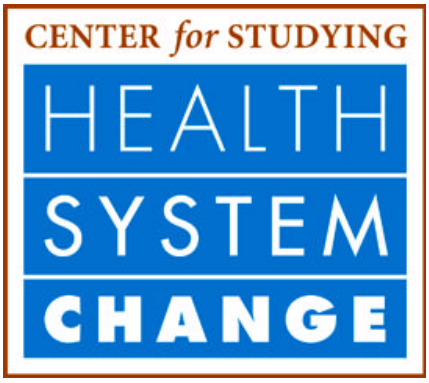
Community Tracking Study

Physician Survey Summary File: User's Guide and Codebook

(Round One, Release 1)

David Edson
Karen Pinkston
Ellen Singer
Sally Trude



600 Maryland Avenue, SW
Suite 550
Washington, DC 20024

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PREFACE

This document gives researchers the information they need to use the Community Tracking Study (CTS) Physician Survey Summary File. The Community Tracking Study, conducted by the Center for Studying Health System Change (HSC), examines changing health care markets and the effects of those changes within 60 communities and across the nation. One component of the CTS, the CTS Physician Survey, is a survey of over 12,000 physicians conducted from August 1996 to August 1997. Data from the CTS Physician Survey is available as microdata, with separate data records for each physician who responded to the survey or in a 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. A Summary File record combines these 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 CTS Physician Survey Summary File provides a rich source of market-level information that will help researchers understand the effects of market-level changes or differences between markets when they analyze CTS surveys or other data sources. This Summary File reflects most of the information collected in the CTS Physician Survey. For each of the selected attributes from the Physician Survey, the Summary File include averages or percentages and the standard errors of these estimates.

The Summary File does not have restrictions on its use, and allows researchers to incorporate geographic and other masked or omitted data in their analyses of other data, such as the CTS Household Survey, without applying for permission for its use. Due to the need to maintain respondent confidentiality, the Physician Survey microdata has two forms: the *Public Use* and the *Restricted Use* files. The Public Use Physician Survey microdata file masks or omits certain geographic and other potentially sensitive information. On the other hand, the Restricted Use version of the Physician Survey microdata file retains much of this confidential information, but access to it is restricted and users must apply for a special license to use this data.

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:

- *Community Tracking Study Physician Survey Methodology Report,* HSC Technical Publication Number 9, describes the sampling procedures, data collection methods and weighting procedures of the survey.

- *Community Tracking Study Physician Survey Public Use File: User's Guide*, HSC Technical Publication Number 10, and *Community Tracking Study Physician Survey Public Use File: Codebook,* HSC Technical Publication Number 11, provide details on the Public Use version of the Physician Survey data. The 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 Guide provides detailed descriptions of how to use the data and how to develop standard errors for

survey-based estimates. The Codebook contains descriptions and unweighted frequencies of responses for each data element.

- *Community Tracking Study Physician Survey Restricted Use File: User's Guide,* HSC Technical Publication Number 12, and *Community Tracking Study Physician Survey Restricted Use File: Codebook,* HSC Technical Publication Number 13, provide information on the Restricted Use version of the Physician Survey data.

These documents are available at the HSC web site (www.hschange.com). The user's guides and codebooks, as well as the Public Use microdata files, are also available at the ICPSR web site (www.icpsr.umich.edu). Additional technical assistance may be obtained by contacting the CTS Public Use File Help Desk by e-mail (ctshelp@hschange.com) or fax (202-863-1763).

CONTENTS

TABLES

FIGURES

Table **Page**

CHAPTER 1

OVERVIEW OF THE COMMUNITY TRACKING STUDY AND THE PHYSICIAN SURVEY

This User's Guide and Codebook helps researchers use the Community Tracking Study (CTS) Physician Survey Summary File. The Summary File provides a rich source of market-level data and national estimates derived from the CTS Physician Survey, a survey of over 12,000 physicians conducted from August 1996 to August 1997.

This chapter provides background information on the Community Tracking Study and the Physician Survey. Chapter 2 describes the Summary File in detail. Chapter 3 provides a codebook containing information about each data in the Summary File.

1.1 CTS Objectives

The CTS is a national study of the rapidly changing health care market and the effects of these changes.[1] Funded by the Robert Wood Johnson Foundation, the study is being conducted by the Center for Studying Health System Change (HSC). The overall goal of the study—to develop an information base designed to track and analyze change in the nation's health care market and to inform public and private decision makers about these changes—has three objectives:

Track Changes in Health Systems. The study's first objective is to document changes in the health system through intensive study of selected communities. The major changes that have been reported in the health system include consolidation of the market at all levels (medical groups, hospitals, insurers, and health plans); vertical integration of providers (for example, hospitals and physicians) and of insurers and providers; increased-risk sharing by providers; growth of large, national, for-profit health care enterprises; and adoption of new techniques for managing clinical care (for example, clinical information systems, quality improvement techniques, utilization management).

Track Changes in Access, Service Delivery, Cost, and Perceived Quality. The second objective is to monitor the effects of health system change on people by tracking indicators of these effects. These effects involve service use and delivery, changes in access to care, and quality and cost of care.

Understand the Effect of Health System Change. The third objective is to understand how differences in health systems are related to differences in access, service delivery, cost, and perceived quality. This objective will be achieved by analyzing — qualitatively and quantitatively — the relationship between health systems and access, service delivery, cost, and perceived quality.

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[1]An overview of the Community Tracking Study is contained in Kemper 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.

1.2 Community Tracking Study Sites

The community focus is central to the design of the study. Health care delivery is primarily local and differs from one community to the next because of history, culture, and state and local policy. Therefore, to analyze and understand institutional changes in the delivery system and their effects, we need information at the local level. We randomly selected 60 communities (listed in Table 1.1) to form the core of the CTS and to be representative of the nation as a whole.[2] We identified 12 of the sites for more intensive study. These are the "high-intensity" sites.

The sites encompass local health care markets. Although there are no set boundaries for these local markets, we attempted to define areas so that residents predominately used health care providers located in the same area, and providers mostly served area residents. We generally defined sites to be MSAs (metropolitan statistical areas) as defined by the Office of Management and Budget or, in the case of nonmetropolitan sites, BEAEAs (Bureau of Economic Analysis economic areas).[3]

The *Community Tracking Study Site-County Crosswalk*, available through ICPSR at www.icpsr.umich.edu, identifies the specific counties, by FIPS code, that comprise each CTS site.

Sites were sampled by stratifying them geographically by region and selecting them randomly, with probability in proportion to their 1995 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 1995 population of 200,000 or more. Of the low-intensity sites, 36 are large metropolitan areas (also having a 1995 population of 200,000 or more), 3 are small metropolitan areas (population of less than 200,000), and 9 are nonmetropolitan sites.

[2]The CTS focuses on the contiguous 48 states. Alaska and Hawaii were not part of the study.

[3]For more details on the definition of CTS sites, refer to C. Metcalf, P. Kemper, L. Kohn, and J. Pickreign. *Site Definition and Sample Design for the Community Tracking Study*. Technical Publication No. 1. Washington, D.C.: Center for Studying Health System Change, October 1996). Note in particular the discussions of New England, where MSAs do not conform with county lines; note also the discussions of the large Consolidated Metropolitan Statistical Areas.

TABLE 1.1

SITES SELECTED FOR THE COMMUNITY TRACKING STUDY

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

Note: Numbers correspond with coding of the site ID variable in the Physician Survey.

*Based on 1995 Census estimates.

1.3 Analytic Components of the Community Tracking Study

The CTS has both qualitative and quantitative components. The qualitative component includes case studies that are being conducted every two years in the 12 high-intensity sites. The first round of comprehensive case studies of the health system were begun in 1996 and continued through 1997 and the second round were conducted in 1998 and early 1999. The findings are available from HSC.[4]

The quantitative component includes survey data from these 12 communities and from the additional 48 CTS sites. In all 60 sites, HSC simultaneously conducted independent surveys of households and physicians, enabling researchers to explore relationships among purchasers, providers, and consumers of health care.[5] Both qualitative and quantitative data are being collected on a two-year cycle, which allows researchers to track changes in the health care system over time. The round one surveys and case studies, completed during 1996 and 1997, are the baseline. Data collection for round two began in the summer of 1998.

1.4 The Physician Survey

The CTS Physician Survey, funded by the Robert Wood Johnson Foundation, was conducted under the direction of HSC. The Gallup Organization was the primary contractor for survey implementation and handled sampling and interviewing. Mathematica Policy Research, Inc. (MPR) was responsible for sample design and variance estimation. Weighting was the joint responsibility of Gallup and MPR. Project Hope and CODA, Inc. helped develop the instrument, including cognitive testing. Social and Scientific Systems, Inc. (SSS) converted the raw survey data into a data file suitable for analysis. MPR and SSS collaborated to prepare the documentation for the Public and Restricted Use Files.

1.4.1 The Physician Survey Sample

The sample frame was developed by combining lists from the American Medical Association (AMA) and the American Osteopathic Association (AOA). The AMA used its Masterfile, which includes non-members, as the source for its sampling frame, and the AOA used its membership file. Within each site, physicians were stratified into primary care and specialist groups and then randomly selected. Primary care physicians were oversampled to permit the development of more precise estimates.

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[4]Center for Studying Health System Change. *Health System Change in Twelve Communities.* Washington, DC: HSC, September 1997. Available at www.hschange.com.

[5]The household survey, conducted by HSC, is available as a Public Use File. The 1997 Robert Wood Johnson Foundation Employer Health Insurance Survey was conducted by RAND. While these surveys were conducted in the same communities, they were independent of one another and do not allow linking persons or employers to specific physicians.

To be eligible for sampling, physicians on the frame had to have completed their medical training,[6] be practicing in the contiguous United States, and be providing direct patient care for at least 20 hours per week.[7] Among those deemed initially eligible, the following categories of physicians were excluded:

- Specialists in fields where the primary focus is not direct patient care[8]
- Federal employees
- Graduates of foreign medical schools who are only temporarily licensed to practice in the United States

The AMA was also asked to exclude osteopathic physicians (D.O.s) from its frame because the sample of osteopaths was to be provided directly by the AOA. The AMA also excluded physicians who were randomly sampled for its 1996 Sociometric Monitoring System survey, as well as those who specifically requested that their names not be released to outsiders. Those in the "do not release name" group were later classified as nonrespondents when making weighting adjustments for nonresponse.

Some physicians thought to be eligible based on the sample frame information were later classified as ineligible because of certain survey responses. For example, physicians who were still in training, provided direct patient care for less than 20 hours per week, practiced in an excluded specialty, were federal employees, or who were deceased were excluded. These ineligible physicians are not included on the Physician Survey data files.

The AMA and the AOA constructed the sample frames and drew the samples based on specifications provided to them by the project team. The selected physicians became the *site sample*. While the site sample alone yields national estimates, they are not as precise as they would have been had even more communities been sampled or had the sample been a simple random sample of the entire U.S. population of physicians. A *supplemental sample* was added to increase the precision of national estimates. The supplemental sample is a relatively small, nationally representative sample of physicians randomly selected from the 48 states in the

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[6] Residents, interns, and fellows were considered to be still in training.

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

[8] 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.

continental United States and the District of Columbia. The supplemental sample and the site sample together make up the *combined sample*.

Figure 1.1 illustrates the sample design. The shaded area shows the cases sampled in site 2 as part of the site sample plus the supplemental sample cases that happened to fall within the site boundaries. For a given site, the combination of cases from the site sample plus those supplemental sample physicians practicing in the site is called the *augmented site sample* for the site.

1.4.2 Survey Content

The CTS Physician Survey instrument collected information on physician supply and specialty distribution, practice arrangements and 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, career satisfaction, effects of care management strategies, and various aspects of physicians' practice of medicine. Physicians were asked to state the percentage of patients for whom they would recommend the course of action specified in each particular vignette. More information on the data in the CTS Physician Survey data files is provided below.

