**Community Tracking Study** 

Physician Survey Summary File: User's Guide and Codebook

(Round Two, 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, physicians, and employers. 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 Round Two Physician Survey Summary File.

Data collection for the Round Two Physician Survey began in the summer of 1998 and was completed by the fall of 1999. An earlier version of the survey, Round One, was conducted in 1996 and 1997. Each survey was designed to allow separate cross-sectional estimates. Researchers can use each round of the CTS Physician Survey for separate cross-sectional analyses or use both rounds to study changes in the health care system over time.

Data from the CTS Round Two 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* and the *Restricted Use* files. 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 Round Two Physician Survey. For each of the selected attributes from the Round Two 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, which are physician-level microdata files:

- Community Tracking Study Physician Survey Public Use File: User's Guide (Round Two), HSC Technical Publication Number 25.
- Community Tracking Study Physician Survey Public Use File: Codebook (Round Two), HSC Technical Publication Number 26.
- Community Tracking Study Physician Survey Restricted Use File: User's Guide (Round Two), HSC Technical Publication Number 27.
- Community Tracking Study Physician Survey Restricted Use File: Codebook (Round Two), HSC Technical Publication Number 28.

These documents summarize the Community Tracking Study, the selection of the study sites, survey content and operation, and the correct use of the survey weights. The user's guides provide detailed descriptions of how to use the physician-level microdata and how to develop standard errors for survey-based estimates calculated from the microdata. The codebooks contain descriptions and unweighted frequencies of responses for each data element. These documents can be obtained either through the HSC web site (www.hschange.org) or directly from the ICPSR web site (www.icpsr.umich.edu).

#### OBTAINING TECHNICAL ASSISTANCE

Information on the CTS Physician Survey, and the CTS in general, may be obtained through the HSC internet home page at <u>http://www.hschange.org</u>. The Summary File and the latest documentation are available through the Inter-university Consortium for Political and Social Research at <u>http://www.icpsr.umich.edu</u>.

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).

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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) Round Two Physician Survey Summary File. The CTS is a national study of the rapidly changing health care market and the effects of these changes on people.<sup>1</sup> 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 <u>ctshelp@hschange.org</u> or fax (202-863-1763).

## **1.1. CTS OBJECTIVES**

The CTS is designed to provide 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. Underway since 1996, the CTS is a longitudinal project that relies on periodic site visits and surveys of households, physicians and employers. 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 stratified by region, community size and type (metropolitan-nonmetropolitan) to provide a representative profile of change across the United States.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>An overview of the Community Tracking Study is contained in Kemper, et al. (1996).

<sup>&</sup>lt;sup>2</sup>The CTS covers the contiguous 48 states. Alaska and Hawaii were not part of the study.

Of these communities, 12 are studied in depth, with site visits and survey samples large enough to draw conclusions about change in each community. These communities are a randomly selected subset of the sites that are metropolitan areas with more than 200,000 people and are referred to as the high-intensity sites.

### **1.2. ANALYTIC COMPONENTS OF THE COMMUNITY TRACKING STUDY**

The CTS has qualitative and quantitative components. Case studies in the 12 high-intensity sites make up the qualitative component of the CTS, and surveys of households, physicians, and employers are the quantitative component. The first three rounds of comprehensive case studies of the health systems in the 12 communities are completed. The first round was conducted in 1996 and 1997, the second in 1998 and 1999, and the third in 2000 and 2001. The findings are available from HSC.<sup>3</sup> This information is complemented by survey data from these 12 communities and from 48 additional sites, listed in Table 1.1. In all 60 sites, HSC simultaneously conducted independent surveys of households and physicians, enabling researchers to study health insurance coverage, access to care, and physician practice patterns, among other issues. Another component of the CTS is the Followback Survey, in which the privately financed health insurance policies covering Household Survey respondents are "followed back" to the organization that administers the policy. The purpose of the Followback Survey is to obtain more detailed and accurate information about those private policies than Household Survey respondents could provide. A CTS survey of employers sponsored by the Robert Wood Johnson Foundation was conducted by RAND in 1996 and 1997.<sup>4</sup>

Data are being collected on a two-year cycle, allowing researchers to track changes in the health care system over time. The Round One Household and Physician surveys and case studies completed during 1996 and 1997 and the Followback Survey completed in 1997 and 1998 are the baseline. Data collection for the Round Two Household and Physician surveys began in 1998 and was completed in 1999. Round Two Followback Survey data collection was conducted during 1999 and 2000.

<sup>&</sup>lt;sup>3</sup>Community reports from each round are available through the HSC web site at www.hschange.org.

<sup>&</sup>lt;sup>4</sup>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.

# 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	
Metro areas >200,000 population 01-Boston (MA) 02-Cleveland (OH) 03-Greenville (SC) 04-Indianapolis (IN) 05-Lansing (MI) 06-Little Rock (AR) 07-Miami (FL) 08-Newark (NJ) 09-Orange County (CA) 10-Phoenix (AZ) 11-Seattle (WA) 12-Syracuse (NY)	Metro areas >200,000 population 13-Atlanta (GA) 14-Augusta (GA/SC) 15-Baltimore (MD) 16-Bridgeport (CT) 17-Chicago (IL) 18-Columbus (OH) 19-Denver (CO) 20-Detroit (MI) 21-Greensboro (NC) 22-Houston (TX) 23-Huntington (WV/KY/OH) 24-Killeen (TX) 25-Knoxville (TN) 26-Las Vegas (NV/AZ) 27-Los Angeles (CA) 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)	Metro areas <200,000 population 49-Dothan (AL) 50-Terre Haute (IN) 51-Wilmington (NC) Nonmetropolitan Areas 52-West Central Alabama 53-Central Arkansas 54-Northern Georgia 55-Northeastern Illinois 56-Northeastern Indiana 57-Eastern Maine 58-Eastern North Carolina 59-No rthern Utah 60-Northwestern Washington	
	40-washington (DC/MD) 47-West Palm Beach (FL) 48-Worcester (MA)		

Note: The numbers listed above are site identifiers and are provided in the data file as the variable SITEID.

# **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 Round One instrument, including cognitive testing. Social and Scientific Systems, Inc. (SSS) was instrumental in converting the raw survey data into a data file suitable for analysis. MPR and SSS collaborated to prepare the documentation for the Summary File.

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. For primary care physicians (PCPs), the instrument also contained vignettes that provided clinical presentations for which there is no prescribed method of treatment. Except for minor changes (discussed below), the same survey instrument was used in Round One and Round Two of the Physician Survey.

The survey was administered completely by telephone, using computer-assisted telephone interviewing technology. Bilingual interviewers were used in the few cases where needed. Interviews with 12,280 physicians were completed between August 1998 and November 1999.

The sample frame was developed by combining lists of physicians from the American Medical Association (AMA) and the American Osteopathic Association (AOA). About 75% of the Round One respondents were randomly selected for the Round Two survey, and a high percentage of those selected agreed to participate in the second round. There were 7,092 physicians who participated in both rounds of the survey.

# **1.4. PHYSICIAN SURVEY DATA FILES**

Three versions of the CTS Physician Survey data are available to researchers: the Restricted Use File, the Public Use File, and the Summary File. Both the Restricted Use and Public Use files are microdata, with separate data records for each physician who responded to the survey. The Summary File contains summary estimates for the CTS sites and the nation as a whole.

The *Restricted Use File* contains most of the data collected during the CTS Physician Survey. Other than deleting individual identifiers such as name and address, minimal data confidentiality masking was performed on the data.<sup>5</sup> Since some of the data on the Restricted Use File could compromise the confidentiality of survey respondents, the Restricted Use File may be used only under the conditions listed in the *Community Tracking Study Physician Survey Restricted Data* 

<sup>&</sup>lt;sup>5</sup>The data file also contains some information from the AMA and AOA sampling frames. This information is limited to gender, birth year, whether the physician graduated from a foreign medical school, and whether the respondent is a primary care physician based on the frame information.

*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 ICPSR web site at <u>www.icpsr.umich.edu</u>. The Restricted Use File is provided to researchers for use on only a specific research project (new applications would be required for subsequent analyses) 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.

The *Public Use File* is available from ICPSR with minimal restrictions. Researchers need not specifically apply for use of the Public Use File. It is suitable for most researchers who wish to perform analysis at the national level and do not anticipate using the site-level information in their analysis. The Public Use File 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. Moreover, information necessary for using statistical software programs that account for the survey design is not included in the Public Use File, necessitating the use of standard error look-up tables or formulas to derive approximate standard errors. In spite of these differences, most researchers will find the Public Use File to be a valuable analytic tool. Separate documentation on the Public Use File is available from ICPSR at www.icpsr.umich.edu.

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. A comparison of the contents of this Summary File with the contents of the Public Use and Restricted Use files is provided in Appendix A.

## CHAPTER 2

### THE STRUCTURE AND CONTENT OF THE COMMUNITY TRACKING STUDY PHYSICIAN SURVEY

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

- The first tier is a sample of 12 communities from which a large number of physicians in each community were surveyed. The sample in each of these "high-intensity" sites is large enough to support estimates in each site.
- The second tier is a sample of 48 communities from which a smaller sample of physicians in each community was surveyed. This sample of "low-intensity" sites allows us to validate results from the high-intensity sites and permits findings to be generalized to the nation. The first and second tiers together are known as the *site sample*.
- The third tier is a smaller, independent national sample. Known as the *supplemental sample*, this sample augments the site sample and substantially increases the precision of national estimates with a relatively modest increase in the total sample size.

This chapter describes the sample design, the process of conducting the survey, the survey content, and survey administration and processing for the Physician Survey. *The background information on sample design (Sections 2.1 and 2.2) is provided for those who are interested; however, it is not necessary to read these sections in order to use the Summary File.* 

# 2.1. CTS SAMPLE SITES

The primary goal of the CTS is to track health system change and its effects on people, accounting for characteristics of local markets. The first step in designing the CTS sample, therefore, was to determine the appropriate communities, or 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.

#### **2.1.1. 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. We generally defined sites as metropolitan statistical areas (MSAs) as defined by the Office of Management and Budget or the nonmetropolitan portions of economic areas as defined by the Bureau of Economic Analysis (BEAEAs).<sup>6</sup>

<sup>&</sup>lt;sup>6</sup>For more details on the definition of CTS sites, refer to Metcalf, et al. (1996).

### 2.1.2. Number of Sites

The next step in creating the site sample was to determine the number of high-intensity sites. 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 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. 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.

## 2.1.3. 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, the 60 sites, or "primary sampling units," were chosen for the first stage of sampling. 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 small MSAs (population of less than 200,000) and for nonmetropolitan areas.

The high-intensity sites were selected randomly from MSAs with a 1992 population of 200,000 or more. Of the low-intensity sites, 36 are large metropolitan areas (also having a 1992 population of 200,000 or more), 3 are small metropolitan areas (population of less than 200,000), and 9 are nonmetropolitan sites. The *Community Tracking Study Site-County Crosswalk* (HSC Technical Publication No. 31) identifies the specific counties, by FIPS code, 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.<sup>7</sup>

Together, the high-intensity and low-intensity sites account for about 90 percent of all Round Two survey respondents and can be used to make national estimates. The sample of highintensity sites may also be used to make site-specific estimates for these twelve sites. However, the small sample size for each low-intensity site means that site-specific estimates for these sites will not be precise enough to support separate site analyses.

<sup>&</sup>lt;sup>7</sup>Additional information about the number of sites and the random selection of the site sample is available in Metcalf et al. (1996).

## 2.2. ADDITIONAL SAMPLES AND BETTER NATIONAL ESTIMATES

Although the site sample alone will yield national estimates, the estimates will not be as precise as they could have been if more communities had been sampled or had the sample been a simple random sample of the entire U.S. population. The *supplemental sample*, the third tier in the design of the CTS Physician Survey sample, was added to increase the precision of national estimates at a relatively small incremental increase in survey costs.

The supplemental sample is a relatively small, nationally representative sample made up of physicians randomly selected from the 48 states in the continental United States. It is stratified by region but essentially uses simple random sampling techniques within strata. When it is added to the site sample to produce national estimates, the resulting sample is called the *combined sample*.

In addition to making national estimates from the site sample more precise, the supplemental sample also slightly enhances site-specific estimates derived from the site sample. Because approximately half of U.S. physicians are located in the 60 site-sample communities, approximately half of the supplemental sample also falls within these communities. Therefore, when making site-specific estimates, we can augment observations from the individual site samples with observations from the supplemental sample. These are known as the *augmented site samples*.

Figure 2.1 illustrates the sample design. The shaded area shows the cases sampled in site 2 as part of the site sample and the supplemental sample cases that happened to fall within the site 2 boundaries.

# FIGURE 2.1

# THE CTS PHYSICIAN SAMPLE STRUCTURE

Site Sample (11,216 physicians)	Supplemental Sample (1,088 physicians)
High-Intensity Sites Site 1	High-Intensity Sites Site 1
Site 2	Site 2
Site 3	Site 3
· ·	
· ·	
Site 12	Site 12
Low-Intensity Sites Site 13 Site 14 Site 15	Low-Intensity Sites Site 13 Site 14 Site 15
	Other areas

## **2.3. CONDUCTING THE SURVEY**

After selecting the sample sites, we randomly selected physicians within each site. In the Round One Physician Survey, the AMA and the AOA constructed the sample frames and they drew the samples based on specifications provided to them. We also randomly selected physicians in this manner for the supplemental sample. In the Round Two Physician Survey, we obtained sample frames from the AMA and the AOA but selected the sample ourselves.

In the Round Two Physician Survey, the sample design involved randomly selecting both physicians who were part of the Round One Survey and physicians who were not. This was true for both the site sample and the supplemental sample. Our goals in sampling the Round One physicians in Round Two were to improve precision for estimates of overall change between the two rounds and to reduce costs. Furthermore, by sampling Round One physicians for Round Two, we were able to create a panel, allowing us to track changes for individual physicians between the two rounds. Our goal in also including physicians who were not part of the Round One sample was to account for the fact that the re-interviewed Round One physicians for Round Two, about 58 percent also participated in the Round One survey.

