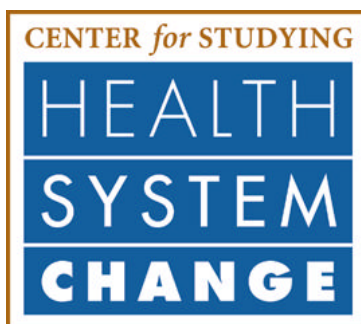


Community Tracking Study
Physician Survey Methodology Report
2000-01 (Round Three)

APPENDICES



600 Maryland Avenue, SW
Suite 550
Washington, DC 20024
www.hschange.org

Appendices to Technical Publication No.

APPENDIX A

SURVEY INSTRUMENT AND ADVANCE MATERIALS

Dear Colleague:

As a fellow physician concerned about changes in American health care, I would like to ask you to take a few minutes to participate in a very important nation-wide survey of physicians sponsored by The Robert Wood Johnson Foundation (RWJF). The Community Tracking Physician Survey focuses on changes in the health care system and the practice of medicine, and how these changes are affecting patients and physicians such as yourself. The survey is conducted by experienced professional interviewers from The Gallup Organization for The Center for Studying Health System Change (HSC), an independent, non-partisan research organization funded by RWJF.

You may be interested in how the survey is affecting the health care debate. The growth of managed care, changing practice arrangements, and new medical technology are forces that may be increasing the role of primary care physicians. In a recent article in the December 23, 1999 issue of *The New England Journal of Medicine*, HSC researchers used results from the physician survey to report on the changing scope of care expected of primary care physicians. The study found that many physicians – specialists and non-specialists alike – believe the scope of care provided by primary care physicians is increasing. Nearly one-fourth of primary care physicians felt that the scope of care they are expected to provide is greater than it should be. Studies like this one provide policy makers and physicians with the data and analysis to frame appropriate responses to pressing health care issues.

Using data from surveys of physicians, employers, and the general public, we are able to provide sound analysis on a growing body of policy issues. To give you a sense of the health concerns addressed by the study, we have enclosed a brief summary of the work that was later published in *The New England Journal of Medicine*, as well as background about the project. You also may want to view our results by visiting the HSC web site at www.hschange.org. If you would like to be added to our mailing list for future research results, please fax your name and address to 202-484-9258.

A professional interviewer from Gallup will be contacting you shortly to ask you to participate in the third round of the survey and I hope you will agree to do so. The telephone interview takes about 20 minutes and will be conducted at a time convenient for you. If you would like to contact Gallup directly to set up an appointment, please call Donna Stetler at 1-800-274-5447. Although we cannot compensate you for your time, we offer an honorarium of \$25 as a token of our appreciation. I hope we can count on your participation, since we will be able to accurately report on changes in communities and across the nation only if a representative sample of physicians takes part in the survey.

For your information, the following physician organizations support the survey and urge members to participate:

American Medical Association
American Osteopathic Association
American College of Surgeons

American College of Physicians—American Society of Internal Medicine
American Academy of Family Physicians
American Academy of Pediatrics

If you have any questions about the study, please call Maureen Michael at The Robert Wood Johnson Foundation at 1-800-719-9419. Thank you in advance for your time and cooperation. I know you are extremely busy and appreciate your willingness to help inform the public debate on health care.

Sincerely,



Steven A. Schroeder, M.D.

SS:mlm

P 1/3

Dear Colleague:

Approximately two years ago, you participated in the Community Tracking Study Physician Survey, a major project sponsored by The Robert Wood Johnson Foundation and conducted by The Gallup Organization for the Center for Studying Health System Change (HSC). The study focuses on changes in the health care system and the practice of medicine and how these changes affect patients and physicians. Your willingness to respond to our physician survey helped ensure that our research reflected the views of doctors throughout the country, and I'd like to thank you very much for your assistance.

You may be interested in how the survey is affecting the health care debate. The growth of managed care, changing practice arrangements, and new medical technology are forces that may be increasing the role of primary care physicians. In a recent article in the December 23, 1999 issue of *The New England Journal of Medicine*, HSC researchers used results from the physician survey to report on the changing scope of care expected of primary care physicians. The study found that many physicians – specialists and non-specialists alike – believe the scope of care provided by primary care physicians is increasing. Nearly one-fourth of primary care physicians felt that the scope of care they are expected to provide is greater than it should be. Studies like this one provide policy makers and physicians with the data and analysis to frame appropriate responses to pressing health care issues.

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Since the main objective of the Community Tracking Study is to understand changes in the health care system, it is particularly important that we conduct follow-up interviews with physicians who participated in previous surveys. A professional interviewer from Gallup will be contacting you shortly to ask you to participate in the third round of the survey, and I hope that you will agree to do so. The telephone interview takes about 20 minutes and will be conducted at a time convenient for you. If you would like to contact Gallup directly to set up an appointment, please call Donna Stetler at 1-800-274-5447. Although we cannot compensate you for your time, we offer an honorarium of \$25 as a token of our appreciation. I hope we can count on your participation again.

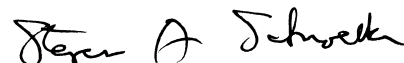
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Steven A. Schroeder, M.D.

SS:mlm
P2

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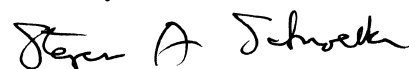
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Sincerely,



Steven A. Schroeder, M.D.

SS:mlm
P2 ps

CRT

HARD COPY REQUIRED

FINANCE, RWJ50259
F259

ROUND #3

FIELD FINAL - AUGUST 28, 2000
(Columns are "absolute")
(Revisions listed on last page)

AC6934
PROJECT REGISTRATION #130663
THE CENTER FOR STUDYING
HEALTH SYSTEM CHANGE (RWJ)
Washington, D.C.
Physicians Study - Round #3
Government/Max Larsen
Mike Ellrich/Stacey Richter
Brenda Sonksen, Specwriter
August, 2000

THE GALLUP ORGANIZATION

 X APPROVED BY CLIENT

 X APPROVED BY PROJECT MANAGER

n=12,600

I.D.#: 0 (1-6)

**AREA CODE AND TELEPHONE NUMBER:

 (649 - 658)

**INTERVIEW TIME:

 (716 - 721)

**SPECIALTY: (Code from "Fone" file) (NOTE TO
SURVENT: Show on "Intro" screen)

 (232 - 234)

