, into a Windows operating system. Responses are welcome from and open to any member of an agency or organization who could directly or indirectly support this effort. Responses are also welcome from the general public.

This Request for Information (RFI) is for planning purposes only. Responses to this RFI are not offers and cannot be accepted by the Government to form a binding contract. The AHRQ intends to issue a subsequent solicitation for the purpose of reprogramming the MEPS Computer Assisted Personal Interviewing (CAPI) instrument. CAPI is a software program that allows for the administration of the MEPS interview on a laptop computer.

The RFI describes the background of the MEPS and its current computerized interview schedule. Your input is invited for information purposes in the areas of systems design and selection, promoting industry competition, time frames for feasible completion and the overall concept of the design. Specific questions and instructions for responding are provided in the RFI.

As mentioned, all suggestions and/or comments are for informational purposes only and will be used for defining the contractual requirements for this opportunity. Your responses will not be used for contract selection.

All questions concerning the RFI should be directed to Darryl Grant at (301) 594-7189 or by e-mail at dgrant@ahrq.gov.

Written responses to this RFI are requested by February 4, 2002. Responses should be directed to Darryl Grant by e-mail or by mail at the following address:

Agency for Healthcare Research & Quality
Division of Contracts Management
2101 East Jefferson St., Suite 502
Rockville, MD 20852

Your interest in responding to this project is greatly appreciated.

Sincerely,

Darryl Grant

DEPARTMENT OF HEALTH AND HUMAN SERVICES
AGENCY FOR HEALTHCARE RESEARCH AND QUALITY

REQUEST FOR INFORMATION

The Center for Cost and Financing Studies within the Department of Health and Human Services' (DHHS) Agency for Health Care Research and Quality (AHRQ) is issuing this Request for Information (RFI) to gather information from the private sector on a proposed opportunity. The AHRQ requests comments on various aspects of this proposed opportunity.

Background

The mission of the Agency for Healthcare Research and Quality is to support research designed to improve the outcomes and quality of health care, reduce its costs, address patient safety and medical errors, and broaden access to effective services. The research sponsored, conducted and disseminated by the Agency for Healthcare Research and Quality provides information that helps people make better decisions about health care.

Within AHRQ, the Medical Expenditure Panel Survey (MEPS) is conducted by the Center for Cost and Financing Studies (CCFS). The MEPS is a vital resource designed to continuously provide policy makers, health care administrators, researchers and others with timely, comprehensive information. MEPS is the most recent in a series of medical expenditure surveys that began in 1977 (National Medical Care Expenditure Survey) and was repeated in 1987 (National Medical Expenditure Survey). Since 1996, MEPS has been continuously in the field. For most of these years, the focus of the project has been on access to health care, health insurance coverage, and health care use and expenses. In late 1999 however, the AHRQ was reauthorized by Congress. That legislation, as well as our temporal budget submissions have expanded the role of the MEPS. This expansion includes the following.

- To identify the determinants of health outcomes and functioning
- Provide data to study the relationships between health care quality, outcomes, access, use and costs
- Provide information on the quality of care and patient outcomes for frequently occurring conditions
- Provide reliable national estimates for children and persons with special health care needs.

In addition, MEPS is identified as one (of many) sources for informing two major annual reports for which AHRQ has responsibility – the National Quality Report and the National Disparities Report.

Current Status of MEPS

MEPS consists of three major components – a household survey, a survey of medical providers and a survey of employers[1]. The Household Component of MEPS is a longitudinal panel survey whose participants are a subsample of those households who completed an interview for the National Health Interview Survey (NHIS) the previous year. Respondents are interviewed via computer assisted interviews, largely in person[2] five times over a two and a half year period. Each year a new panel begins and an older panel is retired. An important goal for the MEPS is to make national estimates for each year. To do so, data from two panels are pooled for the same time period (calendar year, usually). In recent years, the design has also included paper questionnaires – one for parents to answer for each child, a self administered questionnaire for all adults, and most recently, a questionnaire for persons who indicated in the household interview that they had diabetes. With these exceptions, a single household informant provides information for all household members.