## 2.3.1. Eligible Physicians

As the source for our sampling frame, we obtained the April 1998 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,<sup>8</sup> be practicing in the contiguous United States, and be providing direct patient care for at least 20 hours per week.<sup>9</sup> 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 care<sup>10</sup>
- Federal employees
- Graduates of foreign medical schools who are only temporarily licensed to practice in the United States

<sup>&</sup>lt;sup>8</sup> Residents, interns, and fellows were considered to be still in training.

<sup>&</sup>lt;sup>9</sup>This criteria resulted in the exclusion of inactive physicians and physicians who were not office- or hospital-based (teachers, administrators, researchers, etc.).

<sup>&</sup>lt;sup>10</sup>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.

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.

# 2.3.2. 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.

After combining the AMA and AOA lists, we developed two sampling frames: one for the site sample and one for the supplemental sample. The physician's location for sampling purposes was determined by the AMA/AOA preferred mailing address. For the site sample, 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 Round One disposition, and based upon an optimal sample-allocation plan. The plan resulted in 8 strata in each site.<sup>11</sup> PCPs were oversampled in the site sample.

For the supplemental sample, the sample frame was first divided into the following 10 geographic strata:

- 1. New England (CT, ME, MA, NH, RI, VT)
- 2. New York
- 3. Middle-South Atlantic (DE, NJ, PA, WV)
- 4. South Atlantic (DC, GA, MD, NC, SC, VA)
- 5. East South Central (AL, FL, KY, MS, TN)
- 6. West South Central (AR, LA, MO, OK, TX)
- 7. East North Central (IN, MI, OH)
- 8. North Central (IL, IA, MN, WI)
- 9. Mountain-Pacific (AZ, CO, ID, KS, MT, NE, NV, NM, ND, SD, OR, UT, WY, WA)
- 10. California

We selected a stratified random sample of physicians, independent of the site sample, where eight strata were defined within each of the 10 geographical strata, as defined above for the site sample. A probability sample was drawn within each of these strata.

#### 2.3.3. 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,

<sup>&</sup>lt;sup>11</sup> The eight strata were defined by two categories for physician type (PCP and specialist) and four categories for Round One disposition (not in Round One sample frame; in Round One sample frame but not sampled for Round One; sampled for Round One but did not complete Round One interview; and completed Round One interview).

practiced in an excluded specialty, was a federal employee, or was deceased. These ineligible physicians are not included on the file.

# **2.4. SURVEY CONTENT**

Respondents to the survey were questioned about the following:

- Physician supply and specialty distribution
- Physician time allocation
- Practice arrangements and ownership
- "Gatekeeping"/medical care management strategies/scope of care
- Practice styles (PCPs only)
- Ability to provide care/ability to obtain needed services for patients/acceptance of new patients with various types of insurance
- Practice revenue
- Physician compensation
- Race/ethnicity

No proxy respondents were allowed for the Physician Survey. All physicians responded to the interview for themselves. 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 in the documentation for the Physician Survey microdata files.<sup>12</sup>

# 2.4.1. Differences Between Round One and Round Two Survey Content

The survey instruments used in Round One and Round Two were similar, but not identical. The differences include:

- The Round One question on the percentage of time spent in physician's main practice was dropped from the survey for Round Two.
- Information on the physician's race and ethnicity were collected in Round Two. This information was not collected in Round One.
- The Round Two instrument included questions on whether a group practice was single- or multi-specialty, and if it was multi-specialty, whether it included both primary care physicians and specialists. That information was not collected for Round One.

<sup>&</sup>lt;sup>12</sup> See Appendix A of either of the following user's guides: *Community Tracking Study Physician Survey Public Use File: User's Guide* and *Community Tracking Study Physician Survey Restricted Use File: User's Guide*.

Other Round Two changes were made for survey administration purposes.

Note that not all new survey items in Round Two are represented in the Round Two Summary File. See Chapter 3 for a discussion of why some items were excluded.

## 2.5. 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 August 1998 and November 1999. For PCPs, the average interview length was 21 minutes; for non-PCPs, the average length was 17 minutes.

The total number of completed interviews was 12,280, with a response rate among eligibles of 60.9 percent. Physicians were sent advance letters from the Robert Wood Johnson Foundation and were offered a \$25 honorarium for participating in the survey, with the option of forwarding the honorarium to a charity.

# TABLE 2.1

# CONTENTS OF THE PHYSICIAN SURVEY

Topic	Description			
Physician Supply and Specialty Distribution (Questionnaire Section A)				
Eligibility for survey	Federal employee Less than 20 hours/week Excluded specialty			
Practice information	Number of practices Location of primary practice Year began medical practice			
Specialty and certification	Primary specialty Board eligibility and certification			
Satisfaction	Current level of satisfaction with overall career in medicine			
Phys	ician Time Allocation (Questionnaire Section B)			
In 1997, weeks worked	Number of weeks practiced medicine in 1997			
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			
Charity care in the last month	Hours spent in charity care in the last month			
Practice Arrangements and Ownership (Questionnaire Section C)				
Ownership of practice	Respondent ownership Other owners Whether physician was part of a practice that was purchased during the past two years			
Practice description	Type of practice Number of physicians employed Number of non-physician medical practitioners employed			

Not all items in the Physician Survey are represented on the Summary File. See Chapter 3 for a discussion of why some items were excluded.

# TABLE 2.1

### CONTENTS OF THE PHYSICIAN SURVEY (Continued)

Gatekeeping / Medical Care Management Strategies / Scope of Care (Questionnaire Section D)			
Medical care management	Effect of various techniques on practice of medicine		
PCPs	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 Appropriateness Change in number of referrals made		
Non-PCPs	Changes in complexity or severity of patients' conditions at time of referral Appropriateness Change in number of referrals received		
Practice Styles of Primary Care Physicians (Questionnaire Section E)			
PCPs	Clinical descriptions of patient histories for which physician is asked to state the percentage for whom s/he would recommend the course of action specified in the vignette.		
Ability to Provide Care / Ability to Obtain Needed Services for Patients / Acceptance of New Patients with Various Types of Insurance (Questionnaire Section F)			
Level of agreement with statements regarding:	Having adequate time with patients Freedom to make clinical decisions Ability to provide high-quality care Level of communications with specialists/primary care physicians Ability to maintain continuing relationships with patients Ability to obtain a variety of specified services for patients Acceptance of new patients insured by Medicare, Medicaid, private insurance		

Not all items in the Physician Survey are represented on the Summary File. See Chapter 3 for a discussion of why some items were excluded.

### TABLE 2.1

### CONTENTS OF THE PHYSICIAN SURVEY (Continued)

Topic	Description				
1	Practice Revenue (Questionnaire Section G)				
Percentage of practice revenue from:	Medicare Medicaid Managed care, paid on a capitated or other prepaid basis Largest managed care contract Largest contract that is capitated or prepaid				
Number of managed care contracts	Number of managed care contracts				
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				
1997 income	Percentage of 1997 income earned in the form of bonuses, returned withholds, or other incentive payments Amount of income in 1997				
Race/ethnicity	Hispanic origin Race				

Not all items in the Physician Survey are represented on the Summary File. See Chapter 3 for a discussion of why some items were excluded.

#### **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 Round Two 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.<sup>13</sup> 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

Because the selection process for the content of the Round Two Summary File was closely related to the selection process for the Round One file, the discussion below concerns both rounds. Note that, except for the addition of information on race, the basic content of the Round Two file is the same as the Round One file, reflecting the fact that the questions and methods for the Physician Survey were very similar for the two rounds.

#### 3.1.1 Content of the Round One Summary File

In developing the Round One Summary File, we included summary measures for as many of the items in the Round One 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

<sup>&</sup>lt;sup>13</sup> 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.

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 CARSAT from the microdata files identifies each individual physician as being very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied, or neither satisfied nor dissatisfied with his/her overall career in medicine. On the Summary File, that variable is represented as estimates of the percentage of physicians who are very dissatisfied or somewhat dissatisfied with their overall career in medicine (in each site and for the nation).

There are two types of exceptions to the general approach described above, and both occur infrequently. The first exception is the few cases in which the summary measure, although representing the same information as a variable on the microdata files, is not technically a mean or percentage for that variable.<sup>14</sup> The second exception 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.<sup>15</sup>

Some summary estimates were excluded from the Round One Summary File because of concerns about their precision.<sup>16</sup> 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,<sup>17</sup> and
- the relative standard error was less than 0.30.<sup>18</sup>

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 15 or more sites, then all summary estimates for that variable were excluded from the Summary File.

<sup>16</sup>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.

<sup>&</sup>lt;sup>14</sup> Refer to Table A.1 in Appendix A to see how the Summary File measures labelled AGE, YRSGRAD, and YRSPRAC relate to the variables in the microdata files.

<sup>&</sup>lt;sup>15</sup> For example, refer to Table A.1 in Appendix A to see that the variable SPECX in the microdata files is represented by multiple types of estimates in the Summary File (labelled SPECX1, SPECX2, SPECX3, SPECX4, and SPECX5).

<sup>&</sup>lt;sup>17</sup> In other words, there were observations for at least 50 physicians in the site over which the percentage or average was calculated.

<sup>&</sup>lt;sup>18</sup>The "relative standard error" is the standard error of an estimate divided by the estimate itself.

## 3.1.2 Content of the Round Two Summary File

In developing the Round Two Summary File, we calculated summary estimates for the same microdata variables that were included in the Round One Summary File. For each estimate, we then applied the same two statistical criteria as for the Round One file and replaced the estimate with a missing value if either criterion was not met. Because none of the variables had missing estimates for more than 15 sites, all microdata variables represented on the Round One file are also included in the Round Two file.

In addition, the Round Two Summary File contains a summary measure for race (percentage of physicians who are white), based on a survey question that was new in Round Two. Although the microdata variable for race has multiple response categories (White, African-American, Native American or Alaskan Native, and Asian or Pacific Islander), the Summary File contains only estimates for percentages of physicians who were white. The reason that the other race categories could not be represented separately on the Summary File is that there were too many sites for which the estimates had large relative standard errors.

Two other survey items that were new in Round Two could not be included on the Summary File. Measures for percentage of physicians of Hispanic origin (corresponding to the microdata variable HISP) could not be included because of high relative standard errors in many sites. Similarly, estimates for the types of group practices in which physician work (corresponding to the microdata variable GRTYPE) could not be included because of small sample sizes for that survey question in many sites.

Appendix A identifies which variables from the Physician Survey microdata files (the Restricted Use and Public Use files) are represented in the Round Two 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 64 variables within each site and for the nation as a whole. The augmented site sample (site sample plus physicians from the supplemental sample that practiced within the site boundaries) was used to calculate the site-level statistics. The combined sample (site sample plus the supplemental sample) was used to calculate national-level statistics. SUDAAN statistical software was used to derive the estimates.<sup>19</sup> Appendix B provides unweighted counts of the number of responding physicians for each site. The number of physicians providing information for individual questions will vary due to skip patterns in the questionnaire and physician inability or refusal to respond to a

<sup>&</sup>lt;sup>19</sup>Refer to Appendix D of *Community Tracking Study Physician Survey Restricted Use File: User's Guide (Round Two)*, for a description of the use of SUDAAN with the CTS Round Two Physician Survey microdata.

question. Refer to the microdata codebooks for information about the number of physicians responding to specific questions.  $^{20}$ 

# 3.3 NATIONAL ESTIMATES AND THE CTS PHYSICIAN SUMMARY FILE

Because the appropriate weights are not provided, researchers should not use the 60 site-level estimates to calculate national estimates. In addition, researchers should have no need to do this, since correct national estimates are provided on the Summary File for each variable represented.

<sup>&</sup>lt;sup>20</sup> Community Tracking Study Physician Survey Restricted Use File: Codebook (Round Two), HSC Technical Publication No. 26, and Community Tracking Study Physician Survey Restricted Use File: Codebook (Round Two), HSC Technical Publication No. 28.

#### **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 Round Two of the CTS Physician Survey, which was conducted between the August 1998 and November 1999. 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 15.5 percent of Boston physicians are foreign medical school graduates and that the standard error for that estimate is 2.1 percentage points. With 64 types of summary estimates (indicated by different values of VARNAME) and 61 geographic areas (60 CTS sites and the nation), there are 3,904 records on the file.

#### 4.1.1 File Format

			Position	
Variable Name	Description	Туре	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	44
SEMEAN	Standard error of MEAN	Numeric	46	57

The CTSR2PS1.TXT file is distributed in ASCII format. Each record has the following format:

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

Record	VARNAME	SITEID	SITENAME	MEAN	SEMEAN
1	IMGUSPR	1	Boston	15.5004	2.121424
2	IMGUSPR	2	Cleveland	32.3673	3.099563
3	IMGUSPR	3	Greenville	7.4428	1.039289
•			•	•	•
61	IMGUSPR	61	United States	21.1651	1.536435
62	GENDER	1	Boston	69.5081	2.621642
63	GENDER	2	Cleveland	72.2692	2.748748
64	GENDER	3	Greenville	86.7907	1.754534
122	GENDER	61	United States	79.0595	0.497706
		-			
62 63 64	GENDER GENDER GENDER GENDER	1 2 3 61	Boston Cleveland Greenville United States	69.5081 72.2692 86.7907	2.621642 2.748748 1.754534 0.497706

#### THE STRUCTURE OF THE CTS PHYSICIAN SUMMARY FILE

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 IMGUSPR indicates whether a physician is a foreign medical graduate. On the Summary File, the value of MEAN in records 1 through 61 (for which VARNAME = IMGUSPR) represents the percentage of foreign medical graduates in each CTS site and the nation. Thus, Figure 4.1 shows that roughly 15.5 percent of practicing physicians in Boston are foreign medical graduates, and about 32.4 percent of practicing physicians in Cleveland are foreign medical graduates. The value of SEMEAN = 2.121424 in the first record is the standard error associated with Boston's estimated proportion of foreign medical graduates (MEAN=15.5004).

### 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 = WKSWRKC notes that the survey question was not asked to physicians who started practicing medicine in 1997 or later. Therefore, the estimate on the Summary File is based on responses provided by only those physicians practicing prior to 1997.

Table 4.3 also provides information on the source question(s) from the survey, the questionnaire section, and the question number.<sup>21</sup> The summary estimates and their standard errors for the nation and for the twelve high-intensity sites are displayed.<sup>22</sup> Values for the remaining CTS sites are available on the data file itself.