****STATE: (Code from "Fone" file)**

01	Alabama - SC	30	Montana - W
02	Alaska - W	31	Nebraska - NC
04	Arizona - W	32	Nevada - W
05	Arkansas - SC	33	New Hampshire - NE
06	California - W	34	New Jersey - NE
08	Colorado - W	35	New Mexico - W
09	Connecticut - NE	36	New York - NE
10	Delaware - SC	37	North Carolina - SC
11	Washington D.C. - SC	38	North Dakota - NC
12	Florida - SC	39	Ohio - NC
13	Georgia - SC	40	Oklahoma - SC
15	Hawaii - W	41	Oregon - W
16	Idaho - W	42	Pennsylvania - NE
17	Illinois - NC	44	Rhode Island - NE
18	Indiana - NC	45	South Carolina - SC
19	Iowa - NC	46	South Dakota - NC
20	Kansas - NC	47	Tennessee - SC
21	Kentucky - SC	48	Texas - SC
22	Louisiana - SC	49	Utah - W
23	Maine - NE	50	Vermont - NE
24	Maryland - SC	51	Virginia - SC
25	Massachusetts - NE	53	Washington - W
26	Michigan - NC	54	West Virginia - SC
27	Minnesota - NC	55	Wisconsin - NC
28	Mississippi - SC	56	Wyoming - W
29	Missouri - NC		

(213) (214)

****COUNTY: (Code from "Fone" file)**

(274 - 303)

SECTION A
INTRODUCTION AND SCREENING

("FONE" MANAGEMENT NOTE: Any T&T's should send the case to a special "HOLD" category that could be reactivated by refusal converters if necessary)

S1. DOCTOR TYPE: (Code from "Fone" file)

- 1 MD
- 2 DO

_____ (227)

S1b. REPLICATE NUMBER: (Code from "Fone" file)

[SET BY JOHN SELIX]

S1c. PANEL: (Code from "Fone" file)

- 1 New
- 2 Re-interview
- 3 Non-respondent

_____ (228)

(There are no S1d-S1f)

S2. DOCTOR NAME: (Code from "Fone" file)

(_____ - _____)

S3. PRIMARY SPECIALTY: (Code from "Fone" file)

(232 - 234)

S4. SITE NUMBER: (Code from "Fone" file)

(229 - 231)

S5. SITE TYPE: (Code from "Fone" file)

- 1 High intensity
- 2 Low intensity/National _____ ()

S6. ZIP CODE: (Code from "Fone" file)

_____ (203 - 207)

S6a. PRESEND CHECK EXPERIMENT: (Code from "Fone" file)

- 1 Yes
- 2 No _____ (267)

(NOTE TO SURVENT: Display "doctor's name" and "gender" at top of screen)

(If code "1" or "3" in Slc, Continue;
Otherwise, Skip to "Intro #2"

INTRO #1

Hello, Dr. (name from "Fone" file), my name is _____, from The Gallup Organization. A short time ago, you should have received a letter from the Robert Wood Johnson Foundation indicating that Gallup is conducting a national survey of physicians for the Foundation. The survey is part of a study of changes in the health care system in communities across the nation. It concerns how such changes are affecting physicians, their practices and the health care they provide to their patients.

The interview will take about 20 minutes and we are providing an honorarium of \$25 as a small token of our appreciation. All the information you provide will be kept strictly confidential. It will be used in statistical analysis and reported only as group totals. I can conduct the interview now or at any time that's convenient for you.

- 0 Gatekeeper soft refusal
 - 1 Respondent available - **(Skip to #A1)**
 - 2 Gatekeeper not available -
(Set time to call back)
 - 3 No longer works/Lives here - **(Skip to S8)**
 - 4 Never heard of respondent - **(Skip to S7)**
 - 5 Gatekeeper hard refusal
 - 6 Answering service/Can't ever
reach physician at this number -
(Skip to S11)
 - 7 Physician not available -
(Set time to call back)
 - 8 Physician soft refusal
 - 9 Physician hard refusal _____ (1052)
-

INTRO #2

Hello, Dr. (name from "Fone" file), my name is _____, from The Gallup Organization. You should have received a letter from the Robert Wood Johnson Foundation indicating that Gallup would be calling you again to participate in the third round of the study of changes in the health care systems in communities across the nation. The study concerns how these changes are affecting physicians, their practices and the health care they provide to their patients.

The interview will take about twenty minutes, and we are again providing an honorarium of \$25 as a small token of our appreciation. All the information you provide will be kept strictly confidential. It will be used in statistical analysis and reported only as group totals. I can conduct the interview now, or at any time that's convenient for you.

- 0 Gatekeeper soft refusal
- 1 Respondent available - **(Skip to #A1)**
- 2 Gatekeeper not available -
(Set time to call back)
- 3 No longer works/Lives here - **(Skip to S8)**
- 4 Never heard of respondent - **(Continue)**
- 5 Gatekeeper hard refusal
- 6 Answering service/Can't ever
reach physician at this number -
(Skip to S11)
- 7 Physician not available -
(Set time to call back)
- 8 Physician soft refusal
- 9 Physician hard refusal _____ (1052)

- S7. (If code "4" in "Intro", ask:) I would like to verify that I have reached (phone number from "Fone" file).
- 1 Yes - (Thank and Terminate; Skip to S11)
 - 2 No - (INTERVIEWER READ:) I am sorry to have bothered you. - (Reset to "Intro")
 - 3 (DK) (Thank and Terminate; Skip to "Directory Assistant")
 - 4 (Refused) (Thank and Terminate; Skip to "Directory Assistant") _____ (2418)
- S8. (If code "3" in "Intro", ask:) Dr. (response in S2) is a very important part of a medical study for the Robert Wood Johnson Foundation. Do you have the address or telephone number where I can reach (him/her)?
- 1 Yes - (Skip to S10)
 - 2 No/Unknown (Continue)
 - 3 (DK) (Continue)
 - 4 (Refused) (Continue)
 - 5 (Retired) - (Thank and Terminate) _____ (2419)
- S9. (If code "2", "3" or "4" in S8, ask:) Do you happen to know if the doctor is still in this area, or is (he/she) in another city?
- 1 Same area - (Thank and Terminate; Skip to S11)
 - 2 Different city - (Continue)
 - 3 (DK) (Thank and Terminate; Skip to S11)
 - 4 (Refused) (Thank and Terminate; Skip to S11) _____ (2420)

S10. (If code "2" in S9, OR code "1" in S8:) ENTER
PHONE NUMBER AND ADDRESS OR AS MUCH OF IT AS
POSSIBLE.