1.4.3 Survey Administration and Processing

The survey was administered completely by telephone, using computer-assisted telephone interviewing technology. Bilingual interviewers were used as needed. Physicians were selected from list frames compiled by the AMA and the AOA. The survey was fielded between August 1996 and August 1997. For PCPs, the average interview length was 22 minutes; for non-PCPs, the average length was 18 minutes.

The total number of completed interviews was 12,385,[9] with a response rate among eligibles of 65.4 percent. Physicians were sent two advance letters from the Robert Wood Johnson Foundation and were offered a $25 honorarium for participating in the survey.

1.4.4 File Preparation

Editing functions built into the CATI data collection included consistency checks and editing of some skip patterns and outlier values. Other editing was performed following the CATI data collection. These edits included logical editing and imputation of missing values. Verbatim text responses were also reviewed and coded.

Logical editing was performed to resolve any inconsistencies among related variables and to resolve skip pattern inconsistencies that remained after the CATI edits. Missing values for selected variables were imputed using unweighted and weighted sequential hot-deck imputation. Most variables had few incidences of missing values (under 3 percent). The only exceptions

[9]There are 12,528 records on the file because 143 physicians were selected twice for the survey and appear twice on the file, even though they were only interviewed once.

were several variables related to physician's net income and practice revenue (as high as 15 percent).[10]

Some additional variables were constructed to facilitate analysis of the data. Some of the additional variables were constructed from simple combinations of the survey variables. Other variables were derived from multiple survey variables and edited for consistency. Information on these constructed variables is available in the data file user's guides.

File preparation also included assignment of sampling weights. The Physician Survey is made up of several sets of samples, each of which is appropriate for certain types of analyses. The decision to use one sample or another depends on the population of interest (the site or the nation), whether the unit of analysis is the physician or the site, and whether the analysis model being used includes site-level means. Detailed discussions of the samples and preparation of the weights is contained in the methodology report and user's guides.

The weights associated with the augmented site sample were used to calculate the site-level statistics in this Summary File. Weights associated with the combined sample were used for the national-level estimates.

1.5 The 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.

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.[11] Since some of the data on the Restricted Use File could compromise the confidentiality of survey respondents, the CTS Physician Survey Restricted Use File may be accessed only under the conditions listed in the *Community Tracking Study Physician Survey Restricted Data Use Agreement.* This agreement provides details on ownership of the data, when the data may be accessed 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 will be available from the ICPSR web site at www.icpsr.umich.edu.

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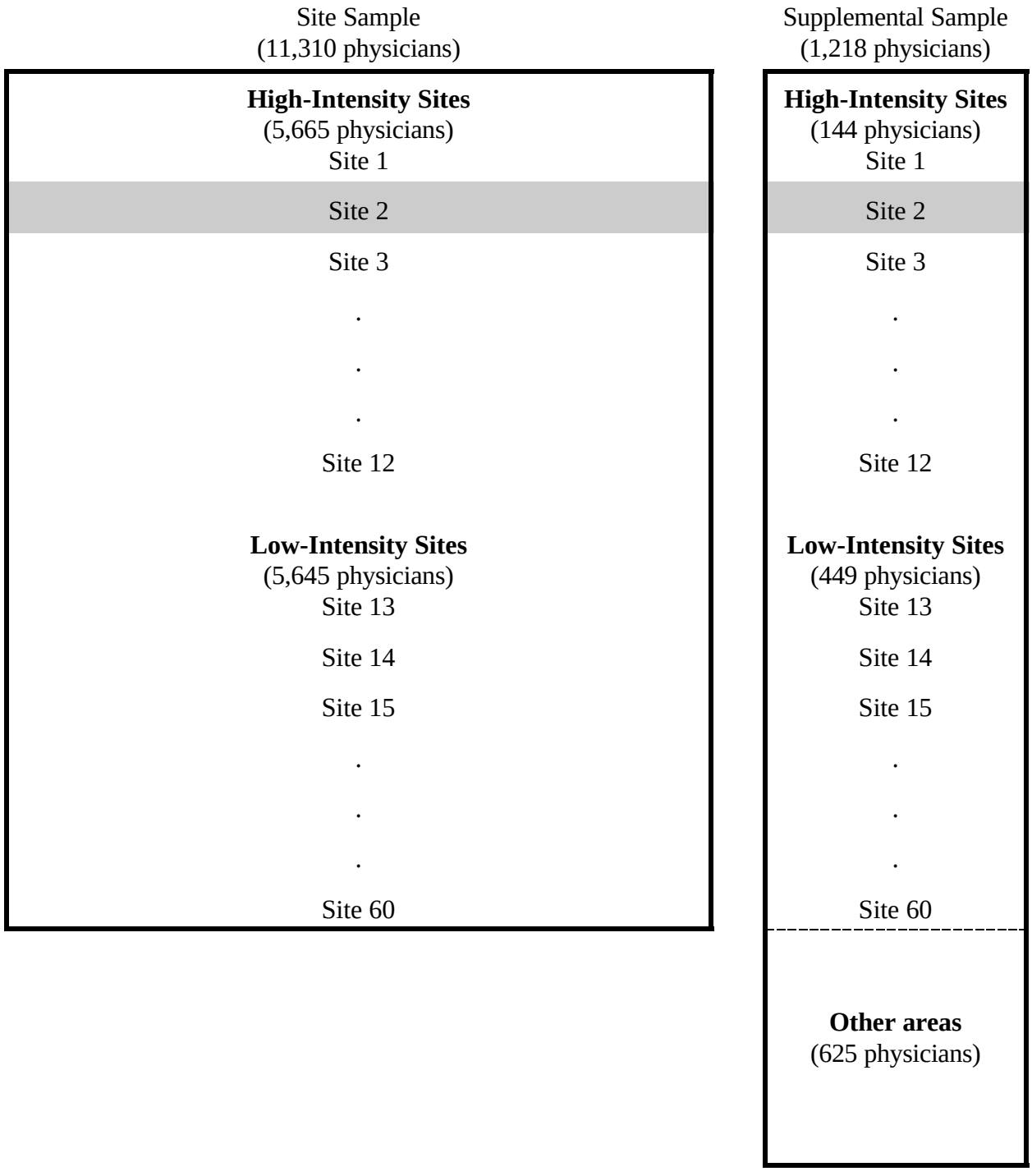
[10]Additional information on file preparation may be obtained from *The Community Tracking Study Physician Survey Methodology Report*, Technical Publication No. 9, Washington, DC: Center for Studying Health System Change, October 1998.

[11]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.

FIGURE 1.1

THE CTS PHYSICIAN SAMPLE STRUCTURE



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 take extensive and possibly costly or inconvenient measures to limit access to their copy of the file in order to assure survey respondent confidentiality.

The ***Public Use File*** is available to all researchers with minimal restrictions. No separate application is necessary and most of the information contained in the Restricted File is also included in the Public Use File. However, because of confidentiality considerations, there are some differences between the two files. The Public Use File does not include site identifiers, so no site-level analysis is possible. 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, so researchers must use 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 analysis tool. Separate documentation on this 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 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 Access files is provided in Appendix A.

CHAPTER 2

THE CTS PHYSICIAN SURVEY SUMMARY FILE

This file provides weighted averages or percentages for selected attributes of CTS Physician Survey respondents as well as standard errors for the averages and percentages. Aggregate statistics are provided for each of the 60 CTS sites and for the nation as a whole. Some of the data included on the Public and Restricted Use files are omitted from the Summary File because of statistical considerations. This chapter describes the selection of variables in the Summary File and discusses the criteria used to omit information for certain sites. The structure and content of the data file are described in Chapter 3.

2.1 Selection of Data Elements

The Summary File reflects much of the information contained in the Physician Survey. We excluded variables such as survey administration variables or variables for which the sample size was too small to provide reliable estimates. The remaining variables were framed in terms of averages or percentages; our goal was to retain one variable in the Summary File for each variable in the Physician Survey microdata files. For instance, GENDER on the microdata files identifies the responding physician as either male or female. Instead of having two variables for GENDER on the Summary File, GENDER was redefined to represent the percentage of physicians who were males in each site. On the microdata file, PMCARE represents the percentage of revenue an individual physician's practice received from Medicare. On the Summary File, PMCARE represents the average percentage of revenue received from Medicare for physicians in the site. The categorical variable CARSAT from the microdata file identifies the responding physician as being very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied or neither satisfied nor dissatisfied with their overall career in medicine. On the Summary File, CARSAT is defined as the percentage of physicians who are very dissatisfied or somewhat dissatisfied with their overall career in medicine.

2.2 Calculation of Site Averages and Percentages

Weighted averages or percentages were calculated for each of 63 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.[12] Appendix B provides unweighted counts of the number of responding physicians for each site. The number of physicians responding to specific questions may vary due to skip patterns in the questions asked and due to item nonresponse. Refer to the microdata codebooks for item nonresponse rates.

[12]Refer to Appendix D of Reschovsky, James, et al. *Community Tracking Study Physician Survey Restricted Use File: User's Guide (Round One, Release 1),* for a description of the use of SUDAAN with the CTS Physician Survey microdata.

2.3 Criteria for Including Site Averages or Percentages

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.[13] This indicates the precision of an estimate. We use estimates of the standard errors to construct confidence intervals around estimates and to conduct hypothesis tests.

We calculated standard errors for the site averages or percentages to determine the precision of each estimate. We then reviewed this information to determine which variable/site combinations would be statistically appropriate for the final Summary File. A variable is included on the Summary File only when the following are true:

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

If either of these criteria was absent, missing values were assigned to that site. If 15 or more sites failed to match these criteria for a survey variable, that variable was excluded from the Summary File. Appendix A identifies those variables that are not in the Summary File. Researchers needing access to excluded variables may need to apply for access to the Restricted Use File.

2.4 Appropriate Uses of the CTS Physician Summary File

Researchers should not use the 60 site-level estimates to calculate national estimates. After stratifying sites geographically, the 60 CTS were selected randomly with probability in proportion to the population in the site. Sample weights correct for this aspect of the CTS design. Therefore, to generate national estimates, researchers must use the Physician Survey microdata and the relevant sample weights.

[13]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. The classical population variance is a measure of the variation among the population, whereas a sampling variance is a measure of the variation of the *estimate* of a population parameter (for example, a population average or percentage) over repeated samples. The population variance is different from the sampling variance in the sense that the population variance is a constant, independent of any sampling issues, while the sampling variance becomes smaller as the sample size increases. The sampling variance is zero when the full population is observed, as in a census.

[14]The "relative standard error" is the standard error of an estimate divided by the estimate itself.

CHAPTER 3

CTS PHYSICIAN SURVEY SUMMARY FILE CODEBOOK

The CTS Physician Survey Summary File Codebook provides information about the Community Tracking Study Physician Survey Summary File and its contents.

3.1 File Details

The file is based on data from Round One of the CTS Physician Survey, which was conducted between August 1996 and August 1997 and has a separate record for each combination of variable and site. Figure 3.1 provides an overview of the file structure. Each observation includes the site name, site identifier, variable name, average (percentage), and the standard error of the average (percentage). For example, the first record on the file shows that 14.7 percent of Boston physicians are foreign medical school graduates, and that the standard error for that estimate is 1.57 percent. With 63 variables and 61 sites (60 CTS sites and national), there are 3,843 observations on the file.

3.1.1 File Format

The CTSR1PS1.TXT file is distributed in ASCII format. Each observation has the following format:

Variable Name	Description	Type	Position	
			Start	End
VARNAME	Variable Name	Character	1	10
SITEID	Site Identifier	Numeric	11	12
SITENAME	Site Name	Character	15	32
MEAN	Average (or percent) of the variable for that site	Numeric	33	44
SEMEAN	Standard error of the average (or percent) for that site	Numeric	46	57

The file is sorted by VARNAME and SITEID.

3.1.2 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 dependable estimate or because the relative standard error for the estimate was too high. Chapter 2 describes the criteria used to determine when to assign a missing value.

