MEPS Medical Provider Component Medical Organizations Survey:

Is a Linked Survey Strategy More Successful In Getting Office Based Medical Providers to Participate in a Survey?

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Abstract: The Medical Expenditure Panel Survey Household Component (MEPS-HC) is an ongoing household survey that yields national estimates of various health care metrics including health care use, expenditures, and insurance coverage. The MEPS Medical Provider Component (MEPS-MPC) collects information from medical providers providing care to the MEPS households. The provider data are an invaluable complement to the household reported data. Often more detailed and accurate, the provider data serve as the gold standard for MEPS expenditure estimates and are the source for MEPS expenditure imputations. Because of increased demand for data on organizational characteristics of providers and/or health care practices, the Robert Wood Johnson Foundation has sponsored a Medical Organization Survey (MEPS-MOS) which collects this type of data from a subset of MEPS-MPC providers. Physician surveys are known to be difficult to execute and obtain low response rates. The linked MEPS-MOS survey approach examines if this unique data collection strategy is easier to execute and results in higher response rates. Results of this survey effort will provide critical information to future efforts in provider and medical practice data collection.

This paper will present underlying design considerations of the MOS instrument development and data collection strategy. It will include discussion of successes and challenges of the linked survey approach and will present response rates by question and respondent category (i.e., the respondent's role in the provider organization). Finally, we discuss item non-response and the analytic potential of the data.

Preliminary findings show an overall response rate of 77 percent at the person-provider and practice levels with phone data collection being the most prevalent mode (90 percent) compared to web (4 percent), and fax/mail (6 percent) modes.

MEPS Medical Provider Component Medical Organizations Survey: Is a Linked Survey Strategy More Successful In Getting Office Based Medical Providers to Participate in a Survey?

Marie N. Stagnitti, MPA and Kathryn Dowd

Introduction

The Agency for Healthcare Research and Quality's (AHRQ) Medical Expenditure Panel Survey (MEPS) supplemental Medical Organizations Survey (MOS) is designed to provide nationally representative estimates of the characteristics of patients' office based usual sources of care (USC) and to support analyses of the association between practice characteristics and patients' experiences with care, including access to care, service use and expenditures, and quality of care. An understanding of the organizational characteristics of office-based physicians and how those characteristics relate to quality of care as well as health care utilization and costs is essential when discussing policies to promote high-quality and efficient healthcare delivery.

This MEPS MOS is the first Federal survey that has the capability of directly linking practice characteristics with patients' experiences. The MEPS MOS was funded in part by support from the Robert Wood Johnson Foundation. The data were collected for the first time for calendar year 2015 and the 2015 data are available on the MEPS web site. A second MEPS MOS collecting 2016 calendar year data is currently in the field. 2016 MEPS MOS data will be available in February 2018.

The MEPS MOS was highly successful and resulted in response rates at the provider and practice levels of 77 percent. Nonetheless, further research needs to be done to determine how much of this success was due to the linked design versus other aspects of the MEPS MOS survey and instrument design and data collection strategy.

Background

MEPS Household Component (HC)

The MEPS Household Component (MEPS HC) provides nationally representative estimates of healthcare use, expenditures, sources of payment, and health insurance coverage for the U.S. civilian noninstitutionalized population. The MEPS HC also provides estimates of respondents' health status, demographic and socio-economic characteristics, employment, access to care, and satisfaction with healthcare. Estimates can be produced for individuals, families, and selected population subgroups. The panel design of the survey, which includes five rounds of interviews covering two full calendar years, provides data for examining person level changes in selected variables such as expenditures, health insurance coverage, and health status. Using computer assisted personal interviewing (CAPI) technology, information about each household member is collected, and the survey builds on this information from interview to interview. All data for a sampled household are reported by a single household respondent.

The MEPS HC was initiated in 1996. Each year a new panel of sample households is selected. Because the data collected are comparable to those from earlier medical expenditure surveys conducted in 1977 and 1987, it is possible to analyze long-term trends. Data can be analyzed at either the person or medical event level. Data must be weighted to produce national estimates.

The set of households selected for each panel of the MEPS-HC is a subsample of households participating in the previous year's National Health Interview Survey (NHIS) conducted by the National Center for Health Statistics of the Centers for Disease Control and Prevention. The NHIS sampling frame provides a nationally representative sample of the U.S. civilian non-institutionalized population and reflects an oversample of blacks, Hispanics and, from 2006-2015, Asians. MEPS, at times, oversamples additional policy relevant subgroups such as low-income households. The linkage of the MEPS to the previous year's NHIS provides additional data for longitudinal analytic purposes.

MEPS Medical Provider Component (MPC)

Upon completion of the household CAPI interview and obtaining permission from the household survey respondents, a sample of medical providers is contacted by telephone to obtain information that household respondents cannot accurately provide. This part of the MEPS is called the Medical Provider Component (MPC). Information collected includes dates of visits, diagnoses and procedure codes, charges and payments. The Pharmacy Component (PC), a subcomponent of the MPC, does not collect charges or diagnosis and procedure codes but does collect drug detail information, including National Drug Code (NDC) and medicine name, as well as date(s) prescriptions are filled and sources and amounts of payment. The MPC is not designed to yield national estimates. It is primarily used to supplement and/or replace household reported expenditure information and as an imputation source.

MEPS Medical Organization Survey (MOS)

The MEPS MOS expands the current MEPS MPC to include information on characteristics of the practices of office-based providers identified by MEPS household respondents as their usual source of care (USC). For each individual family member, MEPS HC ascertains whether there is a particular doctor's office, clinic, health center, or other place that the respondent usually visits if he/she is sick or needs advice about his/her health, i.e., a usual source of care. For the MEPS MOS, the USC can be reported as an individual, an individual in a group practice, or as a practice, however, the MOS survey respondent is asked to answer MOS questions at the practice level.