<sup>&</sup>lt;sup>21</sup>Copies of the survey questionnaire are included in *Community Tracking Study Physician Survey Public Use File: User's Guide (Round Two)*, Technical Publication No. 25. Washington, DC: Center for Studying Health System Change, July 2001, and *Community Tracking Study Physician Survey Restricted Use File: User's Guide (Round Two)*, Technical Publication No. 27. Washington, DC: Center for Studying Health System Change, July 2001. <sup>22</sup> 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 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.

## ESTIMATES ON THE CTS ROUND TWO PHYSICIAN SUMMARY FILE (Positional Order of VARNAME)

Value of VARNAME	Description of Summary File Estimate	Page			
	Survey Administration Variables				
IMGUSPR	Percentage of physicians who are foreign medical graduates	4-10			
GENDER	Percentage of physicians who are males	4-10			
AGE	Average age of physicians	4-11			
YRSGRAD	Average number of years since graduation from medical school	4-11			
	Questionnaire Section A: Introduction				
YRSPRAC	Average number of years in practice	4-12			
SPECX1	Percentage of physicians who are internists	4-13			
SPECX2	Percentage of physicians who are family or general practitioners	4-14			
SPECX3	Percentage of physicians who are pediatricians	4-15			
SPECX4	Percentage of physicians who are medical specialists	4-16			
SPECX5	Percentage of physicians who are surgical specialists	4-17			
PCPFLAG	Percentage of physicians who are primary care physicians	4-18			
BDCERT	Percentage of physicians who are board certified in any specialty or subspecialty	4-18			
CARSAT	Percentage of physicians who are either very or somewhat dissatisfied with their overall career in medicine	4-19			
	Questionnaire Section B: Utilization of Time				
WKSWRKC	Average weeks practiced medicine in 1997	4-19			
HRSMED	Average hours during the previous week spent in medically-related activities	4-20			
HRSPAT	Average hours during the previous week spent in direct patient care	4-20			
HRFREE	Average hours during the previous month spent providing charity care	4-21			
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	4-21			
PRCTYPE1	Percentage of physicians who work in solo or two-physician practices	4-22			
PRCTYPE2	Percentage of physicians who work in group practices with three or more physicians	4-23			
NPHYS	Average number of physicians in each practice	4-24			
	Questionnaire Section D: Medical Care Management				
EFDATA	Percentage of physicians indicating that the use of computers to obtain or record clinical data had either no or a very small effect on their practice of medicine	4-25			
EFTREAT	Percentage of physicians indicating that the use of computer to obtain information about treatment alternatives or recommended guidelines had either no or a very small effect on their practice of medicine	4-26			
EFRMNDR	Percentage of physicians indicating that reminders about specific preventative services had either no or a very small effect on their practice of medicine	4-27			
EFGUIDE	Percentage of physicians indicating that the use of written guidelines had either no or a very small effect on their practice of medicine	4-28			
EFPROFL	Percentage of physicians indicating that the results of practice profiles had either no or a very small effect on their practice of medicine	4-28			

#### ESTIMATES ON THE CTS ROUND TWO PHYSICIAN SUMMARY FILE (Positional Order of VARNAME)

Value of VARNAME	Description of Summary File Estimate	Page
EFSURV	Percentage of physicians indicating that patient satisfaction surveys had either no or a very small effect on their practice of medicine	4-29
CMPPROV	Percentage of primary care physicians indicating increased complexity or severity of patient's conditions for which they provided care without referral in the last two years	4-29
CMPEXPC	Percentage of physicians indicating that the complexity or severity of patient's conditions for which they provide care without referral to specialists is either somewhat or much greater than it should be	4-30
SPECUSE	Percentage of physicians indicating that referrals to specialists increased either a little or a lot over the last two years	4-30
PCTGATE	Average percentage of patients in their practice for whom the physician serves as a gatekeeper	4-31
	Questionnaire Section F – Physician/Patient Interactions	
ADQTIME	Percentage of physicians who either somewhat or strongly agree that they have adequate time to spend with their patients during typical office visits	4-31
CLNFREE	Percentage of physicians who either somewhat or strongly agree that they have the freedom to make clinical decisions that meet their patient's needs	4-32
HIGHCAR	Percentage of physicians who either somewhat or strongly agree that it is possible to provide high quality care to all of their patients	4-32
NEGINCN	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	4-33
USESPCS	Percentage of primary care physicians who either somewhat or strongly agree that the level of communication they have with specialists about the patients they refer is sufficient to ensure high quality of care	4-33
COMMALL	Percentage of physicians who either somewhat or strongly agree that the level of communication they have with specialists (or primary care physicians) about the patients they refer (or who have been referred to them) is sufficient to ensure high quality of care	4-34
PATREL	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	4-35
OBREFS	Percentage of physicians who are either always or almost always able to obtain referrals to specialists when they think it is medically necessary	4-36
OBANCL	Percentage of physicians who are either always or almost always able to obtain ancillary services for their patients when medically necessary	4-37
OBHOSP	Percentage of physicians who are either always or almost always able to obtain non-emergency hospital admissions when they think it is medically necessary	4-38
OBINPAT	Percentage of physicians who are either always or almost always able to obtain an adequate number of inpatient days for their hospitalized patients when they think it is medically necessary	4-39
OBIMAG	Percentage of physicians who are either always or almost always able to obtain diagnostic imaging services for their patients when they think it is medically necessary	4-40

#### ESTIMATES ON THE CTS ROUND TWO PHYSICIAN SUMMARY FILE (Positional Order of VARNAME)

Value of VARNAME	Description of Summary File Estimate	Page		
OBMENTL	Percentage of primary care physicians who are either always or almost always able to obtain inpatient mental care for their patients when they think it is medically necessary	4-41		
OBOUTPT	Percentage of physicians who are either always or almost always able to obtain outpatient mental care for their patients when they think it is medically necessary	4-42		
NWMCARE	Percentage of physicians whose practice is accepting either some or no new Medicare patients	4-43		
NWMCAID	Percentage of physicians whose practice is accepting either some or no new Medicaid patients	4-44		
NWPRIV	Percentage of physicians whose practice is accepting either some or no new privately insured patients	4-45		
Questionnaire Section G: Practice Revenue				
PMCARE	Average percentage of patient care practice revenue from Medicare	4-46		
PMCAID	Average percentage of patient care practice revenue from Medicaid	4-46		
PCAPREV	Average percentage of patient care practice revenue paid on a capitated or other prepaid basis	4-47		
NMCCON	Percentage of physicians in practices who have more than 15 managed care contracts	4-47		
РМС	Average percentage of patient care revenue from managed care	4-48		
CAPAMTC1	Percentage of physicians who indicated that none of the patient care revenue from the largest managed care contract is paid on a capitated or prepaid basis	4-48		
CAPAMTC2	Percentage of physicians who indicated that all of the patient care revenue from the largest managed care contract is paid on a capitated or prepaid basis	4-49		
PBIGCON	Average percentage of patient care revenue from each practice's largest managed care contract	4-49		
Questionnaire Section H - Physician Compensation Methods & Income Level				
SALPAID	Percentage of physicians in the practice who are salaried	4-50		
SPROD	Percentage of physicians indicating that their compensation is affected by their own productivity	4-50		
SSAT	Percentage of physicians indicating that their compensation is affected by satisfaction surveys completed by their own patients	4-51		
SQUAL	Percentage of physicians indicating that their compensation is affected by specific measures of quality of care	4-51		
SPROF	Percentage of physicians indicating that their compensation is affected by practice profiling	4-52		
PCTINCC	Average percentage of a physician's 1997 practice income that was earned from bonuses, returned withdrawals, or other incentive payments	4-52		
INCOMEX	Average 1997 net income received from the practice of medicine	4-53		
RACEWH	Percentage of physicians who are white	4-53		

# ESTIMATES ON THE CTS ROUND TWO PHYSICIAN SUMMARY FILE (Alphabetical Order of VARNAME)

Value of VARNAME	Description of Summary File Estimates	Page
ADQTIME	Percentage of physicians who either somewhat or strongly agree that they have adequate time to spend with their patients during typical office visits	4-31
AGE	Average age of physicians	4-11
BDCERT	Percentage of physicians who are board certified in any specialty or subspecialty	4-18
CAPAMTC1	Percentage of physicians who indicated that none of the patient care revenue from the largest managed care contract is paid on a capitated or prepaid basis	4-48
CAPAMTC2	Percentage of physicians who indicated that all of the patient care revenue from the largest managed care contract is paid on a capitated or prepaid basis	4-49
CARSAT	Percentage of physicians who are either very or somewhat dissatisfied with their overall career in medicine	4-19
CLNFREE	Percentage of physicians who either somewhat or strongly agree that they have the freedom to make clinical decisions that meet their patient's needs	4-32
CMPEXPC	Percentage of physicians indicating that the complexity or severity of patient's conditions for which they provide care without referral to specialists is either somewhat or much greater than it should be	4-30
CMPPROV	Percentage of primary care physicians indicating increased complexity or severity of patient's conditions for which they provided care without referral in the last two years	4-29
COMMALL	Percentage of physicians who either somewhat or strongly agree that the level of communication they have with specialists (or primary care physicians) about the patients they refer (or who have been referred to them) is sufficient to ensure high quality of care	4-34
EFDATA	Percentage of physicians indicating that the use of computers to obtain or record clinical data had either no or a very small effect on their practice of medicine	4-25
EFGUIDE	Percentage of physicians indicating that the use of written guidelines had either no or a very small effect on their practice of medicine	4-28
EFPROFL	Percentage of physicians indicating that the results of practice profiles had either no or a very small effect on their practice of medicine	4-28
EFRMNDR	Percentage of physicians indicating that reminders about specific preventative services had either no or a very small effect on their practice of medicine	4-27
EFSURV	Percentage of physicians indicating that patient satisfaction surveys had either no or a very small effect on their practice of medicine	4-29
EFTREAT	Percentage of physicians indicating that the use of computer to obtain information about treatment alternatives or recommended guidelines had either no or a very small effect on their practice of medicine	4-26
GENDER	Percentage of physicians who are males	4-10
HIGHCAR	Percentage of physicians who either somewhat or strongly agree that it is possible to provide high quality care to all of their patients	4-32
HRFREE	Average hours during the previous month spent providing charity care	4-21
HRSMED	Average hours during the previous week spent in medically-related activities	4-20
HRSPAT	Average hours during the previous week spent in direct patient care	4-20
IMGUSPR	Percentage of physicians who are foreign medical graduates	4-10
INCOMEX	Average 1997 net income received from the practice of medicine	4-53

CTS Physician Survey Summary File

### ESTIMATES ON THE CTS ROUND TWO PHYSICIAN SUMMARY FILE (Alphabetical Order of VARNAME)

Value of VARNAME	Description of Summary File Estimates	Page
NEGINCN	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	4-33
NMCCON	Percentage of physicians in practices who have more than 15 managed care contracts	4-47
NPHYS	Average number of physicians in each practice	4-24
NWMCAID	Percentage of physicians whose practice is accepting either some or no new Medicaid patients	4-44
NWMCARE	Percentage of physicians whose practice is accepting either some or no new Medicare patients	4-43
NWPRIV	Percentage of physicians whose practice is accepting either some or no new privately insured patients	4-45
OBANCL	Percentage of physicians who are either always or almost always able to obtain ancillary services for their patients when medically necessary	4-37
OBHOSP	Percentage of physicians who are either always or almost always able to obtain non-emergency hospital admissions when they think it is medically necessary	4-38
OBIMAG	Percentage of physicians who are either always or almost always able to obtain diagnostic imaging services for their patients when they think it is medically necessary	4-40
OBINPAT	Percentage of physicians who are either always or almost always able to obtain an adequate number of inpatient days for their hospitalized patients when they think it is medically necessary	4-39
OBMENTL	Percentage of primary care physicians who are either always or almost always able to obtain inpatient mental care for their patients when they think it is medically necessary	4-41
OBOUTPT	Percentage of physicians who are either always or almost always able to obtain outpatient mental care for their patients when they think it is medically necessary	4-42
OBREFS	Percentage of physicians who are either always or almost always able to obtain referrals to specialists when they think it is medically necessary	4-36
OWNPR	Percentage of physicians who are not full- or part- owners of the practice in which they work	4-21
PATREL	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	4-35
PBIGCON	Average percentage of patient care revenue from each practice's largest managed care contract	4-49
PCAPREV	Average percentage of patient care practice revenue paid on a capitated or other prepaid basis	4-47
PCPFLAG	Percentage of physicians who are primary care physicians	4-18
PCTGATE	Average percentage of patients in their practice for whom the physician serves as a gatekeeper	4-31
PCTINCC	Average percentage of a physician's 1997 practice income that was earned from bonuses, returned withdrawals, or other incentive payments	4-52
PMC	Average percentage of patient care revenue from managed care	4-48
PMCAID	Average percentage of patient care practice revenue from Medicaid	4-46

CTS Physician Survey Summary File
# TABLE 4.2

# ESTIMATES ON THE CTS ROUND TWO PHYSICIAN SUMMARY FILE (Alphabetical Order of VARNAME)

Value of VARNAME	Description of Summary File Estimates	Page
PMCARE	Average percentage of patient care practice revenue from Medicare	4-46
PRCTYPE1	Percentage of physicians who work in solo or two-physician practices	4-22
PRCTYPE2	Percentage of physicians who work in group practices with three or more physicians	4-23
RACEWH	Percentage of physicians who are white	4-53
SALPAID	Percentage of physicians in the practice who are salaried	4-50
SPECUSE	Percentage of physicians indicating that referrals to specialists increased either a little or a lot over the last two years	4-30
SPECX1	Percentage of physicians who are internists	4-13
SPECX2	Percentage of physicians who are family or general practitioners	4-14
SPECX3	Percentage of physicians who are pediatricians	4-15
SPECX4	Percentage of physicians who are medical specialists	4-16
SPECX5	Percentage of physicians who are surgical specialists	4-17
SPROD	Percentage of physicians indicating that their compensation is affected by their own productivity	4-50
SPROF	Percentage of physicians indicating that their compensation is affected by practice profiling	4-52
SQUAL	Percentage of physicians indicating that their compensation is affected by specific measures of quality of care	4-51
SSAT	Percentage of physicians indicating that their compensation is affected by satisfaction surveys completed by their own patients	4-51
USESPCS	Percentage of primary care physicians who either somewhat or strongly agree that the level of communication they have with specialists about the patients they refer is sufficient to ensure high quality of care	4-33
WKSWRKC	Average weeks practiced medicine in 1997	4-19
YRSGRAD	Average number of years since graduation from medical school	4-11
YRSPRAC	Average number of years in practice	4-12