FIGURE 3.1

THE STRUCTURE OF THE CTS PHYSICIAN SUMMARY FILE

Record	**VARNAME**	**SITEID**	**SITENAME**	**MEAN**	**SEMEAN**
1	IMGUSPR	1	Boston	14.7101	1.565977
2	IMGUSPR	2	Cleveland	21.8475	1.902505
3	IMGUSPR	3	Greenville	8.3692	1.221367
.	.	.	.	.	.
.	.	.	.	.	.
.	.	.	.	.	.
61	IMGUSPR	61	United States	19.5471	1.214238
62	GENDER	1	Boston	74.4671	1.939851
63	GENDER	2	Cleveland	79.9477	1.825889
64	GENDER	3	Greenville	90.4250	1.159106
.	.	.	.	.	.
.	.	.	.	.	.
122	GENDER	61	United States	82.0216	0.382313
.	.	.	.	.	.
.	.	.	.	.	.

Notes to Figure 3.1:

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

VARNAME identifies the attribute for which summary estimates are calculated
SITEID and **SITENAME** identify the CTS site (or records representing the nation as a whole)
MEAN is the mean or percentage for the site or the nation
SEMEAN is the standard error of MEAN

The value of MEAN represents the percentage of foreign medical graduates (IMGUSPR=1) in the CTS site. For example, roughly 14.7 percent of practicing physicians in Boston are foreign medical graduates and about 21.8 percent of practicing physicians in Cleveland are foreign medical graduates.

The value of SEMEAN = 1.565977 is the standard error associated with Boston's estimated proportion of foreign medical graduates (MEAN=14.7101). A 95 percent confidence interval for Boston would be 11.6 to 17.8, calculated as 1.96*SEMEAN plus/minus MEAN.

3.2 Variables on the Summary File

Table 3.1 is a list of the variables included on the Summary File. The sequence of the variables on the list follows the order on the data file and the order of the underlying questions on the CTS Physician Survey. Table 3.1 is also a table of contents for the detailed variable descriptions. Table 3.2 provides the same information but sorted by variable name.

3.3 Detailed Variable Descriptions

The remainder of this codebook (Table 3.3) contains detailed descriptions or definitions of each variable on the Summary File. Each definition contains information on who answered the question and other relevant information. For instance, the description for the variable WKSWRKC, the average number of weeks that physicians practiced medicine in 1995, notes that the responses exclude physicians who started practicing medicine in 1995 or later. Therefore, the average is based on responses provided by only those physicians practicing prior to 1995.

We also provide information on the source of each variable and indicate the source question(s) from the survey upon which the variable is based,[15] the questionnaire section and the question number. The value and standard error of the variable for the nation and for the twelve high-intensity sites are displayed.[16] Values for the remaining CTS sites are available on the data file itself.

[15]Copies of the survey questionnaires are available in *The Community Tracking Study Physician Survey Instrument,* Technical Publication No. 3. Washington, DC: Center for Studying Health System Change, September 1997. A copy is also included in Reschovsky, James, et al. *Community Tracking Study Physician Survey Public Use File: User's Guide (Round One, Release 1),* Technical Publication No. 10. Washington, DC: Center for Studying Health System Change, October 1998.

[16]Please note that when comparing these means to the RUF or PUF codebooks, these are weighted statistics while the RUF and PUF codebook frequencies are unweighted.

TABLE 3.1
VARIABLES ON THE CTS PHYSICIAN SUMMARY FILE
(Positional Order)

Summary File Name	Description of Summary File Variable	Page
Survey Administration Variables		
IMGUSPR	Percentage of physicians who are foreign medical graduates	23
GENDER	Percentage of physicians who are males	23
AGE	Average age of physicians	24
YRSGRAD	Average number of years since graduation from medical school	24
Questionnaire Section A: Introduction		
YRSPRAC	Average number of years in practice	25
SPECX1	Percentage of physicians who are internists	26
SPECX2	Percentage of physicians who are family or general practitioners	27
SPECX3	Percentage of physicians who are pediatricians	28
SPECX4	Percentage of physicians who are medical specialists	29
SPECX5	Percentage of physicians who are surgical specialists	30
PCPFLAG	Percentage of physicians who are primary care physicians	31
BDCERT	Percentage of physicians who are board certified in any specialty or subspecialty	31
CARSAT	Percentage of physicians who are either very or somewhat dissatisfied with their overall career in medicine	32
Questionnaire Section B: Utilization of Time		
WKSWRKC	Average weeks practiced medicine in 1995	32
HRSMED	Average hours during the previous week spent in medically-related activities	33
HRSPAT	Average hours during the previous week spent in direct patient care	33
HRFREE	Average hours during the previous month spent providing charity care	34
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	34
PRCTYPE1	Percentage of physicians who work in solo or two-physician practices	35
PRCTYPE2	Percentage of physicians who work in group practices with three or more physicians	36
NPHYS	Average number of physicians in each practice	37

TABLE 3.1
VARIABLES ON THE CTS PHYSICIAN SUMMARY FILE
(Positional Order)

Summary File Name	Description of Summary File Variable	Page
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	37
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	38
EFRMNDR	Percentage of physicians indicating that reminders about specific preventative services had either no or a very small effect on their practice of medicine	39
EFGUIDE	Percentage of physicians indicating that the use of written guidelines had either no or a very small effect on their practice of medicine	40
EFPROFL	Percentage of physicians indicating that the results of practice profiles had either no or a very small effect on their practice of medicine	40
EFSURV	Percentage of physicians indicating that patient satisfaction surveys had either no or a very small effect on their practice of medicine	41
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	41
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	42
SPECUSE	Percentage of physicians indicating that referrals to specialists increased either a little or a lot over the last two years	42
PCTGATE	Average percentage of patients in their practice for whom the physician serves as a gatekeeper	43

TABLE 3.1
VARIABLES ON THE CTS PHYSICIAN SUMMARY FILE
(Positional Order)

Summary File Name	Description of Summary File Variable	Page
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	43
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	44
HIGHCAR	Percentage of physicians who either somewhat or strongly agree that it is possible to provide high quality care to all of their patients	44
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	45
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	45
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	46
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	47
OBREFS	Percentage of physicians who are either always or almost always able to obtain referrals to specialists when they think it is medically necessary	48
OBANCL	Percentage of physicians who are either always or almost always able to obtain ancillary services for their patients when medically necessary	48
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	49
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	49
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	50
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	51
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	52

TABLE 3.1
VARIABLES ON THE CTS PHYSICIAN SUMMARY FILE
(Positional Order)

Summary File Name	Description of Summary File Variable	Page
Questionnaire Section F - Physician - Patient Interactions (continued)		
NWMCARE	Percentage of physicians whose practice is accepting either some or no new Medicare patients	53
NWMCAID	Percentage of physicians whose practice is accepting either some or no new Medicaid patients	54
NWPRIV	Percentage of physicians whose practice is accepting either some or no new privately insured patients	54
Questionnaire Section G: Practice Revenue		
PMCARE	Average percentage of patient care practice revenue from Medicare	55
PMCAID	Average percentage of patient care practice revenue from Medicaid	55
PCAPREV	Average percentage of patient care practice revenue paid on a capitated or other prepaid basis	56
NMCCON	Percentage of physicians in practices who have more than 15 managed care contracts	56
PMC	Average percentage of patient care revenue from managed care	57
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	57
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	58
PBIGCON	Average percentage of patient care revenue from each practice's largest managed care contract	58
Questionnaire Section H - Physician Compensation Methods & Income Level		
SALPAID	Percentage of physicians in the practice who are salaried	59
SPROD	Percentage of physicians indicating that their compensation is affected by their own productivity	59
SSAT	Percentage of physicians indicating that their compensation is affected by satisfaction surveys completed by their own patients	60
SQUAL	Percentage of physicians indicating that their compensation is affected by specific measures of quality of care	60
SPROF	Percentage of physicians indicating that their compensation is affected by practice profiling	61
PCTINCC	Average percentage of a physician's 1995 practice income that was earned from bonuses, returned withdrawals, or other incentive payments	61
INCOMEX	Average 1995 net income received from the practice of medicine	62

TABLE 3.2
VARIABLES ON THE CTS PHYSICIAN SUMMARY FILE
(Alphabetical Order)

Summary File Name	Description of Summary File Variable	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	43
AGE	Average age of physicians	24
BDCERT	Percentage of physicians who are board certified in any specialty or subspecialty	31
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	57
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	58
CARSAT	Percentage of physicians who are either very or somewhat dissatisfied with their overall career in medicine	32
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	44
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	42
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	41
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	46
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	37
EFGUIDE	Percentage of physicians indicating that the use of written guidelines had either no or a very small effect on their practice of medicine	40
EFPROFL	Percentage of physicians indicating that the results of practice profiles had either no or a very small effect on their practice of medicine	40
EFRMNDR	Percentage of physicians indicating that reminders about specific preventative services had either no or a very small effect on their practice of medicine	39
EFSURV	Percentage of physicians indicating that patient satisfaction surveys had either no or a very small effect on their practice of medicine	41
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	38
GENDER	Percentage of physicians who are males	23

TABLE 3.2
VARIABLES ON THE CTS PHYSICIAN SUMMARY FILE
(Alphabetical Order)

Summary File Name	Description of Summary File Variable	Page
HIGHCAR	Percentage of physicians who either somewhat or strongly agree that it is possible to provide high quality care to all of their patients	44
HRFREE	Average hours during the previous month spent providing charity care	34
HRSMED	Average hours during the previous week spent in medically-related activities	33
HRSPAT	Average hours during the previous week spent in direct patient care	33
IMGUSPR	Percentage of physicians who are foreign medical graduates	23
INCOMEX	Average 1995 net income received from the practice of medicine	62
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	45
NMCCON	Percentage of physicians in practices who have more than 15 managed care contracts	56
NPHYS	Average number of physicians in each practice	37
NWMCAID	Percentage of physicians whose practice is accepting either some or no new Medicaid patients	54
NWMCARE	Percentage of physicians whose practice is accepting either some or no new Medicare patients	53
NWPRIV	Percentage of physicians whose practice is accepting either some or no new privately insured patients	54
OBANCL	Percentage of physicians who are either always or almost always able to obtain ancillary services for their patients when medically necessary	48
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	49
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	50
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	49
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	51
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	52
OBREFS	Percentage of physicians who are either always or almost always able to obtain referrals to specialists when they think it is medically necessary	48

TABLE 3.2
VARIABLES ON THE CTS PHYSICIAN SUMMARY FILE
(Alphabetical Order)

Summary File Name	Description of Summary File Variable	Page
OWNPR	Percentage of physicians who are not full- or part- owners of the practice in which they work	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	47
PBIGCON	Average percentage of patient care revenue from each practice's largest managed care contract	58
PCAPREV	Average percentage of patient care practice revenue paid on a capitated or other prepaid basis	56
PCPFLAG	Percentage of physicians who are primary care physicians	31
PCTGATE	Average percentage of patients in their practice for whom the physician serves as a gatekeeper	43
PCTINCC	Average percentage of a physician's 1995 practice income that was earned from bonuses, returned withdrawals, or other incentive payments	61
PMC	Average percentage of patient care revenue from managed care	57
PMCAID	Average percentage of patient care practice revenue from Medicaid	55
PMCARE	Average percentage of patient care practice revenue from Medicare	55
PRCTYPE1	Percentage of physicians who work in solo or two-physician practices	35
PRCTYPE2	Percentage of physicians who work in group practices with three or more physicians	36
SALPAID	Percentage of physicians in the practice who are salaried	59
SPECUSE	Percentage of physicians indicating that referrals to specialists increased either a little or a lot over the last two years	42
SPECX1	Percentage of physicians who are internists	26
SPECX2	Percentage of physicians who are family or general practitioners	27
SPECX3	Percentage of physicians who are pediatricians	28
SPECX4	Percentage of physicians who are medical specialists	29
SPECX5	Percentage of physicians who are surgical specialists	30
SPROD	Percentage of physicians indicating that their compensation is affected by their own productivity	59
SPROF	Percentage of physicians indicating that their compensation is affected by practice profiling	61
SQUAL	Percentage of physicians indicating that their compensation is affected by specific measures of quality of care	60

TABLE 3.2
VARIABLES ON THE CTS PHYSICIAN SUMMARY FILE
(Alphabetical Order)

Summary File Name	Description of Summary File Variable	Page
SSAT	Percentage of physicians indicating that their compensation is affected by satisfaction surveys completed by their own patients	60
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	45
WKSWRKC	Average weeks practiced medicine in 1995	32
YRSGRAD	Average number of years since graduation from medical school	24
YRSPRAC	Average number of years in practice	25

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

IMGUSPR **Foreign medical school graduate**

Description: The percentage of physicians who are foreign medical school graduates. Foreign medical school graduates include those graduating from medical schools outside of the U.S. or Puerto Rico.