The MEPS MOS data collection is for a subset of office-based care providers already included in the MEPS MPC sample. This strategy was employed because "piggy backing" the MEPS MOS sample off the MEPS MPC data collection was the most efficient manner in which to contact respondents and collect MEPS MOS data. In the MEPS MPC sample, primary location for individuals' office-based usual sources of care were identified. The MEPS MPC contacted these places where medical care was provided to

determine the appropriate respondent and administer a MEPS MOS. The design of the MEPS MOS is multi-modal including phone, fax, mail, self-administration, electronic transmission, and secure email. The data collection method chosen for a provider was the method that results in the most complete and accurate data with minimal burden to the respondent.

The 2015 MEPS MOS was fielded in 2016 but is linked to data collected for the 2015 MEPS. Data are for persons that had a visit to their USC provider in 2015, and the USC question was asked in Panel 19 Round 4 and Panel 20 Round 2 of the MEPS HC. Only persons who saw their office-based USC provider were included in the sample frame. The sum of the MOS weights across sample persons in this file is 150,803,945, which represents the estimated number of persons in the U.S. civilian noninstitutionalized population who had one or more visits to their office based USC provider in 2015.

In 2015, 80 percent of the U.S. civilian noninstitutionalized population, about 250.5 million people, reported having a USC, and of those persons, about 60.0 percent (150.8 million people) had an office-based USC and saw that USC at least once during the year.

MEPS Medical Organization Survey Instrument Development

Initially, research domains of interest covered by MEPS MOS questions included physician group demographics, practice size, provider mix, practice inputs and resources, financial incentives, patient mix, access, quality, coordination of care, electronic health records/electronic medical records (EHRs/EMRs), and survey administration. Most questions in the MEPS MOS covered multiple topic areas. Important considerations taken into account when deciding on the research domains to be covered and questions to be include in the MEPS MOS were: (a) the potential for a practice characteristic to affect access to care, healthcare use and/or expenditures, or quality of care/experience from the perspective of the HC respondent, (b) the likely variation in the practice characteristic in the MEPS MOS sample, (c) the ease of collecting information (if necessary) and answering a question, (d)

whether a variety of potential respondents, especially non-physicians, could answer a question accurately, and (e) coordination with data collected in the MEPS HC or that was otherwise available from other sources.

Examination of Other Surveys

As a starting point for the MEPS MOS instrument, an existing Medical Organizations Survey questionnaire, pilot tested by the National Center for Health Statistics, Centers for Disease Control and Prevention and funded through a contract awarded from the Agency for Healthcare Research and Quality (AHRQ) to Mathematica Policy Research, was used: National Ambulatory Medical Care Survey: Medical Organizations Survey (NAMCS MOS), Attachment 1. Important lessons from this survey effort included that respondents could not provide detailed percentages on how insurance related to revenue, complicated grid formats were difficult for respondents to follow and understand, and long survey administration times were not tolerated by respondents. To further capitalize on other previous surveys' pilot testing and results, the MEPS MOS questions were further simplified and refined based on existing survey questionnaires including the National Ambulatory Medical Care Survey Physician Survey, the National Ambulatory Medical Care Survey National EHR Survey, the National Ambulatory Medical Care Survey Physician Induction Interview, the National Ambulatory Medical Care Survey Physician Workflow Supplement, the National Study of Provider Organizations 2, and the Community Tracking Survey of Physicians , the draft 2015 Commonwealth Fund's International Survey of Primary Care Doctors, and the Survey of Medical Providers for the Evaluation of Regional Extension Centers.

Internal and External Expert Input/Feedback

In developing the MEPS MOS questionnaire, feedback was also sought from several external experts in academia, the private sector and the federal government as well as internal AHRQ experts with expertise in the topic areas/research domains of interest and others with expertise in provider and

establishment surveys. External experts included individuals from Cornell University, the University of California at Berkley, Virginia Commonwealth University, the National Institutes of Health, and the Urban Institute.

Furthermore, the draft MEPS MOS instrument was presented at the AHRQ National Advisory Council and the Department of Health and Human Services Data Council for review and comment. The survey instrument was further revised and refined based on input and recommendations from the internal and external AHRQ experts.

Final Research Domains and Questions

Final domains included practice ownership and size, provider mix, financial incentives, patient mix, access, quality, coordination of care, electronic health records/electronic medical records (EHRs/EMRs), and survey administration. The distribution of final MEPS MOS questions by most relevant research domain (most MOS questions cover multiple topics) is in the table below:

2015 MEPS MOS questions by most relevant research domain

Topics	Question Number
Physician group demographics	1, 4
Practice size	3, 5, 23
Provider mix	2, 6, 7
Practice inputs and resources	8
Financial incentives	10, 11, 12
Patient mix	9
Access	13, 14, 15
Quality	16
Coordination of care	17, 18
Electronic health records (EHRs)	19, 20, 21
Survey administration	22

A copy of the 2015 version of the MOS Questionnaire is provided in Attachment 2.

MEPS MOS Operational Issues Encountered

Defining a MOS practice, Dealing with Potential Multiplicity

One of the first issues the MOS team had to deal with was the misalignment between the MPC Office-Based Doctor (OBD) provider, the MPC OBD contact group or providers combined to a larger entity where patient billing records can be obtained, and the MOS unit of analysis, a physician practice or clinic identified as the USC. For the MPC, the Household component respondent identifies the individual providers from whom household members have received services during the reference period and which was also identified as the USC. To prepare for implementation of the MPC, RTI project staff grouped through algorithms individual providers by statistically matching state, city, street address, and phone numbers, after grouping by National Provider Identifier (NPI). (The NPI is a unique and standardized identifier required by the Health Insurance Portability and Accountability Act.) By doing so RTI minimized the burden of contacts by identifying practices with multiple providers. However, because many physician practices utilize billing services, to identify MOS practices the RTI MOS team grouped only on provider state, city and street address.

