Community Tracking Study

2004-05 Physician Survey Summary File: User's Guide and Codebook

(Release 1)



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PREFACE

The Community Tracking Study (CTS) provides information to help policy makers and health care leaders make sound decisions. The CTS collects information on how the health system is evolving in 60 communities across the United States and the effects of those changes on people. Funded by the Robert Wood Johnson Foundation, the study is being conducted by the Center for Studying Health System Change (HSC).

The CTS relies on periodic site visits and surveys of households and physicians, with occasional surveys of employers and health insurance plans. One component of the CTS, the Physician Survey, provides information about source of practice revenue, problems physicians face in practicing medicine, how they are compensated, and what effect various care management strategies have on their practices, as well as questions about their practice arrangements. This document gives researchers the information necessary for using the 2004-05 Physician Survey Summary File.

Data collection for the 2004-05 Physician Survey began in June 2004 and was completed in July 2005. Earlier versions of the survey were conducted in 1996-97, 1998-99, and 2000-01. Each survey was designed to allow separate cross-sectional estimates. Researchers can use each year of the CTS Physician Survey for separate cross-sectional analyses or combine the years to study changes in the health care system over time.

Data from the 2004-05 Physician Survey is available both as microdata, with separate data records for each physician who responded to the survey, and also in summary form, with data aggregated for each CTS site and the nation as a whole.

A microdata record contains data on a single physician's attributes, such as the physician's age and gender. Due to the need to maintain respondent confidentiality, the Physician Survey microdata has two forms: the *Public Use File* and the *Restricted Use File*. The Physician Survey public use microdata file masks or omits geographic identifiers and other potentially sensitive information. The restricted use version of the microdata file retains much of this confidential information, but access is restricted and users must apply for a special license to use the data.

A Summary File record combines the microdata into a single measure, such as the average age of physicians in a site or the percentage of physicians in a site who are males. The Summary File allows researchers to use site-level averages in their analyses without having to calculate them from the information on the restricted use microdata file, which would require not only more effort but also application for access to the Restricted Use File. This Summary File reflects most of the information collected in the CTS 2004-05 Physician Survey. For each of the selected attributes from the 2004-05 Physician Survey, the Summary File includes averages or percentages and the standard errors of these estimates.

Those interested in using the Summary File may also be interested in the user's guides and codebooks for the Physician Survey public and restricted use files. Those materials are included in the list of references at the end of this document.

ACKNOWLEDGMENTS

The Center for Studying Health System Change (HSC) would like to express its great appreciation to its contractors, Mathematica Policy Research, Inc. (MPR) and Social and Scientific Systems, Inc. (SSS), for their collaboration in the production of this User's Guide and Codebook and data file.

OBTAINING TECHNICAL ASSISTANCE

Information on the CTS Physician Survey, and the CTS in general, can be obtained through the HSC Internet home page at http://www.hschange.org. The public use and restricted use files, as well as the documentation, are available through the Inter-university Consortium for Political and Social Research at http://www.icpsr.umich.edu.

Technical assistance on issues related to the data file can be obtained by contacting the CTS Help Desk by e-mail at ctshelp@hschange.org or fax (202-863-1763).

VISIT THE HSC WEB SITE

www.hschange.org

For users of the CTS data files, the HSC Web site can be a valuable resource. In addition to HSC technical publications and descriptions of the different CTS data collection activities, it has these useful features:

CTSonline user-specified tables. CTSonline is an interactive Web-based system that allows users to request a wide variety of tables with estimates from the CTS Physician Survey and the CTS Household Survey.

Lists of papers published from the public use and restricted use data files. In the section of the Web site that discusses the public and restricted use data, you can view a list of journal articles that have been published by users of the CTS public use and restricted use data files. If you have a paper based on the CTS data that is not included on the list, please let us know by sending an email to CTSonline@hschange.org.

Email list for updates on the CTS data. If you would like to receive email announcements when new versions of the CTS data files are released, go to the Web site and click on "Sign up for email alerts." Then fill out the sign-up form and check the box specific to CTS email.

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CHAPTER 1

OVERVIEW OF THE COMMUNITY TRACKING STUDY AND THE PHYSICIAN SURVEY

This guide is intended to assist researchers in using the Community Tracking Study (CTS) 2004-05 Physician Survey Summary File. The CTS is a national study of the rapid changes in the health care market and the effects of those changes on people. Funded by the Robert Wood Johnson Foundation, the study is being conducted by the Center for Studying Health System Change (HSC). Information about other aspects of the CTS is available from HSC at www.hschange.org. Technical assistance on issues related to the data file may be obtained by contacting the CTS Help Desk by e-mail at ctshelp@hschange.org or fax (202-863-1763).

1.1. CTS OBJECTIVES

The CTS is designed to provide a sound information base for decisions made by health care leaders by collecting information on how the health system is evolving in 60 communities across the United States and the effects of those changes on people. Underway since 1996, the CTS is a longitudinal project that relies on periodic site visits and surveys of households and physicians. While many studies have examined leading markets in California and Minnesota and analyzed local or selected data, there has been no systematic study of change in a broad cross-section of U.S. markets or analysis of the effects of those changes on service delivery, cost and quality. The Community Tracking Study is designed to provide sound empirical evidence that will inform the debate about health system change. The study addresses two broad questions that are important to public and private health decision-makers:

How is the health system changing? How are hospitals, health plans, physicians, safety net providers and other provider groups restructuring, and what key forces are driving organizational change?

How do these changes affect people? How are insurance coverage, access to care, use of services, health care costs and perceived quality of health care changing over time?

Focusing on communities is central to the design of the CTS. Understanding market changes requires studying local markets, including their culture, history, and public policies relating to health care. HSC researchers randomly selected 60 communities to provide a representative profile of change across the United States (see Table 1.1 and Appendix A). Of these communities ("sites"), 12 have been studied in depth, with site visits ("case studies") and survey samples large enough to draw conclusions about change in each community. These 12 communities are referred to as the "high-intensity sites." Because of cost constraints, however, the 2004-05 Physician Survey sample design did not include oversampling of the 12 "high intensity" sites, unlike previous rounds. As a result, the small number of cases within some sites means that estimates for individual sites may not be reliable or suitable for publication.

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¹An overview of the Community Tracking Study is contained in Kemper et al. (1996).

² Surveys of employers and insurance plans have also been conducted.

1.2. ANALYTIC COMPONENTS OF THE COMMUNITY TRACKING STUDY

The CTS has both quantitative and qualitative components. The quantitative component consists of surveys, and the qualitative component consists of site visits.

In all 60 sites, HSC has conducted independent surveys of households and physicians, enabling researchers to explore relationships among purchasers, providers, and consumers of health care. The Household Survey has been conducted in 1996-97, 1998-99, 2000-01, and 2003. The Physician Survey was conducted in 1996-97, 1998-99, 2000-01, and 2004-05.

In addition to the household and physician surveys, the quantitative component of the CTS has also included two other surveys. The Followback Survey was conducted as a supplement to the 1996-97 Household Survey and the 1998-99 Household Survey. For this survey, the privately financed health insurance policies covering Household Survey respondents were "followed back" to the organization that administered the policy. The purpose of the Followback Survey was to obtain more detailed and accurate information about those private policies than Household Survey respondents could provide. A CTS survey of employers that was sponsored by the Robert Wood Johnson Foundation was conducted by RAND in 1996 and 1997.³

Case studies in the 12 high-intensity sites make up the qualitative component of the CTS. The first five rounds of comprehensive case studies of the health systems in the 12 communities are completed. The first round was conducted in 1996-97, the second in 1998-99, the third in 2000-01, and the fourth in 2002-03. The fifth round was conducted in 2005. The findings are available from HSC.⁴

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³ The household and physician surveys were conducted by HSC. The Employer Survey was conducted by RAND in collaboration with HSC. The surveys are available separately as both public and restricted use files. While these three surveys were conducted in the same communities, they were independent of one another and do not allow for the linking of persons, employers, or physicians.

⁴ Community reports from each round are available through the HSC web site at www.hschange.org.

TABLE 1.1

SITES SELECTED FOR THE COMMUNITY TRACKING STUDY

High-Intensity Sites	Low-Intensity Sites	
Metro areas >200,000 population	Metro areas >200,000 population	Metro areas <200,000 population
01-Boston (MA)	13-Atlanta (GA)	49-Dothan (AL)
02-Cleveland (OH)	14-Augusta (GA/SC)	50-Terre Haute (IN)
03-Greenville (SC)	15-Baltimore (MD)	51-Wilmington (NC)
04-Indianapolis (IN)	16-Bridgeport (CT)	
05-Lansing (MI)	17-Chicago (IL)	Nonmetropolitan Areas
06-Little Rock (AR)	18-Columbus (OH)	
07-Miami (FL)	19-Denver (CO)	52-West Central Alabama
08-Newark (NJ)	20-Detroit (MI)	53-Central Arkansas
09-Orange County (CA)	21-Greensboro (NC)	54-Northern Georgia
10-Phoenix (AZ)	22-Houston (TX)	55-Northeastern Illinois
11-Seattle (WA)	23-Huntington (WV/KY/OH)	56-Northeastern Indiana
12-Syracuse (NY)	24-Killeen (TX)	57-Eastern Maine
• • • • • • • • • • • • • • • • • • • •	25-Knoxville (TN)	58-Eastern North Carolina
	26-Las Vegas (NV/AZ)	59-Northern Utah
	27-Los Angeles (CA)	60-Northwestern Washington
	28-Middlesex (NJ)	-
	29-Milwaukee (WI)	
	30-Minneapolis (MN/WI)	
	31-Modesto (CA)	
	32-Nassau (NY)	
	33-New York City (NY)	
	34-Philadelphia (PA/NJ)	
	35-Pittsburgh (PA)	
	36-Portland (OR/WA)	
	37-Riverside (CA)	
	38-Rochester (NY)	
	39-San Antonio (TX)	
	40-San Francisco (CA)	
	41-Santa Rosa (CA)	
	42-Shreveport (LA)	
	43-St. Louis (MO/IL)	
	44-Tampa (FL)	
	45-Tulsa (OK)	
	46-Washington (DC/MD)	
	47-West Palm Beach (FL)	
	48-Worcester (MA)	

Notes:

- 1) The numbers listed above are site identifiers and are provided in the Restricted Use data file as the variable SITEID.
- 2) "High-Intensity Sites" were not oversampled in the 2004-05 Physician Survey.