Derived from: Information about the medical school was obtained from the AMA and AOA.

	PERCENT	STANDARD ERROR
National	20%	1.21
SITE		
Boston	15	1.57
Cleveland	22	1.90
Greenville	8	1.22
Indianapolis	7	1.23
Lansing	11	1.55
Little Rock	5	1.07
Miami	41	2.41
Newark	30	2.48
Orange County	34	2.47
Phoenix	18	1.80
Seattle	8	1.34
Syracuse	22	1.91

GENDER **Gender**

Description: The percentage of physicians who are male.

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

	PERCENT	STANDARD ERROR
National	82%	0.38
SITE		
Boston	74	1.94
Cleveland	80	1.83
Greenville	90	1.16
Indianapolis	83	1.63
Lansing	76	2.00
Little Rock	84	1.66
Miami	83	1.80
Newark	79	2.23
Orange County	86	1.69
Phoenix	86	1.66
Seattle	77	1.99
Syracuse	81	1.66

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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	0.17
SITE		
Boston	48	0.46
Cleveland	48	0.46
Greenville	48	0.44
Indianapolis	45	0.42
Lansing	48	0.51
Little Rock	47	0.43
Miami	51	0.56
Newark	51	0.60
Orange County	49	0.51
Phoenix	49	0.49
Seattle	48	0.41
Syracuse	48	0.46

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	0.18
SITE		
Boston	21	0.50
Cleveland	21	0.48
Greenville	21	0.46
Indianapolis	18	0.43
Lansing	19	0.47
Little Rock	20	0.46
Miami	24	0.55
Newark	24	0.65
Orange County	23	0.51
Phoenix	22	0.51
Seattle	21	0.43
Syracuse	21	0.47

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

YRSPRAC	Number of years in practice

Description: The average number of years in practice. Derived by calculating the difference between the interview year and the year the physician began to practice medicine.

Derived from: Questionnaire Section A, Question A6

	AVERAGE	STANDARD ERROR
National	16 years	0.14
SITE		
Boston	16	0.47
Cleveland	16	0.46
Greenville	16	0.46
Indianapolis	13	0.42
Lansing	15	0.50
Little Rock	15	0.45
Miami	17	0.54
Newark	18	0.62
Orange County	16	0.50
Phoenix	17	0.50
Seattle	16	0.43
Syracuse	16	0.45

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

SPECX1 — Percentage of physicians who are internists

Description: The percentage of physicians who are internists (internal medicine). This includes physicians whose specialty and/or subspecialty are adolescent medicine/internal medicine, geriatrics/internal medicine, or internal medicine. It excludes family or general practitioners, pediatricians, and medical and surgical specialists (including psychiatry and obstetrics/gynecology).

Derived from: Based on responses to Questionnaire Section A, Questions A8 (physician's specialty) and A10 (physician's subspecialty). Refer to the description of the variable SPECX in the CTS Physician Survey Public Use File: User's Guide (page 4-8) for more information concerning how physician specialties and sub-specialties are categorized.

	PERCENT	STANDARD ERROR
National	13%	0.34
SITE		
Boston	18	1.06
Cleveland	16	1.25
Greenville	8	0.74
Indianapolis	10	0.89
Lansing	7	0.93
Little Rock	5	0.62
Miami	13	1.29
Newark	15	1.55
Orange County	12	1.18
Phoenix	11	1.15
Seattle	11	1.10
Syracuse	11	1.02

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

SPECX2	Percentage of physicians who are family/general practitioners

Description: The percentage of physicians who are family or general practitioners. This includes physicians whose specialty and/or subspecialty are family/general practice, geriatrics-family/general practice, or adolescent medicine-general practice. It excludes internists, pediatricians, and medical and surgical specialists (including psychiatry and obstetrics/gynecology).

Derived from: Based on responses to Questionnaire Section A, Questions A8 (physician's specialty) and A10 (physician's subspecialty). Refer to the description of the variable SPECX in the CTS Physician Survey Public Use File: User's Guide (page 4-8) for more information concerning how physician specialties and sub-specialties are categorized.

	PERCENT	STANDARD ERROR
National	18%	0.44
SITE		
Boston	5	0.64
Cleveland	13	0.90
Greenville	20	0.95
Indianapolis	21	1.13
Lansing	28	1.24
Little Rock	16	0.99
Miami	16	1.18
Newark	10	0.91
Orange County	18	1.12
Phoenix	19	1.00
Seattle	21	1.07
Syracuse	15	0.86

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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* (page 4-8) for more information concerning how physician specialties and sub-specialties are categorized.

	PERCENT	STANDARD ERROR
National	8%	0.20
SITE		
Boston	10	0.82
Cleveland	9	0.87
Greenville	8	0.65
Indianapolis	5	0.54
Lansing	9	1.13
Little Rock	8	0.69
Miami	9	0.97
Newark	10	0.93
Orange County	10	0.93
Phoenix	8	0.76
Seattle	7	0.82
Syracuse	9	0.76

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

SPECX4 — Percentage of physicians who are medical specialists

Description: 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* (page 4-8) for more information concerning how physician specialties and sub-specialties are categorized.

	PERCENT	STANDARD ERROR
National	33%	0.46
SITE		
Boston	40	2.20
Cleveland	36	2.36
Greenville	26	2.09
Indianapolis	34	2.18
Lansing	36	2.27
Little Rock	35	2.23
Miami	34	2.38
Newark	35	2.79
Orange County	30	2.58
Phoenix	33	2.30
Seattle	35	2.36
Syracuse	32	2.18

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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 specialties include psychiatry.

Derived from: Based on responses to Questionnaire Section A, Questions A8 (physician's specialty) and A10 (physician's subspecialty). Refer to the description of the variable SPECX in the *CTS Physician Survey Public Use File: User's Guide* (page 4-8) for more information concerning how physician specialties and sub-specialties are categorized.

	PERCENT	STANDARD ERROR
National	29%	0.54
SITE		
Boston	27	2.05
Cleveland	26	2.25
Greenville	38	2.04
Indianapolis	30	2.17
Lansing	19	2.11
Little Rock	37	2.15
Miami	29	2.28
Newark	30	2.62
Orange County	31	2.43
Phoenix	30	2.33
Seattle	26	2.29
Syracuse	32	2.14

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

PCPFLAG **Percentage of physicians who are primary care physicians**

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

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

	PERCENT	STANDARD ERROR
National	39%	0.54
SITE		
Boston	34	1.15
Cleveland	39	1.23
Greenville	36	0.82
Indianapolis	36	1.07
Lansing	44	1.19
Little Rock	28	0.95
Miami	40	1.49
Newark	36	1.78
Orange County	40	1.35
Phoenix	39	1.29
Seattle	39	1.29
Syracuse	36	1.09

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	85%	0.69
SITE		
Boston	89	1.44
Cleveland	86	1.50
Greenville	92	1.11
Indianapolis	87	1.50
Lansing	85	1.71
Little Rock	89	1.31
Miami	73	2.08
Newark	81	1.85
Orange County	83	1.76
Phoenix	85	1.91
Seattle	90	1.40
Syracuse	91	1.27

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

CARSAT **Overall career satisfaction**

Description: 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, Question 19.

	PERCENT	STANDARD ERROR
National	18%	0.72
SITE		
Boston	14	1.62
Cleveland	18	1.91
Greenville	14	1.56
Indianapolis	13	1.50
Lansing	11	1.53
Little Rock	12	1.45
Miami	34	2.41
Newark	24	2.38
Orange County	28	2.46
Phoenix	23	2.07
Seattle	15	1.72
Syracuse	14	1.63

WKSWRKC **Weeks practicing medicine in 1995**

Description: The average number of weeks that physicians practiced medicine in 1995. Physicians who began practicing medicine during 1995 or later were excluded.

Derived from: Questionnaire Section B, Question 1.

	AVERAGE	STANDARD ERROR
National	47 weeks	0.07
SITE		
Boston	47	0.22
Cleveland	47	0.22
Greenville	48	0.17
Indianapolis	47	0.25
Lansing	47	0.25
Little Rock	48	0.20
Miami	48	0.19
Newark	47	0.29
Orange County	48	0.23
Phoenix	47	0.17
Seattle	47	0.18
Syracuse	47	0.25

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

HRSMED **Hours during previous week spent in medically-related activities**

Description: The average number of hours during the last full week of work that each physician in the site spent in medically-related activities, including direct patient care.

Derived from: Questionnaire Section B, Questions 2, 3c, and 4.

	AVERAGE	STANDARD ERROR
National	56 hours	0.18
SITE		
Boston	55	0.80
Cleveland	56	0.80
Greenville	57	0.60
Indianapolis	57	0.69
Lansing	53	0.69
Little Rock	57	0.79
Miami	55	0.88
Newark	56	1.09
Orange County	53	0.89
Phoenix	57	0.75
Seattle	53	0.68
Syracuse	56	0.68

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	0.20
SITE		
Boston	42	0.74
Cleveland	44	0.82
Greenville	48	0.58
Indianapolis	44	0.66
Lansing	41	0.69
Little Rock	47	0.79
Miami	44	0.89
Newark	43	0.83
Orange County	42	0.83
Phoenix	46	0.71
Seattle	42	0.67
Syracuse	44	0.74

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

HRFREE **Hours during previous month spent providing charity care**

Description: The average number of hours during the last month that each physician in the site spent providing charity care.

Derived from: Questionnaire Section B, Question 6.

	AVERAGE	STANDARD ERROR
National	9 hours	0.23
SITE		
Boston	9	0.86
Cleveland	7	0.58
Greenville	9	0.71
Indianapolis	10	1.22
Lansing	7	0.57
Little Rock	11	1.09
Miami	11	0.91
Newark	11	0.84
Orange County	7	0.76
Phoenix	7	0.75
Seattle	6	0.51
Syracuse	9	0.80

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	38%	0.66
SITE		
Boston	55	2.21
Cleveland	49	2.43
Greenville	37	1.97
Indianapolis	45	2.22
Lansing	53	2.46
Little Rock	45	2.26
Miami	33	2.25
Newark	22	2.28
Orange County	26	2.20
Phoenix	33	2.29
Seattle	45	2.33
Syracuse	39	2.21

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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* (page 4-11) for information about how the ownership and employment were combined to determine practice type.

	PERCENT	STANDARD ERROR
National	41%	0.91
SITE		
Boston	33	2.13
Cleveland	35	2.35
Greenville	28	2.07
Indianapolis	26	2.05
Lansing	28	2.23
Little Rock	35	2.19
Miami	58	2.44
Newark	59	2.77
Orange County	59	2.52
Phoenix	45	2.42
Seattle	35	2.39
Syracuse	34	2.17

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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* (page 4-11) for information about how the ownership and employment were combined to determine practice type.