RTI in consultation with AHRQ, added several questions to the instrument, to detect instances where the grouping algorithm imperfectly identified an appropriate MOS practice or clinic. "Screening" questions were added asking if the MPC point of contact was employed by the practice and if the point of contact was located in the same place that patient services were rendered. The objective of these questions was to detect instances where the MPC point of contact was located at a billing service or within the administrative arm of a large health care system.

Similarly, a question was added to the instrument asking if the practice or clinic had multiple locations. While not typical, it is possible, especially for clinics, to have multiple offices within a community. In addition to the multiple location item, for those responding "yes", RTI provided instructions to respond about the site where the respondent was located. Finally, multiple location respondents were asked a

question at the end of the interview about whether the majority of their responses had been for their location or for the practice or clinic as a whole (combined across locations). These flags can be used by analysts to better interpret the data.

OBD Point of Contact (POC) as the Presumed MOS Respondent

The MOS was initially planned to be fully integrated with OBD MPC data collection activities. For example, to fulfill Institutional Review Board requirements for providing full information before asking for verbal consent, the package faxed to the OBD point of contact containing patient-signed Authorization Forms and information about the MEPS and the MPC component was supplemented with a page describing the MOS and providing answers to Frequently Asked Questions. The supplemental information was automatically added to packages for OBD groups that were flagged as being sampled for MOS. The system used by data collection specialists in their interactions with points of contact (POCs) automatically flowed to screens with information about MOS, the screening questions, and the required informed consent statements if the OBD group was flagged as in the MOS sample. Prompts were programmed to continue at each MPC OBD interaction until the MOS interview was completed or another final nonresponse disposition was assigned.

Prior to fielding the main MOS data collection in February 2016, three project staff conducted a small pretest of procedures and the questionnaire. RTI project managers contacted 15 OBD POCs from the 2014 MPC, and successfully completed interviews with 3. One complicating factor was the need to record the interviews so AHRQ staff could directly hear the interactions and assess whether the instrument was performing as intended.

The most significant finding from the pretest was that some OBD POCs – generally a staff person involved with billing – did not consider themselves to be sufficiently knowledgeable to respond to questions about the practice as a whole. In several instances, reassuring the OBD POC required much

more time than administration of the questionnaire would have taken. A second finding was that office managers are very busy, are difficult to reach, and do not encourage other administrative staff in the practice to provide their name and phone number to callers.

While more completed interviews would have been helpful, a great deal was learned regarding the full integration of the two studies, the appropriateness of the OBD POC for MOS responses, and staff willingness to respond to a 20-item questionnaire. RTI rewrote selected data collection manual sections to provide for greater flexibility in identifying another MOS respondent within the practice, and to encourage the selection of the office manager or administrator if possible.

High Item Nonresponse for Some Types of Respondents

RTI and AHRQ monitored calls frequently during the early days of data collection, reviewed raw data frequencies, and frequencies were provided to the AHRQ MOS team on a weekly basis. Within approximately the first 100 completed interviews, it became clear that respondents with some job titles were better at providing the information requested than others. Receptionists especially could not provide complete information; some of our assumed respondents – the OBD point of contact – also could not answer all the questions completely. After consultation with AHRQ, RTI provided feedback to the data collection specialists on the types of administrative staff who could provide the information, but also left respondent selection flexible in order to minimize nonresponse. Attachment 3 provides information about nonresponse (e.g., the total number of "don't Know" responses) distributions by item and respondent job title.

In late May, 2016, or about 16 weeks into the 37-week data collection period, RTI discussed with AHRQ and then implemented prompts to a "Don't Know" response to key questions. The objective was to ascertain whether the questionnaire wording and provided definitions were unclear or if the respondent understood what was being asked but really did not know the answer to the question. The prompts

were fielded on June 1, and the additional data suggested that some of each type of situation was occurring – some respondents did not understand terms like "capitated contracts", "Accountable Care Organization", and "clinical quality of care" even with definitions provided verbally (in phone data collection) or in a glossary (for self-administered interviews), and some did not know about the status of their organization on these.

Distributed MOS Data Collection and Delays Getting MOS Completed

As noted, our assumptions beginning the MOS data collection was that the MOS effort would be fully integrated with the MPC OBD data collection activity. The MOS systems were developed based on this assumption of complete integration. At the start of the 2015 cycle of the MPC and MOS, RTI trained all data collection specialists assigned to the OBD component on the MOS and MOS was launched successfully on February 5, 2016. However, after seven weeks of missed production goals and a cumulative deficit of 450 completed interviews, we determined that the decentralized approach to MOS data collection was not working. The survey specialist responsible for the MOS data collection was talking to all the staff and their team supervisors, but the emphasis necessary was not being placed on MOS.

To remedy the situation, we identified the 15 OBD data collection specialists performing most effectively on the MOS, centralized those staff into one team, and reallocated resources so they spent 100% of their hours on MOS data collection. To accomplish this centralization, we identified OBD contact groups that had completed the MPC data collection, and then assigned those cases to the MOS staff for completion of the MOS component. The deficit against cumulative goals was eliminated within five weeks, and staff time was then distributed fluidly to the effort that most needed their attention. As MOS activity declined over time, the core team was further consolidated to the five highest performing MOS data collection specialists. This approach was both highly efficient and highly effective. The MOS

survey specialist continued to shepherd the data collection to the end, and her undivided attention to the effort was invaluable.