1.3. THE PHYSICIAN SURVEY

The Physician Surveys, funded by the Robert Wood Johnson Foundation, were conducted under the direction of HSC. The Gallup Organization was the primary data collection contractor. Mathematica Policy Research, Inc. (MPR) managed the Gallup subcontract for HSC and was responsible for sample design, weighting, variance estimation and tracking of physicians who could not be located. Project Hope and CODA, Inc. assisted in developing the original survey instrument (for 1996-97), including cognitive testing. Gallup and MPR assisted in the development of the new items for subsequent surveys, including cognitive testing. Social and Scientific Systems, Inc. (SSS) was instrumental in converting the raw survey data into data files suitable for analysis. MPR, SSS, and HSC collaborated to prepare the documentation for the public and restricted use files.

The Physician Survey instrument collected information on physician supply and specialty distribution; practice arrangements and physician ownership; physician time allocation; sources of practice revenue; level and determinants of physician compensation; provision of charity care; physicians' perception of their ability to deliver care and of career satisfaction; effects of care management strategies; and various aspects of physicians' practice of medicine.

The survey was administered completely by telephone, using computer-assisted telephone interviewing technology. Interviews with 6,628 physicians were completed between June 2004 and July 2005.

The sample frame was developed by combining lists of physicians from the American Medical Association (AMA) and the American Osteopathic Association (AOA). The sample consisted of a combination of those who were part of the 2000-01 sample and physicians that had not been included in earlier samples. There were 4,428 physicians who responded to both the 2000-01 and 2004-05 surveys.⁵

1.4. PHYSICIAN SURVEY DATA FILES

Three versions of the CTS Physician Survey physician-level data files are available to researchers. The *Restricted Use File* may be used only under the conditions listed in the *Community Tracking Study Physician Survey Restricted Data Use Agreement.* This agreement provides details on ownership of the data, when the data may be obtained and by whom, how the data may be used, the data security procedures that must be implemented, and the sanctions that will be imposed in the case of data misuse. Researchers must specifically apply for use of the Restricted Use File. Copies of the agreement and a description of the application process are available from the Inter-University Consortium for Political and Social Research (ICPSR) web site at www.icpsr.umich.edu.

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⁵ Refer to the Round Four Methodology Report for more information on the survey sample (HSC Technical Publication No. 70).

The Restricted Use File is provided to researchers for use on only a specific research project (new applications would be required for subsequent analyses using the data) and for a limited time period, after which all copies of the data must be destroyed. Moreover, researchers using the Restricted Use File may be required to undertake costly or inconvenient security measures. Researchers are encouraged to review documentation for both the public and restricted use files, available from ICPSR at www.icpsr.umich.edu, as well as the requirements of the *Community Tracking Study Physician Survey Restricted Data Use Agreement*, before deciding which file will meet their needs.

The *Public Use File* is available from ICPSR and can be downloaded directly from the ICPSR Web site. Researchers need not specifically apply for use of the Public Use File. Unlike the Restricted Use File, the Public Use File does not contain information on physician practice location (i.e., which of the 60 CTS sites) and so does not support analysis at the site level or analysis that uses site-level information. Although it contains all of the same observations as the Restricted Use File, several variables have been deleted or modified slightly for data confidentiality reasons (see below). Note that, unlike the Restricted Use File, the Public Use File does not contain information that allows the user to identify the panel sample of physicians who are part of both the 2000-01 and 2004-05 samples. Moreover, information necessary for using statistical software programs that account for the survey design is not included in the Public Use File. This means that **the Public Use File does not allow researchers to calculate standard errors and perform significance tests correctly**. The primary purpose of the Public Use File is to do preliminary investigation of the data in order to determine whether it is worthwhile to obtain the Restricted Use File to pursue an analysis further.

The *Summary File* allows researchers access to certain site-level estimates without applying for the use of the Restricted Use File. The Summary File, described in this document, provides information from the Physician Survey aggregated to the level of the CTS sites and the nation as a whole. This information will be useful to researchers who are interested in market-level attributes when analyzing the CTS surveys or who want to link the CTS data to other sources. Ideally, the Summary File is best merged with other surveys that follow the CTS sample design, including the CTS Household Survey and the 1997 Robert Wood Johnson Foundation Employer Health Insurance Survey. The Summary File also allows researchers to access summary information without having to process the CTS Physician Survey microdata.

When using the CTS Physician Survey data, researchers may wish to consult the *Crosswalk File*. This file identifies the specific counties, by FIPS code, that make up each CTS site and facilitates linking data from the CTS with other data sources. The Crosswalk File is available from ICPSR at www.icpsr.umich.edu.

We encourage researchers to review documentation for all three files and the *Community Tracking Study Physician Survey Restricted Data Use Agreement* before deciding which file will meet their needs.

CHAPTER 2

THE STRUCTURE AND CONTENT OF THE COMMUNITY TRACKING STUDY PHYSICIAN SURVEY

This chapter describes the CTS Physician Survey sample design, the process of conducting the survey, the survey content, and survey administration and processing. Chapter 3 provides information specifically about the Summary File.

The Physician Survey was administered to a sample of physicians in the 60 CTS sites.⁶ The survey's sample design makes it possible to develop estimates at the national and community (site) levels.

For the first three rounds of the CTS Physician Survey, interviews were administered to physicians in the 60 CTS sample sites and to an independent national sample of physicians, referred to as the "national supplement." To reduce the cost of the Round Four 2004-05 Physician Survey, the national supplement was eliminated and the sample among the 60 CTS sites was reallocated among the sites more closely proportional to the number of physicians represented by each site. In addition, the sample allocation was adjusted to achieve approximately equal samples of primary care providers and specialists. Otherwise, the design of the 2004-05 sample was similar to prior rounds, retaining a nationally representative 60-site sample design.

2.1. THE PHYSICIAN SURVEY SAMPLE

We randomly selected physicians within each CTS site. In the 1996-97 (Round One) Physician Survey, the AMA and the AOA constructed the sample frames and drew the samples based on specifications provided to them. Physicians were also randomly selected in this manner for the supplemental sample. In the later surveys, we obtained sample frames from the AMA and the AOA but selected the sample ourselves.

In the 2004-05 Physician Survey, the sample design involved randomly selecting both physicians who were part of the 2000-01 survey and physicians who were not. Our goals in sampling the previous survey's physicians were to improve precision for estimates of overall change between the two rounds and to reduce costs. Furthermore, by sampling the previous survey's physicians, we were able to create a panel, allowing us to track changes for individual physicians between the two rounds. Because of our goal for cross-sectional analysis for each survey, we included physicians who were not part of the previous survey's sample frame (as well as physicians who were part of the previous survey's sample, but did not complete the interview) to ensure representation of all eligible physicians. In the final sample of physicians for 2004-05, about 70 percent were included in the 2000-01 survey sample.

⁶ See Appendix A for information on the selection of the CTS sites.

2.1.1. Eligible Physicians

As the source for our sampling frame, we obtained the November 2003 version of the AMA Masterfile (which includes nonmembers) and the AOA membership file. To meet the initial eligibility criteria for sampling, physicians on the frame had to have completed their medical training, be practicing in the contiguous United States, and be providing direct patient care for at least 20 hours per week. Among those deemed initially eligible, the following types of physicians were specifically designated as ineligible for this survey and were removed from the frame:

- Specialists in fields in which the primary focus is not direct patient care⁹
- Federal employees
- Graduates of foreign medical schools who are only temporarily licensed to practice in the United States

We did not attempt to survey those who specifically requested to the AMA that their names not be released to outsiders. These physicians were later classified as nonrespondents for the purpose of weighting adjustments for nonresponse.

2.1.2. Stratification of Physician Sample Frames

Once we constructed our list of eligible physicians, we classified each physician on the list as either a primary care physician (PCP) or a non-primary care physician (non-PCP). PCPs were defined as those with a primary specialty of family practice, general practice, general internal medicine, internal medicine/pediatrics, or general pediatrics. All others with survey-eligible specialties were classified as non-PCPs. The physician's location for sampling purposes was determined by the AMA/AOA preferred mailing address. We included only those physicians whose preferred mailing address fell within the boundary of one of the 60 sites. Within each site, we selected a probability sample of PCPs and a probability sample of non-PCPs, further stratified by status and disposition relative to the 2000-01 survey, resulting in 8 strata in each site. The sample allocated to each site was more directly proportional to the number of physicians represented by each site and with two restrictions: (a) each site was allocated a sample size expected to result in at least 100 completed interviews among physicians practicing

⁷ Residents, interns, and fellows were considered to be still in training.

⁸This criteria resulted in the exclusion of inactive physicians and physicians who were not office- or hospital-based (teachers, administrators, researchers, etc.).

⁹For example: radiology (including diagnostic, nuclear, pediatric, neuro-, radiation oncology, radiological physics, vascular, and interventional); anesthesiology; pain management; pain medicine; palliative medicine; pathology (including anatomic, clinical, dermato-, forensic, neuro-, chemical, cyto-, immuno-, pediatric, radioisotophic, selective); medical toxicology; aerospace medicine and undersea medicine; allergy and immunology/diagnostic laboratory; bloodbanking/transfusion medicine; clinical and laboratory dermatological immunology; forensic psychiatry; hematology; legal medicine; medical management; public health and general preventive medicine; nuclear medicine; clinical pharmacology; sleep medicine; other specialty; unspecified specialty.

¹⁰ The eight strata were defined by two categories for physician type (PCP and specialist) and four categories for disposition in the previous survey (not in the 2000-01 sample frame; in the 2000-01 sample frame but not sampled for the 2000-01 survey; sampled for 2000-01 but did not complete the 2000-01 interview; and completed the 2000-01 interview).

in the site or (b) if the number of physicians in a site was small, all physicians were included in the sample.

2.1.3. Physicians Excluded from the Survey

Some physicians thought to be eligible based on the sample frame information were later classified as ineligible based on survey responses. This happened if it turned out that the physician was still in training, provided direct patient care for less than 20 hours per week, practiced in an excluded specialty, was a federal employee, or was deceased. These ineligible physicians are not included on the file.

2.2. SURVEY CONTENT

Table 2.1 shows the topics covered in the survey in more detail. Detailed documentation for the computer-assisted telephone interview program, the equivalent of a survey instrument, is provided as Appendix A. No proxy respondents were allowed for the Physician Survey. All physicians responded to the interview for themselves.