WORK PHONE NUMBER:

_____ (2421 - 2430)

HOME PHONE NUMBER:

_____ (2441 - 2450)

STREET ADDRESS:

_____ (2892 - 2931)

CITY:

_____ (2591 - 2620)

STATE:

_____ (2431) (2432)

ZIP CODE:

_____ (2433 - 2437)

(All in S10, Thank and Terminate;
Call new number and reset to "Intro";
If "blank" in "WORK PHONE NUMBER" and
"HOME PHONE NUMBER" in S10, Continue)

S11. (FDIRECTA) (If code "1", "3" or "4" in S7, OR code "6" in "Intro", OR code "1", "3" or "4" in S9, OR "blank" in "WORK PHONE NUMBER" and "HOME PHONE NUMBER" in S10:) (Call directory assistance for most recent city or area code. Ask for directory assistance using full name from "Fone" file.)

(Original phone number from "Fone" file)

(Original city from "Fone" file) or ("CITY" from S10)

(Name from "Fone" file)

- 1 New number - (Enter on next screen)
- 2 No number/Match - (Thank and Terminate;
Save Case ID)

_____ (894)

(All in S11, call new number,
and Reset to "Intro")

CLOCK:

(_____ - _____)

A1. Are you currently a full-time employee of a federal agency such as the U.S. Public Health Service, Veterans Administration or a military service? **(Probe:)** Do you receive your paychecks from a federal agency? **(If respondent works part-time for a Federal Agency, ask:)** Do you consider this (Federal Agency) your main practice?

1 Yes - (Continue)

2 No - (Skip to #A2)

3 Retired - (Thank and Terminate,
and Set to "Failed Screener")

4 Out of country (Thank and Terminate,
and Set to "Failed Screener")

5 Institutionalized (Thank and Terminate,
and Set to "Failed Screener")

8 (DK) (Thank and Terminate)

9 (Refused) (Thank and Terminate)

_____ (1053)

**(If code "1" in A1,
INTERVIEWER READ:)**

In this survey, we will not be interviewing physicians who are Federal employees. So it appears that we do not need any further information from you at this time, but we thank you for your cooperation. - (Thank and Terminate)

A2. Are you currently a resident or fellow?

1 Yes - (Continue)

2 No - (Skip to #A3)

8 (DK) (Thank and Terminate)

9 (Refused) (Thank and Terminate)

_____ (1054)

(If code "1" in #A2,
INTERVIEWER READ:)

In this survey, we will not be interviewing physicians who are residents or fellows. So it appears that we do not need any further information from you at this time, but we thank you for your cooperation. - (Thank and Terminate)

A3. During a TYPICAL week, do you provide direct patient care for at least twenty hours a week? [(If necessary, say:) Direct patient care includes seeing patients and performing surgery.] [(If necessary, say:) INCLUDE time spent on patient record-keeping, patient-related office work, and travel time connected with seeing patients. EXCLUDE time spent in training, teaching, or research, any hours on-call when not actually working, and travel between home and work at the beginning and end of the work day.]

1 Yes - (Skip to "Note" before #A3a)

2 No - (Continue)

8 (DK) (Thank and Terminate)

9 (Refused) (Thank and Terminate)

_____ (1055)

(If code "2" in #A3,
INTERVIEWER READ:)

In this survey, we will not be interviewing physicians who typically provide patient care for less than 20 hours a week. So it appears that we do not need any further information from you at this time, but we thank you for your cooperation. - (Thank and Terminate)

(If code "1" or "3" in S1c, Continue;
Otherwise, Skip to #A4)

A3a. Thinking back to April, 1998, at that time, were you a full-time employee of a federal agency?

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused) _____ (1615)

A3b. In April, 1998, were you a resident or fellow?

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused) _____ (1616)

A3c. In April, 1998, were you providing direct patient care for at least twenty hours a week?

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused) _____ (1617)

A4. Do you currently provide patient care in one practice, or more than one practice? [(If necessary, say:) We consider multiple sites or offices associated with the same organization to be only one practice.] (INTERVIEWER NOTE #1: Examples are: a private MD with a downtown and suburban office is one practice; a regional organization with member doctors practicing in numerous satellite clinics or offices is one practice; and multiple sites with DIFFERENT organizations are different practices.) (INTERVIEWER NOTE #2: Do not count non-patient-care activity, such as teaching or administrative jobs, as practices.)

- 1 One - (Skip to #A5)
- 2 More than one - (Continue)
- 8 (DK) (Skip to #A5)
- 9 (Refused) (Skip to #A5)

_____ (1056)

A4a. (If code "2" in #A4, ask:) In how many different practices do you provide patient care? (Open ended and code actual number)

- DK (DK)
- RF (Refused)

_____ (1057) _____ (1058)

A5. We'd like you to think about the practice location at which you spend the greatest amount of time in direct patient care. Is this practice located in (county and state from "Fone" file)? (INTERVIEWER NOTE: Surgeons should give the location of their office, not the hospital where they perform surgery.)

- 1 Yes - (Skip to "Note" before #A5b)
- 2 No (Continue)
- 8 (DK) (Continue)
- 9 (Refused) (Continue)

_____ (2634)

A5a. (If code "2", "8" or "9" in #A5, ask:) In what county and state is the practice located. (Open ended) (VERIFY SPELLING)

DK (DK)
RF (Refused)

COUNTY:

(2834 - 2858)

STATE:

(2859) (2860)

(If code "15 - Hawaii" or "02 - Alaska" in #A5a - "State", Continue with "Interviewer Read"; Otherwise, Skip to #A5b)

(INTERVIEWER READ:) We are not interviewing physicians in your state at this time. So it appears that we do not need any further information from you, but we thank you for your cooperation.
- **(Thank and Terminate)**

A5b. What is the zip code of your practice? (Open ended and code all five digits of zip code)

99998 (DK)
99999 (Refused)

(1618 - 1622)

(If code "2" in S1c, Skip to #A7;
Otherwise, Continue)

A6. In what year did you begin medical practice after completing your undergraduate and graduate medical training? (INTERVIEWER NOTE: A residency or fellowship would be considered graduate medical training.) (Open ended and code all four digits of year) (NOTE TO SURVENT: Force interviewers to enter FOUR DIGITS)

DK (DK)
RF (Refused)

(1623 - 1626)

(If code "999" in S3, Skip to #A8;
Otherwise, Continue)

A7. We have your primary specialty listed as (response in S3). Is this correct? [(If necessary, say:) We define primary specialty as that in which the most hours are spent weekly.]