General Preference for CATI over Other Available Modes

In planning the MOS, the decision was made to offer potential respondents as many response mode options as practicable to minimize nonresponse. A telephone interview, web-based self-interview, and hardcopy questionnaire submitted by fax or mail were offered to MOS respondents. Based on the knowledge that many physician practices were utilizing electronic health records and other computerized tools, RTI assumed that a web-based questionnaire would be essential to achieving a high response rate, and that hardcopy questionnaires would be favored because of time flexibility. RTI assumed that 15% would be completed on hardcopy and 5% would be completed via the web, leaving 80% to be completed by phone. However, the assumptions were far from the rates actually achieved – of the 4,330 completed questionnaires (5.7% of those completed), and 4,022 (92.9%) completed by telephone. Because the telephone questionnaire application was easily transformed for data entry and web completion, RTI still believes that offering respondents as many completion modes as possible was the best approach to minimizing nonresponse.

Accommodations for Healthcare System (Corporate) Level Responses

As described above, the preference for the location of the respondent was in the same physical space as patient services. However, several practices owned and operated by large health care systems conditioned their response on corporate office response for the one or more practices or clinics endorsed as a patient's USC. In these 14 instances, RTI identified a willing respondent who had access to the relevant information and interviewed that person sequentially for each practice. The most skilled

data collection specialist was assigned these Corporate cases. These MOS practices were flagged as having a Corporate respondent so analysts could assess potential data quality differences.

Defining Eligibility

Because the analytic objective was to link MOS-practice level data to MEPS patient-level data, we focused on MPC OBD component eligibility for the determination of MOS eligibility. In other words, if the practice was ineligible for the MPC OBD data collection (e.g., because there was not a medical doctor or doctor of osteopathy on staff, or was in a specialty ineligible for the MPC such as a dentist or optometrist), the practice was coded as ineligible for the MOS. Further, in order to make the most efficient use of MOS resources, we set aside OBD practices and clinics early ineligibles (for which all patients were disavowed either because their records did not show the household respondent as being a patient and not as having received services at the practice or the household respondent was a patient of the practice but did not receive services during the reference year). The RTI data collection team reassessed eligibility upon the release of each sample wave, and reactivated MOS practices where eligible patient-provider pairs were associated with the practice. Finally, we coded as ineligible MOS practices that had closed and from which OBD patient billing records were unavailable. The level of ineligibility was low, with only 104 practices of 5,672 sampled (1.8%) identified as ineligible for MOS.

Analytic Potential of MEPS MOS Data

The MEPS MOS was designed to meet two main analytic goals: 1) to provide nationally representative estimates of the characteristics of patient's office based usual sources of care and 2) to support analyses of the association between practice characteristics and patient's experiences with care, including health care use and expenditures, access to care, and quality of care.

The MEPS MOS is the only data set of its kind and is unique in providing an internally consistent source of information both on an individual's characteristics and health care utilization and expenditures, and

on the characteristics of the providers they use. The following areas were addressed in the MOS questionnaire as they potentially affect individuals' access to, use of and affordability of health care services: practice characteristics, e.g., size, ownership, and type of practice, use of health information technology, case management and use of clinical quality data, and financial arrangements, e.g., reimbursement methods, number and types of insurance contracts, and compensation arrangements within the practice.

The MEPS MOS fills a "data gap" in making data available that allows research to be conducted looking at relationships between provider characteristics and individual behavior and outcomes. Understanding the relationships between healthcare providers and healthcare consumers is essential to a complete understanding of the health care system, how it functions, successes, weaknesses and challenges of the current system, as well as allowing evaluation of healthcare policy reforms. The MEPS MOS allows researchers, policy makers and academics to answer critical health policy questions such as

- how do practice characteristics affect access to healthcare for persons with different socio/demographic characteristics and insurance status,
- how do practice characteristics affect healthcare utilization,
- what is the relationship between practice characteristics and healthcare expenditures including out of pockets cost and insurance (public and private) costs,
- how do practice characteristics relate to a person's health status and quality of care.

A preliminary version of the 2015 Full Year Medical Organizations Survey File (HC-175) is currently available on the MEPS Web site:

https://meps.ahrq.gov/mepsweb/data_stats/download_data_files_detail.jsp?cboPufNumber=HC-175

A second release of the 2015 MEPS MOS data that will contain the final population weights and include expenditure data is scheduled for release in November 2017.

The 2016 MOS (collection 2016 calendar year data) funded in part by support from the Robert Wood Johnson Foundation is currently in the field and preliminary estimates from that data collection effort will be available in February 2018.

Conclusion and Results

The MEPS MOS is the only data set of its kind and is unique in providing an internally consistent source of information both on an individual's characteristics and health care utilization and expenditures, and on the characteristics of the providers they use. The MEPS MOS was successful and resulted in response rates at the provider and practice levels of 77 percent. By comparison, other similar surveys in the past have had lower response rates: the Community Tracking Study – Physician Survey had response rates between 59 – 65 percent (1996-1997, 1998-1999, 2000-2001, and 2004-2005), the National Study of Physician Organizations and the Management of Chronic Illness (NSPO1), 2000-2001 had a response rate of 70 percent, the National Study of Small and Medium-sized Physician Practices (July 2007 and March 2009) had a response rate of 64 percent and the NAMCS MOS, 2014 had a response rate of 20 percent. However, more research is needed to tease out how much of this success was due to the linked survey design versus a streamlined, easy to understand and administer short survey instrument. Testing the positive impact of the linked design could be as easy as attempting to collect MOS data from physician practices not included in the MPC. One can perhaps take a preliminary look at the importance of the link by assessing participation among office managers and other administrative job titles less likely to be familiar with the MPC versus billing specialist and similar job titles more likely to be familiar with the MEPS research program. Additional methodological research could lead to future refinements to the MOS survey instrument and MOS survey administration to potentially increase response rates and/or decrease non-response, especially item non-response, which was a challenge with the initial MOS collecting 2015 data. For example, we could test a multiple-respondent approach and assess the

improvement in item response versus data completeness and unit response by targeting some key questions to the office manager but maintaining flexibility in the respondent for other questions.