IMGUSPR Forei	gn medical school gradua	ite
Description:	The percentage of physicia Foreign medical school gra schools outside of the U.S	ns who are foreign medical school graduates. aduates include those graduating from medical . or Puerto Rico.
Derived from:	Information about the medi	cal school was obtained from the AMA and AOA.
	PERCENT	STANDARD ERROR
National	21%	1.54
SITE		
Boston	16	2.12
Cleveland	32	3.10
Greenville	7	1.04
Indianapolis	8	1.39
Lansing	14	2.14
Little Rock	8	1.75
Miami	50	3.05
Newark	35	2.92
Orange Count	y 33	2.77
Phoenix	24	2.72
Seattle	6	1.27
Syracuse	28	2.54

GENDER Genuer
---------------

**Description:** The percentage of physicians who are male.

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

PERCENT	STANDARD ERROR
79%	0.50
70	2.62
72	2.75
87	1.75
79	2.01
76	2.25
83	2.27
79	2.52
75	2.56
81	2.17
86	1.66
72	2.53
82	1.84
	<b>PERCENT</b> 79% 70 72 87 79 76 83 79 75 81 86 72 82

#### 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		48 years	0.12
SITE			
Boston		48	0.52
Cleveland		48	0.51
Greenville		47	0.45
Indianapol	is	45	0.43
Lansing		48	0.48
Little Roc	k	47	0.50
Miami		49	0.57
Newark		51	0.57
Orange Cou	nty	48	0.52
Phoenix		49	0.53
Seattle		47	0.43
Svracuse		49	0.48

#### 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	21 years	0.13
SITE		
Boston	21	0.56
Cleveland	22	0.54
Greenville	20	0.45
Indianapolis	18	0.43
Lansing	19	0.47
Little Rock	20	0.51
Miami	23	0.59
Newark	24	0.63
Orange County	22	0.53
Phoenix	22	0.55
Seattle	20	0.46
Syracuse	22	0.51

YRSPRAC Num	ber 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	A, Question A6		
	AVERAGE	STANDARD ERROR		
National	15 years	cs 0.11		
SITE				
Boston	16	0.58		
Cleveland	16	0.53		
Greenville	15	0.45		
Indianapol:	is 14	0.42		
Lansing	14	0.46		
Little Rocl	< 14	0.52		
Miami	16	0.60		
Newark	18	0.62		
Orange Cou	nty 16	0.53		
Phoenix	17	0.53		
Seattle	15	0.46		
Syracuse	16	0.49		

SPECX1 Perc	entage of physicians who	are internists	
Description:	The percentage of physicians includes physicians whos medicine/internal medicin excludes family or generations specialists (including psycerity)	ans who are internists (internal medicine). This specialty and/or subspecialty are adolescent e, geriatrics/internal medicine, or internal medicine. I practitioners, pediatricians, and medical and surgica hiatry 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	13%	0.41	
<u>SITE</u> Boston Cleveland	18 16	1.30 1.51	

0.93

1.36

1.37

1.31

1.57

1.86

1.32

1.65

1.19

1.35

8

12

11

7

15

18 12

13

11

11

Greenville

Lansing Little Rock

Miami

Newark

Phoenix

Seattle

Syracuse

Indianapolis

Orange County

SPECX2 Perc	entage of physi	icians who are fa	amily/general practitioners
Description:	The percentag includes physi practice, geria practice. It ex specialists (in	e of physicians w icians whose spe atrics-family/gene ccludes internists, cluding psychiatry	who are family or general practitioners. This cialty and/or subspecialty are family/general ral practice, or adolescent medicine-general pediatricians, and medical and surgical and obstetrics/gynecology).
Derived from:	Based on resp specialty) and variable SPEC more informat categorized.	oonses to Questio A10 (physician's X in the CTS Ph tion concerning h	nnaire Section A, Questions A8 (physician's subspecialty). Refer to the description of the ysician Survey Public Use File: User's Guide for ow physician specialties and sub-specialties are
		PERCENT	STANDARD ERROR
National		17%	0.51
SITE			
Boston		6	0.73
Cleveland		9	0.90
Greenville		24	1.80
Indianapol	is	22	1.40
Lansing		25	1.71
Little Roc	k	15	1.57
Miami		14	1.48
Newark		8	1.03
Orange Cou	nty	17	1.63
Phoenix		18	1.31
Seattle		23	1.70

1.30

19

Syracuse

#### SPECX3 Percentage of physicians who are pediatricians

- **Description:** The percentage of physicians who are pediatricians. This includes physicians whose specialty and/or subspecialty are pediatrics, adolescent medicine, or internal medicine-pediatrics. It excludes internists, medical and surgical specialists, and family or general practitioners. Psychiatry is categorized as a medical specialty, while obstetrics/gynecology is categorized as a surgical specialty.
- **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	9%	0.23
SITE		
Boston	9	0.84
Cleveland	8	0.90
Greenville	8	0.89
Indianapolis	8	1.09
Lansing	8	1.05
Little Rock	5	0.66
Miami	12	1.62
Newark	11	1.14
Orange County	10	1.07
Phoenix	б	0.77
Seattle	6	0.95
Syracuse	9	1.10

SPECX4	Percentage of physicians who are medical specialists
Descriptior	The percentage of physicians who are medical specialists. This category is based on 60 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	34%	0.57
SITE		
Boston	37	2.99
Cleveland	41	3.06
Greenville	32	2.73
Indianapolis	37	2.42
Lansing	26	2.50
Little Rock	36	3.04
Miami	37	3.00
Newark	36	3.23
Orange County	27	2.57
Phoenix	36	2.74
Seattle	35	2.77
Syracuse	35	2.53

SPECX5 Percentage of physicians who are surgical specialists			
Description:	The percentage of physicians who are surgical specialists. This category is based on 40 physician specialty and subspecialty surgical classifications. It also includes obstetrics/gynecology. This category excludes medical specialists, internists, pediatricians, and family or general practitioners. Medical specialities 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 <i>CTS Physician Survey Public Use File: User's Guide</i> for more information concerning how physician specialties and sub-specialties are categorized.		
		PERCENT	STANDARD ERROR
National		27%	0.61
SITE			
Boston		30	2.93
Cleveland		25	2.87
Greenville		29	2.40
Indianapoli	5	22	2.17
Lansing		30	2.88
Little Rock		36	3.17
Miami		23	2.71
Newark		27	2.95
Orange Count	ty	34	2.99
Phoenix		26	2.89
Seattle		24	2.60
Syracuse		27	2.54

#### 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 a subspecialty.

**Derived from:** Questionnaire Section A, Questions 8, 9, 9a, 9b, and 10.

	PERCENT	STANDARD ERROR
National	38%	0.62
SITE		
Boston	33	1.53
Cleveland	34	1.80
Greenville	39	1.70
Indianapolis	41	1.60
Lansing	44	1.81
Little Rock	27	1.90
Miami	40	2.01
Newark	37	2.23
Orange County	39	1.96
Phoenix	37	1.76
Seattle	40	1.88
Syracuse	38	1.76

#### BDCERT Board certification status

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

**Derived from:** Questionnaire Section A, Questions 11, 13, 15, and 17.

	PERCENT	STANDARD ERROR
National	88%	0.64
SITE		
Boston	89	2.11
Cleveland	88	2.07
Greenville	90	1.72
Indianapolis	90	1.28
Lansing	86	2.01
Little Rock	91	1.58
Miami	76	2.46
Newark	84	2.20
Orange County	87	1.64
Phoenix	88	1.89
Seattle	94	1.08
Syracuse	91	1.63
_		

CARSAT Overa	Il career satisfaction		
<b>Description:</b> The percentage of physicians who are either very dissatisfied or somewhat dissatisfied with their overall career in medicine. Physicians could respond that they were generally very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied, or neither satisfied nor dissatisfied.			
Derived from:	Questionnaire Section A, Q	uestion 19.	
	PERCENT	STANDARD ERROR	
National	19%	0.68	
SITE			
Boston	22	2.71	
Cleveland	20	2.56	
Greenville	15	2.04	
Indianapoli	s 14	1.69	
Lansing	9	1.36	
Little Rock	13	2.43	
Miami	31	2.89	
Newark	30	3.09	
Orange Coun	ty 26	2.69	
Phoenix	27	2.62	
Seattle	16	1.98	
Syracuse	12	1.66	

### WKSWRKC Weeks practicing medicine in 1997

- **Description:** The average number of weeks that physicians practiced medicine in 1997. Physicians who began practicing medicine during 1997 or later were excluded.
- **Derived from:** Questionnaire Section B, Question 1.

	AVERAGE	STANDARD ERROR
National	47 weeks	0.06
SITE		
Boston	47	0.24
Cleveland	47	0.40
Greenville	48	0.17
Indianapolis	47	0.25
Lansing	47	0.19
Little Rock	48	0.18
Miami	48	0.24
Newark	48	0.19
Orange County	48	0.17
Phoenix	47	0.23
Seattle	46	0.37
Syracuse	47	0.30

HRSMED Hours	during previous	s week spent i	n medically-related activities
Description:	The average nun physician in the care.	nber of hours du site spent in me	uring the last full week of work that each edically-related activities, including direct patient
Derived from:	Questionnaire Se	ection B, Questi	ons 2, 3c, and 4.
	AV	ERAGE	STANDARD ERROR
National	55	hours	0.22
SITE			
Boston	54		0.99
Cleveland	56		0.97
Greenville	55		0.77
Indianapoli	s 56		0.67
Lansing	53		0.72
Little Rock	57		0.96
Miami	56		1.18
Newark	57		1.45
Orange Coun	ty 55		0.99
Phoenix	55		1.03
Seattle	52		0.85
Syracuse	53		0.73

#### 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 in the site spent in direct patient care activities.

#### **Derived from:** Questionnaire Section B, Questions 3, 3d, and 5.

	AVERAGE	STANDARD ERROR
National	45 hours	0.19
SITE		
Boston	42	0.90
Cleveland	44	0.90
Greenville	47	0.81
Indianapolis	45	0.70
Lansing	44	0.88
Little Rock	45	1.04
Miami	46	1.16
Newark	44	1.18
Orange County	45	1.00
Phoenix	46	0.96
Seattle	42	0.82
Syracuse	43	0.76

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 Se	ection B, Ques	tion 6.
	A	VERAGE	STANDARD ERROR
National	8	hours	0.31
SITE			
Boston	7		0.78
Cleveland	б		0.45
Greenville	8		0.87
Indianapolis	s 6		0.48
Lansing	б		0.55
Little Rock	9		1.21
Miami	12		1.93
Newark	16		2.99
Orange Count	ty 7		0.57
Phoenix	5		0.54
Seattle	8		0.98
Syracuse	8		0.83

#### 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 1.

	PERCENT	STANDARD ERROR
National	43%	0.77
SITE		
Boston	57	2.93
Cleveland	54	2.89
Greenville	40	2.42
Indianapolis	46	2.35
Lansing	50	2.86
Little Rock	44	2.91
Miami	37	2.76
Newark	25	2.24
Orange County	22	2.32
Phoenix	41	2.75
Seattle	43	2.67
Syracuse	42	2.57

#### 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 2, 3, 3a, 3b, and 9. 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	37%	0.81
SITE		
Boston	31	2.89
Cleveland	34	2.86
Greenville	27	2.38
Indianapolis	19	1.87
Lansing	27	2.63
Little Rock	26	2.57
Miami	57	2.95
Newark	55	3.14
Orange County	54	2.99
Phoenix	46	2.94
Seattle	30	2.73
Syracuse	35	2.60

#### 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 2, 3, 3a, 3b, and 9. 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	27%	0.89
SITE		
Boston	23	2.47
Cleveland	21	2.44
Greenville	41	2.74
Indianapolis	41	2.55
Lansing	27	2.76
Little Rock	36	3.32
Miami	13	1.94
Newark	26	2.88
Orange County	24	2.45
Phoenix	26	2.49
Seattle	33	2.81
Syracuse	31	2.55

#### NPHYS Number of physicians in each practice

**Description:** The average number of physicians in each practice at all locations, including both full- and part-time physicians. Physicians working in medical schools, universities, hospitals, state or local governments, integrated delivery systems, physician practice management companies, management services organizations, physicians hospital organizations or locum tenens were not included.