1 Yes - (Autocode response in S3 into #A8)

2 No - (Continue)

8 (DK) (Thank and Terminate)

9 (Refused) (Thank and Terminate)

(1065)

A8. (If code "2" or "blank" in #A7, ask:) What is your primary specialty? [(If necessary, say:) We define primary specialty as that in which the most hours are spent weekly.] (Open ended and code from hard copy) (INTERVIEWER NOTE: Probe for codeable response)

(If code "1" in S1 [MD-AMA LIST])

301	Abdominal Radiology	(AR)
202	AIDS/HIV Specialist	
001	Allergy	(A)
133	Adolescent Medicine Pediatrics	(ADL)
127	Addiction Medicine	(ADM)
132	Addiction Psychiatry	(ADP)
002	Allergy & Immunology	(AI)
003	Allergy & Immunology/ Diagnostic Laboratory Immunology	(ALI)
005	Aerospace Medicine	(AM)
085	Adolescent Medicine (Internal Medicine)	(AMI)
006	Anesthesiology	(AN)
007	Pain Management	(APM)
026	Abdominal Surgery	(AS)
103	Anatomic Pathology	(ATP)
104	Bloodbanking/Transfusion Medicine	(BBK)
190	Cardiovascular Surgery	(CDS)
049	Clinical Biochemical Genetics	(CBG)
008	Critical Care Medicine (Anesthesiology)	(CCA)
050	Clinical Cytogenetics	(CCG)
191	Craniofacial Surgery	(CFS)
128	Critical Care Medicine (Internal Medicine)	(CCM)
086	Critical Care Pediatrics	(CCP)
027	Critical Care Surgery	(CCS)
009	Cardiovascular Disease	(CD)
051	Clinical Genetics	(CG)
054	Child Neurology	(CHN)
010	Child & Adolescent Psychiatry	(CHP)
105	Clinical Pathology	(CLP)
052	Clinical Molecular Genetics	(CMG)
055	Clinical Neurophysiology	(CN)
011	Colon & Rectal Surgery	(CRS)
124	Cardiothoracic Surgery	(CTS)
012	Dermatology	(D)
164	Dermatologic Surgery	(DS)
013	Clinical & Laboratory Dermatological Immunology	(DDL)
035	Diabetes	(DIA)

A8. (Continued:)

106	Dermatopathology	(DMP)
014	Diagnostic Radiology	(DR)
015	Emergency Medicine	(EM)
308	Internal Medicine/Emergency Medicine	(MEM)
036	Endocrinology, Diabetes & Metabolism	(END)
302	Epidemiology	(EP)
016	Sports Medicine (Emergency Medicine)	(ESM)
140	Medical Toxicology (Emergency Medicine)	(ETX)
303	Flex Residents	(FLX)
018	Forensic Pathology	(FOP)
019	Family Practice	(FP)
020	Geriatric Medicine (Family Practice)	(FPG)
078	Facial Plastic Surgery	(FPS)
021	Sports Medicine (Family Practice)	(FSM)
022	Gastroenterology	(GE)
061	Gynecological Oncology	(GO)
023	General Practice	(GP)
024	General Preventive Medicine	(GPM)
029	General Surgery	(GS)
062	Gynecology	(GYN)
037	Hematology	(HEM)
038	Hepatology	(HEP)
107	Hematology Pathology	(HMP)
030	Head & Neck Surgery	(HNS)
136	Hematology/Oncology	(HO)
070	Hand Surgery Orthopedics	(HSO)
101	Hand Surgery Plastic	(HSP)
031	Hand Surgery	(HSS)
201	Hospitalists	
039	Clinical Cardiac Electrophysiology	(ICE)
040	Infectious Diseases	(ID)
004	Immunology	(IG)
041	Clinical & Laboratory Immunology (IM)	(ILI)
042	Internal Medicine	(IM)
194	Interventional Cardiology	(IC)
043	Geriatric Medicine (IM)	(IMG)
044	Sports Medicine	(ISM)
309	Sports Medicine (Physical Medicine and Rehabilitation) (IM)	(PMM)
129	Legal Medicine	(LM)
138	Medical Management	(MDM)
063	Maternal & Fetal Medicine	(MFM)
304	Maxillofacial Radiology	(MXR)
053	Medical Genetics	(MG)
108	Medical Microbiology	(MM)
195	Internal Medicine/Family Practice	(IFP)

A8. (Continued:)

137	Internal Medicine/Pediatrics	(MPD)
099	Public Health & General Preventive Medicine	(MPH)
056	Neurology	(N)
310	Internal Medicine/Neurology	(MN)
311	Neurology/Physical Medicine and Rehabilitation	(NPR)
058	Critical Care Medicine (Neurosurgery)	(NCC)
045	Nephrology	(NEP)
057	Nuclear Medicine	(NM)
109	Neuropathology	(NP)
087	Neonatal/Perinatal Medicine	(NPM)
117	Nuclear Radiology	(NR)
305	Neurology/Diagnostic Radiology/ Neuroradiology	(NRN)
059	Neurological Surgery	(NS)
060	Pediatric Neurosurgery	(NSP)
046	Nutrition	(NTR)
071	Adult Reconstructive Orthopedics	(OAR)
064	Obstetrics & Gynecology	(OBG)
065	Obstetrics	(OBS)
066	OB Critical Care Medicine	(OCC)
134	Foot & Ankle Orthopedics	(OFA)
068	Occupational Medicine	(OM)
072	Musculoskeletal Oncology	(OMO)
047	Medical Oncology	(ON)
073	Pediatric Orthopedics	(OP)
069	Ophthalmology	(OPH)
074	Orthopedic Surgery	(ORS)
028	Other Specialty	(OS)
075	Sports Medicine (Orthopedic Surgery)	(OSM)
076	Orthopedic Surgery of the Spine	(OSS)
079	Otology	(OT)
197	Otology/Neurotology	(NO)
080	Otolaryngology	(OTO)
077	Orthopedic Trauma	(OTR)
082	Psychiatry	(P)
312	Psychiatry/Family Practice	(FPP)
313	Internal Medicine/Psychiatry	(MP)
130	Clinical Pharmacology	(PA)
147	Pulmonary Critical Care Medicine	(PCC)
110	Chemical Pathology	(PCH)
111	Cytopathology	(PCP)
088	Pediatrics	(PD)
089	Pediatric Allergy	(PDA)
306	Pediatric Anesthesiology (Pediatrics)	(PAN)
098	Pediatric Cardiology	(PDC)