	PERCENT	STANDARD ERROR
National	28%	0.96
SITE		
Boston	25	1.85
Cleveland	24	2.17
Greenville	43	2.23
Indianapolis	37	2.23
Lansing	24	2.21
Little Rock	29	2.10
Miami	15	1.77
Newark	24	2.41
Orange County	21	2.11
Phoenix	30	2.20
Seattle	30	2.27
Syracuse	33	2.15

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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	35	3.22
SITE		
Boston	55	8.31
Cleveland	95	13.26
Greenville	13	1.06
Indianapolis	20	1.86
Lansing	8	0.57
Little Rock	5	0.36
Miami	8	2.25
Newark	11	2.83
Orange County	56	9.12
Phoenix	36	6.02
Seattle	91	9.70
Syracuse	11	2.26

EFDATA	Effect of using computers to obtain or record clinical data on the practice of medicine

Description: The percentage of physicians who indicated that their use of computers to obtain or record clinical data 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.

Derived from: Questionnaire Section D, Question D1A.

	PERCENT	STANDARD ERROR
National	29%	0.52
SITE		
Boston	22	1.91
Cleveland	23	1.93
Greenville	24	1.83
Indianapolis	19	1.65
Lansing	34	2.35
Little Rock	25	1.97
Miami	29	2.22
Newark	34	2.59
Orange County	34	2.48
Phoenix	30	2.24
Seattle	27	2.14
Syracuse	24	1.85

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

EFTREAT	**Effect of using computers to obtain treatment guidelines on the practice of medicine**

Description: The percentage of physicians who indicated that their use of computers to obtain information about treatment alternatives or recommended guidelines 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.

Derived from: Questionnaire Section D, Question D1B.

	PERCENT	**STANDARD ERROR**
National	43%	0.46
SITE		
Boston	45	2.27
Cleveland	40	2.36
Greenville	42	2.21
Indianapolis	42	2.24
Lansing	43	2.46
Little Rock	38	2.21
Miami	42	2.49
Newark	44	2.75
Orange County	42	2.61
Phoenix	47	2.45
Seattle	41	2.44
Syracuse	44	2.25

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

EFRMNDR	Effect of preventive treatment reminders on the practice of medicine

Description: The percentage of primary care and selected specialty physicians who indicated that reminders they received from medical groups, insurance companies, or HMO's alerting them about specific preventive services for their patients 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. This applies to those physicians whose specialty or subspecialty was family practice, geriatric medicine, general practice, gynecology, obstetrics and gynecology, obstetrics, adolescent medicine. It also applies to other specialists that spend more time practicing general internal medicine or general pediatrics than spent practicing a subspecialty.

Derived from: Questionnaire Section D, Question D1C.

	PERCENT	STANDARD ERROR
National	33%	0.66
SITE		
Boston	27	2.51
Cleveland	31	2.68
Greenville	37	2.45
Indianapolis	34	2.61
Lansing	24	2.51
Little Rock	37	2.90
Miami	24	2.58
Newark	35	2.98
Orange County	28	2.68
Phoenix	26	2.50
Seattle	39	2.96
Syracuse	33	2.57

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

EFGUIDE **Effect of formal written guidelines on the practice of medicine**

Description: The percentage of physicians who indicated that their use of formal, written practice guidelines from physician organizations, insurance companies, HMOs, or government agencies, 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 D1D.

	PERCENT	STANDARD ERROR
National	27%	0.47
SITE		
Boston	26	2.03
Cleveland	23	2.05
Greenville	32	2.05
Indianapolis	26	1.99
Lansing	25	2.20
Little Rock	27	2.00
Miami	23	2.10
Newark	25	2.38
Orange County	23	2.25
Phoenix	25	2.13
Seattle	26	2.13
Syracuse	28	2.07

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	39%	0.55
SITE		
Boston	46	2.28
Cleveland	33	2.35
Greenville	37	2.17
Indianapolis	33	2.19
Lansing	36	2.43
Little Rock	34	2.19
Miami	36	2.45
Newark	40	2.79
Orange County	34	2.56
Phoenix	33	2.35
Seattle	37	2.36
Syracuse	40	2.22

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

EFSURV — Effect of patient satisfaction surveys on the practice of medicine

Description: The percentage of physicians who indicated that feedback from patient satisfaction surveys 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 D1F.

	PERCENT	STANDARD ERROR
National	24%	0.50
SITE		
Boston	23	1.90
Cleveland	22	1.99
Greenville	27	1.98
Indianapolis	20	1.80
Lansing	21	2.08
Little Rock	22	1.85
Miami	32	2.39
Newark	29	2.56
Orange County	22	2.26
Phoenix	21	1.96
Seattle	24	2.13
Syracuse	23	1.91

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%	0.60
SITE		
Boston	33	2.46
Cleveland	36	2.57
Greenville	27	2.04
Indianapolis	31	2.28
Lansing	28	2.40
Little Rock	29	2.61
Miami	31	2.91
Newark	31	3.30
Orange County	36	2.65
Phoenix	37	2.56
Seattle	37	2.53
Syracuse	32	2.34

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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	24%	0.77
SITE		
Boston	19	2.03
Cleveland	32	2.51
Greenville	14	1.51
Indianapolis	18	1.74
Lansing	21	2.34
Little Rock	18	2.21
Miami	33	2.95
Newark	37	3.36
Orange County	40	2.81
Phoenix	30	2.43
Seattle	22	2.13
Syracuse	18	2.12

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	19%	0.53
SITE		
Boston	24	2.19
Cleveland	24	2.33
Greenville	11	1.50
Indianapolis	16	1.96
Lansing	17	1.90
Little Rock	25	2.48
Miami	19	2.53
Newark	19	2.11
Orange County	30	2.70
Phoenix	23	2.32
Seattle	23	2.12
Syracuse	16	2.06

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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	39%	0.71
SITE		
Boston	55	1.61
Cleveland	43	1.61
Greenville	26	0.97
Indianapolis	40	1.52
Lansing	48	1.60
Little Rock	39	1.56
Miami	48	2.08
Newark	39	1.57
Orange County	48	1.80
Phoenix	51	1.76
Seattle	46	1.70
Syracuse	39	1.46

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	71%	0.66
SITE		
Boston	64	2.15
Cleveland	68	2.30
Greenville	75	1.90
Indianapolis	72	2.10
Lansing	72	2.18
Little Rock	74	1.98
Miami	62	2.44
Newark	67	2.74
Orange County	70	2.43
Phoenix	66	2.27
Seattle	64	2.32
Syracuse	69	2.09

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

CLNFREE **Freedom to make clinical decisions**

Description: The percentage of physicians who somewhat or strongly agreed that they have the freedom to make clinical decisions that meet their patients' needs. Physicians could agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree.

Derived from: Questionnaire Section F, Question F1C.

	PERCENT	STANDARD ERROR
National	78%	0.57
SITE		
Boston	80	1.85
Cleveland	80	2.05
Greenville	86	1.69
Indianapolis	79	2.00
Lansing	84	1.84
Little Rock	75	2.04
Miami	69	2.38
Newark	68	2.58
Orange County	71	2.55
Phoenix	71	2.24
Seattle	76	2.25
Syracuse	80	1.91

HIGHCAR **Possibility of high quality of patient care to all patients**

Description: The percentage of physicians who either somewhat or strongly agreed that it is possible to provide high quality care to all of their patients. Physicians could agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree.

Derived from: Questionnaire Section F, Question F1D.

	PERCENT	STANDARD ERROR
National	77%	0.50
SITE		
Boston	78	1.89
Cleveland	80	2.04
Greenville	82	1.77
Indianapolis	79	1.90
Lansing	82	1.88
Little Rock	77	1.97
Miami	67	2.41
Newark	72	2.64
Orange County	69	2.58
Phoenix	69	2.28
Seattle	75	2.14
Syracuse	81	1.82

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

NEGINCN **Clinical decisions without possibility of reducing income**

Description: The percentage of physicians who either somewhat or strongly agreed that they can make clinical decisions in the best interests of their patients without the possibility of reducing their income. Physicians could agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree.

Derived from: Questionnaire Section F, Question F1E.

	PERCENT	STANDARD ERROR
National	72%	0.54
SITE		
Boston	70	2.10
Cleveland	74	2.13
Greenville	76	2.02
Indianapolis	77	1.94
Lansing	75	2.20
Little Rock	67	2.19
Miami	66	2.44
Newark	63	2.78
Orange County	64	2.65
Phoenix	69	2.31
Seattle	65	2.35
Syracuse	74	2.07

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	86%	0.63
SITE		
Boston	83	1.82
Cleveland	83	2.04
Greenville	91	1.48
Indianapolis	83	1.88
Lansing	84	2.07
Little Rock	87	1.88
Miami	76	2.67
Newark	77	3.49
Orange County	82	2.45
Phoenix	86	1.85
Seattle	90	1.56
Syracuse	94	1.67

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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%	0.65
SITE		
Boston	80	1.80
Cleveland	79	2.11
Greenville	83	1.83
Indianapolis	77	2.03
Lansing	80	2.06
Little Rock	79	1.95
Miami	66	2.44
Newark	75	2.58
Orange County	73	2.43
Phoenix	74	2.17
Seattle	84	1.86
Syracuse	87	1.67

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

PATREL	Continuing patient relationships

Description: The percentage of physicians who either somewhat or strongly agreed that they can maintain continuing relationships with patients over time that promote the delivery of high quality care. Physicians could agree strongly, agree somewhat, disagree somewhat, disagree strongly, or neither agree nor disagree. Physicians who indicated that they don't normally have continuing relationships with patients were excluded.

Derived from: Questionnaire Section F, Question F1H.

	PERCENT	STANDARD ERROR
National	66%	0.79
SITE		
Boston	65	2.25
Cleveland	62	2.47
Greenville	75	2.06
Indianapolis	68	2.21
Lansing	78	2.19
Little Rock	64	2.26
Miami	51	2.50
Newark	57	2.84
Orange County	55	2.64
Phoenix	53	2.44
Seattle	63	2.40
Syracuse	75	2.07

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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	74%	0.76
SITE		
Boston	76	2.06
Cleveland	76	2.16
Greenville	84	1.73
Indianapolis	81	1.85
Lansing	79	2.07
Little Rock	75	2.05
Miami	59	2.50
Newark	64	2.69
Orange County	59	2.66
Phoenix	65	2.37
Seattle	79	2.04
Syracuse	79	1.94

OBANCL **High quality ancillary services**

Description: The percentage of physicians who indicated that they are either always or almost always able to obtain high quality ancillary services for their patients when medically necessary. Physicians could indicate that they are always, almost always, frequently, sometimes, rarely, or never able to obtain these services. The calculation excludes physicians who indicated that this question does not apply to them.

Derived from: Questionnaire Section F, Question F8B.

	PERCENT	STANDARD ERROR
National	64%	0.82
SITE		
Boston	63	2.25
Cleveland	66	2.38
Greenville	78	1.95
Indianapolis	68	2.22
Lansing	70	2.36
Little Rock	70	2.16
Miami	47	2.54
Newark	53	2.91
Orange County	49	2.63
Phoenix	55	2.46
Seattle	62	2.52
Syracuse	65	2.22

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

OBHOSP **Non-emergency hospital admission**

Description: The percentage of physicians who indicated that they are either always or almost always able to obtain non-emergency hospital admissions for their patients when medically necessary. Physicians could indicate that they are always, almost always, frequently, sometimes, rarely, or never able to obtain these services. The calculation excludes physicians who indicated that this question does not apply to them.

Derived from: Questionnaire Section F, Question F8C.

	PERCENT	STANDARD ERROR
National	57%	0.78
SITE		
Boston	57	2.39
Cleveland	54	2.64
Greenville	69	2.30
Indianapolis	57	2.44
Lansing	56	2.69
Little Rock	55	2.43
Miami	46	2.62
Newark	48	3.07
Orange County	51	2.79
Phoenix	54	2.60
Seattle	62	2.64
Syracuse	61	2.42

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
National	56%	0.94
SITE		
Boston	54	2.34
Cleveland	49	2.58
Greenville	62	2.40
Indianapolis	48	2.39
Lansing	62	2.66
Little Rock	51	2.44
Miami	45	2.57
Newark	35	2.67
Orange County	50	2.75
Phoenix	57	2.55
Seattle	61	2.60
Syracuse	67	2.31

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

OBIMAG **High quality diagnostic imaging**

Description: The percentage of physicians who indicated that they are either always or almost always able to obtain high quality diagnostic imaging services 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 these services. The calculation excludes physicians who indicated that this question does not apply to them.