#### Derived from: Questionnaire Section C, Question 7.

	AVERAGE	STANDARD ERROR
National	42	4.57
SITE		
Boston	55	11.99
Cleveland	126	23.87
Greenville	8	0.60
Indianapolis	24	3.24
Lansing	8	0.69
Little Rock	9	1.48
Miami	б	0.93
Newark	14	4.07
Orange County	77	13.87
Phoenix	-3	-3.00
Seattle	96	13.38
Syracuse	7	0.58

ct of using con medicine	nputers to obtair	n or record clinical data on the practice of
The percentag or record clin of medicine. moderate, sm	ge of physicians w ical data had eithe Physicians could nall, very small, or	who indicated that their use of computers to obtain er no effect or a very small effect on their practice respond that the effect was very large, large, r had no effect.
Questionnaire	Section D, Ques	tion D1A.
	PERCENT	STANDARD ERROR
	26%	0.66
	23	2.72
	19	2.25
	21	2.25
ls	18	1.82
	30	2.55
2	19	2.41
	35	2.99
	26	2.68
nty	29	2.79
	28	2.59
	22	2.28
	25	2.16
	The percentag or record clin of medicine. moderate, sm Questionnaire	ct of using computers to obtain medicine         The percentage of physicians work or record clinical data had either of medicine. Physicians could moderate, small, very small, or         Questionnaire       Section D, Question         Questionnaire       Section D, Question         26 %       23         19       21         21       30         4       19         35       26         26       23         19       21         21       35         26       28         22       25

EFTREAT Effect	of using compute practice of meeting	ters to obtain treat dicine	ment guidelines on the
Description:	The percentage of information about no effect or a ver respond that the had no effect.	of physicians who ind t treatment alternati ry small effect on the effect was very larg	dicated that their use of computers to obtain ves or recommended guidelines had either eir practice of medicine. Physicians could e, large, moderate, small, very small, or
Derived from:	Questionnaire Se	ction D, Question D	1B.
	PE	RCENT STAN	DARD ERROR
National	33	% 0.59	
SITE			
Boston	37	2.93	
Cleveland	32	2.68	
Greenville	27	2.42	
Indianapoli	s 33	2.31	
Lansing	32	2.68	
Little Rock	28	2.64	
Miami	40	2.99	
Newark	32	2.80	
Orange Coun	ty 37	3.12	
Phoenix	38	2.86	
Seattle	27	2.42	
Syracuse	31	2.41	

EFRMNDR Effec	t of preventi	ve treatment rem	inders on the practice of medicine
Description:	The percenta that reminde HMO's alerti either no effe could respor or had no effe whose speci practice, gyr medicine. It general inter subspecialty	age of primary car ers they received fing them about spe ect or a very smal nd that the effect w fect on their medic falty or subspecial necology, obstetric also applies to oth rnal medicine or go	e and selected specialty physicians who indicated rom medical groups, insurance companies, or ecific preventive services for their patients had l effect on their practice of medicine. Physicians vas very large, large, moderate, small, very small, cal practice. This applies to those physicians ty was family practice, geriatric medicine, general es and gynecology, obstetrics, adolescent her specialists that spend more time practicing eneral pediatrics than spent practicing a
Derived from:	Questionnair	re Section D, Que	stion D1C.
		PERCENT	STANDARD ERROR
National		30%	0.69
SITE			
Boston		19	2.24
Cleveland		34	3.40
Greenville		33	3.39
Indianapolis	3	37	3.00
Lansing		25	3.06
Little Rock		30	4.10
Miami		22	3.44
Newark		34	3.50
Orange Count	су	26	3.10
Phoenix		25	2.96
Seattle		35	3.48
Syracuse		36	3.24

EFGUIDE Effe	ct of formal wr	itten guidelines	on the practice of medicine
Description:	The percentage practice guide or government practice of me large, modera	ge of physicians of elines from physic at agencies, had e edicine. Physicia ate, small, very sr	who indicated that their use of formal, written cian organizations, insurance companies, HMOs, either no effect or a very small effect on their ns could respond that the effect was very large, nall, or had no effect on their medical practice.
Derived from:	Questionnaire	e Section D, Ques	stion D1D.
		PERCENT	STANDARD ERROR
National		25%	0.46
SITE			
Boston		25	2.73
Cleveland		18	2.06
Greenville		26	2.34
Indianapoli	ls	23	2.09
Lansing		20	2.27
Little Rock	2	31	2.87
Miami		25	2.63
Newark		24	2.53
Orange Cour	nty	26	2.85
Phoenix		25	2.69
Seattle		24	2.21
Syracuse		25	2.43

#### EFPROFL Effect of practice profiles on the practice of medicine

**Description:** The percentage of physicians who indicated that the results of practice profiles, comparing their patterns of medical resources to treat patients with that of other physicians, had either no effect or a very small effect on their practice of medicine. Physicians could respond that the effect was very large, large, moderate, small, very small, or had no effect on their medical practice.

#### **Derived from:** Questionnaire Section D, Question D1E.

	PERCENT	STANDARD ERROR
National	40%	0.57
SITE		
Boston	38	2.92
Cleveland	36	2.90
Greenville	33	2.59
Indianapolis	37	2.46
Lansing	36	2.94
Little Rock	37	2.98
Miami	41	3.12
Newark	43	3.23
Orange County	40	2.95
Phoenix	34	2.83
Seattle	37	2.70
Syracuse	41	2.67

EFSURV Effec	t of patient satisfactio	n surveys on the prac	ctice of medicine
Description:	The percentage of phy satisfaction surveys h of medicine. Physicia moderate, small, very	/sicians who indicated t ad either no effect or a ans could respond that small, or had no effect	that feedback from patient very small effect on their practice the effect was very large, large, t on their medical practice.
Derived from:	Questionnaire Section	D, Question D1F.	
	PERCEN	IT STANDARD I	IRROR
National	23%	0.68	
SITE			
Boston	24	2.64	
Cleveland	21	2.48	
Greenville	22	2.36	
Indianapoli	ls 18	1.86	
Lansing	21	2.40	
Little Rock	s 23	2.30	
Miami	36	2.92	
Newark	26	2.90	
Orange Cour	nty 28	2.82	
Phoenix	19	2.44	
Seattle	19	2.27	
Syracuse	22	2.18	

#### **CMPPROV** Change in complexity without referral to specialists

**Description:** The percentage of primary care physicians who indicated that the complexity or severity of patients' conditions for which they provided care without referral to specialists increased either a little or a lot over the last two years. Physicians could respond that the change increased a lot, increased a little, stayed the same, decreased a little, or decreased a lot.

Derived from: Questionnaire Section D, Question D7.

	PERCENT	STANDARD ERROR
National	31%	0.68
SITE		
Boston	39	2.76
Cleveland	37	3.05
Greenville	29	2.95
Indianapolis	27	2.86
Lansing	31	3.02
Little Rock	22	2.72
Miami	34	3.78
Newark	29	3.51
Orange County	34	3.31
Phoenix	41	3.51
Seattle	35	2.98
Syracuse	30	2.82

#### CMPEXPC Appropriateness of expected care without referral

**Description:** The percentage of primary care physicians who indicated that the complexity or severity of patients'conditions for which they were expected to provide care without referral to specialists is either somewhat or much greater than it should be. Physicians could respond that the amount was much greater, somewhat greater, about right, somewhat less, or much less.

#### Derived from: Questionnaire Section D, Question D8.

	PERCENT	STANDARD ERROR
National	25%	0.70
SITE		
Boston	22	2.27
Cleveland	30	2.78
Greenville	14	2.12
Indianapolis	16	2.20
Lansing	19	2.73
Little Rock	28	3.51
Miami	33	3.79
Newark	35	3.68
Orange County	31	3.27
Phoenix	33	3.03
Seattle	15	1.92
Syracuse	18	2.41

#### SPECUSE Change in number of referrals to specialists

**Description:** The percentage of primary care physicians who indicated that the number of patients they have referred to specialists increased either a little or a lot over the last two years. Physicians could respond that the number increased a lot, increased a little, stayed the same, decreased a little, or decreased a lot.

**Derived from:** Questionnaire Section D, Question D9.

	PERCENT	STANDARD ERROR
National	14%	0.47
SITE		
Boston	20	2.24
Cleveland	19	2.84
Greenville	13	2.43
Indianapolis	16	2.68
Lansing	15	2.26
Little Rock	8	2.22
Miami	14	2.55
Newark	15	3.49
Orange County	15	2.15
Phoenix	10	1.71
Seattle	16	2.32
Syracuse	10	1.92

#### **PCTGATE** Percent of patients for whom physician acts as a gatekeeper

**Description:** The average percentage of patients in their practice for whom the primary care physician serves as a gatekeeper. A gatekeeper is described as a primary care physician whose patient's insurance plan (or medical group) require that their enrollee obtain permission from a primary care physician before seeing a specialist.

#### **Derived from:** Questionnaire Section D, Question D10.

	PERCENT	STANDARD ERROR
National	43%	0.75
SITE		
Boston	57	1.64
Cleveland	48	1.97
Greenville	28	1.39
Indianapolis	42	1.83
Lansing	50	1.75
Little Rock	43	2.48
Miami	54	2.50
Newark	50	2.08
Orange County	51	2.15
Phoenix	52	2.22
Seattle	48	1.73
Syracuse	38	1.80

#### ADQTIME 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	65%	0.61
SITE		
Boston	58	2.93
Cleveland	68	2.74
Greenville	69	2.67
Indianapolis	63	2.45
Lansing	64	2.75
Little Rock	72	2.62
Miami	61	3.09
Newark	58	3.19
Orange County	62	3.00
Phoenix	58	2.99
Seattle	62	2.75
Syracuse	70	2.43

CLNFREE	Freedom to m	ake clinical decisi	ons
Descriptio	n: The per- the free Physici disagre	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 fro	om: Question	nnaire Section F, Qu	uestion F1C.
		PERCENT	STANDARD ERROR
Nationa	al	79%	0.62
SITE			
Boston		84	2.19
Clevela	and	79	2.58
Greenv	ille	83	2.38
Indiana	apolis	79	2.14
Lansing	3	85	1.94
Little	Rock	82	2.69
Miami		70	3.07
Newark		66	3.29
Orange	County	76	2.75
Phoeniz	ĸ	74	2.56
Seattle	9	78	2.43
Syracus	se	82	2.22

HIGHCAR	Possibility of high quality of patient care to all patients
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**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	76%	0.58
SITE		
Boston	79	2.39
Cleveland	76	2.74
Greenville	80	2.31
Indianapolis	76	2.17
Lansing	82	2.10
Little Rock	79	2.60
Miami	66	3.00
Newark	67	3.22
Orange County	73	2.57
Phoenix	70	2.65
Seattle	75	2.44
Syracuse	81	2.18

NEGINCN Clinic	cal decisions with	out possibility of re	educing 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 Sec	ction F, Question F1	Ε.
	PER	CENT STAN	DARD ERROR
National	73%	s 0.50	
SITE			
Boston	70	2.78	
Cleveland	75	2.66	
Greenville	74	2.50	
Indianapoli	is 78	2.07	
Lansing	77	2.37	
Little Rocł	s 74	2.85	
Miami	72	2.79	
Newark	61	3.28	
Orange Cour	nty 71	2.59	
Phoenix	67	2.81	
Seattle	66	2.83	
Syracuse	77	2.47	

#### USESPCS High communication level with specialists

**Description:** The percentage of primary care physicians who either somewhat or strongly agreed that the level of communication they have with specialists about the patients they refer is sufficient to ensure high quality care. Physicians could agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree.

Derived from: Questionnaire Section F, Question F1F.

	PERCENT	STANDARD ERROR
National	84%	0.60
SITE		
Boston	82	2.02
Cleveland	81	2.36
Greenville	87	2.27
Indianapolis	87	1.99
Lansing	85	2.15
Little Rock	89	1.99
Miami	78	2.67
Newark	75	3.59
Orange County	83	2.29
Phoenix	83	2.27
Seattle	89	1.87
Syracuse	91	1.40

#### COMMALL Level of communication among physicians

**Description:** The percentage of physicians who either somewhat or strongly agreed that the level of communication they have with specialists (or primary care physicians) about the patients they refer (or about the patients that have been referred to them) is sufficient to ensure high quality of care. Physicians could agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree.

#### **Derived from:** Questionnaire Section F, Questions F1F and F1G.

	PERCENT	STANDARD ERROR
National	79%	0.54
SITE		
Boston	79	2.39
Cleveland	80	2.41
Greenville	82	2.20
Indianapolis	79	2.11
Lansing	87	1.64
Little Rock	80	2.47
Miami	71	2.86
Newark	76	2.75
Orange County	74	2.65
Phoenix	73	2.61
Seattle	85	1.84
Syracuse	82	2.21

PATREL	Continuin	g patient relationships	\$	
Descripti	on: The car del dis Ph wit	e percentage of physiciar n maintain continuing rela livery of high quality care agree somewhat, disagr ysicians who indicated th h patients were excluded	ns who either somewhat or strongly agreed that the ationships with patients over time that promote the e. Physicians could agree strongly, agree somew ree strongly, or neither agree nor disagree. hat they don't normally have continuing relationshed.	hey ie vhat, nips
Derived f	rom: Que	estionnaire Section F, Qu	uestion F1H.	
		PERCENT	STANDARD ERROR	
Natio	nal	69%	0.90	
SITE				
Bosto	n	71	2.88	
Cleve	land	65	3.06	
Green	ville	80	2.31	
India	napolis	66	2.48	
Lansi	ng	80	2.26	
Little	e Rock	72	2.96	
Miami		57	3.18	
Newar	k	53	3.24	
Orange	e County	61	3.10	
Phoen	ix	59	2.98	
Seatt	le	64	2.84	
Syrac	use	74	2.45	

#### OBREFS Referrals to specialists of high quality

**Description:** The percentage of physicians who indicated that they are either always or almost always able to obtain referrals to specialists of high quality when they think it is medically necessary. Physicians could indicate that they are always, almost always, frequently, sometimes, rarely, or never able to obtain a referral. The calculation excludes physicians who indicated that this question does not apply to them.

#### **Derived from:** Questionnaire Section F, Question F8A.

	PERCENT	STANDARD ERROR
National	73%	0.79
SITE		
Boston	79	2.59
Cleveland	73	2.82
Greenville	88	1.68
Indianapolis	79	2.03
Lansing	75	2.62
Little Rock	77	2.66
Miami	59	3.12
Newark	63	3.16
Orange County	64	2.93
Phoenix	66	2.81
Seattle	77	2.33
Syracuse	76	2.50

OBANCL Hig	gh quality	ancillary services		
Description:	The per almost when n almost service does n	centage of physiciar always able to obtai nedically necessary. always, frequently, s s. The calculation e ot apply to them.	ns who indicated that they are either always or in high quality ancillary services for their patients Physicians could indicate that they are always, sometimes, rarely, or never able to obtain these excludes physicians who indicated that this questio	on
Derived from:	Questio	nnaire Section F, Qu	uestion F8B.	
		PERCENT	STANDARD ERROR	
National		61%	0.79	
SITE				
Boston		64	2.98	
Cleveland		67	2.88	
Greenvill	e	74	2.46	
Indianapo	lis	66	2.40	
Lansing		68	2.77	
Little Ro	ck	60	3.29	
Miami		45	3.12	
Newark		49	3.31	
Orange Co	unty	56	3.05	
Phoenix		54	2.99	
Seattle		62	2.86	

2.69

63

Syracuse

OBHOSP Non-	emergency ho	spital admission	1
Description:	The percentage almost always patients whe always, almost these service question doe	ge of physicians v vs able to obtain n n medically neces ost always, freque es. The calculatio s not apply to the	who indicated that they are either always or non-emergency hospital admissions for their sary. Physicians could indicate that they are ntly, sometimes, rarely, or never able to obtain on excludes physicians who indicated that this m.
Derived from:	Questionnaire	e Section F, Ques	tion F8C.
		PERCENT	STANDARD ERROR
National		57%	0.74
SITE			
Boston		59	3.28
Cleveland		53	3.26
Greenville		65	2.94
Indianapol	is	63	2.67
Lansing		62	3.12
Little Roc	k	54	3.47
Miami		50	3.34
Newark		49	3.48
Orange Cou	nty	58	3.16
Phoenix		51	3.22
Seattle		69	2.90
Syracuse		58	2.92

#### **OBINPAT** Adequate number of inpatient days

**Description:** The percentage of physicians who indicated that they are either always or almost always able to obtain the adequate number of inpatient days for their hospitalized patients when they think it is medically necessary. Physicians could indicate that they are always, almost always, frequently, sometimes, rarely, or never able to obtain an adequate number of days. The calculation excludes physicians who indicated that this question does not apply to them.