Research currently being conducted with the 2015 MOS data will provide nationally representative estimates of the characteristics of patient's office-based usual sources of care. Additional analyses will allow researchers to investigate practice characteristics and how those characteristics are associated with various person characteristics, e.g., age, race, gender, health insurance status, poverty status, region, health status, and chronic conditions, among others. Examining the association between practice characteristics and healthcare use, including the use of preventive services can also be examined.

References

Cohen, J. *Design and Methods of the Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 1. AHCPR Pub. No. 97-0026. Rockville, MD. Agency for Health Care Policy and Research, 2001. <u>http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr1/mr1.shtml</u>

Cohen, S. *Sample Design of the 1996 Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 2. AHCPR Pub. No. 97-0027. Rockville, MD. Agency for Health Care Policy and Research, 2001. http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr2/mr2.shtml

Cohen, S. Design Strategies and Innovations in the Medical Expenditure Panel Survey. *Medical Care*, July 2003: 41(7) Supplement: III-5–III-12.

Cohen, S. B., Cohen, J.W., Stagnitti, M.N., Lefkowitz, D.C. Implementation of a Linked Medical Organization Survey in the Medical Expenditure Panel Survey. *Journal of Economic and Social Measurement*, February 2017: 41(4): 417-432.

Ezzati-Rice, T.M., Rohde, F., Greenblatt, J. *Sample Design of the Medical Expenditure Panel Survey Household Component, 1998–2007*. Methodology Report No. 22. March 2008. Agency for Healthcare Research and Quality, Rockville, MD.

http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr22/mr22.shtml

Liebhaber, A., Grossman, J.M. *Physicians Moving to Mid-Sized, Single-Specialty Practices*. Tracking Report No. 18. Results from the Community Tracking Study. Center for Studying Health System Change, 2007.

Rittenhouse, D.R., Casalino, L.P., Shortell, S.M., McClellan, S.R., Gillies, R.R., Alexander, J.A., Drum, M.L. Small And Medium-Size Physician Practices Use Few Patient-Centered Medical Home Processes. *Health Affairs, June 2011:* <u>https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2010.1210</u> Schaefer, E., *Community Tracking Study Household and Physician Surveys*. SHADAC Information Center. March 2004. Center for Studying Health System Change, Washington, DC. http://www.shadac.org/sites/default/files/publications/CTSInfoSession_Mar2004.pdf

Shortell, S.M., National Study of Physician Organizations and the Management of Chronic Illness (NSPO), 2000-2001 (ICPSR 4455). Robert Wood Johnson Health and Medical Care Archive. http://www.icpsr.umich.edu/icpsrweb/HMCA/studies/4455

Stagnitti, Marie N., Beauregard, Karen, and Solis, Amy, *Design, Methods, and Field Results of the Medical Expenditure Panel Survey Medical Provider Component (MEPS MPC)—2006 Calendar Year Data,* Methodology Report No. 23. November 2008. Agency for Healthcare Research and Quality, Rockville, MD. <u>http://www.meps.ahrq.gov/mepsweb/data_files/publications/mr23/mr23.pdf</u>

Stagnitti, M.N., Moriya, A., Soni, A., Wolford, M., Zodet, M. *Characteristics of Practices Used as Usual Source of Care Providers during 2015 – Results from the MEPS Medical Organizations Survey.* Statistical Brief #502. April, 2017. Agency for Healthcare Research and Quality, Rockville, MD. <u>http://www.meps.ahrq.gov/mepsweb/data_files/publications/st502/stat502.pdf</u>

University of California, Berkley School of Public Health. Health Research for Action. National Study of Physician Organizations, Research Project Details.

http://www.healthresearchforaction.org/sph/national-study-physician-organizations

Zodet, M., S. Chowdhury, S. Machlin, and J. Cohen. 2016. Linked designs of the MEPS Medical Provider and Organization Surveys. *In JSM Proceedings*, Survey Research Methods Section. Alexandria, VA: American Statistical Association. 1914-1921.

Attachment 1: NAMCS: Medical Organizations Survey

Accessible PDF (CDC.gov)

NAMCS: Medical Organizations Survey

OMB No.: Approval expires

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NOTICE - Public reporting burden of this collection of information is estimated to average 20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: CDC/ATSDR Information Collection Review Office; 1600 Clifton Road, MS D-74, Atlanta, GA 30333, ATTN: PRA (0920-0234).

Assurance of Confidentiality - All information which would permit identification of an individual, a practice, or an establishment will be held confidential, will be used only by NCHS staff, contractors, and agents only when required and with necessary controls, and will not be disclosed or released to other persons without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m) and the Confidential Information Protection and Statistical Efficiency Act (PL-107-347).

NAMCS: Medical Organizations Survey

The Medical Organizations Supplement is an expansion of the National Ambulatory Medical Care Survey (NAMCS). The purpose of the survey is to collect information about medical organizations where all physicians work across many settings. Your participation is greatly appreciated. Your answers are completely confidential. Participation in this survey is voluntary. If you have questions or comments about this survey, please call 866-966-1473.