TABLE 2.1

CONTENTS OF THE 2004-05 PHYSICIAN SURVEY

Topic	Description		
Basic Practice Information / Specialty and Certification / Career Satisfaction (Questionnaire Section A)			
Eligibility for survey	Federal employee Less than 20 hours/week Excluded specialty		
Practice information	Location of primary practice Year began medical practice		
Specialty and certification	Primary specialty Board certification		
Satisfaction	Current level of satisfaction with overall career in medicine		
Physician Time Allocation / Case Mix (Questionnaire Section B)			
Weeks worked	Number of weeks practiced medicine in 2003		
Hours worked during last complete week of work	Hours worked in medicine during last complete week of work Hours spent in direct patient care during last complete week of work Number of patient visits in office, outpatient clinics, etc. (PCPs)		
Charity care in the last month	Hours spent in charity care in the last month Location of charity care		
Case mix	Percentage of patients with chronic conditions Race/ethnicity of patients Difficulty communicating due to language differences		
	Practice Arrangements and Ownership (Questionnaire Section C)		
Ownership of practice	Respondent ownership		
Practice description	Type of practice Quality/level of nursing support		
Financial incentives and competitive situation	Effect of financial incentives on quantity of services Competitive situation of practice		

TABLE 2.1

CONTENTS OF THE 2004-05 PHYSICIAN SURVEY (Continued)

Description	Topic	
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Computer Use / Medical Care Management Strategies / Gatekeeping (Questionnaire Section D)			
Access to clinical IT in medical practice	Access to computers or other forms of information technology: Treatment guidelines Formularies Preventive service reminders Patient notes Prescriptions Exchange of clinical data with other physicians Exchange of clinical data with labs, hospitals Email patients Identify drug interactions Percentage of prescriptions written electronically		
Medical care management	Percentage of patients with prescription drug formulary Effect of practice guidelines on practice of medicine Computerized order system for tests and medications in hospital Anonymous medical error reporting system in hospital Percentage of hospitalized patients with hospitalist		
PCP Scope of Care	Percentage of patients for whom physician acts as gatekeeper Change in severity or complexity of patients' conditions for which care is provided without referral to specialists Change in number of referrals made		
Practice Styles of Primary Care Physicians (Questionnaire Section E)			
No Section E in the 2004-05	survey.		

TABLE 2.1

CONTENTS OF THE 2004-05 PHYSICIAN SURVEY (Continued)

Tonio	Description
Topic	Description

Ability to Provide Care / Ability to Obtain Needed Services for Patients / Acceptance of New Patients (Questionnaire Section F)		
Perceptions of ability to provide quality care	Adequate time to spend with patients Freedom to make clinical decisions Providing high-quality care Making clinical decisions without negative effect on income Maintaining continuing patient relationships	
Inability to obtain needed services for patients	Inability to obtain: Referrals Hospital admissions Diagnostic imaging Outpatient mental health care Reasons for difficulties obtaining: Referrals Hospital admissions Outpatient mental health care	
Cost sharing (privately insured patients)	Impact of patient out-of-pocket costs on: Prescription of generic vs. name brand drugs Diagnostic tests Selection of out-patient vs. in-patient care	
Acceptance of new patients	Practice accepts: New Medicare patients New Medicaid patients New privately insured patients New uninsured patients unable to pay Reasons practice not accepting all or most: New Medicare patients New Medicaid patients	
Practice Revenue (Questionnaire Section G)		
Public programs	Percentage of practice revenue from Medicare Percentage of practice revenue from Medicaid or other public insurance	
Managed care	Percentage of practice revenue that is capitated/prepaid Number of managed care contracts Percentage of practice revenue from managed care	

TABLE 2.1

CONTENTS OF THE 2004-05 PHYSICIAN SURVEY (Continued)

Торіс	Description		
Physician Compensation and Race/Ethnicity (Questionnaire Section H)			
Physician compensation	Whether physician is salaried Physician eligible to earn bonus or incentive income Factors used by practice to determine compensation Importance of factors in determining compensation		
Income	Net income from practice of medicine in 2003		
Race/ethnicity	Hispanic origin Race		
Ability to provide care	Factors affecting ability to provide high quality care: Inadequate time with patients during office visits Patients inability to pay for needed care Rejections of care decisions by insurance companies Lack of qualified specialists in area Not getting timely reports from other physicians/facilities Difficulties communicating due to language/cultural barriers		

2.2.1. Changes in the Physician Survey Questionnaire

While core items were retained, the questionnaire used for the 2004-05 survey was revised substantially from previous surveys. The main changes made for the 2004-05 survey are listed below. The User's Guides for the earlier public and restricted use data files describe the differences between those surveys. In addition, Appendix B provides a table listing which variables are on the data files for which years.

Items dropped from the 2004-05 survey

- Number of practices; board eligibility [Section A]
- Information brought by patients [Section B]
- Other owners of practice; number of nurse practitioners, etc.; practice acquired in last two years; practice preferences [Section C]
- Internet access; effect of profiling and patient satisfaction surveys on practice of medicine; effect of care management tools on ability to provide efficient and high quality of care; PCP change in scope of care; specialist scope of care [Section D]
- Level of communication with specialists/PCPs; acceptance of new capitated patients [Section F]
- Whether profiles are risk adjusted; eligibility for bonuses/percent income from bonuses [Section H]

Items added to the 2004-05 survey

- Number of patient visits in different settings (PCPs); location of charity care; case mix: chronic conditions, race/ethnicity group, language communication problems [Section B]
- Level of nursing support compared to three years ago [Section C*]
- IT clinical data exchange with hospitals and labs; IT used to obtain information on drug interactions; percentage of prescriptions written electronically; CPOE, Medical errors (asked of specialists and also PCPs with hospital visits); percent hospitalized patients with hospitalist [Section D]
- Inability to obtain specific services (and reasons); cost sharing; reasons not accepting new Medicare/Medicaid patients [Section F]
- End of year compensation adjustments; role of overall financial performance of practice on compensation; importance of factors affecting compensation; importance of factors that may limit ability to provide high quality care [Section H*]
- * Also, some questions moved from other sections; changes in skip patterns

2.3. SURVEY ADMINISTRATION AND PROCESSING

The survey was administered completely by telephone, using computer-assisted telephone interviewing technology. As described earlier, all physicians were selected from list frames received from the AMA and the AOA. The survey was fielded between June 2004 and July 2005.

The total number of completed interviews was 6,628 with a response rate among eligibles of 52.4 percent.

Physicians were sent advance letters from the Robert Wood Johnson Foundation and were offered a \$25 honorarium for participating in the survey.

CHAPTER 3

THE CTS PHYSICIAN SURVEY SUMMARY FILE

This Summary File provides summary statistics describing the characteristics of physicians in the 60 CTS sites and the nation as a whole. Those summary statistics have been calculated from data on individual physicians who were respondents for the CTS 2004-05 Physician Survey. More specifically, the summary statistics are estimates of site-level and national averages (or percentages) for selected variables from the Physician Survey's physician-level microdata files. This chapter describes which information from the microdata files is included in the Summary File. The structure of the Summary File, as well as more details on its content, are described in Chapter 4.

3.1. SELECTION OF INFORMATION TO INCLUDE ON THE SUMMARY FILE

In developing the Summary File, we included summary measures for as many of the items in the Physician Survey as possible. However, we did decide to exclude most survey administration items and items for which we considered the summary estimates to be unreliable for a large number of sites, as discussed below.

In general, for each geographic area and the nation, the Summary File contains a single summary estimate (mean or percentage) for each variable on the Physician Survey microdata files. Here are examples of three different types of variables on the microdata files and how exactly they are represented on the Summary File:

- The variable GENDER from the microdata files identifies each individual physician as either male or female. On the Summary File, that variable is represented as estimates of the percentage of physicians who were males (in each site and for the nation), instead of estimates for two types of percentages (one for percentage of male physicians and another for percentage of female physicians).
- The variable PMCARE from the microdata files indicates the percentage of revenue that each individual physician's practice received from Medicare. On the Summary File, that variable is represented as estimates of the average percentage of revenue received from Medicare for physicians' practices (in each site and for the nation).
- The categorical variable PRCTYPE from the microdata files identifies the physician's practice type (categorized into one of six classifications). On the Summary File, that variable is represented as estimates of the percentage of physicians with a solo or two-physician practice type (PRCTYPE1) and physicians in a practice with 3 or more physicians (PRCTYPE2).

¹¹ As described in the Preface and Chapter 1 of this document, the Physician Survey microdata files are data files in which each record contains data on a single physician's responses to the survey questions, such as specialty or practice size. The versions of the microdata files that are available to the public are the CTS Physician Survey Public Use File and Restricted Use File.

An exception to the general approach described above is the few cases in which a variable from the microdata files that has multiple response categories is represented by multiple types of summary estimates on the Summary File instead of a single type of estimate.¹²

Some summary estimates were excluded from the Summary File because of concerns about their precision.¹³ To determine which should be excluded, we reviewed both cell sizes and standard error for each estimate. An estimate for a particular site was included on the Summary File only when both of the following were true:

- 50 or more observations contributed to the site-level estimate, ¹⁴ and
- the relative standard error was less than 0.30. 15

If either of these criteria was not met for an estimate for a particular site, a missing value was assigned to that estimate. If a variable from the microdata file had summary estimates that failed to match these criteria for 20 or more sites, then all summary estimates for that variable were excluded from the Summary File. Researchers interested in summary estimates for the excluded variables may want to apply for access to the Restricted Use File so that they can calculate those estimates themselves directly from the microdata.

3.2. CALCULATION OF AVERAGES AND PERCENTAGES

Weighted averages or percentages were calculated for each of the variables within each site and for the nation as a whole. The in-site sample (physicians practicing within the site boundaries) was used to calculate the site-level statistics. The full sample (all physicians, regardless of practice location) was used to calculate national-level statistics. SUDAAN statistical software was used to derive the estimates.

¹² For example, the variable SPECX in the microdata files is represented by multiple types of estimates in the Summary File (labeled SPECX2, SPECX4, and SPECX5).

¹³ Some element of uncertainty is always associated with sample-based estimates of population characteristics because the estimates are not based on the full population. The resultant sampling error is generally measured in terms of the standard error of the estimate, or its sampling variance, which indicates the precision of an estimate. The sampling variance, which is the square of the standard error, is a measure of the variation of an estimator attributable to having sampled a portion of the full population of interest using a specific probability-based sampling design.