#### **Derived from:** Questionnaire Section F, Question F8D.

PERCENT	STANDARD ERROR
56%	0.80
57	3.17
45	3.10
62	3.05
58	2.73
65	3.09
52	3.50
58	3.30
34	2.99
61	3.04
54	3.22
65	3.01
62	2.82
	<b>PERCENT</b> 56% 57 45 62 58 65 52 58 34 61 54 65 62

OBIMAG High	quality diagnostic	: imaging	
Description:	The percentage of almost always at patients when the that they are alway able to obtain the indicated that this	of physicians who is the to obtain high of ey think it is medic ays, almost always ase services. The s question does no	ndicated that they are either always or quality diagnostic imaging services for their cally necessary. Physicians could indicate s, frequently, sometimes, rarely, or never calculation excludes physicians who be apply to them.
Derived from:	Questionnaire Se	ction F, Question	F8E.
	PEI	RCENT STA	ANDARD ERROR
National	779	8 0.6	55
SITE			
Boston	84	2.2	26
Cleveland	76	2.6	54
Greenville	87	1.5	57
Indianapoli	is 85	1.7	79
Lansing	85	2.0	)6
Little Rock	c 83	2.4	18
Miami	67	2.9	98
Newark	67	3.(	)7
Orange Cour	nty 70	2.5	74
Phoenix	74	2.5	53
Seattle	83	2.1	L7
Syracuse	79	2.2	23

#### **OBMENTL** High quality inpatient mental health care

**Description:** The percentage of primary care physicians and selected specialists who indicated that they are either always or almost always able to obtain high quality inpatient mental health care for their patients when they think it is medically necessary. Physicians could indicate that they are always, almost always, frequently, sometimes, rarely, or never able to obtain this type of care. This calculation includes responses from only primary care physicians and specialists in obstetrics/ gynecology and psychiatry. The calculation excludes physicians who indicated that this question does not apply to them.

#### **Derived from:** Questionnaire Section F, Question F8F.

PERCENT	STANDARD ERROR
30%	0.75
33	2.93
28	3.35
29	2.99
32	2.97
32	3.34
35	4.52
36	3.65
26	3.00
35	4.26
19	2.54
26	2.96
34	3.40
	<b>PERCENT</b> 30% 33 28 29 32 32 35 36 26 35 19 26 34

#### **OBOUTPT** High quality outpatient mental health care

**Description:** The percentage of physicians who indicated that they are either always or almost always able to obtain high quality outpatient mental health care for their patients when they think it is medically necessary. Physicians could indicate that they are always, almost always, frequently, sometimes, rarely, or never able to obtain this type of care. This calculation includes responses from only primary care physicians and specialists in obstetrics/ gynecology and psychiatry. The calculation excludes physicians who indicated that this question does not apply to them.

#### **Derived from:** Questionnaire Section F, Question F8G.

	PERCENT	STANDARD ERROR
National	28%	0.82
SITE		
Boston	27	2.66
Cleveland	33	3.77
Greenville	24	2.58
Indianapolis	29	2.77
Lansing	30	3.24
Little Rock	32	4.29
Miami	31	3.36
Newark	22	2.81
Orange County	38	3.92
Phoenix	18	2.47
Seattle	14	2.01
Syracuse	26	3.28

#### NWMCARE Limited acceptance of new Medicare patients

- **Description:** The percentage of physicians whose practice is accepting either some or no new patients who are insured through Medicare. Physicians were asked if the practice was accepting all, most, some, or no new patients who were insured through Medicare, including Medicare managed care patients.
- **Derived from:** Questionnaire Section F, Question F9A.

	PERCENT	STANDARD ERROR
National	19%	0.43
SITE		
Boston	15	2.30
Cleveland	14	1.82
Greenville	26	2.09
Indianapolis	20	1.69
Lansing	21	1.97
Little Rock	18	2.35
Miami	22	2.51
Newark	19	2.21
Orange County	21	2.13
Phoenix	24	2.72
Seattle	23	2.40
Syracuse	22	2.07

#### 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			
37%	0.85			
17	2.43			
31	2.73			
40	2.59			
32	2.04			
43	2.76			
24	2.83			
42	3.02			
58	3.14			
63	2.98			
47	2.94			
32	2.72			
44	2.67			
	PERCENT 37% 17 31 40 32 43 24 43 24 42 58 63 47 32 44			
NWPRIV Limi	ited accepta	nce of new priv	vately-insured patients	
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Description:	<b>Description:</b> The percentage of physicians whose practice is accepting either some or no new patients who are insured through private or commercial insurance plans. Physicians were asked if the practice was accepting all, most, some, or no new patients who were insured through private or commercial insurance plans, including managed care plans and HMOs with whom the practice has contracts Privately-insured patients included fee for service patients but excluded Medicaid or Medicare managed care patients.			
Derived from:	Questionna	ire Section F, Q	uestion F9C.	
		PERCENT	STANDARD ERROR	
National		13%	0.48	
SITE				
Boston		10	1.81	
Cleveland		11	1.93	
Greenville		11	1.51	
Indianapol	is	11	1.37	
Lansing		12	1.39	
Little Rocl	k	9	1.68	
Miami		16	2.28	
Newark		13	1.61	
Orange Cou	nty	15	1.85	
Phoenix	_	17	2.23	

2.12

1.60

16

12

Seattle

Syracuse

PMCARE Perce	entage of pract	tice revenue fror	n Medicare
Description:	The average percentage of patient care practice revenue that comes from Medicare, including Medicare managed care.		
Derived from:	Questionnaire	Section G, Ques	tions G1 and G1a.
		PERCENT	STANDARD ERROR
National		31%	0.30
SITE			
Boston		30	1.40
Cleveland		33	1.40
Greenville		30	1.22
Indianapoli	S	28	1.16
Lansing		28	1.15
Little Rock		30	1.36
Miami		34	1.72
Newark		30	1.43
Orange Coun	ty	27	1.35
Phoenix		33	1.59
Seattle		24	1.06
Syracuse		29	1.04

#### 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	15%	0.27
SITE		
Boston	15	0.73
Cleveland	15	1.01
Greenville	13	0.69
Indianapolis	12	0.77
Lansing	12	0.57
Little Rock	16	0.83
Miami	17	1.49
Newark	10	0.87
Orange County	11	0.99
Phoenix	14	0.90
Seattle	14	0.68
Syracuse	14	0.98

PCAPREV Perc	entage of praction	ce revenue pre	paid or capitated	
Description:	The average per other prepaid ba	The average percentage of patient care practice revenue paid on a capitated or other prepaid basis.		
Derived from:	Questionnaire S	ection G, Quest	ions G6 through G11.	
	PE	RCENT	STANDARD ERROR	
National	17	8 (	0.56	
SITE				
Boston	20	-	L.19	
Cleveland	21	-	L.84	
Greenville	7	(	).68	
Indianapoli	s 16	(	).94	
Lansing	17	-	L.14	
Little Rock	10	-	L.33	
Miami	19	-	L.51	
Newark	14	-	L.26	
Orange Coun	ty 32		2.05	
Phoenix	22	-	L.61	
Seattle	23	-	L.43	
Syracuse	12	(	0.96	

#### 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%	0.86
SITE		
Boston	23	2.53
Cleveland	47	3.01
Greenville	45	2.76
Indianapolis	38	2.47
Lansing	8	1.38
Little Rock	39	3.19
Miami	31	2.94
Newark	48	3.19
Orange County	43	2.97
Phoenix	35	2.73
Seattle	34	2.70
Syracuse	27	2.32

PMC Percenta	PMC Percentage of practice revenue from managed care						
Description:	The average pe	rcentage of pati	ient care	practice	revenue f	rom all ma	anaged care.
Derived from:	Questionnaire S	Section G, Quest	tions G6	through (	G11.		
	PI	ERCENT ST.	ANDARD	ERROR			
National	43	38	0.57				
SITE							
Boston	49	9	1.52				
Cleveland	4'	7	1.60				
Greenville	30	5	1.09				
Indianapoli	s 41	L	1.25				
Lansing	4	5	1.30				
Little Rock	39	9	1.32				
Miami	4	5	1.90				
Newark	4	5	1.51				
Orange Coun	ty 54	1	1.81				
Phoenix	52	2	1.79				
Seattle	4'	7	1.57				
Syracuse	30	5	1.19				

#### CAPAMTC1 No capitated revenue from largest managed care contract

**Description:** The percentage of physicians who responded that none of the patient care revenue received from the largest managed care contract is paid on a capitated or prepaid basis. Physicians could indicate that all, most, some, or none of their revenue is paid on that basis.

#### **Derived from:** Questionnaire Section G, Question G11.

PERCENT	STANDARD ERROR
57%	1.22
51	2.98
49	3.15
81	2.07
42	2.57
58	2.75
77	2.47
53	3.13
61	3.07
31	2.89
50	2.96
44	2.98
65	2.63
	<b>PERCENT</b> 57% 51 49 81 42 58 77 53 61 31 50 44 65

CAPAMTC2	All revenue	e from largest m	anaged care contract is capitated	
Description:	The percentage of physicians who responded that all of the patient care revenue received from the largest managed care contract is paid on a capitated or prepaid basis. Physicians could indicate that all, most, some, or none of their revenue is paid on that basis.			
Derived from:	Questionnaire	Section G, Ques	stion G11.	
		PERCENT	STANDARD ERROR	
National		23%	1.01	
SITE				
Boston		25	2.67	
Cleveland		21	2.69	
Greenville		6	1.25	
Indianapoli	S	26	2.28	
Lansing		21	2.10	
Little Rock		10	1.63	
Miami		25	2.51	
Newark		20	2.66	
Orange Count	ty	43	3.13	
Phoenix		32	2.78	
Seattle		33	2.63	
Syracuse		16	1.91	

PBIGCON	Percentage of revenue from largest managed care contract
	i oroontago or rovonao nom la goot managoa oaro oontraot

**Description:** The average percentage of patient care practice revenue from each practice's largest managed care contract. Applies only to physicians in practices with at least one managed care contract.

**Derived from:** Questionnaire Section G, Questions G6 through G11.

	PERCENT	STANDARD ERROR
National	21%	0.57
SITE		
Boston	26	0.96
Cleveland	22	1.57
Greenville	13	0.51
Indianapolis	17	0.69
Lansing	25	0.84
Little Rock	17	0.81
Miami	22	1.20
Newark	18	0.70
Orange County	30	1.99
Phoenix	24	1.06
Seattle	21	1.05
Syracuse	16	0.89

SALPAID P	ercentage o	f physicians in the	e practice who are salaried
Description:	The ave who are physicia	rage percent of phy full owners of solo ns may be eligible	vsicians in the practice who are salaried. Physicians practices are assumed to be not salaried. Salaried to receive bonuses.
Derived from:	Question	nnaire Section H, Q	uestion H1.
		PERCENT	STANDARD ERROR
National		51%	0.77
SITE			
Boston		63	2.88
Cleveland	l	63	2.92
Greenvill	e	56	2.74
Indianapo	olis	61	2.50
Lansing		62	2.80
Little Ro	ock	50	3.16
Miami		41	2.90
Newark		43	3.09
Orange Co	ounty	35	2.91
Phoenix		46	2.89
Seattle		48	2.81
Syracuse		53	2.67

#### 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	79%	0.51
SITE		
Boston	78	2.48
Cleveland	75	2.79
Greenville	83	2.09
Indianapolis	78	2.23
Lansing	80	2.26
Little Rock	81	2.63
Miami	81	2.29
Newark	78	2.40
Orange County	83	2.37
Phoenix	77	2.60
Seattle	78	2.36
Syracuse	73	2.25

SSAT Patie	ent satisfaction affect	ts compensation						
Description:	The percentage of physicians indicating that their compensation is affected by satisfaction surveys completed by their own patients. Physicians who are full owners of solo practices are assumed to not have their compensation affected by satisfaction surveys.							
Derived from:	Questionnaire Sectio	n H, Questions H5	iB and H7C.					
	PERCENT	STANDARD	ERROR					
National	18%	0.60						
SITE								
Boston	18	2.06						
Cleveland	24	2.91						
Greenville	15	1.72						
Indianapoli	s 27	2.21						
Lansing	18	2.19						
Little Rock	7	1.33						
Miami	12	2.28						
Newark	16	2.76						
Orange Coun	ty 23	2.30						
Phoenix	20	2.08						
Seattle	14	1.56						
Syracuse	15	2.07						

#### SQUAL Quality measures affects compensation

**Description:** The percentage of physicians indicating that their compensation is affected by specific measures of quality of care. Physicians who are full owners of solo practices are assumed to not have their compensation affected by specific measures of quality.