Derived from: Questionnaire Section F, Question F8E.

	PERCENT	STANDARD ERROR
National	79%	0.61
SITE		
Boston	82	1.91
Cleveland	81	1.92
Greenville	86	1.61
Indianapolis	85	1.73
Lansing	83	1.93
Little Rock	80	1.94
Miami	67	2.43
Newark	75	2.39
Orange County	64	2.65
Phoenix	72	2.20
Seattle	82	1.94
Syracuse	81	1.93

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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
National	32%	0.80
SITE		
Boston	33	2.59
Cleveland	31	2.84
Greenville	35	2.43
Indianapolis	32	2.66
Lansing	29	2.68
Little Rock	39	3.03
Miami	38	3.21
Newark	32	3.07
Orange County	30	2.83
Phoenix	18	2.26
Seattle	28	2.67
Syracuse	26	2.53

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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	29%	0.72
SITE		
Boston	30	2.53
Cleveland	29	2.69
Greenville	36	2.45
Indianapolis	27	2.46
Lansing	27	2.67
Little Rock	34	2.92
Miami	34	2.96
Newark	30	3.44
Orange County	29	2.60
Phoenix	22	2.32
Seattle	22	2.40
Syracuse	21	2.28

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

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%	0.40
SITE		
Boston	14	1.49
Cleveland	12	1.29
Greenville	22	1.51
Indianapolis	19	1.41
Lansing	26	1.99
Little Rock	23	1.73
Miami	20	1.94
Newark	19	1.83
Orange County	24	2.21
Phoenix	21	1.79
Seattle	16	1.70
Syracuse	19	1.47

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

NWMCAID — Limited acceptance of new Medicaid patients

Description: The percentage of physicians whose practice is accepting either some or no new patients who are insured through Medicaid. Physicians were asked if the practice was accepting all, most, some, or no new patients who were insured through Medicaid, including Medicaid managed care patients.

Derived from: Questionnaire Section F, Question F9B.

	PERCENT	STANDARD ERROR
National	39%	0.83
SITE		
Boston	17	1.66
Cleveland	34	2.25
Greenville	41	2.06
Indianapolis	35	2.01
Lansing	43	2.34
Little Rock	24	1.82
Miami	43	2.51
Newark	57	2.81
Orange County	65	2.58
Phoenix	44	2.38
Seattle	28	2.14
Syracuse	38	2.12

NWPRIV — Limited acceptance of new privately-insured patients

Description: 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: Questionnaire Section F, Question F9C.

	PERCENT	STANDARD ERROR
National	13%	0.48
SITE		
Boston	10	1.35
Cleveland	11	1.39
Greenville	10	1.11
Indianapolis	11	1.19
Lansing	16	1.57
Little Rock	9	1.30
Miami	21	2.07
Newark	12	1.51
Orange County	16	1.94
Phoenix	14	1.54
Seattle	13	1.59
Syracuse	12	1.24

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

PMCARE **Percentage of practice revenue from Medicare**

Description: The average percentage of patient care practice revenue that comes from Medicare, including Medicare managed care.

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

	PERCENT	STANDARD ERROR
National	31%	0.29
SITE		
Boston	30	0.99
Cleveland	37	1.17
Greenville	29	0.85
Indianapolis	27	0.95
Lansing	28	1.14
Little Rock	29	1.01
Miami	36	1.34
Newark	32	1.11
Orange County	26	1.12
Phoenix	31	1.27
Seattle	24	0.97
Syracuse	29	0.95

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	14%	0.27
SITE		
Boston	14	0.66
Cleveland	15	0.83
Greenville	13	0.61
Indianapolis	13	0.63
Lansing	14	0.72
Little Rock	18	0.94
Miami	16	0.86
Newark	10	0.82
Orange County	12	0.98
Phoenix	16	0.97
Seattle	15	0.69
Syracuse	13	0.72

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

PCAPREV **Percentage of practice revenue prepaid or capitated**

Description: The average percentage of patient care practice revenue paid on a capitated or other prepaid basis.

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

	PERCENT	STANDARD ERROR
National	16%	0.47
SITE		
Boston	18	1.16
Cleveland	19	1.32
Greenville	8	0.72
Indianapolis	14	0.92
Lansing	16	0.83
Little Rock	9	0.70
Miami	17	0.98
Newark	14	0.97
Orange County	31	1.61
Phoenix	21	1.23
Seattle	22	1.22
Syracuse	11	0.94

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	28%	0.79
SITE		
Boston	24	1.92
Cleveland	39	2.41
Greenville	39	2.22
Indianapolis	39	2.25
Lansing	6	1.39
Little Rock	29	2.09
Miami	34	2.40
Newark	41	2.84
Orange County	52	2.66
Phoenix	35	2.35
Seattle	34	2.37
Syracuse	17	1.73

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

PMC **Percentage of practice revenue from managed care**

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

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

	PERCENT	STANDARD ERROR
National	40%	0.58
SITE		
Boston	49	1.24
Cleveland	43	1.33
Greenville	36	0.95
Indianapolis	41	1.15
Lansing	42	1.12
Little Rock	32	0.88
Miami	43	1.37
Newark	39	1.21
Orange County	53	1.51
Phoenix	53	1.50
Seattle	44	1.29
Syracuse	35	1.03

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
National	57%	1.04
SITE		
Boston	58	2.22
Cleveland	51	2.51
Greenville	76	1.90
Indianapolis	50	2.31
Lansing	63	2.21
Little Rock	69	2.00
Miami	55	2.49
Newark	58	2.73
Orange County	35	2.65
Phoenix	52	2.44
Seattle	41	2.48
Syracuse	70	2.05

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

CAPAMTC2 — All revenue from largest managed 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, Question G11.

	PERCENT	STANDARD ERROR
National	23%	0.84
SITE		
Boston	18	1.62
Cleveland	22	2.04
Greenville	7	1.10
Indianapolis	23	1.85
Lansing	19	1.63
Little Rock	12	1.56
Miami	25	2.10
Newark	19	1.98
Orange County	42	2.67
Phoenix	27	2.06
Seattle	35	2.19
Syracuse	14	1.56

PBIGCON — Percentage of revenue from largest managed care contract

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	20%	0.48
SITE		
Boston	24	0.91
Cleveland	21	1.08
Greenville	12	0.46
Indianapolis	17	0.81
Lansing	24	0.81
Little Rock	15	0.56
Miami	19	0.75
Newark	15	0.69
Orange County	25	1.31
Phoenix	26	1.04
Seattle	23	1.03
Syracuse	16	0.66

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

SALPAID **Percentage of physicians in the practice who are salaried**

Description: The average percent of physicians in the practice who are salaried. Physicians who are full owners of solo practices are assumed to be not salaried. Salaried physicians may be eligible to receive bonuses.

Derived from: Questionnaire Section H, Question H1.

	PERCENT	STANDARD ERROR
National	70%	0.59
SITE		
Boston	81	1.98
Cleveland	80	2.46
Greenville	67	2.43
Indianapolis	73	2.39
Lansing	79	2.42
Little Rock	74	2.36
Miami	73	3.10
Newark	76	3.29
Orange County	58	3.54
Phoenix	63	2.93
Seattle	66	2.75
Syracuse	72	2.41

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	71%	0.74
SITE		
Boston	70	2.43
Cleveland	75	2.47
Greenville	79	2.05
Indianapolis	72	2.31
Lansing	67	2.73
Little Rock	82	1.95
Miami	66	3.15
Newark	52	3.88
Orange County	70	3.26
Phoenix	72	2.74
Seattle	73	2.49
Syracuse	64	2.58

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

SSAT **Patient satisfaction affects 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 Section H, Questions H5B and H7C.

	PERCENT	STANDARD ERROR
National	23%	0.67
SITE		
Boston	22	2.07
Cleveland	35	2.73
Greenville	24	2.01
Indianapolis	25	2.06
Lansing	23	2.04
Little Rock	13	1.71
Miami	23	2.63
Newark	20	3.25
Orange County	41	3.40
Phoenix	31	2.63
Seattle	21	2.50
Syracuse	18	2.06

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	19%	0.64
SITE		
Boston	16	1.78
Cleveland	28	2.53
Greenville	17	1.75
Indianapolis	16	1.63
Lansing	15	1.81
Little Rock	12	1.68
Miami	26	2.69
Newark	21	3.22
Orange County	34	3.11
Phoenix	25	2.44
Seattle	10	1.55
Syracuse	15	1.86

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

SPROF **Profiling results affects compensation**

Description: 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: Questionnaire Section H, Questions H5D and H7D.

	PERCENT	STANDARD ERROR
National	16%	0.56
SITE		
Boston	13	1.73
Cleveland	22	2.25
Greenville	15	1.68
Indianapolis	15	1.69
Lansing	20	1.95
Little Rock	11	1.64
Miami	19	2.34
Newark	14	2.82
Orange County	29	3.07
Phoenix	24	2.36
Seattle	9	1.73
Syracuse	12	1.66

PCTINCC **Percent of 1995 income from bonuses**

Description: The average percentage of a physician's 1995 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	12%	0.33
SITE		
Boston	9	0.84
Cleveland	11	1.07
Greenville	17	1.34
Indianapolis	11	1.20
Lansing	14	1.08
Little Rock	16	1.25
Miami	10	1.23
Newark	12	1.02
Orange County	7	0.69
Phoenix	11	1.04
Seattle	12	1.58
Syracuse	14	1.34

TABLE 3.3

DETAILED VARIABLE DESCRIPTIONS

INCOMEX **Net income in 1995**

Description: Average 1995 net income received from the practice of medicine after expenses but before taxes.

Derived from: Questionnaire Section H, Question H10.

	AVERAGE	STANDARD ERROR
National	$179,000	$1,900
SITE		
Boston	153,000	5,800
Cleveland	171,000	6,000
Greenville	194,000	4,400
Indianapolis	216,000	8,700
Lansing	158,000	4,400
Little Rock	200,000	5,800
Miami	175,000	6,300
Newark	180,000	5,700
Orange County	168,000	6,200
Phoenix	183,000	5,600
Seattle	164,000	5,800
Syracuse	196,000	7,500

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.

Kohn, Linda, P. Kemper, R. Baxter, R. Feldman, and P. Ginsburg, editors, *Health System Change in Twelve Communities,* Washington, DC: Health System Change and The Lewin Group, September 1997.

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.

Reschovsky, James, et al. *Community Tracking Study Physician Survey Public Use File: User's Guide (Round One, Release 1),* Technical Publication No. 10. Washington, DC: Center for Studying Health System Change, October 1998.

Reschovsky, James, et al. *Community Tracking Study Physician Survey Public Use File: Codebook (Round One, Release 1),* Technical Publication No. 11. Washington, DC: Center for Studying Health System Change, October 1998.

Reschovsky, James, et al. *Community Tracking Study Physician Survey Restricted Use File: User's Guide (Round One, Release 1),* Technical Publication No. 13. Washington, DC: Center for Studying Health System Change, October 1998.

Reschovsky, James, et al. *Community Tracking Study Physician Survey Restricted Use File: Codebook (Round One, Release 1),* Technical Publication No. 14. Washington, DC: Center for Studying Health System Change, October 1998.

The Community Tracking Study Physician Survey Instrument, Technical Publication No. 3. Washington, DC: Center for Studying Health System Change, September 1997.

The Community Tracking Study Site-County Crosswalk. Washington, DC: Center for Studying Health System Change, January 1999.

The Community Tracking Study Physician Survey Methodology Report, Technical Publication No. 9. Washington, DC: Center for Studying Health System Change, October 1998.