The Household and Medical Provider Components of MEPS are conducted under contract. Westat has been the prime contractor on both of these components since 1995. In addition to data collection, the scope of work for the contracts included all post-data collection processing, including analytic editing, imputation and the production of public use files. The MEPS website (www.meps.ahrq.gov) contains examples of the final products (i.e., public use files and their respective documentation) delivered to date.

The MEPS survey instruments are available on the MEPS website (www.meps.ahrq.gov). Executable copies of the program are available from Kelly Carper at (301) 594-0313. A number of other documents are available to provide general information about the current MEPS data processing systems (see the attached Reference List). The Data Processing Report, which is available on the website contains extensive technical information on the MEPS CAPI system.

Features of the Current MEPS Instrument

At present, only the MEPS Household Component interview is conducted in CAPI. The Medical Provider Component is conducted via paper and pencil interviews and by abstraction from medical records onto the paper interview schedule.

The Household Component CAPI interview is a complex questionnaire with a highly structured logic that controls the sequence and flow of the interview. It also instructs the interviewer about the administration of several paper forms including[1,2,3]

[1] A survey of employers is conducted through the Insurance Component (IC). The IC does not require a CAPI redesign, it is conducted separately from the household and medical provider surveys. A fourth component – a survey of residents and new admissions to nursing homes was conducted only in 1996.
[2] Less than 5 percent of interviews are conducted over the phone.

- Self-administered questionnaires
- Disease-specific self-administered questionnaires
- Permission forms for contacting medical providers
- Other items on a periodic basis including paper questionnaires administered to parents about their children, and requests for copies of specific insurance policies identified by respondents.

The MEPS Data Processing Report describes the instrument in detail. Briefly, the instrument contains 42 matricies, including some two- level rosters supporting dwelling unit and reporting unit levels, 50 dynamic choice lists, 50 hierarchical database segments, almost 4,000 variables and extensive dynamic word fills.

Status of Instrument Design

Between its first administration in 1996 and 2000, few changes were made to the instrument. Beginning in 2000, AHRQ has asked its contractor to make a number of changes to the DOS version of the MEPS instrument in order to support the analytical requirements of the new AHRQ authorizing legislation, including

- The addition (beginning in 2000) of a carefully designed Self Administered Questionnaire, included as part of the interview protocol in rounds 2 and 4 to facilitate annual and longitudinal estimation
- A revised Child Health Supplement – administered in paper-and pencil in 2000 and moved into the CAPI in 2001.
- A condition/quality section, beginning in 2000. Previously, conditions in MEPS have been identified only if the respondent reported them as a reason for a medical encounter. This section asks specifically about a limited number of conditions. Positive answers to diagnostic questions trigger questions regarding the care received for that condition.

Future Changes Contemplated

The extent and content of future changes have not been fully specified at this time. However future changes are likely to include (but not necessarily be limited to) the following:

- Moving indentification of specific high priority conditions forward to the beginning of Round 1 (now in round 3). We would want this information to be updated dynamically during the interview and to be used to steer other sections of the instrument (for instance, questions on “usual source of care might be asked “in general” and then who is the usual source of care for the high priority condition, diabetes for instance).

- Increasing our ability to capture enrollment in specific state insurance plans and movement between Medicaid, private insurance and those state plans.
- Decreasing redundancy in the interview for respondents, especially in the medical events section.
- Improving the provider probes section to induce better recall of medical events
- Improving the income and asset sections to reduce item non-response

Followback Surveys

Medical Provider Component

The primary objective of the Medical Provider Component (MPC) is to collect data from medical providers (hospitals, physicians, home health agencies, and pharmacies) on expenditures for medical services provided to MEPS sample persons. MPC data also serve as an imputation source for item nonresponse to reduce the level of bias in survey estimates of medical expenditures. It also serves as source of expenditure information on physician charges that are associated with hospital care but not billed by the hospital as well as serving as the primary source of expenditure information for Medicaid recipients. The sample for the MPC is chosen from medical providers identified in the HC as having provided care to the sample person during the year. Only providers for whom the respondent completed a signed permission form authorizing contact are candidates for the MPC.

A sampling scheme, which is implemented by CAPI, was developed for the various provider types covered by the MPC. Specifically 100% of households with Medicaid recipients and 75 percent of households with managed care insurance arrangements are sampled, compared to 50 percent of other households. Once a household is selected for the sample, all office-based physicians and HMOs associated with physician care provided to persons in that household become part of the MPC sample. Prior to sample selection, households are sorted by selected geographic and demographic characteristics within each sampling group.