A8. (Continued:)

198	Pediatric Cardiothoracic Surgery	(PCS)
193	Pediatric Emergency Medicine	(EMP)
090	Pediatric Endocrinology	(PDE)
145	Pediatric Infectious Diseases	(PDI)
081	Pediatric Otolaryngology	(PDO)
091	Pediatric Pulmonology	(PDP)
192	Pediatrics/Psychiatry/Child & Adolescent Ps	(CPP)
118	Pediatric Radiology	(PDR)
032	Pediatric Surgery	(PDS)
139	Medical Toxicology (Pediatrics)	(PDT)
144	Pediatric Emergency Medicine	(PE)
017	Pediatric Emergency Medicine (Pediatrics)	(PEM)
135	Forensic Psychiatry	(PFP)
092	Pediatric Gastroenterology	(PG)
093	Pediatric Hematology/Oncology	(PHO)
112	Immunopathology	(PIP)
094	Clinical & Laboratory Immunology (Pediatrics)	(PLI)
143	Palliative Medicine	(PLM)
100	Physical Medicine & Rehab	(PM)
314	Internal Medicine/Physical Medicine & Rehabilitation	(MPM)
200	Physical Medicine & Rehabilitation (Pediatrics)	(PMP)
142	Pain Medicine	(PMD)
095	Pediatric Nephrology	(PN)
146	Pediatric Ophthalmology	(PO)
113	Pediatric Pathology	(PP)
096	Pediatric Rheumatology	(PPR)
102	Plastic Surgery/Cosmetic Surgery	(PS)
199	Pharmaceutical Medicine	(PHM)
307	Public Health	(PH)
097	Sports Medicine (Pediatrics)	(PSM)
114	Anatomic/Clinical Pathology	(PTH)
141	Medical Toxicology (Preventive Medicine)	(PTX)
116	Pulmonary Diseases	(PUD)
196	Internal Medicine/Preventive Medicine	(IPM)
083	Psychoanalysis	(PYA)
084	Geriatric Psychiatry	(PYG)
119	Radiology	(R)
067	Reproductive Endocrinology	(REN)
048	Rheumatology	(RHU)
115	Radioisotopic Pathology	(RIP)
120	Neuroradiology	(RNR)

A8. (Continued:)

123	Radiation Oncology	(RO)	
121	Radiological Physics	(RP)	
150	Spinal Cord Injury	(SCI)	
149	Sleep Medicine	(SM)	
151	Surgical Oncology	(SO)	
148	Selective Pathology	(SP)	
033	Trauma Surgery	(TRS)	
152	Transplant Surgery	(TTS)	
125	Urology	(U)	
025	Undersea Medicine	(UM)	
126	Pediatric Urology	(UP)	
131	Unspecified	(US)	
122	Vascular & Interventional Radiology		(VIR)
165	Vascular Medicine	(VM)	
034	Vascular Surgery	(VS)	
210	Developmental & Behavioral Pediatrics	(DBP)	
159	Proctology	(PRO)	
124	Thoracic Surgery	(TS)	
997	Other (list) -	(USE VERY SPARINGLY; Thank and Terminate)	
998	(DK)	(Thank and Terminate)	
999	(Refused)	(Thank and Terminate)	

(1066 - 1068)

A8. (Continued:)

(If code "2" in S1 [DO-AOA LIST])

301	Abdominal Radiology	AR	
202	AIDS/HIV Specialist		
002	Allergy and Immunology	AI	
003	Allergy-Diagnostic Lab Immunology	ALI	
004	Immunology	IG	
005	Preventive Medicine-Aerospace Medicine	AM	
006	Anesthesiology	AN	
006	Anesthesiology	CAN	
006	Anesthesiology	IRA	
006	Anesthesiology	OBA	
006	Anesthesiology	PAN	
007	Pain Management	APM	
007	Pain Management	PMR	
008	Critical Care-Anesthesiology	CCA	
009	Cardiovascular Diseases-Cardiology	C	
009	Cardiovascular Diseases-Cardiology	CVD	
009	Cardiovascular Diseases-Cardiology	IC	
190	Cardiovascular Surgery	CDS	
191	Craniofacial Surgery	CFS	
010	Pediatric Psychiatry	CHP	
010	Pediatric Psychiatry	PDP	
011	Colon & Rectal Surgery	CRS	
012	Dermatology	D	
015	Emergency Medicine	EM	
014	Diagnostic Radiology	DR	
308	Internal Medicine/Emergency Medicine		MEM
015	Emergency Medicine	EMS	
015	Emergency Medicine	FEM	
015	Emergency Medicine	IEM	
302	Epidemiology	EP	
016	Sports Medicine (Emergency Medicine)		ESM
017	Pediatric Emergency Medicine	PEM	
303	Flex Residents	FLX	
018	Forensic Pathology	FOP	
019	Family Practice	FP	
019	Family Practice	UFP	
020	Geriatrics-General or Family Practice	GFP	
020	Geriatrics-General or Family Practice	GGP	
021	Sports Medicine-Family or General Practice	SFP	
021	Sports Medicine-Family or General Practice	SGP	
022	Gastroenterology	GE	
023	General Practice	GP	

A8. (Continued:)

024	Preventive Medicine	PVM
025	Undersea Medicine	UM
026	Abdominal Surgery	AS
027	Critical Care-Surgery or Trauma	CCS
027	Critical Care-Surgery or Trauma	CCT
028	Other Specialty	OS
029	Surgery-General	S
030	Head & Neck Surgery	HNS
031	Hand Surgery	HS
031	Hand Surgery	HSS
201	Hospitalists	
032	Pediatric Surgery	PDS
033	Traumatic Surgery	TRS
034	Vascular Surgery-General or Peripheral	GVS
034	Vascular Surgery-General or Peripheral	PVS
036	Endocrinology	END
037	Hematology	HEM
039	Cardiac Electrophysiology	ICE
040	Infectious Diseases	ID
041	Diag Lab Immunology-Int Med	ILI
042	Internal Medicine	IM
194	Interventional Cardiology	IC
195	Internal Medicine/Family Practice	IFP
042	Internal Medicine	IP
043	Geriatrics-Internal Medicine	GER
309	Geriatrics-Internal Medicine	GIM
044	Sports Medicine (Physical Medicine & Rehabilitation)	PMM
044	Sports Medicine	ISM
044	Sports Medicine	PMS
044	Sports Medicine	RMS
044	Sports Medicine	SM
045	Nephrology	NEP
046	Nutrition	NTR
047	Oncology	ON
048	Rheumatology	RHU
050	Clinical Cytogenetics	CCG
051	Clinical Genetics	CG
053	Medical Genetics	IMG
054	Pediatric or Child Neurology	CHN
054	Pediatric or Child Neurology	PDN
055	Clinical Neurophysiology	CN