APPENDIX A

VARIABLES ON THE PHYSICIAN SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES

APPENDIX A

VARIABLES ON THE CTS PHYSICIAN SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES

Table A.1 below provides a crosswalk between the contents of the CTS Physician 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.

TABLE A.1

VARIABLES ON THE PHYSICIAN SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES

Summary File Name	Description of Summary File Variable	Restricted Use Name	Public Use Name	Variable Label (on Restricted Use File)
Survey Administration Variables				
n/a	n/a	PHYSIDX	PHYSIDX	PH1:Physician identification number
n/a	n/a	MSACAT	n/a	PH1:Large metro/small metro/non-metro
n/a	n/a	FIPS	n/a	PH1:State and county code when surveyed
n/a	n/a	SITEID	n/a	PH1:Updated master file SITE variable
n/a	n/a	SUBGRP	n/a	PH1:Subgroup in Sample - A/B/C/D
n/a	n/a	DOCTYP	n/a	PH1:S1: Doctor type (MD, DO)
n/a	n/a	IMGSTAT	n/a	PH1:Country of medical school
IMGUSPR	Percentage of foreign medical graduates	IMGUSPR	IMGUSPR	PH1:Foreign medical school graduate
GENDER	Percentage of male physicians	GENDER	GENDER	PH1:AMA/AOA: Sex, 1-Male, 2-Female
AGE	Mean age of physicians	BIRTH	BIRTHX	PH1:AMA/AOA: Year of birth (corrected)
YRSGRAD	Mean number of years since graduation from medical school	GRAD_YR	GRADYRX	PH1:AMA/AOA: Year of graduation
n/a	n/a	AMAPRIM	n/a	AMA/AOA: Primary care physician flag

See notes at end of table.

TABLE A.1

VARIABLES ON THE PHYSICIAN SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES
(Continued)

Summary File Name	Description of Summary File Variable	Restricted Use Name	Public Use Name	Variable Label (on Restricted Use File)
Questionnaire Section A: Introduction				
n/a	n/a	MULTPR	MULTPR	PH1:A4: Multiple practices
n/a	n/a	_MULTPR	_MULTPR	PH1:Imputation flag for MULTPR
n/a	n/a	NUMPR	NUMPRX	PH1:A4A: Number of practices
YRSPRAC	Mean number of years in practice	YRBGN	YRBGNX	PH1:A6: Year began practicing medicine
n/a	n/a	NWSPEC	n/a	PH1:A8: Primary specialty/subspecialty
n/a	n/a	GENSUB	n/a	PH1:A9: General practice vs. subspecialty
n/a	n/a	SIPNPED	n/a	PH1:A9a: Subspc, internal, or pediatric (adult specialty)
n/a	n/a	SIPPED	n/a	PH1:A9b: Subspc, internal, or pediatric (ped specialty)
n/a	n/a	SUBSPC	n/a	PH1:A10: Subspecialty
SPECX1	Percentage of physicians who are Internists	SPECX	SPECX	PH1:CV:Combined specialty/subspecialty
SPECX2	Percentage... Family/General Practitioners	SPECX	SPECX	PH1:CV:Combined specialty/subspecialty
SPECX3	Percentage...Pediatricians	SPECX	SPECX	PH1:CV:Combined specialty/subspecialty
SPECX4	Percentage...Medical Specialists	SPECX	SPECX	PH1:CV:Combined specialty/subspecialty
SPECX5	Percentage...Surgical Specialists	SPECX	SPECX	PH1:CV:Combined specialty/subspecialty
PCPFLAG	Percentage...Primary Care Physicians	PCPFLAG	PCPFLAG	PH1:Questionnaire definition of PCP
BDCERT	Percentage...board certified	BDCERT	BDCERT	PH1:Board certification status
n/a	n/a	BDCTPS	BDCTPS	PH1:Board certified in primary subspecialty/specialty
n/a	n/a	BDELPS	BDELPS	PH1:Board eligible in primary subspecialty/specialty
CARSAT	Percentage...very or somewhat dissatisfied with overall career	CARSAT	CARSAT	PH1:A19: Overall career satisfaction

See notes at end of table.

TABLE A.1

VARIABLES ON THE PHYSICIAN SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES
(Continued)

Summary File Name	Description of Summary File Variable	Restricted Use Name	Public Use Name	Variable Label (on Restricted Use File)
Questionnaire Section B: Utilization of Time				
n/a	n/a	WKSWRK	WKSWRKX	PH1:B1: Weeks practicing medicine in 1995
WKSWRKC	Mean weeks practiced medicine 1995	WKSWRKC	n/a	PH1:Weeks worked in 1995, w/o new phys
n/a	n/a	_WKSWRKC	n/a	PH1:Imputation flag for WKSWRKC
HRSMED	Mean hours previous week spent in medically-related activities	HRSMED	HRSMEDX	PH1:Hours previous week spent medically-related activities
n/a	n/a	_HRSMED	n/a	PH1:Imputation flag for HRSMED
HRSPAT	Mean hours previous week spent in direct patient care	HRSPAT	HRSPATX	PH1:Hours previous week spent direct patient care activities
n/a	n/a	_HRSPAT	n/a	PH1:Imputation flag for HRSPAT
HRFREE	Mean hours previous month spent providing charity care	HRFREE	HRFREEX	PH1:B6: Hours previous month charity care
n/a	n/a	_HRFREE	n/a	PH1:Imputation flag for HRFREE
n/a	n/a	PPATMN	PPATMN	PH1:Percent patient care time spent in main practice

See notes at end of table.

TABLE A.1

VARIABLES ON THE PHYSICIAN SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES
(Continued)

Summary File Name	Description of Summary File Variable	Restricted Use Name	Public Use Name	Variable Label (on Restricted Use File)
Questionnaire Section C: Type and Size of Practice				
OWNPR	Percentage not owners	OWNPR	OWNPR	PH1:C1: Ownership status (full/part/no own)
n/a	n/a	_OWNPR	_OWNPR	PH1:Imputation flag for OWNPR
n/a	n/a	TOPOWN	n/a	PH1:C2: Type of practice (owners)
n/a	n/a	TOPOWNC	TOPOWNX	PH1:Practice type (owners), w/C9 recodes
n/a	n/a	TOPEMP	n/a	PH1:C3: Type of employer (non-owner)
n/a	n/a	TOPEMPC	n/a	PH1:Employer type, w/C9 recodes
n/a	n/a	TOPEMPA	TOPEMPX	PH1:Employer type (all employees)
PRCTYPE1	Percentage in solo/2 phys. pract.	PRCTYPE	PRCTYPE	PH1:Practice type (categorical)
PRCTYPE2	Percentage in group practice	PRCTYPE	PRCTYPE	PH1:Practice type (categorical)
n/a	n/a	OTHSET	n/a	PH1:C3a: Government hospital or clinic
n/a	n/a	EMPTYP	n/a	PH1:C3b: Empl type verbatims, coded
n/a	n/a	OTHPAR	OTHPAR	PH1:C4: Owner: Other phyicians in practice
n/a	n/a	OTHGRP	n/a	PH1:C5A: Owner: Other phyicians group
n/a	n/a	HSPPAR	n/a	PH1:C5B: Owner: Hospital
n/a	n/a	INSPAR	n/a	PH1:C5C: Owner: Insurance Co, HMO
n/a	n/a	ORGPAR	n/a	PH1:C5D: Owner: Other
n/a	n/a	C5OWNER	C5OWNX	PH1:C5: Outside ownership
n/a	n/a	ORGC_1-ORGC_12	n/a	PH1:What kinds of organizations are these?
NPHYS	Mean number phys. in practice	NPHYS	NPHYSX	PH1:C7: Number of physicians at practice
n/a	n/a	_NPHYS	n/a	PH1:Imputation flag for NPHYS
n/a	n/a	NASSIST	NASSISX	PH1:C8: Number of assistants in practice
n/a	n/a	_NASSIST	n/a	PH1:Imputation flag for NASSIST
n/a	n/a	ACQUIRD	ACQUIRD	PH1:C10: Practice acquired in last 2 yrs
n/a	n/a	_ACQUIRD	_ACQUIRD	PH1:Imputation flag for ACQUIRD
n/a	n/a	OWNPUR	OWNPURX	PH1:C11: Resp ownership when practice purchased

See notes at end of table.

TABLE A.1

VARIABLES ON THE PHYSICIAN SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES
(Continued)

Summary File Name	Description of Summary File Variable	Restricted Use Name	Public Use Name	Variable Label (on Restricted Use File)
Questionnaire Section D: Medical Care Management				
EFDATA	Percentage...computer little effect on practice	EFDATA	EFDATA	PH1:D1A: Effect of computer get pt data
EFTREAT	Percentage...computer little effect on treatment	EFTREAT	EFTREAT	PH1:D1B: Effect of computer get tx/guidelines
EFRMNDR	Percentage...reminders little effect on practice	EFRMNDR	EFRMNDR	PH1:D1C: Effect of preventive tx reminders
EFGUIDE	Percentage...written guidelines little effect	EFGUIDE	EFGUIDE	PH1:D1D: Effect of formal written guidelines
EFPROFL	Percentage...practice profiles little effect	EFPROFL	EFPROFL	PH1:D1E: Effect of practice profile results
EFSURV	Percentage...satisfaction surveys little effect	EFSURV	EFSURV	PH1:D1F: Effect of patient satisfaction surveys
CMPPROV	Percentage...increased complexity w/o referral	CMPPROV	CMPPROV	PH1:D7: Change-complexity w/o ref, PCP
CMPEXPC	Percentage...complexity greater than should be	CMPEXPC	CMPEXPC	PH1:D8: Appropriateness w/o ref, PCP
SPECUSE	Percentage...referrals increased	SPECUSE	SPECUSE	PH1:D9: Change-number of referrals to specialists
PCTGATE	Mean percent of patients for whom gatekeeper	PCTGATE	PCTGATE	PH1:D10: Percent of patients for whom gatekeeper
n/a	n/a	_PCTGATE	_PCTGATE	PH1:Imputation flag for PCTGATE
n/a	n/a	CMPCHG	CMPCHG	PH1:D11: Change-complexity at ref, NPCP
n/a	n/a	CMPLVL	CMPLVL	PH1:D12: Appropriateness at ref, NPCP
n/a	n/a	CHGREF	CHGREF	PH1:D13: Change-# referrals by PCPs

See notes at end of table.

TABLE A.1

VARIABLES ON THE PHYSICIAN SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES
(Continued)

Summary File Name	Description of Summary File Variable	Restricted Use Name	Public Use Name	Variable Label (on Restricted Use File)
Questionnaire Section E - Vignettes				
n/a	n/a	WHOCARE	WHOCARE	PH1:EA: Care to adults and/or kids
n/a	n/a	FORM	FORM	PH1:E_FORM: Rotation of vignette questions
n/a	n/a	VCHOL	VCHOL	PH1:E1: Percent oral agents elevated cholesterol
n/a	n/a	VCHOLF	VCHOLF	PH1:E1a: Freq oral agents elevated cholesterol
n/a	n/a	VHYPER	VHYPER	PH1:E3: Percent urology referrals w/ prostatic hyperplasia
n/a	n/a	VHYPERF	VHYPERF	PH1:E3a: Freq urology referrals prostatic hyprplasia
n/a	n/a	VCHEST	VCHEST	PH1:E4: Percent cardiology referrals w/ chest pains
n/a	n/a	VCHESTF	VCHESTF	PH1:E4a: Freq cardiology referrals w/ chest pains
n/a	n/a	VBACK	VBACK	PH1:E5: Percent MRI for low back pain
n/a	n/a	VBACKF	VBACKF	PH1:E5a: Freq MRI for low back pain
n/a	n/a	V60MAN	V60MAN	PH1:E9: Percent PSA test 60 year old male
n/a	n/a	V60MANF	V60MANF	PH1:E9a: Freq PSA test 60 year old male
n/a	n/a	VVITCH	VVITCH	PH1:E10: Percent office visit for vaginal itching
n/a	n/a	VVITCHF	VVITCHF	PH1:E10a: Freq office visit for vaginal itching
n/a	n/a	VENUR	VENUR	PH1:E11: Percent DDAVP 10 year child enuresis
n/a	n/a	VENURF	VENURF	PH1:E11a: Freq DDAVP 10 year child enuresis
n/a	n/a	VTHRT	VTHRT	PH1:E16: Percent office visit fever sore throat child
n/a	n/a	VTHRTF	VTHRTF	PH1:E16a: Freq office visit fever sore throat child
n/a	n/a	VCOUGH	VCOUGH	PH1:E17: Percent x-ray fever tachypnea child
n/a	n/a	VCOUGHF	VCOUGHF	PH1:E17a: Freq x-ray fever tachypnea child
n/a	n/a	VSUPOT	VSUPOT	PH1:E18: Percent ENT referrl suppurative otitis med child
n/a	n/a	VSUPOTF	VSUPOTF	PH1:E18a: Frq ENT referral suppurative otitis med child
n/a	n/a	V6FEVR	V6FEVR	PH1:E20: Percent sepsis workup fever 6 week child
n/a	n/a	V6FEVRF	V6FEVRF	PH1:E20a: Freq sepsis workup fever 6 week child
n/a	n/a	VECZEM	VECZEM	PH1:E21: Percent allergist eczema asthma
n/a	n/a	VECZEMF	VECZEMF	PH1:E21a: Freq allergist eczema asthma child

See notes at end of table.