All hospitals that were reported as a site of care for in-patient stays, outpatient department visits, and emergency room encounters for sample persons during that year are included in the sample. All separately billing doctors identified by the hospitals as providing care during any hospital event are also included in the MPC.

All home health agencies, hospitals, social service agencies, and other places identified as providing home health care to the sample person are included in the MPC. However, self-employed and unpaid persons providing home health services are not considered in scope for the MPC.

Providers for the MPC sample are identified based on three rounds of data collection. During the HC interviews, a provider directory database is used to conduct a computerized search for sample providers and to prepare a list for fielding the MPC.

The MPC data are collected using a paper questionnaire. The interviews are primarily conducted by telephone. Different versions of the MPC are used to collect data from different types of providers. The MPC questionnaires are available on the web site (http://www.meps.ahrq.gov)

During the last interview in the calendar year household respondents were asked to sign permission forms authorizing contact with pharmacies and the release of data by pharmacies.

Pharmacies are asked to provide the following information regarding the dates the prescription was filled, The National Drug Code (NDC), the medication name (brand or generic), the strength of the medicine, the quantity dispensed, the total charge, and the sources of payment

The request for data offers pharmacies two main options. If available, they are invited to send computerized printouts of data for the identified patients. Alternatively, pharmacies can fill in the requested information on data forms that accompanies the patient list. When data are returned to the home office the prime contractor's subcontractor is responsible for data editing.

For more detailed information on the Pharmacy Survey see MEPS Methodology Report 12: Outpatient Prescription Drugs: Data Collection and Editing in the 1996 Medical Expenditure Panel Survey (list the URL).

Data processing requirements

The Household and Medical Provider Components of MEPS are conducted under contract. Westat has been the prime contractor on both of these components since 1995. In addition to data collection, the scope of work for the contracts included all post-data collection processing, including analytic editing, imputation and the production of public use files. For details regarding MEPS data processing requirements are included in the Final data Processing Report, which is available on our website (http://www.meps.ahrq.gov).

Questions Regarding re-CAPIing the MEPS Instrument

1) How many Windows-based surveys has you organization programmed? For each project describe your experience. Please include the following information:

   a) A brief description of the survey design, unit of data collection, unit of analysis, and estimated sample size.

   b) Was this a new survey or did your organization convert the survey to a Windows operating system?

   c) What difficulties were encountered unexpectedly and how were they resolved?

   d) Did you incorporate any "add-on" or look-up directories with software other than the CAPI software to accomplish the desired survey goals? What software was used for the add-on work?

   e) How did your organization incorporate a field management system into this project?

   f) What was the period of performance for the project and how long did the design/programming phase last?

   g) What was the average survey administration time?

2) Does you organization have any experience in programming Computer Assisted Telephone Interviewing (CATI) in a Windows operating system? CATI is a software program that allows for the administration of the MEPS interview by telephone. How many Windows-based CATI surveys has your organization programmed? For at least three of these projects provide similar information as above, making sure you identify each as a Windows CATI project.

3) How long do you expect DOS to be supported? Is this the right time to be thinking about a transition to Windows or are there new developments in hardware and/or software on the horizon that might make waiting a better option? If waiting is better, how long would AHRQ need to wait and what are the advantages of waiting?

4) Other than Blaise what other only Windows software can handle a CAPI instrument as complex as the MEPS?

5) When converting the MEPS from paper to CAPI (without significant design change) the cost was approximately $5.3 million dollars in direct labor ($9.6 including overhead and the development of a Field Management System), in 1994-5 dollars. This conversion included one major design phase, a very limited pretest, and a second phase where the instrument was reduced from a three-hour administration time to just under two hours. How should we think about the cost of a Blaise conversion? Should we expect the costs to be similar, higher, or lower than our PAPI to CAPI conversion?

6) What would be the optimal timeline for re-programming our current instrument to a Windows operating system? What schedule would you suggest and how might the work be organized in an efficient manner?

7) What are your recommendations on the type and amount of staffing required for reprogramming the MEPS CAPI instrument?