Т

 Which of the following best describes this medical organization? By medical organization we mean the organization that employs physic who work together and may share staff, patier medical records, and income, and includes so practices and groups owned by a hospital. If if medical organization has more than one locat answer across all locations. CHECK ONE ON Independent solo or two physician pract Independent group practice – three or n physicians Group or staff model HMO Network of physicians owned by a hospital system or medical school Hospital or medical school staff Other (please specify) 2. Overall, how many locations does this medic organization have to do clinical work? Number of locations. 	ion cians nt blo the tion ILY tice nore	4 .	What are the specialties in the special is the special in the special is the spe	Anization, a Number of three mos represented he medical THAT APP s in the pract hysician grou company, he ty health cent chool or unive	across all o physicians st common d in your mo organizatio PLY ice up ealth plan, or ter ersity/academ hospital, heal	f its loca physicia edical or 	tions? n ganization?
6. How would you rate this medical organization's performance in each of the following areas over the past 12 months?	Exce	llent	Very Good	Good	Fair	Poor	Uncertain
Financial Performance.]1	□2	□3	□4	□5	□6
Leadership of the organization]1	□2	□3	□4	□5	□6
Qualitty of patient care]1	□2	□3	□4	□5	□6

7. Who is most involved with decisions for each of the following activities?	Physicians at their location	Administrators at each clinical location	Administrators off-site within my organization	Administrators outside of my medical organization	Not applicable
a. Contracting with insurance plans	□1	□2	□3	□4	□5
b. Purchasing medical equipment used at your reporting location	□1	□2	□3	□4	□5
c. Hiring new physicians	□1	□2	□3	□4	□5
d. Hiring support staff	□1	□2	□3	□4	□5

8. Who primarily provides the following services for clinical locations in the medical organization? CHECK ONE ONLY	Each clinical location	The medical organization	Network affiliation (e.g., PHO, IPA)	Independent Vendor (e.g.,management service compay)	N/A
a. Billing services	□1	□2	□3	□4	□5
b. Clinical health information system implementation and support	□1	□2	□3	□4	□5
 c. Shared clinical support services such as nurse care managers or patient educators 	□1	□2	□3	□4	□5
d. Quality improvement program	□1	□2	□3	□4	□5
e. Malpractice insurance	□1	□2	□3	□4	□5

The next two questions are about types of insurance accepted by the medical organization.

	out what percent of physician patient care revenue nes from each type of insurance in your medical anization?		10. Is the medical organization accepting ne patients for each type of insurance?			
Types of insurance	Percent	Yes	No	Unknown		
1. Private insurance capitated	%	□1	□2	□3		
2. Private insurance non-capitated	%	□1	□2	□3		
3. Medicare	%	□1	□2	□3		
4. Medicaid/SCHIP	%	□1	□2	□3		
5. Workers compensation	%	□1	□2	□3		
6. Self pay	%	□1	□2	□3		
7. No charge	%	□1	□2	□3		
Other: specify	%	□1	□2	□3		
	100%	Ī	·			

11. Does the medical organization receive any additional compensation beyond routine visit fees for offering <i>Patient-Centered Medical Home</i> (<i>PCMH</i>) type services or participate in a certified PCMH arrangement?	12a. Are there plans <u>to participate</u> in an Accountable Care Organization arrangement in the next 12 months?
Settilea Point analychient.	
1□ Yes (Skip to 13)	2□ No
2□ No (Go to 12a)	3□ Uncertain
3 Uncertain (Go to 12a)	13. Is this medical organization affiliated with an Independent Practice Association (IPA) or Physician Hospital Organization (PHO)?
11a. Are there plans <u>to participate</u> in a PCMH arrangement in the next 12 months?	1□ No (skip to 14) 2□ Yes (Go to 13a)
1□ Yes	3 Uncertain (Go to 13a)
2□ No	
3□ Uncertain	13a. What percentage of your patients come to you through your IPA or PHO?
12. Does the medical organization participate in an	percent of patients
Accountable Care Organization (ACO) arrangement with Medicare or private insurers?	0□ Uncertain
An ACO is an entity typically composed of primary	
care physicians, specialists, and hospitals that is held financially accountable for the cost and quality	
of care delivered to a defined group of patients.	
1 \square Yes (Skip to 13)	
2□ No (Go to 12a)	
3□ Uncertain (Go to 12a)	

14. Do physicians in your medical organization manage patients that have at least one chronic condition?

2□ No \rightarrow SKIP to Q 15 3□Uncertain \rightarrow SKIP to Q15 1□ Yes \rightarrow Continue to Q14a

14a. Among patients cared for by the medical organization, what percent of patients <u>with at least one</u> chronic condition are managed by your physicians?

14b What percent of patients with at least one chronic condition receive the	Percent of		Service prov	ided by	
following services, and indicate who provides the service.	patients receiving service	Your organization	IPA, PHO, or ACO	Health plan or other payer	Service not provided
a. Clinicans use guideline-based reminders during patient visit	%_	→ □1	□2	□3	□0
b. Patients are sent reminders for preventive or follow-up care	%_	→ □1	□2	□3	□0
 Non-physician staff meets with patients to provide them with education or help manage their condition 	%_	□1 →	□2	□3	□0
d. Specially trained nurse care managers are used to coordinate care.	%_	→ □1	□2	□3	□0

____% of patients

15. Indicate whether this medical organization provides each of the following to its physicians. Do not include reports from other organizations that only cover a portion of the physicians' patient panels?	Yes	Νο	Uncertain
a. Reports on the clinical quality of care they individually provide to patients	□1	□2	□3
b. Report on their individual resource use when treating patients	□1	□2	□3
c. A registry of patients with specific conditions.	□1	□2	□3

16. What percentage of your organization's patient care revenue comes from the following?	Percent
a. Traditional fee-for-service. Note: does not include performance adjustments, shared savings, etc.	
b. Modified fee-for-service with adustments for performance quality or cost measures. Includes quality bonuses, pay for performance	
c. Shared savings . Organization receives fee-for-service payments but has financial incentives to reduce <i>health care spending</i> for a <i>defined</i> patient population. Organization receives a percentage of any net savings resulting from care improvement efforts and may bear risk for higher costs.	
d. Bundling payments . Organization alone or in conjunction with others receives financial incentive for reducing total service use during episodes of care experienced by a specific patient population.	
e. Capitation payments. Set payment covers full or partial patient services.	
f. Other. (Please specify)	