¹⁴ In other words, there were observations for at least 50 physicians in the site over which the percentage or average was calculated.

¹⁵ The "relative standard error" is the standard error of an estimate divided by the estimate itself.

CHAPTER 4

CTS PHYSICIAN SURVEY SUMMARY FILE CODEBOOK

This chapter consists of the CTS Physician Survey Summary File Codebook and provides detailed information about the Summary File and its contents.

4.1. FILE DETAILS

The file is based on data from the CTS 2004-05 Physician Survey, which was conducted between June 2004 and July 2005. The file has a separate record for each combination of geographic area (CTS site or nation) and Physician Survey item selected for inclusion on the file (see Chapter 3 for a discussion of how those items were selected). Figure 4.1 shows the file structure. Each record includes the site name, site identifier, label indicating what the summary estimate represents (in other words, which variable from the physician microdata is being summarized), mean (the summary estimate), and standard error of the mean. For example, the first record on the file shows that 60.6 percent of Boston physicians are male and that the standard error for that estimate is 4.37 percentage points. With 79 types of summary estimates (indicated by different values of VARNAME) and 61 geographic areas (60 CTS sites and the nation), there are 4,819 records on the file.

4.1.1. File Format

The CTSR4PS1.TXT file is distributed in ASCII format. Each record has the following format:

		_	Position	
Variable Name	Description	Type	Start	End
VARNAME	Label indicating what the summary estimate represents (which variable from the microdata file is being summarized)	Character	1	10
SITEID	Site Identifier	Numeric	11	12
SITENAME	Site Name	Character	15	32
MEAN	Average (or percent) of the variable in VARNAME for that site	Numeric	33	43
SEMEAN	Standard error of MEAN	Numeric	46	56

The file is sorted by SITEID within each separate value of VARNAME. The order of the values for VARNAME is listed in Table 4.1.

FIGURE 4.1

THE STRUCTURE OF THE CTS PHYSICIAN SUMMARY FILE

Record	VARNAME	SITEID	SITENAME	MEAN	SEMEAN
1	GENDER	1	Boston	60.60073	4.371076
2	GENDER	2	Cleveland	73.77519	5.629260
3	GENDER	3	Greenville	75.37435	5.115349
					•
				•	
61	GENDER	61	United States	74.82910	0.758818
62	AGE	1	Boston	50.28582	0.751893
63	AGE	2	Cleveland	49.45203	1.106835
64	AGE	3	Greenville	49.72464	0.855291
122	AGE	61	United States	49.60701	0.182782

Notes to Figure 4.1:

The CTS Physician Survey Summary File has five variables per record:

VARNAME identifies the variable from the microdata files for which the summary estimate (the variable MEAN) was calculated.

SITEID and **SITENAME** identify the geographic area (CTS site or the nation as a whole).

MEAN is the mean or percentage for the site or the nation.

SEMEAN is the standard error of MEAN.

For example, in the microdata files, the variable GENDER indicates whether a physician is male. On the Summary File, the value of MEAN in records 1 through 61 (for which VARNAME = GENDER) represents the percentage of physicians who are male in each CTS site and the nation. Thus, Figure 4.1 shows that roughly 60.6 percent of practicing physicians in Boston are male, and about 74.8 percent of practicing physicians in Cleveland are male. The value of SEMEAN = 4.371076 in the first record is the standard error associated with Boston's estimated proportion of physicians who are male (MEAN=60.60073).

4.1.2. Special Codes

A value of -3 for MEAN or SEMEAN indicates a missing value for that site. Site level averages or percentages are missing either because there were too few observations in that site to make a reliable estimate or because the relative standard error for the estimate was too high. Chapter 3 describes the criteria used to determine when a missing value was assigned.

4.2. LIST OF SURVEY ITEMS ON THE SUMMARY FILE

Table 4.1 is a list of the items from the Physician Survey that are included on the Summary File. The sequence of the items in the list reflects the order of the questions on the survey and also the order of the values of VARNAME on the Summary File. Table 4.1 also provides page numbers for the detailed descriptions provided in Table 4.3. Table 4.2 provides the same information as Table 4.1 but sorted alphabetically by the variable VARNAME.

4.3. DETAILED VARIABLE DESCRIPTIONS

The remainder of this codebook (Table 4.3) contains detailed descriptions of the estimates on the Summary File. Each description contains details on who answered the survey question on which the estimate is based, as well as other relevant information. For instance, the description for estimates associated with VARNAME = LOCFREE indicates that the survey question applied only to those respondents providing at least some charity care.

Table 4.3 also provides information on the source question(s) from the survey, the questionnaire section, and the question number.¹⁶ The summary estimate and standard error for the nation are displayed.¹⁷ Values for the remaining CTS sites are available on the data file itself.

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¹⁶ Copies of the survey questionnaire are included in the user's guides for the public use and restricted use data files. The survey questionnaire for 2004-05 is also available as HSC Technical Publication No. 70.

¹⁷ Please note that when comparing these means to the codebooks for the public use and restricted use data files, these are weighted statistics while the public use and restricted use file codebook frequencies are unweighted.

Value of VARNAME	Description of Summary File Estimate	Page		
	Survey Administration Variables			
GENDER	Percentage of physicians who are males	4-12		
AGE	Average age of physicians	4-12		
YRSGRAD	Average number of years since graduation from medical school	4-12		
	Questionnaire Section A: Introduction			
YRSPRAC	Average number of years in practice	4-13		
SPECX2	Percentage of physicians who are family or general practitioners	4-13		
SPECX4	Percentage of physicians who are medical specialists	4-14		
SPECX5	Percentage of physicians who are surgical specialists	4-14		
BDCTANY	Percentage of physicians who are board certified in any specialty	4-14		
PCPFLAG	Percentage of physicians who are primary care physicians	4-15		
Questionnaire Section B: Utilization of Time				
WKSWRKC	Average weeks practiced medicine in 2003	4-15		
HRSMED	Average hours during the previous week spent in medically-related activities	4-15		
HRSPAT	Average hours during the previous week spent in direct patient care	4-16		
HRFREE	Average hours during the previous month spent providing charity care	4-16		
LOCFREE	Percentage of doctors who typically provide charity care in main practice	4-16		
CHRNPT	Percentage of patients with chronic medical conditions	4-17		
ASIAPT	Percentage of patients that are Asian or Pacific Islander	4-17		
BLCKPT	Percentage of patients that are African American or Black	4-17		
HISPPT	Percentage of patients that are Hispanic or Latino	4-18		
LANGPT	Percentage of patients with language differences	4-18		
Questionnaire Section C: Type and Size of Practice				
OWNPR	Percentage of physicians who are not full- or part- owners of the practice in which they work	4-18		
FOSP	Percentage of physicians who are full owners of a solo practice	4-19		
PRCTYPE1	Percentage of physicians who work in solo or two-physician practices	4-19		
PRCTYPE2	Percentage of physicians who work in group practices with three or more physicians	4-20		
NURSLEV	Percentage of physicians who have slightly better or much better levels of nursing support when compared with three years ago	4-20		

	Questionnaire Section D: Medical Care Management			
IT_TRT	Percentage of physicians whose practices use computers to obtain information on treatments	4-20		
IT_FORM	Percentage of physicians whose practices use computers to obtain information on formularies	4-21		
ITRMNDR	Percentage of physicians whose practices use computers to generate reminders	4-21		
ITNOTES	Percentage of physicians whose practices use computers to access patient notes	4-21		
ITCLIN	Percentage of physicians whose practices use computers for clinical data and image exchanges	4-22		
ITHOSP	Percentage of physicians whose practices use computers for clinical data and image exchanges with labs, etc.	4-22		
ITCOMM	Percentage of physicians whose practices use computers to communicate with patients	4-22		
ITDRUG	Percentage of physicians whose practices use computers for information on drug interactions	4-23		
FORMLRY	Average percentage of patients with formulary	4-23		
CPOEHSP	Percentage of physicians where the hospital where most of their patients are treated has computerized systems to order tests and medications	4-23		
HSPLST	Average percentage of hospitalized patients who had a hospitalist	4-24		
Questionnaire Section F – Physician/Patient Interactions				
RADQTIME	Percentage of physicians who either somewhat or strongly agree that they have adequate time to spend with their patients during typical office visits	4-24		
RCLNFREE	Percentage of physicians who either somewhat or strongly agree that they have the freedom to make clinical decisions that meet their patient's needs	4-24		
RHIGHCAR	Percentage of physicians who either somewhat or strongly agree that it is possible to provide high quality care to all of their patients	4-25		
RNEGINCN	Percentage of physicians who either somewhat or strongly agree that they can make clinical decisions in the best interests of their patients without the possibility of reducing their income	4-25		
RPATREL	Percentage of physicians who either somewhat or strongly agree that they can maintain continuing relationships with patients over time that promote the delivery of high quality care	4-25		
NOTREFS	Percentage of physicians unable to get referrals to high-quality specialists	4-26		
NOTIMAG	Percentage of physicians unable to get high-quality diagnostic imaging services	4-26		
GENERIC	Percentage of physicians who usually or always prescribe a generic over a brand- name drug if a generic option is available	4-26		
DIAGCST	Percentage of physicians who usually or always consider an insured patient's out- of-pocket costs in deciding the types of tests to recommend, if there is uncertainty about a diagnosis	4-27		