8) What would be the options for pretesting the instrument? Would all rounds need to be pretested over a 2 1/2 year period (the administration period of a Panel) or are compressed or simultaneous schedules possible?

9) Do you have experience programming a bilingual instrument? Is programming a Spanish instrument feasible for the MEPS? How costly would it be? How costly would it be to develop a bilingual version of the instrument?

10) It is also our intention to convert the MPC paper instrument into a CAPI instrument. What would be the optimal timing for this conversion, i.e., before or after the household instrument or concurrently with the household instrument.

11) In taking advantage of the capabilities of CAPI technology, many of the skip patterns in the MEPS survey instrument are extremely complex. Because of this complexity, and the danger that frequent back-ups and modifications could compromise data integrity, it was deemed necessary to build fire walls into the MEPS CAPI instrument. Any data changes that may be required after the firewall for a specific section has been crossed must be entered in the comment field. This creates both a data quality issue as well as a cost issue related to data-processing. Are there other strategies we should consider in formulating the requirements for the new CAPI system to handle interviewer use of comment fields?

12) MEPS respondents have the ability to update data from previous rounds in subsequent interviews. For example, if a respondent told an interviewer she had employer-sponsored health insurance in Round 1, and when she is interviewed in Round 2 she claims never to have had insurance, we record the information in comment review. The Round 1 data is then updated in the home office database, so that when yearly indicators are constructed in post-processing they reflect the correct data. Lag time between rounds of data collection is minimal but it is labor

intensive. Are there better ways to deal with updating/correcting data from a previous interview?

13) Considering that data collected in one round can be used to update data in previous rounds and the overlapping panel design of the MEPS, what problems should we expect to encounter in phasing in a new CAPI instrument? For example, will there be problems integrating the DOS and Windows databases? Please include recommendations for phasing in the new CAPI system.

14) Does your organization or agency have experience in developing metadata repositories? If so, please describe your experience. For optimal functioning of MEPS including administering the survey instruments as well as inter-round processing, and post data collection editing and development of analytic files, what type of metadata system would you recommend AHRQ seek?

15) What information about the proposed re-programming would the Government need to provide to offerers to insure accurate bids?

16) What is the feasibility of updating the content of the MEPS CAPI while we are changing from a DOS based CAPI language to a Windows operating systems? Would you recommend that major design changes be made while still using DOS or would it be a better use of resources to postpone major redesigns until we begin the reCAPI process?

17) The Government wishes to make the instrument portable so that firms other than the one who designed the CAPI could potentially field the survey. How can this be done?

18) MEPS invests heavily in post-data collection processing. Historically this has been bundled with the field work for contracting purposes. What strategies would you recommend to enhance the efficiency of post-data collection processing? How might the burden of post-data collection processing be reduced without sacrificing data quality?

19) Would you recommend that the field management system and the new CAPI instrument be developed by the same vendor or can the questionnaire be developed independently of the field management system? Why?

Reference Materials

Cohen J. Design and methods of the Medical Expenditure Panel Survey Household Component. Rockville (MD):Agency for Health Care Policy and Research; 1997. MEPS Methodology Report No. 1 AHCPR Pub. No. 97- 0026
http://www.meps.ahrq.gov/papers/mr1_97-0026/mr1.pdf

Final Data Processing Report (list the URL)

MEPS HC Questionnaire (http://www.meps.ahrq.gov/survey.htm)

MEPS MPC Questionnaire (http://www.meps.ahrq.gov/survey.htm)

Machlin SR, Taylor AK. Design, Methods, and Field Results of the 1996 Medical Expenditure Panel Survey Medical Provider Component. Rockville (MD): Agency for Health Care Policy and Research; 2000. MEPS Methodology Report No. 9 AHRQ Pub. No. 00-0028. (http://www.meps.ahrq.gov/papers/mr9_00-0028/mr9.pdf)

Moeller JF, Stagnitti MN, Horan E. et al. Outpatient Prescription Drugs: Data Collection and Editing in the 1996 Medical Expenditure Panel Survey. Rockville (MD): Agency for Health Care Policy and Research; 2001. MEPS Methodology Report No. 12 AHRQ Pub. No. 01-0002. (http://www.meps.ahrq.gov/PrintProducts/PrintProdLookupLive.asp)