A8. (Continued:)

056	Neurology	N
310	Internal Medicine/Neurology	MN
311	Neurology/Physical Medicine & Rehab	NPR
056	Neurology	NMD
056	Neurology	NP
056	Neurology	NPN
305	Neurology/Diagnostic Radiology/ Neuroradiology	NRN
057	Nuclear Medicine	NI
057	Nuclear Medicine	NM
057	Nuclear Medicine	NV
058	Critical Care-Neuro Surgery	NCC
059	Neurological Surgery	NS
061	Gynecological Oncology	GO
062	Gynecology	GS
062	Gynecology	GYN
063	Maternal & Fetal Medicine	MFM
304	Maxillofacial Radiology	MXR
064	Obstetrics & Gynecology	OBG
064	Obstetrics & Gynecology	OGS
065	Obstetrics	OBS
066	Critical Care-Obstetrics & Gynecology	OCC
067	Reproductive Endocrinology	RE
068	Occupational Medicine	OCM
068	Occupational Medicine	OM
069	Ophthalmology	COR
069	Ophthalmology	OAS
069	Ophthalmology	OCR
069	Ophthalmology	OGL
069	Ophthalmology	OPH
069	Ophthalmology	VRS
070	Hand Surgery-Orthopedic Surg	HSO
071	Adult Reconstructive Orthopedics	OAR
072	Musculoskeletal Oncology	OMO
073	Pediatric Orthopedics	OP
074	Orthopedic Surgery	AJI
074	Orthopedic Surgery	OR
074	Orthopedic Surgery	ORS
075	Sports Medicine-Orthopedic Surgery	OSM
076	Orthopedic Surgery-Spine	OSS
078	Facial Plastic Surgery	OPL
080	Otolaryngology or Rhinology	OTL
080	Otolaryngology or Rhinology	OTR
080	Otolaryngology or Rhinology	RHI
197	Otology/Neurotology	NO

A8. (Continued:)

081	Pediatric Otolaryngology	PDO
082	Psychiatry	P
312	Psychiatry/Family Practice	FPP
313	Psychiatry/Internal Medicine	MP
083	Psychoanalysis	PYA
084	Geriatric Psychiatry	PYG
085	Adolescent Medicine-Family or General Practice	AFP
085	Adolescent Medicine-Family or General Practice	AGP
086	Pediatric Intensive Care	PIC
087	Neonatology	NE
088	Pediatrics	PD
089	Pediatric Allergy & Immunology	PAI
306	Pediatric Anesthesiology (Pediatrics)	PAN
091	Pediatric Pulmology Medicine	PDX
198	Pediatric Cardiothoracic Surgery	PCS
092	Pediatric Gastroenterology	PG
093	Pediatric Hematology-Oncology	PHO
094	Pediatric Diag Lab Immunology	PLI
095	Pediatric Nephrology	PNP
192	Pediatrics/Psychiatry/Child & Adolescent Ps	CPP
096	Pediatric Rheumatology	PPR
097	Sports Medicine - Pediatrics	PSM
098	Pediatric Cardiology	PDC
099	Preventive Medicine, Epidemiology or Public Health	EPI
099	Preventive Medicine, Epidemiology or Public Health	OE
099	Preventive Medicine, Epidemiology or Public Health	PH
099	Preventive Medicine, Epidemiology or Public Health	PHP
199	Pharmaceutical Medicine	PHM
100	Physical Medicine & Rehabilitation	PM
100	Physical Medicine & Rehabilitation	IAR
100	Physical Medicine & Rehabilitation	PDR
314	Internal Medicine/Physical Medicine & Rehabilitation	MPM
100	Physical Medicine & Rehabilitation	RM
200	Physical Medicine & Rehabilitation (Pediatrics)	PMP
101	Hand Surgery-Plastic Surg	HSP
102	Plastic Surgery	OOP
102	Plastic Surgery	PLR
103	Anatomic Pathology	AP

A8. (Continued:)

104	Blood Banking-Transfusion Medicine	BBT
104	Blood Banking-Transfusion Medicine	LBM
105	Clinical Pathology	CLP
106	Dermatopathology	DPT
107	Hematology-Pathology	HEP
108	Medicine Microbiology	MMB
109	Neuropathology	NPT
110	Chemical Pathology	CP
111	Cytopathology	CY
112	Immunopathology	IPT
113	Pediatric Pathology	PP
114	Anatomic/Clinical Pathology	APL
114	Anatomic/Clinical Pathology	PTH
115	Radioisotopic Pathology	RIP
307	Public Health	PH
196	Internal Medicine/Preventive Medicine	IPM
116	Pulmonary Diseases	PUD
116	Pulmonary Diseases	PUL
117	Nuclear Radiology	NR
118	Pediatric Radiology	PRD
119	Radiology	DUS
119	Radiology	R
119	Radiology	RI
119	Radiology	RT
119	Radiology	RTD
120	Neuroradiology	NRA
121	Radiological Physics	RP
122	Angiography & Intervent'l Radiology	ANG
122	Angiography & Intervent'l Radiology	SCL
123	Radiation Oncology	RO
123	Radiation Oncology	TR
124	Cardiovascular or Thoracic Cardiovascular Surgery	CVS
124	Cardiovascular or Thoracic Cardiovascular Surgery	TS
125	Urology	U
125	Urology	URS
126	Pediatric Urology	UP
127	Addictive Diseases	ADD
128	Critical Care-Medicine	CCM
129	Legal Medicine	LM
130	Clinical Pharmacology	PA
131	Unknown Blank	
133	Adolescent Medicine	ADL
134	Orthopedic Foot & Ankle Surg	OFA
135	Forensic Psychiatry	FPS

A8. (Continued:)