Questionnaire Section F – Physician/Patient Interactions (continued)		
IOPTCST	Percentage of physicians who usually or always consider an insured patient's out- of-pocket costs if there is a choice between outpatient and inpatient care	4-27
NWMCAID	Percentage of physicians whose practice is accepting either some or no new Medicaid patients	4-27
NWNPAY	Percentage of physicians with limited acceptance of new patients unable to pay	4-28
	Questionnaire Section G: Practice Revenue	
PMCARE	Average percentage of patient care practice revenue from Medicare	4-28
PMCAID	Average percentage of patient care practice revenue from Medicaid	4-28
PCAPREV	Average percentage of patient care practice revenue paid on a capitated or other prepaid basis	4-29
NMCCON	Percentage of physicians in practices who have more than 15 managed care contracts	4-29
PMC	Average percentage of patient care revenue from managed care	4-29
	Questionnaire Section H - Physician Compensation Methods & Income Level	
SALPAID	Percentage of physicians who are salaried	4-30
BONUSR	Percentage of physicians who are eligible to earn income through any type of bonus or incentive plan	4-30
ELINCENT	Percentage of physicians eligible for bonuses	4-30
SPROD	Percentage of physicians indicating that their compensation is affected by their own productivity	4-31
INCOMEX	Average 2003 net income received from the practice of medicine	4-31
INCENT2	Percentage of physicians whose financial incentives favor expanding services	4-31
INCENT3	Percentage of physicians whose financial incentives favor neither expanding nor reducing services	4-32
COMPETE1	Percentage of physicians reporting that competitive situation their practice faces is not competitive	4-32
COMPETE2	Percentage of physicians reporting that competitive situation their practice faces is somewhat competitive	4-32
RACEWH	Percentage of physicians who are white	4-33
QNOTIME1	Percentage of physicians who said inadequate time with patients is not a problem	4-33
QNOTIME2	Percentage of physicians who said inadequate time with patients is a minor problem	4-33
QNOTIME3	Percentage of physicians who said inadequate time with patients is a major problem	4-34
QPRBPAY1	Percentage of physicians who said patients' inability to pay for needed care is not a problem	4-34

Questionnaire Section H - Physician Compensation Methods & Income Level (continued)		
QPRBPAY2	Percentage of physicians who said patients' inability to pay for needed care is a minor problem	4-34
QPRBPAY3	Percentage of physicians who said patients' inability to pay for needed care is a major problem	4-35
QINSREJ1	Percentage of physicians who said rejections of care decisions by insurance companies is not a problem	4-35
QINSREJ2	Percentage of physicians who said rejections of care decisions by insurance companies is a minor problem	4-35
QINSREJ3	Percentage of physicians who said rejections of care decisions by insurance companies is a major problem	4-36
QNOSPEC1	Percentage of physicians who said lack of qualified specialists is not a problem	4-36
QNOSPEC2	Percentage of physicians who said lack of qualified specialists is a minor problem	4-36
QNOREPT1	Percentage of physicians who said not getting timely reports from other physicians and facilities is not a problem	4-37
QNOREPT2	Percentage of physicians who said not getting timely reports from other physicians and facilities is a minor problem	4-37
QLANG1	Percentage of physicians who said communicating with patients due to language or cultural barriers is not a problem	4-37
QLANG2	Percentage of physicians who said communicating with patients due to language or cultural barriers is a minor problem	4-38
QERRHSP1	Percentage of physicians who said medical errors in hospitals is not a problem	4-38
QERRHSP2	Percentage of physicians who said medical errors in hospitals is a minor problem	4-38

Value of VARNAME	Description of Summary File Estimates	Page
AGE	Average age of physicians	4-12
ASIAPT	Percentage of patients that are Asian or Pacific Islander	4-17
BDCTANY	Percentage of physicians who are board certified in any specialty	4-14
BLCKPT	Percentage of patients that are African American or Black	4-17
BONUSR	Percentage of physicians who are eligible to earn income through any type of bonus or incentive plan	4-30
CHRNPT	Percentage of patients with chronic medical conditions	4-17
COMPETE1	Percentage of physicians reporting that competitive situation their practice faces is not competitive	4-32
COMPETE2	Percentage of physicians reporting that competitive situation their practice faces is somewhat competitive	4-32
CPOEHSP	Percentage of physicians where the hospital where most of their patients are treated has computerized systems to order tests and medications	4-23
DIAGCST	Percentage of physicians who usually or always consider an insured patient's out- of-pocket costs in deciding the types of tests to recommend, if there is uncertainty about a diagnosis	4-27
ELINCENT	Percentage of physicians eligible for bonuses	4-30
FORMLRY	Average percentage of patients with formulary	4-23
FOSP	Percentage of physicians who are full owners of a solo practice	4-19
GENDER	Percentage of physicians who are males	4-12
GENERIC	Percentage of physicians who usually or always prescribe a generic over a brand- name drug if a generic option is available	4-26
HISPPT	Percentage of patients that are Hispanic or Latino	4-18
HRFREE	Average hours during the previous month spent providing charity care	4-16
HRSMED	Average hours during the previous week spent in medically-related activities	4-15
HRSPAT	Average hours during the previous week spent in direct patient care	4-16
HSPLST	Average percentage of hospitalized patients who had a hospitalist	4-24
INCENT2	Percentage of physicians whose financial incentives favor expanding services	4-31
INCENT3	Percentage of physicians whose financial incentives favor neither expanding nor reducing services	4-32
INCOMEX	Average 2003 net income received from the practice of medicine	4-31
IOPTCST	Percentage of physicians who usually or always consider an insured patient's out- of-pocket costs if there is a choice between outpatient and inpatient care	4-27
IT_FORM	Percentage of physicians whose practices use computers to obtain information on formularies	4-21
IT_TRT	Percentage of physicians whose practices use computers to obtain information on treatments	4-20

Value of VARNAME	Description of Summary File Estimates	Page
ITCLIN	Percentage of physicians whose practices use computers for clinical data and image exchanges	4-22
ITCOMM	Percentage of physicians whose practices use computers to communicate with patients	4-22
ITDRUG	Percentage of physicians whose practices use computers for information on drug interactions	4-23
ITHOSP	Percentage of physicians whose practices use computers for clinical data and image exchanges with labs, etc.	4-22
ITNOTES	Percentage of physicians whose practices use computers to access patient notes	4-21
ITRMNDR	Percentage of physicians whose practices use computers to generate reminders	4-21
LANGPT	Percentage of patients with language differences	4-18
LOCFREE	Percentage of doctors who typically provide charity care in main practice	4-16
NMCCON	Percentage of physicians in practices who have more than 15 managed care contracts	4-29
NOTIMAG	Percentage of physicians unable to get high-quality diagnostic imaging services	4-26
NOTREFS	Percentage of physicians unable to get referrals to high-quality specialists	4-26
NURSLEV	Percentage of physicians who have slightly better or much better levels of nursing support when compared with three years ago	4-20
NWMCAID	Percentage of physicians whose practice is accepting either some or no new Medicaid patients	4-27
NWNPAY	Percentage of physicians with limited acceptance of new patients unable to pay	4-28
OWNPR	Percentage of physicians who are not full- or part- owners of the practice in which they work	4-18
PCAPREV	Average percentage of patient care practice revenue paid on a capitated or other prepaid basis	4-29
PCPFLAG	Percentage of physicians who are primary care physicians	4-15
PMC	Average percentage of patient care revenue from managed care	4-29
PMCAID	Average percentage of patient care practice revenue from Medicaid	4-28
PMCARE	Average percentage of patient care practice revenue from Medicare	4-28
PRCTYPE1	Percentage of physicians who work in solo or two-physician practices	4-19
PRCTYPE2	Percentage of physicians who work in group practices with three or more physicians	4-20
QERRHSP1	Percentage of physicians who said medical errors in hospitals is not a problem	4-38
QERRHSP2	Percentage of physicians who said medical errors in hospitals is a minor problem	4-38
QINSREJ1	Percentage of physicians who said rejections of care decisions by insurance companies is not a problem	4-35
QINSREJ2	Percentage of physicians who said rejections of care decisions by insurance companies is a minor problem	4-35

Value of VARNAME	Description of Summary File Estimates	Page
QINSREJ3	Percentage of physicians who said rejections of care decisions by insurance companies is a major problem	4-36
QLANG1	Percentage of physicians who said communicating with patients due to language or cultural barriers is not a problem	4-37
QLANG2	Percentage of physicians who said communicating with patients due to language or cultural barriers is a minor problem	4-38
QNOREPT1	Percentage of physicians who said not getting timely reports from other physicians and facilities is not a problem	4-37
QNOREPT2	Percentage of physicians who said not getting timely reports from other physicians and facilities is a minor problem	4-37
QNOSPEC1	Percentage of physicians who said lack of qualified specialists is not a problem	4-36
QNOSPEC2	Percentage of physicians who said lack of qualified specialists is a minor problem	4-36
QNOTIME1	Percentage of physicians who said inadequate time with patients is not a problem	4-33
QNOTIME2	Percentage of physicians who said inadequate time with patients is a minor problem	4-33
QNOTIME3	Percentage of physicians who said inadequate time with patients is a major problem	4-34
QPRBPAY1	Percentage of physicians who said patients' inability to pay for needed care is not a problem	4-34
QPRBPAY2	Percentage of physicians who said patients' inability to pay for needed care is a minor problem	4-34
QPRBPAY3	Percentage of physicians who said patients' inability to pay for needed care is a major problem	4-35
RACEWH	Percentage of physicians who are white	4-33
RADQTIME	Percentage of physicians who either somewhat or strongly agree that they have adequate time to spend with their patients during typical office visits	4-24
RCLNFREE	Percentage of physicians who either somewhat or strongly agree that they have the freedom to make clinical decisions that meet their patient's needs	4-24
RHIGHCAR	Percentage of physicians who either somewhat or strongly agree that it is possible to provide high quality care to all of their patients	4-25
RNEGINCN	Percentage of physicians who either somewhat or strongly agree that they can make clinical decisions in the best interests of their patients without the possibility of reducing their income	4-25
RPATREL	Percentage of physicians who either somewhat or strongly agree that they can maintain continuing relationships with patients over time that promote the delivery of high quality care	4-25
SALPAID	Percentage of physicians who are salaried	4-30
SPECX2	Percentage of physicians who are family or general practitioners	4-13
SPECX4	Percentage of physicians who are medical specialists	4-14

Value of VARNAME	Description of Summary File Estimates	Page
SPECX5	Percentage of physicians who are surgical specialists	4-14
SPROD	Percentage of physicians indicating that their compensation is affected by their own productivity	4-31
WKSWRKC	Average weeks practiced medicine in 2003	4-15
YRSGRAD	Average number of years since graduation from medical school	4-12
YRSPRAC	Average number of years in practice	4-13

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

GENDER Gender

Description: The percentage of physicians who are male.

Derived from: This information was obtained from the AMA and AOA.

PERCENT STANDARD ERROR

National 75% 0.76

AGE Physician's age

Description: The average age of physicians. The age of the physician was derived by

calculating the difference between the interview year and the year of birth.

Derived from: Based on year of birth obtained from the AMA and AOA.