17. Are you either a full or part owner at the medical organization? Select all that apply.

- 1□ Part owner
- 2□ Full owner
- 3□ Not an owner

18. Which of the following best describes your role in this medical organization? Select all that apply.

- 1 Practice administrator
- 2□ Medical director
- 3 Physician
- 4□ Office Manager
- 5 Other (*Please specify*)

Thank you for your participation. Please return your survey in the envelope provided. If you have misplaced this envelope, please send survey to: 2605 Meridian Parkway, Suite 200, Durham, NC 27713 Boxes for Admin Use

Attachment 2: MEPS MPC Medical Organizations Survey

Accessible HTML





OMB#: 0935-0118 Exp. Date 12/31/2018

Reference #:

MEPS MPC Medical Organizations Survey (MOS)

The Medical Organizations Survey (MOS) is an expansion of the Medical Expenditure Panel Survey Medical Provider Component (MEPS MPC). The purpose of the survey is to collect information about how different medical practices are organized and what resources they have available for providing care. Your participation is greatly appreciated. Your answers are completely confidential. Participation in this survey is voluntary. This survey will take 5 - 10 minutes to complete. If you have questions or comments about this survey, please call 866-800-9203. If you have any questions about your rights as a study participant, you can call RTI's Office of Research Protection at (919) 316-3358 in Durham, NC or 1-866-214-2043 (a toll-free number).

1)	PLEASE FOLLOW SKIP INSTRUCTIONS AS LISTED. OTHERWISE, CONTINUE Who owns this medical practice? (CIRCLE ONLY ONE RESPONSE)	TO THE NEXT QUESTION.
-1	Physicians in the practice	
	Another physician group	
	Other, please specify	
		-
	l don't know1	
	I'd rather not answer this question2	
2)	ls this a multi-specialty group practice? (CIRCLE ONLY ONE RESPONSE)	
	Yes	
	No	
	l don't know1	
	I'd rather not answer this question2	
3)	Does this medical practice have more than one location? (CIRCLE ONLY C	ONE RESPONSE)
	Yes	
	No	
	l don't know1	
	I'd rather not answer this question2	
4)	Please indicate which of these best describes this practice. (CIRCLE ONLY ONLY ONLY ONLY ONLY ONLY ONLY ONLY	ONE RESPONSE)
	An independent practice 1	
	A physician network owned by a hospital 2	
	A non-profit or government clinic	
	A practice owned by an academic medical center 4	
	An HMO 5	
	Other, please specify6	
		7
	l don't know1	
	I'd rather not answer this question2	
5)	 Approximately how many physicians work either part or full time at this p 	ractice?
NU	IUMBER:	
	I can't estimate the number1	
	I'd rather not answer this question2	
	-	

6) How many of those are primary care physicians?
NUMBER:
I can't estimate the number
I'd rather not answer this question2
7) Approximately how many nurse practitioners and physician assistants work at this practice?
I can't estimate the number
I'd rather not answer this question2
8) Does this practice have the ability to x-ray both chests and extremities (e.g., arm, leg, hand, foot) in the office? (CIRCLE ONLY ONE RESPONSE)
Yes 1
No 2
I don't know1
I'd rather not answer this question2
9) What percentage of this practice's patients are covered by Medicaid? (CIRCLE ONLY ONE)
Less than 10 percent
10-50 percent
Greater than 50 percent
I can't estimate the number
I'd rather not answer this question
·
10) Does this practice have any capitated contracts (per person, per month) with managed care plans?
(CIRCLE ONLY ONE RESPONSE)
Yes 1 \rightarrow SKIP TO 11
No $2 \rightarrow SKIP TO 11$
I don't know1
I'd rather not answer this question
Did you answer don't know because:
I'm not familiar with this term
I don't know if the practice engages in this
11) Does this practice participate in an Accountable Care Organization (ACO) arrangement with either
Medicare or private insurers? (CIRCLE ONLY ONE RESPONSE)
Yes 1 \rightarrow SKIP TO 12
No 2 \rightarrow SKIP TO 12
I don't know1
I'd rather not answer this question
Did you answer don't know because:
I'm not familiar with this term1
I don't know if the practice engages in this

12) Are physicians in this practice paid a base salary? (CIRCLE ONLY ONE RESPONSE)
Yes 1
No 2
I don't know1
I'd rather not answer this question2
13) Does this practice routinely set time aside for same-day appointments? (CIRCLE ONLY ONE RESPONSE)
Yes 1
No 2
I don't know1
I'd rather not answer this question2
14) Is this practice certified as a patient-centered medical home? (CIRCLE ONLY ONE RESPONSE)
Yes 1
No 2
I don't know1
I'd rather not answer this question2
15) Does this practice routinely send patients reminders for preventive care or follow-up care? (CIRCLE ONLY
ONE RESPONSE)
Yes 1
No 2
I don't know1
I'd rather not answer this question2
16) Does this practice regularly give reports to physicians on the clinical quality of care they individually
provide? (CIRCLE ONLY ONE RESPONSE)
Yes 1 → SKIP TO 17
No 2 \rightarrow SKIP TO 17
I don't know1
I'd rather not answer this question2 $ ightarrow$ SKIP TO 17
Did you answer don't know because:
I'm not familiar with this term1
I don't know if the practice engages in this
17) Does this practice use case managers whose primary job is to coordinate patient care? (CIRCLE ONLY
ONE RESPONSE)
Yes 1
No
I don't know
I'd rather not answer this question2
-
18) When one of your patients is discharged from the hospital, does someone from this practice usually
contact the patient within 48 hours? (CIRCLE ONLY ONE RESPONSE)
Yes 1
No 2
Practice does not know when patients are discharged from hospital3