136	Hematology & Oncology	HEO
137	Internal Med-Pediatrics	IPD
139	Toxicology	TX
142	Psychosomatic Medicine	PYM
145	Pediatric Infectious Diseases	PID
146	Pediatric Ophthalmology	PO
147	Pulmonary-Critical Care	PUC
153	MOHS Micrographic Surgery	DMS
154	Hair Transplant	HT
155	Osteo Manipulative Treat +1	OM1
156	Osteopathic Manipulative Medicine	OMM
157	Sports Medicine - OMM	OMS
158	Osteo Manipulative Medicine	OMT
159	Proctology	PRO
160	Internship	IN
161	Retired	RET
162	Transitional Year	TY
209	Nuclear Cardiology	NC
210	Developmental & Behavioral Pediatrics	DBP
159	Proctology	PRO
124	Thoracic Surgery	TS
997	Other (list) - (USE VERY SPARINGLY; Thank and Terminate)	
998	(DK) (Thank and Terminate)	
999	(Refused) (Thank and Terminate)	

(1066 - 1068)

(If code "003", "005-007", "013-014", "018", "025", "028", "057", "099", "103-115", "117-122", "129-131", "135", "138-141", "148", "160-162", "209" or "301-307" in #A8,

INTERVIEWER READ:) In this survey, we are only interviewing physicians in certain specialties, and your specialty is not among those being interviewed. So, it appears that we do not need any further information from you at this time, but we thank you for your cooperation. - (Thank and Terminate)

(If code "201" in #A8, Skip to #A17;

If code "042", "088", "137" or "195" in #A8, Continue;

If code "001-002", "004", "009", "012", "015-016", "020-022", "024", "035-041", "043-048", "055-056", "085", "116", "128", "136", "142", "143", "147", "149", "194", "196", "199", "308", "310", "314" or "313" in #A8,

Skip to #A9a;

If code "017", "049-054", "063", "086-087", "089-094", "095-098", "133", "144-145", "192", "193", "200" or "210" in #A8,

Skip to #A9b;

Otherwise, Skip to #A15)

A9. (If code "042", "088", "137" or "195" in #A8, ask:) Do you spend more hours weekly in general (response in #A8), or a subspecialty in (response in #A8)? (INTERVIEWER NOTE: If respondent says "50/50 split", code as "1")

- 1 General - (Skip to #A15)
- 2 Subspecialty (including adolescent medicine or geriatrics) - (Skip to #A10)
- 8 (DK) (Skip to #A15)
- 9 (Refused) (Skip to #A15)

_____ (1069)

A9a. (If code "001-002", "004", "009", "012", "015-016", "020-022", "024", "035-041", "043-048", "055-056", "085", "116", "128", "136", "142", "143", "147", "149", "194", "196", "199", "308", "310", "313" OR "314" in #A8, ask:) Do you spend most of your time practicing in (response in #A8), or in general internal medicine? (NOTE TO INTERVIEWER: If respondent says "50/50 split", code as "1")

- 1 Subspecialty
- 2 General internal medicine (or
general family practice)
- 3 General pediatrics

- 8 (DK)
- 9 (Refused)

_____ (2720)

(All in #A9a, Skip to #A15)

A9b. If code "017", "049-054", "063", "086-087", "089-098", "133", "144-145", "192", "193", "200" or "210" in #A8, ask:) Do you spend most of your time practicing in (response in #A8), or in general pediatrics? (NOTE TO INTERVIEWER: If respondent says "50/50 split", code as "1")

- 1 Subspecialty
- 2 General internal medicine (General
Family Practice)
- 3 General pediatrics

- 8 (DK)
- 9 (Refused)

_____ (1357)

(All in #A9b, Skip to #A15)

A10. **(If code "2" in #A9, ask:)** And what is that subspecialty? **(If "More than one", say:)** We're interested in the one in which you spend the most hours weekly. (Open ended **and code from hard copy**)
(CHECK SPELLING)

(If code "1" in S1 [MD-AMA LIST])

301	Abdominal Radiology	(AR)
202	AIDS/HIV Specialist	
001	Allergy	(A)
133	Adolescent Medicine Pediatrics	(ADL)
127	Addiction Medicine	(ADM)
132	Addiction Psychiatry	(ADP)
002	Allergy & Immunology	(AI)
003	Allergy & Immunology/ Diagnostic Laboratory Immunology	(ALI)
005	Aerospace Medicine	(AM)
085	Adolescent Medicine (Internal Medicine)	(AMI)
006	Anesthesiology	(AN)
007	Pain Management	(APM)
026	Abdominal Surgery	(AS)
103	Anatomic Pathology	(ATP)
104	Bloodbanking/Transfusion Medicine	(BBK)
190	Cardiovascular Surgery	(CDS)
049	Clinical Biochemical Genetics	(CBG)
008	Critical Care Medicine (Anesthesiology)	(CCA)
050	Clinical Cytogenetics	(CCG)
191	Craniofacial Surgery	(CFS)
128	Critical Care Medicine (Internal Medicine)	(CCM)
086	Critical Care Pediatrics	(CCP)
027	Critical Care Surgery	(CCS)
009	Cardiovascular Disease	(CD)
051	Clinical Genetics	(CG)
054	Child Neurology	(CHN)
010	Child & Adolescent Psychiatry	(CHP)
105	Clinical Pathology	(CLP)
052	Clinical Molecular Genetics	(CMG)
055	Clinical Neurophysiology	(CN)
011	Colon & Rectal Surgery	(CRS)
124	Cardiothoracic Surgery	(CTS)
012	Dermatology	(D)
164	Dermatologic Surgery	(DS)
013	Clinical & Laboratory Dermatological Immunology	(DDL)
035	Diabetes	(DIA)

A10. (Continued:)