AVERAGE STANDARD ERROR

National 50 years 0.18

YRSGRAD Number of years since graduation from medical school

Description: The average number of years since graduation from medical school, derived by

calculating the difference between the year of the interview and the year the

physician graduated from medical school.

Derived from: Based on year graduated from medical school, obtained from the AMA and AOA.

AVERAGE STANDARD ERROR

National 22 years 0.19

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

YRSPRAC Number of years in practice

Description: The average number of years in practice. Derived by calculating the difference

between the interview year and the year the physician began to practice

medicine.

Derived from: Questionnaire Section A, Question A6

AVERAGE STANDARD ERROR

National 17 years 0.17

SPECX2 Percentage of physicians who are family/general practitioners

Description: The percentage of physicians who are family or general practitioners. This

includes physicians whose specialty and/or subspecialty are family/general practice, geriatrics-family/general practice, or adolescent medicine-general practice. It excludes internists, pediatricians, and medical and surgical

specialists (including psychiatry and obstetrics/gynecology).

Derived from: Based on responses to Questionnaire Section A, Questions A8 (physician's

specialty) and A10 (physician's subspecialty). Refer to the description of the variable SPECX in the CTS Physician Survey Public Use File: User's Guide for more information concerning how physician specialties and sub-specialties are

categorized.

PERCENT STANDARD ERROR

National 17% 0.67

TABLE 43

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

SPECX4 Percentage of physicians who are medical specialists

Description: The percentage of physicians who are medical specialists. This category is

based on 84 physician specialty and subspecialty classifications including allergy, immunology, cardiology, and diabetes, etc. It also includes psychiatry. This category excludes surgical specialists, internists, pediatricians, and family or

general practitioners. Surgical specialties include obstetrics/gynecology.

Derived from: Based on responses to Questionnaire Section A, Questions A8 (physician's

specialty) and A10 (physician's subspecialty). Refer to the description of the variable SPECX in the *CTS Physician Survey Public Use File: User's Guide* for more information concerning how physician specialties and sub-specialties are

categorized.

PERCENT STANDARD ERROR

National 38% 0.86

SPECX5 Percentage of physicians who are surgical specialists

Description: The percentage of physicians who are surgical specialists. This category is

based on 46 physician specialty and subspecialty surgical classifications. It also includes obstetrics/gynecology. This category excludes medical specialists, internists, pediatricians, and family or general practitioners. Medical specialties

include psychiatry.

Derived from: Based on responses to Questionnaire Section A, Questions A8 (physician's

specialty) and A10 (physician's subspecialty). Refer to the description of the variable SPECX in the *CTS Physician Survey Public Use File: User's Guide* for more information concerning how physician specialties and sub-specialties are

categorized.

PERCENT STANDARD ERROR

National 26% 0.83

BDCTANY Percentage of physicians who are board certified in any specialty

Description: The percentage of physicians who are board certified in any specialty.

Derived from: Questionnaire Section A, Questions A11, A13, A15, and A17.

PERCENT STANDARD ERROR

National 91% 0.64

TABLE 43

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

PCPFLAG Percentage of physicians who are primary care physicians

Description: The percentage of physicians who are primary care physicians. Physicians are

considered to be primary care if their specialty is one of the following: (1) family practice, geriatric medicine, general practice, or adolescent medicine; (2) internal medicine, pediatrics, internal medicine-pediatrics and spends the most time in this specialty; (3) an adult specialist that spends more time practicing general internal medicine than practicing a subspecialty; or (4) a pediatric specialist that spends more time practicing general pediatrics than practicing a subspecialty.

Derived from: Questionnaire Section A, Questions A8, A9, A9a, A9b, and A10.

PERCENT STANDARD ERROR

National 37% 0.81

WKSWRKC Weeks practicing medicine in 2003

Description: The average number of weeks that physicians practiced medicine in 2003.

Physicians who began practicing medicine during 2004 or later were excluded.

Derived from: Questionnaire Section B, Question B1.

AVERAGE STANDARD ERROR

National 47 weeks 0.10

HRSMED Hours during previous week spent in medically-related activities

Description: The average number of hours during the last full week of work that each

physician spent in medically-related activities, including direct patient care.

Derived from: Questionnaire Section B, Questions B2, B3c, and B4.

AVERAGE STANDARD ERROR

National 53 hours 0.32

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

HRSPAT Hours during previous week spent in direct patient care activities

Description: The average number of hours during the last full week of work that each

physician spent in direct patient care activities.

Derived from: Questionnaire Section B, Questions B3, B3d, and B5.

AVERAGE STANDARD ERROR

National 46 hours 0.30

HRFREE Hours during previous month spent providing charity care

Description: The average number of hours during the last month that each physician in the

site spent providing charity care.

Derived from: Questionnaire Section B, Question B6.

AVERAGE STANDARD ERROR

National 8 hours 0.29

LOCFREE Percentage of doctors who typically provide charity care in main practice

Description: The percentage of doctors who typically provide charity care in main practice.

Applies only to physicians who provide some type of charity care.

Derived from: Questionnaire Section B, Question B6a.

AVERAGE STANDARD ERROR

National 71% 1.21

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

CHRNPT Percentage of patients with a chronic medical condition

Description: Average percentage of physicians' patients with a chronic medical condition. For

physicians who indicated the percentage of patients was not zero but was less than one, a value of 0.5% was used in calculating the average percentage.

Derived from: Questionnaire Section B, Question B12.

PERCENT STANDARD ERROR

National 57% 0.57

ASIAPT Percentage of physicians' patients who are Asian or Pacific Islander

Description: Average percentage of physicians' patients who are Asian or Pacific Islander.

For physicians who indicated the percentage of patients was not zero but was less than one, a value of 0.5% was used in calculating the average percentage.

Derived from: Questionnaire Section B, Question B14C.

PERCENT STANDARD ERROR

National 6% 0.23

BLCKPT Percentage of physicians' patients who are African-American or Black

Description: Average percentage of physicians' patients who are African-American or Black.

For physicians who indicated the percentage of patients was not zero but was less than one, a value of 0.5% was used in calculating the average percentage.

Derived from: Questionnaire Section B, Question B14A.

PERCENT STANDARD ERROR

National 19% 0.75

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

HISPPT Percentage of physicians' patients who are Hispanic or Latino

Description: Average percentage of physicians' patients who are Hispanic or Latino. For

physicians who indicated the percentage of patients was not zero but was less than one, a value of 0.5% was used in calculating the average percentage.

Derived from: Questionnaire Section B, Question B14B.

PERCENT STANDARD ERROR

National 15% 0.73

LANGPT Percentage of patients with language differences

Description: Average percentage of patients with whom physician has a hard time speaking

with or understanding because he/she speak different languages. For physicians who indicated the percentage of patients was not zero but was less than one, a

value of 0.5% was used in calculating the average percentage.

Derived from: Questionnaire Section B, Question B15.

PERCENT STANDARD ERROR

National 5% 0.25

OWNPR Ownership status of physician's practice

Description: The percentage of physicians who are not full or part-owners of the practice in

which they work.

Derived from: Questionnaire Section C, Question C1.

PERCENT STANDARD ERROR

National 46% 1.13

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

FOSP Percentage of physicians who are full owners of a solo practice

Description: The percentage of physicians who are full owners of a solo practice.

Derived from: Based on responses to Questionnaire Section C, Questions C1 and C2.

PERCENT STANDARD ERROR

National 23% 0.91

PRCTYPE1 Physician's practice type is solo or two physicians

Description: The percentage of physicians who work in solo or two physician practices.

Physician's type of practice was categorized into one of six classifications: solo or two physicians, a group of three or more physicians, staff or group model HMO, medical school, hospital-based, or all other (other insurance, integrated health, freestanding clinic, physician practice management, community health

center, management services organization (MSO), physician hospital

organization (PHO), and locum tenens).

Derived from: Questionnaire Section C, Questions C2, C3, C3a, C3b, C3c, C3d, and C9. Refer

to the description of the variable PRCTYPE in the *CTS Physician Survey Public Use File: User's Guide* for information about how the ownership and employment

were combined to determine practice type.

PERCENT STANDARD ERROR

National 32% 0.97

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

PRCTYPE2 Physician's practice type is a group of three or more physicians

Description: The percentage of physicians who work in group practices with three or more

physicians. Physician's type of practice was categorized into one of six

classifications: solo or two physicians, a group of three or more physicians, staff

or group model HMO, medical school, hospital based, or all other (other

insurance, integrated health, freestanding clinic, physician practice management, community health center, management services organization (MSO), physician

hospital organization (PHO), and locum tenens).

Derived from: Questionnaire Section C, Questions C2, C3, C3a, C3b, C3c, C3d, and C9. Refer

to the description of the variable PRCTYPE in the *CTS Physician Survey Public Use File: User's Guide* for information about how the ownership and employment

were combined to determine practice type.

PERCENT STANDARD ERROR

National 32% 1.13

NURSLEV Percentage of physicians who have slightly better or much better levels of nursing support when compared with three years ago

Description: The percentage of physicians who report that the overall level of nursing support

in their practice is slightly better or much better when compared with three years ago. Not asked of physicians who were practicing in a hospital nor asked of physicians who began practice after 2001 and who were not interviewed in the

previous round of the survey.

Derived from: Questionnaire Section C, Question C8a.

PERCENT STANDARD ERROR

National 28% 0.95

Description: Percentage of physicians whose practices use computers or other forms of

information technology to obtain information about treatment alternatives or

recommended guidelines.

Derived from: Questionnaire Section D, Question D1A.

PERCENT STANDARD ERROR

National 65% 1.05

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

IT_FORM Use computers to obtain information on formularies

Description: Percentage of physicians whose practices use computers or other forms of

information technology to obtain information on formularies.

Derived from: Questionnaire Section D, Question D1B.

PERCENT STANDARD ERROR

National 45% 1.03

ITRMNDR Use computers to generate reminders

Description: Percentage of physicians whose practices use computers or other forms of

information technology to generate reminders for themselves about preventive

services.

Derived from: Questionnaire Section D, Question D1C.

PERCENT STANDARD ERROR

National 29% 0.99

ITNOTES Use computers to access patient notes

Description: Percentage of physicians whose practices use computers or other forms of

information technology to access patient notes, medication lists, or problem lists.

Derived from: Questionnaire Section D, Question D1D.

PERCENT STANDARD ERROR

National 50% 1.10

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

ITCLIN Use computers for clinical data and image exchanges

Description: Percentage of physicians whose practices use computers or other forms of

information technology for clinical data and image exchanges with other

physicians.