TABLE A.1

VARIABLES ON THE PHYSICIAN SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES
(Continued)

Summary File Name	Description of Summary File Variable	Restricted Use Name	Public Use Name	Variable Label (on Restricted Use File)
Questionnaire Section F - Physician - Patient Interactions				
ADQTIME	Percentage w/adequate time for patients	ADQTIME	ADQTIME	PH1: Adequacy of time, all physicians
CLNFREE	Percentage w/freedom for clinical decisions	CLNFREE	CLNFREE	PH1:F1C: Freedom for clinical decisions
HIGHCAR	Percentage w/possibility high quality care	HIGHCAR	HIGHCAR	PH1:F1D: Possibility of high quality care
NEGINCN	Percentage decision w/o neg. financial incent.	NEGINCN	NEGINCN	PH1:F1E: Decision w/o neg financial incentive
USESPCS	Percentage w/high comm. level w/specialists	USESPCS	USESPCS	PH1:F1F: High communication level w/ specialists
COMPRM	n/a	COMPRM	COMPRM	PH1:F1G: Communication w/ primary care physician
COMMALL	Percentage w/high comm. level, all	COMMALL	COMMALL	PH1: Level of communication, all
PATREL	Pct able to maintain cont.relationships	PATREL	PATREL	PH1:F1H: Continuing patient relationships
OBREFS	Percentage able to obtain referrals	OBREFS	OBREFS	PH1:F8A: Referrals to quality specialists
OBANCL	Percentage able to obtain ancillary	OBANCL	OBANCL	PH1:F8B: High quality ancillary services
OBHOSP	Percentage able to obtain non-emer. admiss.	OBHOSP	OBHOSP	PH1:F8C: Non-emergency hospital admission
OBINPAT	Percentage able to obtain adeq.inpatient days	OBINPAT	OBINPAT	PH1:F8D: Adequate number inpatient days
OBIMAG	Percentage able to obtain diagnostic imaging	OBIMAG	OBIMAG	PH1:F8E: High quality diagnostic imaging
OBMENTL	Percentage able to obtain inpatient mental	OBMENTL	OBMENTL	PH1:F8F: High quality inpatient mental health care
OBOUTPT	Percentage able to obtain outpatient mental	OBOUTPT	OBOUTPT	PH1:F8G: High quality outpatient mental health care
NWMCARE	Pct accepting some/no new Medicare patients	NWMCARE	NWMCARE	PH1:F9A: Accept new Medicare patients
n/a	n/a	_NWMCARE	_NWMCARE	PH1:Imputation flag for NWMCARE
NWMCAID	Pct accepting some/no new Medicaid patients	NWMCAID	NWMCAID	PH1:F9B: Accept new Medicaid patients
n/a	n/a	_NWMCAID	_NWMCAID	PH1:Imputation flag for NWMCAID
NWPRIV	Pct accepting some/no new private patients	NWPRIV	NWPRIV	PH1:F9C: Accept new privately insured
n/a	n/a	_NWPRIV	_NWPRIV	PH1:Imputation flag for NWPRIV

See notes at end of table.

TABLE A.1

VARIABLES ON THE PHYSICIAN SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES
(Continued)

Summary File Name	Description of Summary File Variable	Restricted Use Name	Public Use Name	Variable Label (on Restricted Use File)
Questionnaire Section G: Practice Revenue				
PMCARE	Mean pct. revenue from Medicare	PMCARE	PMCARE	PH1:G1A: Percent payments from Medicare
n/a	n/a	_PMCARE	_PMCARE	PH1:Imputation flag for PMCARE
PMCAID	Mean pct. revenue from Medicaid	PMCAID	PMCAID	PH1:G1B: Percent payments from Medicaid
n/a	n/a	_PMCAID	_PMCAID	PH1:Imputation flag for PMCAID
PCAPREV	Mean pct. revenue, capitated	PCAPREV	PCAPREV	PH1: % practice rev prepaid, capitated
n/a	n/a	_PCAPREV	_PCAPREV	PH1:Imputation flag for PCAPREV
NMCCON	Percentage with 15+ managed care contracts	NMCCON	NMCCONX	PH1: Number of managed care contracts
n/a	n/a	_NMCCON	n/a	PH1:Imputation flag for NMCCON
PMC	Mean pct. revenue from managed care	PMC	PMC	PH1:% practice rev from managed care
n/a	n/a	_PMC	_PMC	PH1: Imputation flag for PMC
CAPAMTC1	Pct w/no capitated rev. from largest MC contract	CAPAMTC	CAPAMTC	PH1: Capitated rev from largest MC contr
CAPAMTC2	Pct w/all capitated rev. from largest MC contract	CAPAMTC	CAPAMTC	PH1: Capitated rev from largest MC contr
n/a	n/a	_CAPAMTC	_CAPAMTC	PH1: Imputation flag for CAPAMTC
PBIGCON	Mean pct. of revenue from largest MC contract	PBIGCON	PBIGCON	PH1: Percent revenue largest MC contract
n/a	n/a	_PBIGCON	_PBIGCON	PH1:Imputation flag for PBIGCON

See notes at end of table.

TABLE A.1

VARIABLES ON THE PHYSICIAN SUMMARY, RESTRICTED USE, AND PUBLIC USE FILES
(Continued)

Summary File Name	Description of Summary File Variable	Restricted Use Name	Public Use Name	Variable Label (on Restricted Use File)
Questionnaire Section H - Physician Compensation Methods & Income Level				
SALPAID	Percentage of physicians who are salaried	SALPAID	SALPAID	PH1:H1: Salaried physician flag
n/a	n/a	SALTIME	SALTIME	PH1:H2: Compensate per work time period
n/a	n/a	SALADJ	SALADJ	PH1:H3: Salary adjustments
n/a	n/a	BONUS	BONUS	PH1:H4: Eligible for bonuses now flag
SPROD	Percentage...own productivity affects compensation	SPROD	SPROD	PH1:H5A: Own productivity affects compensation
SSAT	Percentage...compensation affected by surveys	SSAT	SSAT	PH1:H5B: Patient satisfaction affects compensation
SQUAL	Percentage...compens. affected by quality measures	SQUAL	SQUAL	PH1:H5C: Quality measures affects compensation
SPROF	Percentage...compens. affected by profiling results	SPROF	SPROF	PH1:H5D: Profiling results affects compensation
n/a	n/a	RADJ	RADJ	PH1:H6: Profiles are risk adjusted
n/a	n/a	_RADJ	_RADJ	PH1:Imputation flag for RADJ_A
n/a	n/a	PCTINCN	PCTINCX	PH1:H9: Percent income from bonuses
PCTINCC	Mean pct. income from bonuses, 1995	PCTINCC	n/a	PH1:CV:Percent income from bonuses, corrected
n/a	n/a	_PCTINCC	n/a	PH1:Imputation flag for PCTINCC
n/a	n/a	EBONUS	EBONUS	PH1:H9a: Eligible for bonuses in 1995
INCOMEX	Mean net income in 1995	INCOMEX	INCOMEX	PH1:H10: Net income in 1995
n/a	n/a	_INCOMEX	n/a	PH1:Imputation flag for INCOMEX

Notes: "n/a" identifies variables that are not available on the CTS Physician Survey Summary 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., PH1 for the CTS Physician Survey) and the question number (e.g., "A6" for Section A, Question 6 in the survey instrument). "CV" denotes "constructed variables" derived from other variables.

APPENDIX B

NUMBER RESPONDING TO THE CTS PHYSICIAN SURVEY, BY SITE

APPENDIX B

NUMBER RESPONDING TO THE CTS PHYSICIAN SURVEY, BY SITE

Table B.1 below provides unweighted counts of the number of physicians responding to the CTS Physician Survey, by site of the physician's practice. Note that response rates for individual variables will vary due to skip patterns in the questionnarie and item nonresponse. Refer to the microdata codebooks for information about individual variables.

TABLE B.1

NUMBER OF RESPONDING PHYSICIANS BY PRACTICE LOCATION OF PHYSICIAN

SITEID	Site	Count
0	Outside the 60 CTS sites	1,054
1	Boston (MA)	651
2	Cleveland (OH)	509
3	Greenville (SC)	396
4	Indianapolis (IN)	510
5	Lansing (MI)	286
6	Little Rock (AR)	354
7	Miami (FL)	440
8	Newark (NJ)	489
9	Orange County (CA)	452
10	Phoenix (AZ)	501
11	Seattle (WA)	508
12	Syracuse (NY)	376
13	Atlanta (GA)	159
14	Augusta (GA/SC)	120
15	Baltimore (MD)	157
16	Bridgeport (CT)	119
17	Chicago (IL)	181
18	Columbus (OH)	140
19	Denver (CO)	150
20	Detroit (MI)	155
21	Greensboro (NC)	145
22	Houston (TX)	153
23	Huntington (WV/KY/OH)	81
24	Killeen (TX)	95
25	Knoxville (TN)	119

TABLE B.1

NUMBER OF RESPONDING PHYSICIANS BY PRACTICE LOCATION OF PHYSICIAN
(continued)

SITEID	Site	Count
26	Las Vegas (NV/AZ)	115
27	Los Angeles (CA)	201
28	Middlesex (NJ)	150
29	Milwaukee (WI)	157
30	Minneapolis (MN)	161
31	Modesto (CA)	98
32	Nassau (NY)	117
33	New York City (NY)	250
34	Philadelphia (PA/NJ)	139
35	Pittsburgh (PA)	148
36	Portland (OR)	143
37	Riverside (CA)	138
38	Rochester (NY)	136
39	San Antonio (TX)	125
40	San Francisco (CA)	115
41	Santa Rosa (CA)	112
42	Shreveport (LA)	113
43	St. Louis (MO/IL)	144
44	Tampa (FL)	128
45	Tulsa (OK)	124
46	Washington, DC (DC/MD/VA)	201
47	W Palm Beach (FL)	108
48	Worchester (MA)	130
49	Dothan (AL)	60
50	Terre Haute (IN)	55

TABLE B.1

NUMBER OF RESPONDING PHYSICIANS BY PRACTICE LOCATION OF PHYSICIAN
(continued)

SITEID	Site	Count
51	Wilmington (NC)	78
52	West Central Alabama	25
53	Central Arkansas	114
54	North Georgia	109
55	Northeast Illinois	89
56	Northeast Indiana	55
57	Eastern Maine	114
58	Eastern North Carolina	98
59	Northern Utah	80
60	Northwest Washington	98