**Derived from:** Questionnaire Section H, Questions H5C and H7C.

	PERCENT	STANDARD ERROR
National	14%	0.54
SITE		
Boston	9	1.03
Cleveland	21	2.76
Greenville	9	1.23
Indianapolis	16	1.84
Lansing	12	1.56
Little Rock	8	1.89
Miami	14	2.14
Newark	10	1.85
Orange County	23	2.64
Phoenix	14	1.78
Seattle	7	1.28
Syracuse	11	1.69

SPROF Profi	ling results	affects compensat	tion			
Description:	The per practice not to h	The percentage of physicians indicating that their compensation is affected by practice profiling. Physicians who are full owners of solo practices are assumed not to have their compensation affected by practice profiling.				
Derived from	: Questio	nnaire Section H, C	Questions H5D and H7D.			
		PERCENT	STANDARD ERROR			
National		11%	0.44			
SITE						
Boston		7	0.97			
Clevelan	d	15	2.18			
Greenvil	le	9	1.16			
Indianap	olis	11	1.56			
Lansing		12	1.69			
Little R	ock	7	1.72			
Miami		13	2.35			
Newark		9	1.74			
Orange C	ounty	13	1.94			
Phoenix		12	2.09			
Seattle		7	1.76			
Svracuse		9	1.44			

#### PCTINCC Percent of 1997 income from bonuses

**Description:** The average percentage of a physician's 1997 practice income that was earned from bonuses, returned withholds, or other incentive payments. Physicians who are not eligible for bonuses were not asked this question.

**Derived from:** Questionnaire Section H, Questions H9 and H9a.

	PERCENT	STANDARD ERROR
National	6%	0.24
SITE		
Boston	4	0.47
Cleveland	4	0.64
Greenville	10	1.16
Indianapolis	6	0.64
Lansing	12	1.24
Little Rock	9	1.20
Miami	5	0.75
Newark	6	0.82
Orange County	4	0.62
Phoenix	б	0.70
Seattle	5	0.56
Syracuse	5	0.71

Description:	Average 1997 net ind but before taxes.	come received from the practice of medicine after expense
Derived from:	Questionnaire Sectio	n H, Question H10.
	AVERAGE	STANDARD ERROR
National	\$181,517	\$2,189
SITE		
Boston	165,974	5,468
Cleveland	174,932	9,414
Greenville	205,355	13,934
Indianapolis	199,440	6,533
Lansing	180,224	6,408
Little Rock	223,624	8,406
Miami	162,669	6,511
Newark	178,401	5,978
Orange Count	y 191,061	9,455
Phoenix	195,459	9,629
Seattle	156,854	6,265
Syracuse	186,129	8,194
CEWH Perce	ntage of physicians	s who are white

Islander).

#### **Derived from:** Questionnaire Section H, Questions H11 and H12.

	AVERAGE	STANDARD ERROR
National	78%	1.63
SITE		
Boston	88	1.69
Cleveland	71	2.79
Greenville	92	1.27
Indianapolis	88	1.74
Lansing	83	2.25
Little Rock	85	2.36
Miami	46	3.05
Newark	68	2.91
Orange County	66	2.79
Phoenix	80	2.55
Seattle	87	1.90
Syracuse	81	2.30

#### REFERENCES

- Kemper, Peter, et al. "The Design of the Community Tracking Study: A Longitudinal Study of Health System Change and Its Effects on People." *Inquiry*, vol. 33, Summer 1996, pp. 195-206.
- Metcalf, C., P. Kemper, L. Kohn, J. Pickreign. *Site Definition and Sample Design for the Community Tracking Study*, Technical Publication No. 1. Washington, DC: Center for Studying Health System Change, October 1996.
- Community Tracking Study Physician Survey Public Use File: User's Guide (Round Two), Technical Publication No. 25. Washington, DC: Center for Studying Health System Change, July 2001.
- Community Tracking Study Physician Survey Public Use File: Codebook (Round Two), Technical Publication No. 26. Washington, DC: Center for Studying Health System Change, July 2001.
- Community Tracking Study Physician Survey Restricted Use File: User's Guide (Round Two), Technical Publication No. 27. Washington, DC: Center for Studying Health System Change, July 2001.
- Community Tracking Study Physician Survey Restricted Use File: Codebook (Round Two), Technical Publication No. 28. Washington, DC: Center for Studying Health System Change, July 2001.
- *The Community Tracking Study Site-County Crosswalk (Rounds One and Two).* Technical Publication No. 31. Washington, DC: Center for Studying Health System Change, August 2001.
- Potter, Frank, et al. "Report on Survey Methods for the Community Tracking Study's 1998-1999 Round Two Physician Survey." Washington, DC: HSC, forthcoming technical publication.

Appendix A

**Contents of the Round Two Physician Survey Summary, Restricted Use, and Public Use Files** 

#### **APPENDIX A**

### CONTENTS OF THE CTS ROUND TWO PHYSICIAN SURVEY SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES

Table A.1 below provides a crosswalk between the contents of the CTS Round Two Physician Survey Summary, Restricted Use, and Public Use files. The table shows the availability of the variables on each of the files. Additional information about specific variables included on the Restricted Use and Public Use files is contained in the User's Guides and Codebooks, which are available through ICPSR at www.icpsr.umich.edu.

## CONTENTS OF THE CTS ROUND TWO PHYSICIAN SURVEY SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES

Summary File (VARNAME)	Description of Summary File Estimate	Restricted Use Variable Name	Public Use Variable Name	Variable Label (on Restricted Use File)
	Surv	ey Administrati	ion Variables	
n/a n/a n/a n/a n/a n/a iMGUSPR GENDER AGE YRSGRAD n/a	n/a n/a n/a n/a n/a n/a n/a Percentage of foreign medical graduates Percentage of male physicians Mean age of physicians Mean number of years since graduation from medical school n/a	PHYSIDX R1PHYIDX MSACAT FIPS SITEID SUBGRP DOCTYP IMGSTAT IMGUSPR GENDER BIRTH GRAD_YR AMAPRIM	PHYSIDX n/a n/a n/a n/a n/a iMGUSPR GENDER BIRTHX GRADYRX n/a	PH2:Physician identification number PH2:Value for PHYSIDX in Round One PH2:Large metro/small metro/non-metro PH2:State and county code when surveyed PH2:Updated master file SITE variable PH2:Subgroup in sample - A/B/C/D PH2:S1: Doctor type (MD, DO) PH2:Country of medical school PH2:Foreign medical school graduate PH2:AMA/AOA: Sex, 1-Male, 2-Female PH2:AMA/AOA: Year of birth (Corrected) PH2:AMA/AOA: Year of graduation AMA/AOA: Primary care physician flag

#### CONTENTS OF THE CTS ROUND TWO PHYSICIAN SURVEY SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES (continued)

Summary File (VARNAME)	Description of Summary File Estimate	Restricted Use Variable Name	Public Use Variable Name	Variable Label (on Restricted Use File)
	S	Section A – Intr	oduction	
n/a n/a yRSPRAC n/a n/a n/a n/a sPECX1 sPECX2 sPECX3 sPECX3 sPECX4 sPECX5 PCPFLAG BDCERT n/a n/a cARSAT	n/a n/a Mean number of years in practice n/a n/a n/a n/a n/a Percentage of physicians who are internists Percentage family/general practitioners Percentage pediatricians Percentage pediatricians Percentage medical specialists Percentage surgical specialists Percentage primary care physicians Percentage board certified n/a n/a Percentage very or somewhat dissatisfied	MULTPR _MULTPR NUMPR YRBGN NWSPEC GENSUB SIPNPED SIPPED SUBSPC SPECX	MULTPR _MULTPR NUMPRX YRBGNX n/a n/a n/a n/a n/a SPECX	PH2:A4: Multiple practices PH2:Imputation flag for MULTPR PH2:A4A: Number of practices PH2:A6: Year began practicing medicine PH2:A8: Primary specialty/subspecialty PH2:A9: General practice vs. subspecialty PH2:A9a: Subspc, internal, or pediatric (adult specialty) PH2:A9b: Subspc, internal, or pediatric (ped specialty) PH2:A10: Subspc, internal, or pediatric (ped specialty) PH2:A10: Subspc, internal, or pediatric (ped specialty) PH2:Combined specialty/subspecialty PH2:Combined specialty/subspecialty PH2:Combined specialty/subspecialty PH2:Combined specialty/subspecialty PH2:Combined specialty/subspecialty PH2:Combined specialty/subspecialty PH2:Board certification status PH2:Board certified in primary subspecialty/specialty PH2:Board eligible in primary subspecialty/specialty PH2:A19: Overall career satisfaction
CARSAT	Percentagevery or somewhat dissatisfied with overall career	CARSAT	CARSAT	PH2:A19: Overall career satisfaction

#### CONTENTS OF THE CTS ROUND TWO PHYSICIAN SURVEY SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES (continued)

Summary File (VARNAME)	Description of Summary File Variable	Restricted Use Variable Name	Public Use Variable Name	Variable Label (on Restricted Use File)
	Sect	tion B – Utilizat	ion of Time	
n/a WKSWRKC n/a HRSMED n/a HRSPAT	n/a Mean weeks practiced medicine in 1997 n/a Mean hours previous week spent in medically-related activities n/a Mean hours previous week spent in direct patient care	WKSWRK WKSWRKC _WKSWRKC HRSMED _HRSMED HRSPAT	WKSWRKX n/a n/a HRSMEDX n/a HRSPATX	PH2:B1: Weeks practicing medicine in 1997 PH2:Weeks worked in 1997, w/o new phys PH2:Imputation flag for WKSWRKC PH2:Hrs previous wk spent medically-related activities PH2:Imputation flag for HRSMED PH2:Hrs previous wk spent direct patient care activities
n/a HRFREE n/a	n/a Mean hours previous month spent providing charity care n/a	_HRSPAT HRFREE _HRFREE	n/a HRFREEX n/a	PH2:Imputation flag for HRSPAT PH2:B6: Hours previous month charity care PH2:Imputation flag for HRFREE

#### CONTENTS OF THE CTS ROUND TWO PHYSICIAN SURVEY SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES (continued)

Summary File (VARNAME)	Description of Summary File Variable	Restricted Use Variable Name	Public Use Variable Name	Variable Label (on Restricted Use File)		
Section C – Type and Size of Practice						
OWNPR	Percentage who are not full or part -owners of the practice in which they work	OWNPR	OWNPR	PH2:C1: Ownership status (Full/Part/No Own)		
n/a	n/a	_OWNPR	_OWNPR	PH2:Imputation flag for OWNPR		
n/a	n/a	TOPOWN	n/a	PH2:C2: Type of practice (owners)		
n/a	n/a	TOPOWNC	TOPOWNX	PH2:Practice type (owners), w/C9 recodes		
n/a	n/a	TOPEMP	n/a	PH2:C3: Type of employer (non-owner)		
n/a	n/a	TOPEMPC	n/a	PH2:Employer type, w/C9 recodes		
n/a	n/a	TOPEMPA	TOPEMPX	PH2:Employer type (all employees)		
PRCTYPE1	Percentage in solo/2 physician practice	PRCTYPE	PRCTYPE	PH2:Practice type (categorical)		
PRCTYPE2	Percentage in group practice	PRCTYPE	PRCTYPE	PH2:Practice type (categorical)		
n/a	n/a	GRTYPE	GRTYPEX	PH2:Type of group physician		
n/a	n/a	OTHSET	n/a	PH2:C3a: Government hospital or clinic		
n/a	n/a	EMPTYP	n/a	PH2:C3b: Empl type verbatims, coded		
n/a	n/a	EMPTYP2	n/a	PH2:C3c:Type of employer, other		
n/a	n/a	ALLPRTP	n/a	PH2:All practice type		
n/a	n/a	OTHPAR	OTHPAR	PH2:C4: Owner: Other phys in practice		
n/a	n/a	OTHGRP	n/a	PH2:C5A: Owner: Other phys group		
n/a	n/a	HSPPAR	n/a	PH2:C5B: Owner: Hospital		
n/a	n/a	INSPAR	n/a	PH2:C5C: Owner: Insurance Co, HMO		
n/a	n/a	ORGPAR	n/a	PH2:C5D: Owner: Other		
n/a	n/a	C5OWNER	C5OWNX	PH2:C5: Outside ownership		
n/a	n/a	ORGC_1-16	n/a	PH2:What kinds of organizations are these?		
NPHYS	Mean number physicians in practice	NPHYS	NPHYSX	PH2:C7: Number of physicians at practice		
n/a	n/a	_NPHYS	n/a	PH2:Imputation flag for NPHYS		
n/a	n/a	NASSIST	NASSISX	PH2:C8: Number of assistants in practice		
n/a	n/a	_NASSIST	n/a	PH2:Imputation flag for NASSIST		
n/a	n/a	ACQUIRD	ACQUIRD	PH2:C10: Practice acquired in last 2 yrs		
n/a	n/a	_ACQUIRD	_ACQUIRD	PH2:Imputation flag for ACQUIRD		
n/a	n/a	OWNPUR	OWNPURX	PH2:C11: Resp ownership when practice purchased		

# CONTENTS OF THE CTS ROUND TWO PHYSICIAN SURVEY SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES

(continued)

Summary File	Description of	Restricted Use	Public Use	Variable Label (on Restricted Use File)				
(VARNAME)	Summary File Variable	Variable Name	Variable Name					
	Section D – Medical Care Management							
EFDATA EFTREAT EFRMNDR EFGUIDE EFPROFL EFSURV CMPPROV CMPPROV CMPEXPC SPECUSE PCTGATE n/a n/a	Percentcomputer little effect on practice Percentcomputer little effect on treatment Percentreminders little effect on practice Percentwritten guidelines little effect Percentpractice profiles little effect Percentsatisfaction surveys little effect Percentincreased complexity w/o referral Percentcomplexity greater than it should be Percentreferrals increased Mean percent of patients for whom gatekeeper n/a	EFDATA EFTREAT EFRMNDR EFGUIDE EFPROFL EFSURV CMPPROV CMPEXPC SPECUSE PCTGATE _PCTGATE _PCTGATE CMPCHG	EFDATA EFTREAT EFRMNDR EFGUIDE EFPROFL EFSURV CMPPROV CMPEXPC SPECUSE PCTGATE _PCTGATE _PCTGATE CMPCHG	PH2:D1A: Effect of computer get pt data PH2:D1B: Effect of computer get tx/guidelines PH2:D1C: Effect of preventive tx reminders PH2:D1D: Effect of formal written guidelines PH2:D1E: Effect of practice profile results PH2:D1F: Effect of patient satisfaction surveys PH2:D1F: Change-complexity w/o ref, PCP PH2:D8: Appropriateness w/o ref, PCP PH2:D9: Change-number of referrals to specialists PH2:D10: Percent of patients for whom gatekeeper PH2:Imputation flag for PCTGATE PH2:D11: Change-complexity at ref_NPCP				
n/a	n/a	CMPLVL	CMPLVL	PH2:D12: Appropriateness at ref, NPCP				
n/a	n/a	CHGREF	CHGREF	PH2:D13: Change-# referrals by PCPs				