Derived from: Questionnaire Section D, Question D1F.

PERCENT STANDARD ERROR

National 50% 1.01

ITHOSP Use computers for clinical data and image exchanges with hospitals and laboratories

Description: Percentage of physicians whose practices use computers or other forms of

information technology for clinical data and image exchanges with hospitals and

laboratories.

Derived from: Questionnaire Section D, Question D1F1.

PERCENT STANDARD ERROR

National 66% 1.15

ITCOMM Use computers to communicate with patients

Description: Percentage of physicians whose practices use computers or other forms of

information technology to communicate about clinical issues with patients by e-

mail.

Derived from: Questionnaire Section D, Question D1G.

PERCENT STANDARD ERROR

National 24% 0.89

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

ITDRUG Use computers for information on drug interactions

Description: Percentage of physicians whose practices use computers or other forms of

information technology for information on potential patient drug interactions with

other drugs, allergies, and/or patient conditions.

Questionnaire Section D, Question D1H. **Derived from:**

> PERCENT STANDARD ERROR

National 60% 1.13

FORMLRY Percentage of patients with formulary

Description: Average percentage of physicians' patients who have prescription coverage that

> includes the use of a formulary. For physicians who indicated the percentage of patients was not zero but was less than one, a value of 0.5% was used in

calculating the average percentage.

Derived from: Questionnaire Section D, Question D3.

> STANDARD ERROR PERCENT

National 62% 0.59

CPOEHSP Percentage of physicians where the hospital where most of their patients are treated has computerized systems to order tests and medications

Description: The percentage of physicians where the hospital where most of their patients

are treated has computerized systems to order tests and medications. Asked of

all specialists and PCPs who said that they saw patients on hospital rounds.

Derived from: Questionnaire Section D, Question D6a.

> PERCENT STANDARD ERROR

National 76% 0.97

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

HSPLST Percentage of hospitalized patients who had a hospitalist

Description: The average percentage of hospitalized patients last year who had a hospitalist

involved in their inpatient care. Hospitalists are physicians whose primary professional focus is the general medical care of hospitalized patients. For physicians who indicated the percentage of patients was not zero but was less than one, a value of 0.5% was used in calculating the average percentage.

Derived from: Questionnaire Section D, Question D7.

PERCENT STANDARD ERROR

National 30% 0.89

RADQTIME Adequacy of time to spend with patients

Description: The percentage of physicians who either somewhat or strongly agreed that they

have adequate time to spend with their patients during typical office visits.

Physicians could agree strongly, agree somewhat, disagree somewhat, disagree

strongly, or neither agree nor disagree.

Derived from: Questionnaire Section F, Questions F1A and F1B.

PERCENT STANDARD ERROR

National 69% 0.84

RCLNFREE Freedom to make clinical decisions

Description: The percentage of physicians who somewhat or strongly agreed that they have

the freedom to make clinical decisions that meet their patients' needs.

Physicians could agree strongly, agree somewhat, disagree somewhat, disagree

strongly, or neither agree nor disagree.

Derived from: Questionnaire Section F, Question F1C.

PERCENT STANDARD ERROR

National 88% 0.57

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

RHIGHCAR Possibility of high quality of patient care to all patients

Description: The percentage of physicians who either somewhat or strongly agreed that it is

possible to provide high quality care to all of their patients. Physicians could agree strongly, agree somewhat, disagree somewhat, disagree strongly, or

neither agree nor disagree.

Derived from: Questionnaire Section F, Question F1D.

PERCENT STANDARD ERROR

National 80% 0.85

RNEGINCN Clinical decisions without possibility of reducing income

Description: The percentage of physicians who either somewhat or strongly agreed that they

can make clinical decisions in the best interests of their patients without the possibility of reducing their income. Physicians could agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree.

Derived from: Questionnaire Section F, Question F1E.

PERCENT STANDARD ERROR

National 82% 0.80

RPATREL Continuing patient relationships

Description: The percentage of physicians who either somewhat or strongly agreed that they

can maintain continuing relationships with patients over time that promote the delivery of high quality care. Physicians could agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree. Physicians who indicated that they don't normally have continuing relationships with patients

were excluded.

Derived from: Questionnaire Section F, Question F1H.

PERCENT STANDARD ERROR

National 80% 0.83

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

NOTREFS Percentage of physicians unable to get referrals to high quality specialists

Description: The percentage of physicians who indicated that they were unable to obtain

referrals to specialists of high quality when they thought it was medically

necessary.

Derived from: Questionnaire Section F, Question F8bA.

PERCENT STANDARD ERROR

National 34% 1.11

NOTIMAG Percentage of physicians unable to get high quality diagnostic imaging services

Description: The percentage of physicians who indicated that they were unable to obtain high

quality diagnostic imaging services for their patients when they thought it was

medically necessary.

Derived from: Questionnaire Section F, Question F8bD.

PERCENT STANDARD ERROR

National 29% 0.88

GENERIC Percentage of physicians who usually or always prescribe a generic over a brand name drug if a generic option is available

brana name arag ii a generie opaon is available

Description: The percentage of physicians who usually or always prescribe a generic over a

brand name drug if a generic option is available. This question describes the impact of insured patients' out-of-pocket costs for co-payments and deductibles

on physicians' decision making.

Derived from: Questionnaire Section F, Question F8dA.

PERCENT STANDARD ERROR

National 78% 0.82

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

DIAGCST Percentage of physicians who usually or always consider an insured patient's

out-of-pocket costs in deciding the types of tests to recommend, if there

is uncertainty about a diagnosis

Description: The percentage of physicians who usually or always consider an insured

patient's out-of-pocket costs in deciding the types of tests to recommend, if there is uncertainty about a diagnosis. This question describes the impact of insured patients' out-of-pocket costs for co-payments and deductibles on physicians'

decision making.

Derived from: Questionnaire Section F, Question F8dB.

PERCENT STANDARD ERROR

National 40% 0.91

IOPTCST Percentage of physicians who usually or always consider an insured patient's

out-of-pocket costs if there is a choice between outpatient and inpatient

care

Description: The percentage of physicians who usually or always consider an insured

patient's out-of-pocket costs if there is a choice between outpatient and inpatient care. This question describes the impact of insured patients' out-of-pocket costs

for co-payments and deductibles on physicians' decision making.

Derived from: Questionnaire Section F, Question F8dC.

PERCENT STANDARD ERROR

National 51% 1.04

NWMCAID Limited acceptance of new Medicaid patients

Description: The percentage of physicians whose practice is accepting either some or no new

patients who are insured through Medicaid. Physicians were asked if the practice was accepting all, most, some, or no new patients who were insured

through Medicaid, including Medicaid managed care patients.

Derived from: Questionnaire Section F, Question F9B.

PERCENT STANDARD ERROR

National 39% 1.12

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

NWNPAY Limited acceptance of new patients unable to pay

Description: Percentage of physicians whose practice is accepting either some or no new

uninsured patients who are unable to pay. Physicians were asked if the practice was accepting all, most, some, or no new uninsured patients who were unable to

pay.

Derived from: Questionnaire Section F, Question F9G.

PERCENT STANDARD ERROR

National 47% 1.06

PMCARE Percentage of practice revenue from Medicare

Description: The average percentage of patient care practice revenue that comes from

Medicare, including Medicare managed care.

Derived from: Questionnaire Section G, Questions G1 and G1a.

PERCENT STANDARD ERROR

National 32% 0.56

PMCAID Percentage of practice revenue from Medicaid

Description: The average percentage of patient care practice revenue that comes from

Medicaid, including Medicaid managed care.

Derived from: Questionnaire Section G, Questions G1 and G1a.

PERCENT STANDARD ERROR

National 17% 0.46

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

PCAPREV Percentage of practice revenue prepaid or capitated

Description: The average percentage of patient care practice revenue paid on a capitated or

other prepaid basis.

Derived from: Questionnaire Section G, Questions G3, G7b, G8c, and G8g.

PERCENT STANDARD ERROR

National 13% 0.57

NMCCON Physicians with more than 15 managed care contracts

Description: The percentage of physicians who have more than 15 managed care contracts in

the practice in which they work.

Derived from: Questionnaire Section G, Questions G6 through G6c.

PERCENT STANDARD ERROR

National 30% 0.95

PMC Percentage of practice revenue from managed care

Description: The average percentage of patient care practice revenue from all managed care.

Derived from: Questionnaire Section G, Questions G7, G7a, G8, G8b, and G8f.

PERCENT STANDARD ERROR

National 41% 0.72

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

SALPAID Percentage of physicians in the practice who are salaried

Description: The average percent of physicians in the practice who are salaried. Physicians

who are full owners of solo practices are assumed to be not salaried. Salaried

physicians may be eligible to receive bonuses.

Derived from: Questionnaire Section H, Question H1.

PERCENT STANDARD ERROR

National 51% 1.25

BONUSR Percentage of physicians who are eligible to earn income through any type of bonus or incentive plan

Description: The percentage of physicians who are eligible to earn income through any type

of bonus or incentive plan. Bonus can include any type of payment above the fixed, guaranteed salary. Physicians who are full owners of solo practices are

assummed not to be eligible for bonuses.

Derived from: Questionnaire Section H, Question H4.

PERCENT STANDARD ERROR

National 41% 1.12

ELINCENT Percentage of physicians who are eligible for bonuses

Description: The percentage of physicians who are eligible for bonuses. Full owners of solo

practices are assumed not eligible for bonuses.

Derived from: Based on responses to Questionnaire Section H, Question H4 and H4a.

PERCENT STANDARD ERROR

National 48% 1.13

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

SPROD Own productivity affects compensation

Description: The percentage of physicians indicating that their compensation is affected by

their own productivity. Physicians who are full owners of solo practices are assumed to have their compensation affected by their own productivity.

Derived from: Questionnaire Section H, Questions H5A and H7A.

PERCENT STANDARD ERROR

National 77% 0.95

INCOMEX Net income in 2003

Description: Average 2003 net income received from the practice of medicine after expenses

but before taxes.

Derived from: Questionnaire Section H, Question H15a.

AVERAGE STANDARD ERROR

National \$202,982 \$3,179

INCENT2 Financial incentives favor expanding services

Description: Percentage of physicians who report that their overall personal financial

incentives in their practice favor expanding services to individual patients.