I don't know..... -1 I'd rather not answer this question...... -2

19) Does this practice <u>use</u> an electronic health record (EHR) or electronic medical record (EMR) system? Do not include billing record systems. (CIRCLE ONLY ONE RESPONSE)

Yes	1	
No	2	→ SKIP TO 22
I don't know	1	\rightarrow SKIP TO 22
I'd rather not answer this question	2	\rightarrow SKIP TO 22

20) Does the electronic records system routinely provide reminders for either guideline-based interventions or screening tests? (CIRCLE ONLY ONE RESPONSE)

Yes 1	L
No	2
I don't know	1
I'd rather not answer this question	2

21) Is the electronic records system routinely used for exchanging secure messages with patients? (CIRCLE ONLY ONE RESPONSE)

Yes	1
No	2
I don't know	-1
I'd rather not answer this question	-2

Medical Director	2
Physician	3
Office Manager	4
Other, please specify	. 6

NOTE: PLEASE ANSWER QUESTION 23 IF YOU ANSWERED YES TO QUESTION 3.

23) You reported this practice has multiple locations where services are provided to patients. Thinking back on your responses, were most of your responses ... (CIRCLE ONLY ONE RESPONSE)

Inclusive of the practice as a whole, across the multiple

locations	1
Exclusive to the location where you work	2
I don't know	-1
I'd rather not answer this question	-2

Thank you for your participation. Please return your survey in the envelope provided. If you have misplaced the envelope, please send survey to:

RTI International 1 North Commerce Center 5265 Capital Blvd. Raleigh, NC 27616 Or FAX to: Attn.: Martha Ryals (866) 309-4556

MEPS MPC Medical Organizational Survey (MOS)

OMB#: 0935-0118 Exp. Date 12/31/2018

NOTICE: Public reporting burden for this collection of information is estimated to average 5-10 minutes per response. The estimated time required to complete the survey. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection information, including suggestions for reducing the burden, to: AHRQ Reports Clearance Officer Attention: PRA, Paperwork Reduction Project (0935-0118) AHRQ, 5600 Fishers Lane, Rockville, MD

Attachment 3: MEPS MPC MOS Non-Response Distributions and "Don't Know Responses" by Job Title

Table 1. MOS Nonresponse Frequency Summary

		# of Don't		
		Know	# of Refused	# of missing
Q #	Variable name	responses	responses	responses
Q1	Practice Ownership	158	16	0
Q2	Practice contains multi specialties	27	4	2
Q3	Practice has multi locations	6	3	0
Q4	Practice Type	110	9	1
Q5	Number of Physicians	156	6	0
Q6	Number Primary Care Physicians	195	9	0
Q7	Number Nurse Prac/Phys Asst	189	11	0
Q8	X-ray on site	39	2	0
Q9	% Patients covered by Medicaid	610	23	0
Q10	Any capitated contracts	1047	17	0
			Don't know if	
		Not familiar	the practice	
		with term:	engages in	
	Type of Don't Know	198	this: 609	0
Q11	Participates in ACO	1166	25	0
			Don't know if	
		Not familiar	the practice	
	Type of Don't Know	with term: 260	engages in this: 583	0
Q12	Physicians Paid a Base Salary	1728	70	0
Q12 Q13	Time Set Aside for Same Day Appt	32	70	0
Q13	Patient-centered Medical Home	666	8	0
Q14 Q15	Reminders for Preventative Care	64	4	0
Q15	Feedback on Clinical Qual of Care	507	15	0
410			Don't know if	
			the practice	
		Not familiar	engages in	
	Type of Don't Know	with term: 86	this: 243	0
Q17	Case Mgr Coordinating Care	253	17	0
Q18	Check after Discharge	237	13	0
Q19	Use Electronic Health Records	31	4	0
Q20	EHR Reminders for Scr/Interven	422	2	0
Q21	EHR Send Secure Msgs to Patients	139	3	0
Q22	Role in Practice	0	0	0
Q23	Multiple Location Follow-Up	32	11	0

Table 2. Count and Percentage of Don't Know (DK) responses

Total Count of DK Responses in Questions	Count of Completes	% of Completes
0	1590	37%
1	924	21%
2	594	14%
3	435	10%
4	302	7%
5	181	4%
6-10	270	6%
11-15	31	1%
16-20	0	0%
20+	0	0%
Total	4327	100%

Table 3. Don't Know (DK) responses by role

Total Count DK	k) responses by role		
Responses in Questions	Total Completes	Role	Number in Role
		Practice Administrator/ Office Manager	467
		Billing	79
		Receptionist	185
		Patient Care	145
		Director	47
1	924	Refused	1
		Practice Administrator/ Office Manager	211
		Billing	69
		Receptionist	165
		Patient Care	109
2	594	Director	40
		Practice Administrator/ Office Manager	138
		Billing	49
		Receptionist	167
		Patient Care	63
3	435	Director	18
		Practice Administrator/ Office Manager	67
		Billing	38
		Receptionist	127
		Patient Care	56
4	302	Director	14
		Practice Administrator/ Office Manager	34
		Billing	30
		Receptionist	83
		Patient Care	28
5	181	Director	6
		Practice Administrator/ Office Manager	41
		Billing	47
		Receptionist	133
		Patient Care	34
6-10	270	Director	15
		Practice Administrator/ Office Manager	3
		Billing	14
		Receptionist	6
		Patient Care	5
		Director	2
11-15	31	Refused	1
16-20	0		•
20+	0		
Total	2737		