#### CONTENTS OF THE CTS ROUND TWO PHYSICIAN SURVEY SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES (continued)

Summary File (VARNAME)	Description of Summary File Variable	Restricted Use Variable Name	Public Use Variable Name	Variable Label (on Restricted Use File)
		Section E – V	vignettes	
n/a	n/a	WHOCARE	WHOCARE	PH2:EA: Care to adults and/or kids
n/a	n/a	FORM	FORM	PH2:E_FORM: Rotation of vignette questions
n/a	n/a	VCHOL	VCHOL	PH2:E1: Percent oral agents elevated cholesterol
n/a	n/a	VCHOLF	VCHOLF	PH2:E1a: Freq oral agents elevated cholesterol
n/a	n/a	VHYPER	VHYPER	PH2:E3: Percent urology referrals w/ prostatic hyperplasia
n/a	n/a	VHYPERF	VHYPERF	PH2:E3a: Freq urology referrals prostatic hyperplasia
n/a	n/a	VCHEST	VCHEST	PH2:E4: Percent cardiology referrals w/ chest pains
n/a	n/a	VCHESTF	VCHESTF	PH2:E4a: Freq cardiology referrals w/ chest pains
n/a	n/a	VBACK	VBACK	PH2:E5: Percent MRI for low back pain
n/a	n/a	VBACKF	VBACKF	PH2:E5a: Freq MRI for low back pain
n/a	n/a	V60MAN	V60MAN	PH2:E9: Percent PSA test 60 year old male
n/a	n/a	V60MANF	V60MANF	PH2:E9a: Freq PSA test 60 year old male
n/a	n/a	VVITCH	VVITCH	PH2:E10: Percent office visit for vaginal itching
n/a	n/a	VVITCHF	VVITCHF	PH2:E10a: Freq office visit for vaginal itching
n/a	n/a	VENUR	VENUR	PH2:E11: Percent DDAVP 10 year child enuresis
n/a	n/a	VENURF	VENURF	PH2:E11a: Freq DDAVP 10 year child enuresis
n/a	n/a	VTHRT	VTHRT	PH2:E16: Percent office visit fever sore throat child
n/a	n/a	VTHRTF	VTHRTF	PH2:E16a: Freq office visit fever sore throat child
n/a	n/a	VCOUGH	VCOUGH	PH2:E17: Percent x-ray fever tachypnea child
n/a	n/a	VCOUGHF	VCOUGHF	PH2:E17a: Freq x-ray fever tachypnea child
n/a	n/a	VSUPOT	VSUPOT	PH2:E18: Percent ENT referrl suppurative otitis med child
n/a	n/a	VSUPOTF	VSUPOTF	PH2:E18a: Freq ENT referral suppurative otitis med child
n/a	n/a	V6FEVR	V6FEVR	PH2:E20: Percent sepsis workup fever 6 week child
n/a	n/a	V6FEVRF	V6FEVRF	PH2:E20a: Freq sepsis workup fever 6 week child
n/a	n/a	VECZEM	VECZEM	PH2:E21: Percent allergist eczema asthma
n/a	n/a	VECZEMF	VECZEMF	PH2:E21a: Freq allergist eczema asthma child

#### CONTENTS OF THE CTS ROUND TWO PHYSICIAN SURVEY SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES (continued)

Summary File (VARNAME)	Description of Summary File Variable	Restricted Use Variable Name	Public Use Variable Name	Variable Label (on Restricted Use File)
Section F – Physician - Patient Interactions				
ADQTIMEPCLNFREEPHIGHCARPNEGINCNPUSESPCSPn/anCOMMALLPPATRELPOBREFSPOBANCLPOBHOSPFOBINPATFOBIMAGFOBMENTLFNWMCAREFn/anNWMCAIDFn/anNWPRIVFn/an	Percentage w/adequate time for patients Percentage w/freedom for clinical decisions Percentage w/possibility high quality care Percentage decision w/o neg. financial incent. Percentage decision w/o neg. financial incent. Percentage w/high comm. level w/specialists n/a Percentage w/high comm. level, all Pct able to maintain cont.relationships Percentage able to obtain referrals Percentage able to obtain non-emer. admiss. Percentage able to obtain adeq.inpatient days Percentage able to obtain inpatient mental Percentage able to obtain outpatient mental Pet accepting some/no new Medicaid patients n/a Pct accepting some/no new private patients n/a	ADQTIME CLNFREE HIGHCAR NEGINCN USESPCS COMPRM COMMALL PATREL OBREFS OBANCL OBHOSP OBINPAT OBINAG OBMENTL OBOUTPT NWMCARE _NWMCARE NWMCAID NWPRIV _NWPRIV	ADQTIME CLNFREE HIGHCAR NEGINCN USESPCS COMPRM COMMALL PATREL OBREFS OBANCL OBHOSP OBINPAT OBINAG OBMENTL OBOUTPT NWMCARE _NWMCARE NWMCAID _NWMCAID NWPRIV _NWPRIV	<ul> <li>PH2: Adequacy of time, all physicians</li> <li>PH2:F1C: Freedom for clinical decisions</li> <li>PH2:F1C: Freedom for clinical decisions</li> <li>PH2:F1D: Possibility of high quality care</li> <li>PH2:F1E: Decision w/o neg financial incentive</li> <li>PH2:F1E: Decision w/o neg financial incentive</li> <li>PH2:F1F: Highlevel communication w/ specialists</li> <li>PH2:F1G: Communication w/ primary care physician</li> <li>PH2:F1G: Communication, all</li> <li>PH2:F1H: Continuing patient relationships</li> <li>PH2:F8A: Referrals to quality specialists</li> <li>PH2:F8B: High quality ancillary services</li> <li>PH2:F8C: Non-emergency hospital admission</li> <li>PH2:F8E: High quality diagnostic imaging</li> <li>PH2:F8E: High quality outpatient mental health care</li> <li>PH2:F8G: High quality outpatient mental health care</li> <li>PH2:F9A: Accept new Medicare patients</li> <li>PH2:F9B: Accept new Medicaid patients</li> <li>PH2:F9B: Accept new privately insured</li> <li>PH2:F9C: Accept new Privately insured</li> </ul>

#### CONTENTS OF THE CTS ROUND TWO PHYSICIAN SURVEY SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES (continued)

Summary File (VARNAME)	Description of Summary File Variable	Restricted Use Variable Name	Public Use Variable Name	Variable Label (on Restricted Use File)
Section G – Practice Revenue				
PMCARE	Mean pct. revenue from Medicare	PMCARE	PMCARE	PH2:G1A: Percent payments from Medicare
n/a	n/a	_PMCARE	_PMCARE	PH2:Imputation flag for PMCARE
PMCAID	Mean pct. revenue from Medicaid	PMCAID	PMCAID	PH2:G1B: Percent payments from Medicaid
n/a	n/a	_PMCAID	_PMCAID	PH2:Imputation flag for PMCAID
PCAPREV	Mean pct. revenue, capitated	PCAPREV	PCAPREV	PH2: % practice rev prepaid, capitated
n/a	n/a	_PCAPREV	_PCAPREV	PH2:Imputation flag for PCAPREV
NMCCON	Percentage with 15+ managed care contracts	NMCCON	NMCCONX	PH2: Number of managed care contracts
n/a	n/a	_NMCCON	n/a	PH2:Imputation flag for NMCCON
PMC	Mean pct. revenue from managed care	PMC	PMC	PH2: % practice rev from managed care
n/a	n/a	_PMC	_PMC	PH2: Imputation flag for PMC
CAPAMTC1	Pct w/no capitated rev. from largest MC contract	CAPAMTC	CAPAMTC	PH2: Capitated rev from largest MC contr
CAPAMTC2	Pct w/all capitated rev. from largest MC contract	CAPAMTC	CAPAMTC	PH2: Capitated rev from largest MC contr
n/a	n/a	_CAPAMTC	_CAPAMTC	PH2: Imputation flag for CAPAMTC
PBIGCON	Mean pct. of revenue from largest MC contract	PBIGCON	PBIGCON	PH2: Percent revenue largest MC contract
n/a	n/a	_PBIGCON	_PBIGCON	PH2:Imputation flag for PBIGCON

#### CONTENTS OF THE CTS ROUND TWO PHYSICIAN SURVEY SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES (continued)

Summary File	Description of	Restricted Use	Public Use	Variable Label (on Restricted Use File)
(VARNAME)	Summary File Variable	Variable Name	Variable Name	
Section H – Physician Compensation Methods and Income Level				come Level
SALPAID n/a n/a SPROD SSAT SQUAL SPROF n/a n/a PCTINCC n/a n/a INCOMEX	Section H – Physician C Percentage of physicians who are salaried n/a n/a Percentageown productivity affects compen. Percentagecompensation affected by surveys Percentcompens. affected by quality measures Percentcompens. affected by profiling results n/a n/a n/a Mean pct. income from bonuses, 1997 n/a n/a Mean net income in 1997	SALPAID SALTIME SALADJ BONUS SPROD SSAT SQUAL SPROF RADJ _RADJ PCTINCN PCTINCC _PCTINCC EBONUS INCOMET	Aethods and In SALPAID SALTIME SALADJ BONUS SPROD SSAT SQUAL SPROF RADJ _RADJ PCTINCX n/a n/a EBONUS INCOMEX	come LevelPH2:H1: Salaried physician flagPH2:H2: Compensate per work time periodPH2:H3: Salary adjustmentsPH2:H4: Eligible for bonuses now flagPH2:H5A: Own productivity affects compensationPH2:H5B: Patient satisfaction affects comp.PH2:H5C: Quality measures affects compensationPH2:H5D: Profiling results affects compensationPH2:H6: Profiles are risk adjustedPH2:H9: Percent income from bonusesPH2:H9: Percent income from bonuses, correctedPH2:Imputation flag for PCTINCCPH2:H9a: Eligible for bonuses in 1997PH2:H10: Net income in 1997
n/a	n/a	_INCOMET	n/a	PH2:Imputation flag for INCOMET
n/a	n/a	HISP	n/a	PH2:H11:Hispanic origin
RACEWH	Percentage of physicians who are white	RACE	RACEX	PH2:H12:Race

Notes: "n/a" identifies variables that are not available on the CTS Physician Survey Summary File or the CTS Physician Survey Public Use File. Variable label contains a brief description of the variable. In some cases, the label also provides information on the source of the variable (e.g., PH2 for the Round Two Physician Survey) and the question number (e.g., "A6" for Section A, Question 6).

Appendix B

Number Responding to the CTS Round Two Physician Survey, by Site

#### **APPENDIX B**

## NUMBER RESPONDING TO THE CTS ROUND TWO PHYSICIAN SURVEY, BY SITE

Table B.1 below provides unweighted counts of the number of physicians responding to the CTS Round Two Physician Survey, by site of the physician's practice. Note that the number of physicians providing information for individual questions will vary due to skip patterns in the questionnaire and physician inability or refusal to respond to a question. Refer to the microdata codebooks for information about the number of physicians responding to specific questions.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Community Tracking Study Physician Survey Public Use File: Codebook (Round Two), HSC Technical Publication No. 26, and Community Tracking Study Physician Survey Restricted Use File: Codebook (Round Two), HSC Technical Publication No. 28.

CTS Physician Survey Summary File

## TABLE B.1

# NUMBER OF RESPONDING PHYSICIANS BY PRACTICE LOCATION OF PHYSICIAN

SITEID	Site	Count
0	Outside the 60 CTS sites	1,384
1	Boston (MA)	579
2	Cleveland (OH)	471
3	Greenville (SC)	345
4	Indianapolis (IN)	465
5	Lansing (MI)	276
6	Little Rock (AR)	302
7	Miami (FL)	406
8	Newark (NJ)	475
9	Orange County (CA)	440
10	Phoenix (AZ)	453
11	Seattle (WA)	493
12	Syracuse (NY)	361
13	Atlanta (GA)	167
14	Augusta (GA/SC)	113
15	Baltimore (MD)	156
16	Bridgeport (CT)	136
17	Chicago (IL)	159
18	Columbus (OH)	135
19	Denver (CO)	143
20	Detroit (MI)	139
21	Greensboro (NC)	139
22	Houston (TX)	153
23	Huntington (WV/KY/OH)	94
24	Killeen (TX)	92
25	Knoxville (TN)	108
26	Las Vegas (NV/AZ)	127
27	Los Angeles (CA)	206
28	Middlesex (NJ)	144
29	Milwaukee (WI)	134
30	Minneapolis (MN)	144

## TABLE B.1

## NUMBER OF RESPONDING PHYSICIANS BY PRACTICE LOCATION OF PHYSICIAN

(continued)

SITEID	Site	Count
31	Modesto (CA)	92
32	Nassau (NY)	111
33	New York City (NY)	211
34	Philadelphia (PA/NJ)	165
35	Pittsburgh (PA)	145
36	Portland (OR)	137
37	Riverside (CA)	117
38	Rochester (NY)	125
39	San Antonio (TX)	131
40	San Francisco (CA)	137
41	Santa Rosa (CA)	108
42	Shreveport (LA)	98
43	St. Louis (MO/IL)	141
44	Tampa (FL)	130
45	Tulsa (OK)	115
46	Washington, DC (DC/MD/VA)	167
47	W Palm Beach (FL)	112
48	Worchester (MA)	129
49	Dothan (AL)	60
50	Terre Haute (IN)	64
51	Wilmington (NC)	95
52	West Central Alabama	23
53	Central Arkansas	119
54	North Georgia	103
55	Northeast Illinois	85
56	Northeast Indiana	70
57	Eastern Maine	104
58	Eastern North Carolina	93
59	Northern Utah	79
60	Northwest Washington	99