Derived from: Questionnaire Section C, Question CX.

PERCENT STANDARD ERROR

National 24% 0.93

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

INCENT3 Financial incentives favor neither expanding nor reducing services

Description: Percentage of physicians who report that their overall personal financial

incentives in their practice favor neither expanding nor reducing services to

individual patients.

Derived from: Questionnaire Section C, Question CX.

PERCENT STANDARD ERROR

National 64% 0.97

COMPETE1 Not competitive situation faced by practice

Description: Percentage of physicians who report that the competitive situation their practice

faces is not competitive.

Derived from: Questionnaire Section C, Question CZ.

PERCENT STANDARD ERROR

National 36% 1.07

COMPETE2 Somewhat competitive situation faced by practice

Description: Percentage of physicians who report that the competitive situation their practice

faces is somewhat competitive.

Derived from: Questionnaire Section C, Question CZ.

PERCENT STANDARD ERROR

National 45% 0.91

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

RACEWH Percentage of physicians who are white

Description: Percentage of physicians who are white, versus all others (African-American /

Black, Hispanic, Native American or Alaska Native, and Asian or Pacific

Islander).

Derived from: Questionnaire Section H, Questions H18 and H19.

PERCENT STANDARD ERROR

National 75% 1.21

QNOTIME1 Percentage of physicians who said inadequate time with patients is not a problem

Description: Percentage of physicians who said inadequate time with patients during office

visits is not a problem affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20A.

PERCENT STANDARD ERROR

National 33% 0.86

QNOTIME2 Percentage of physicians who said inadequate time with patients is a minor problem

Description: Percentage of physicians who said inadequate time with patients during office

visits is a minor problem affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20A.

PERCENT STANDARD ERROR

National 51% 0.97

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

QNOTIME3 Percentage of physicians who said inadequate time with patients is a major problem

Description: Percentage of physicians who said inadequate time with patients during office

visits is a major problem affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20A.

PERCENT STANDARD ERROR

National 17% 0.74

QPRBPAY1 Percentage of physicians who said patients' inability to pay for needed care is not a problem

Description: Percentage of physicians who said patients' inability to pay for needed care is not

a problem affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20B.

PERCENT STANDARD ERROR

National 29% 0.92

QPRBPAY2 Percentage of physicians who said patients' inability to pay for needed care is a minor problem

Description: Percentage of physicians who said patients' inability to pay for needed care is a

minor problem affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20B.

PERCENT STANDARD ERROR

National 48% 0.89

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

QPRBPAY3 Percentage of physicians who said patients' inability to pay for needed care is a major problem

Description: Percentage of physicians who said patients' inability to pay for needed care is a

major problem affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20B.

PERCENT STANDARD ERROR

National 23% 0.75

QINSREJ1 Percentage of physicians who said rejection of care decisions by insurance companies is not a problem

Description: Percentage of physicians who said rejection of care decisions by insurance

companies is not a problem affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20C.

PERCENT STANDARD ERROR

National 23% 0.90

QINSREJ2 Percentage of physicians who said rejection of care decisions by insurance companies is a minor problem

Description: Percentage of physicians who said rejection of care decisions by insurance

companies is a minor problem affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20C.

PERCENT STANDARD ERROR

National 52% 0.90

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

QINSREJ3 Percentage of physicians who said rejection of care decisions by insurance companies is a major problem

Description: Percentage of physicians who said rejection of care decisions by insurance

companies is a major problem affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20C.

PERCENT STANDARD ERROR

National 25% 0.76

QNOSPEC1 Percentage of physicians who said lack of qualified specialists is not a problem

Description: Percentage of physicians who said lack of qualified specialists in area is not a

problem affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20D.

PERCENT STANDARD ERROR

National 52% 1.26

QNOSPEC2 Percentage of physicians who said lack of qualified specialists is a minor problem

Description: Percentage of physicians who said lack of qualified specialists in area is a minor

problem affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20D.

PERCENT STANDARD ERROR

National 38% 1.01

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

QNOREPT1 Percentage of physicians who said not getting timely reports from other physicians and facilities is not a problem

Description: Percentage of physicians who said not getting timely reports from other

physicians and facilities is not a problem affecting their ability to provide high

quality care.

Derived from: Questionnaire Section H, Question H20E.

PERCENT STANDARD ERROR

National 27% 0.85

QNOREPT2 Percentage of physicians who said not getting timely reports from other physicians and facilities is a minor problem

Description: Percentage of physicians who said not getting timely reports from other

physicians and facilities is a minor problem affecting their ability to provide high

quality care.

Derived from: Questionnaire Section H, Question H20E.

PERCENT STANDARD ERROR

National 61% 0.92

QLANG1 Percentage of physicians who said difficulties communicating with patients due to language or cultural barriers is not a problem

Description: Percentage of physicians who said difficulties communicating with patients due to

language or cultural barriers is not a problem affecting their ability to provide high

quality care.

Derived from: Questionnaire Section H, Question H20F.

PERCENT STANDARD ERROR

National 45% 0.99

DETAILED DESCRIPTIONS OF ESTIMATES (Positional Order of VARNAME)

QLANG2 Percentage of physicians who said difficulties communicating with patients due to language or cultural barriers is a minor problem

Description: Percentage of physicians who said difficulties communicating with patients due to

language or cultural barriers is a minor problem affecting their ability to provide

high quality care.

Derived from: Questionnaire Section H, Question H20F.

PERCENT STANDARD ERROR

National 51% 1.00

QERRHSP1 Percentage of physicians who said medical errors in hospitals is not a problem

Description: Percentage of physicians who said medical errors in hospitals is not a problem

affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20H.

PERCENT STANDARD ERROR

National 42% 0.89

QERRHSP2 Percentage of physicians who said medical errors in hospitals is a minor problem

Description: Percentage of physicians who said medical errors in hospitals is a minor problem

affecting their ability to provide high quality care.

Derived from: Questionnaire Section H, Question H20H.

PERCENT STANDARD ERROR

National 53% 0.84

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Appendix A

Site Selection for the Community Tracking Study

APPENDIX A

SITE SELECTION FOR THE COMMUNITY TRACKING STUDY

For the first three rounds of the CTS Physician Survey, the survey used a two-tiered sample design that made it possible to develop estimates at the national and community (site) levels.

- The first tier was a sample from 12 communities, in each of which a large number of physicians were surveyed. The sample in each of these "high-intensity" sites was large enough to support estimates in each site.
- The second tier was a sample from 48 communities, in each of which a smaller sample of physicians were surveyed. This sample of "low-intensity" sites allowed us to validate results from the high-intensity sites and permits findings to be generalized to the nation. The first and second tiers together were known as the *site sample*.

Interviews were administered to physicians in the 60 CTS sample sites and to an independent national sample of households, referred to as the "national supplement." To reduce the cost of the Round Four 2004-05 Physician Survey, the national supplement was eliminated. In addition, in Round Four the 12 "high intensity" sites were not oversampled as they had been previously. In addition, the sample allocation was adjusted to achieve approximately equal samples of primary care providers and specialists. Otherwise, the design of the 2004-05 sample was similar to prior rounds, retaining a nationally representative 60-site sample design.

The following paragraphs describe how the sites were selected using terminology (e.g., site sample) from the original sampling design. Although the sampling was changed in the Round Four as described above, the 60 sites in Round Four are the same as those used in the previous rounds of the survey.

1. SITE SAMPLE

As discussed in Chapter 1, the primary goal of the CTS is to track health system change and its effects on people at the local level. Therefore, we selected 60 communities (*sites*) to provide a representative profile of change across the U.S.; the sample drawn from those sites constitutes the *site sample*. The first step in designing the CTS site sample was to determine the appropriate sites to study. Three issues were central to the sample design: the definition of the sites, the number of sites, and the selection of the sites.

1.1. Definition of Sites

The sites encompass local health care markets. Although there are no set boundaries for these local markets, the intent was to define areas such that residents predominately used health care providers in their area and providers served predominately area residents. The sites generally conform to the metropolitan statistical areas (MSAs) defined by the Office of Management and Budget and the nonmetropolitan portions of the economic areas defined by the Bureau of Economic Analysis (BEAEAs) at the beginning of the CTS. ¹⁸

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¹⁸For more details on the definition of CTS sites, refer to Metcalf et al. (1996).

1.2. Number of Sites

The next step in creating the site sample was to determine the number of high-intensity sites. The high-intensity sites have larger samples, and they are also the sites used for the case studies described in Chapter 1. In making this decision, we considered the tradeoffs between data collection costs (case studies plus survey costs) and the research benefits of a large sample of sites. The research benefits of a larger number of sites include a greater ability to empirically examine the relationship between health system change and its effect on care delivery and consumers and to make the study findings more "generalizable" to the nation. Despite the cost advantages of conducting intensive case studies in fewer sites, focusing on a smaller number of communities makes it more difficult to distinguish between changes of general importance and changes or characteristics unique to a community. Solving this problem by increasing the number of case study sites would make the cost of data collection and analysis prohibitively high.

We chose 12 sites for intensive study and added 48 sites for less-intensive study. Physicians from these 60 high-intensity and low-intensity sites form the *site sample*. Although there was no formal scientific basis for choosing 12 high-intensity sites, this number reflects a balance between the benefits of studying a range of different communities and the costs of doing so. The addition of 48 low-intensity sites solves the problem of limited generalizability associated with only 12 sites and provides a benchmark for interpreting how representative the high-intensity sites are.

1.3. Site Selection

Once the number of sites for the site sample had been determined, we selected the actual sites, shown previously in Table 1.1. Sites were sampled by stratifying them geographically by region and selecting them randomly, with probability in proportion to their 1992 population. There were separate strata for large MSAs (population of more than 200,000), small MSAs (population of less than 200,000), and nonmetropolitan areas. The 12 high-intensity sites were selected randomly from the large MSAs. Among the 48 low-intensity sites, 36 are large MSAs, 3 are small MSAs, and 9 are nonmetropolitan sites. The *Community Tracking Study Site-County Crosswalk* identifies the specific counties, by FIPS codes, that make up each CTS site. This sampling approach provided maximum geographic diversity, judged critical for the 12 high-intensity sites in particular, and acceptable natural variation in city size and degree of market consolidation. ¹⁹

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¹⁹Additional information about the number of sites and the random selection of the site sample is available in Metcalf et al. (1996).