106	Dermatopathology	(DMP)
014	Diagnostic Radiology	(DR)
015	Emergency Medicine	(EM)
308	Internal Medicine/Emergency Medicine	(MEM)
036	Endocrinology Diabetes & Metabolism	(END)
302	Epidemiology	(EP)
016	Sports Medicine (Emergency Medicine)	(ESM)
140	Medical Toxicology (Emergency Medicine)	(ETX)
303	Flex Residents	(FLX)
018	Forensic Pathology	(FOP)
019	Family Practice	(FP)
020	Geriatric Medicine (Family Practice)	(FPG)
078	Facial Plastic Surgery	(FPS)
021	Sports Medicine (Family Practice)	(FSM)
022	Gastroenterology	(GE)
061	Gynecological Oncology	(GO)
023	General Practice	(GP)
024	General Preventive Medicine	(GPM)
029	General Surgery	(GS)
062	Gynecology	(GYN)
037	Hematology	(HEM)
038	Hepatology	(HEP)
107	Hematology Pathology	(HMP)
030	Head & Neck Surgery	(HNS)
136	Hematology/Oncology	(HO)
070	Hand Surgery Orthopedics	(HSO)
101	Hand Surgery Plastic	(HSP)
031	Hand Surgery	(HS)
201	Hospitalists	
039	Cardiac Electrophysiology	(ICE)
040	Infectious Diseases	(ID)
004	Immunology	(IG)
041	Clinical & Laboratory Immunology (IM)	(ILI)
042	Internal Medicine	(IM)
194	Interventional Cardiology	(IC)
043	Geriatric Medicine (IM)	(IMG)
044	Sports Medicine	(ISM)
309	Sports Medicine (Physical Medicine and Rehabilitation) (IM)	(PMM)
129	Legal Medicine	(LM)
138	Medical Management	(MDM)
063	Maternal & Fetal Medicine	(MFM)
304	Maxillofacial Radiology	
053	Medical Genetics	(MG)
108	Medical Microbiology	(MM)
195	Internal Medicine/Family Practice	(IFP)

A10. (Continued:)

137	Internal Medicine/Pediatrics	(MPD)
099	Public Health & General Preventive Medicine	(MPH)
056	Neurology	(N)
310	Internal Medicine/Neurology	(MN)
311	Neurology/Physical Medicine and Rehabilitation	(NPR)
058	Critical Care Medicine (Neurosurgery)	(NCC)
045	Nephrology	(NEP)
057	Nuclear Medicine	(NM)
109	Neuropathology	(NP)
087	Neonatal/Perinatal Medicine	(NPM)
117	Nuclear Radiology	(NR)
305	Neurology/Diagnostic Radiology/ Neuroradiology	(NRN)
059	Neurological Surgery	(NS)
060	Pediatric Neurosurgery	(NSP)
046	Nutrition	(NTR)
071	Adult Reconstructive Orthopedics	(OAR)
064	Obstetrics & Gynecology	(OBG)
065	Obstetrics	(OBS)
066	OB Critical Care Medicine	(OCC)
134	Foot & Ankle Orthopedics	(OFA)
068	Occupational Medicine	(OM)
072	Musculoskeletal Oncology	(OMO)
047	Medical Oncology	(ON)
073	Pediatric Orthopedics	(OP)
069	Ophthalmology	(OPH)
074	Orthopedic Surgery	(ORS)
028	Other Specialty	(OS)
075	Sports Medicine (Orthopedic Surgery)	(OSM)
076	Orthopedic Surgery of the Spine	(OSS)
079	Otology	(OT)
197	Otology/Neurotology	(NO)
080	Otolaryngology	(OTO)
077	Orthopedic Trauma	(OTR)
082	Psychiatry	(P)
312	Psychiatry/Family Practice	(FPP)
313	Internal Medicine/Psychiatry	(MP)
130	Clinical Pharmacology	(PA)
147	Pulmonary Critical Care Medicine	(PCC)
110	Chemical Pathology	(PCH)
111	Cytopathology	(PCP)
088	Pediatrics	(PD)
089	Pediatric Allergy	(PDA)
306	Pediatric Anesthesiology (Pediatrics)	(PRN)
098	Pediatric Cardiology	(PDC)

A10. (Continued:)

198	Pediatric Cardiothoracic Surgery	(PCS)
193	Pediatric Emergency Medicine	(EMP)
090	Pediatric Endocrinology	(PDE)
145	Pediatric Infectious Diseases	(PDI)
081	Pediatric Otolaryngology	(PDO)
091	Pediatric Pulmonology	(PDP)
192	Pediatrics/Psychiatry/Child & Adolescent Ps	(CPP)
118	Pediatric Radiology	(PDR)
032	Pediatric Surgery	(PDS)
139	Medical Toxicology (Pediatrics)	(PDT)
144	Pediatric Emergency Medicine	(PE)
017	Pediatric Emergency Medicine (Pediatrics)	(PEM)
135	Forensic Psychiatry	(PFP)
092	Pediatric Gastroenterology	(PG)
093	Pediatric Hematology/Oncology	(PHO)
112	Immunopathology	(PIP)
094	Clinical & Laboratory Immunology (Pediatrics)	(PLI)
143	Palliative Medicine	(PLM)
100	Physical Medicine & Rehab	(PM)
314	Internal Medicine/Physical Medicine & Rehabilitation	(MPM)
200	Physical Medicine & Rehabilitation (Pediatrics)	(PMP)
142	Pain Medicine	(PMD)
095	Pediatric Nephrology	(PN)
146	Pediatric Ophthalmology	(PO)
113	Pediatric Pathology	(PP)
096	Pediatric Rheumatology	(PPR)
102	Plastic Surgery/Cosmetic Surgery	(PS)
199	Pharmaceutical Medicine	(PHM)
307	Public Health	(PH)
097	Sports Medicine (Pediatrics)	(PSM)
114	Anatomic/Clinical Pathology	(PTH)
141	Medical Toxicology (Preventive Medicine)	(PTX)
116	Pulmonary Diseases	(PUD)
196	Internal Medicine/Preventive Medicine	(IPM)
083	Psychoanalysis	(PYA)
084	Geriatric Psychiatry	(PYG)
119	Radiology	(R)
067	Reproductive Endocrinology	(REN)
048	Rheumatology	(RHU)
115	Radioisotopic Pathology	(RIP)
120	Neuroradiology	(RNR)

A10. (Continued:)

123	Radiation Oncology	(RO)	
121	Radiological Physics	(RP)	
150	Spinal Cord Injury	(SCI)	
149	Sleep Medicine	(SM)	
151	Surgical Oncology	(SO)	
148	Selective Pathology	(SP)	
033	Trauma Surgery	(TRS)	
152	Transplant Surgery	(TTS)	
125	Urology	(U)	
025	Undersea Medicine	(UM)	
126	Pediatric Urology	(UP)	
131	Unspecified	(US)	
122	Vascular & Interventional Radiology		(VIR)
165	Vascular Medicine	(VM)	
034	Vascular Surgery	(VS)	
210	Developmental Medicine/Pediatrics	(DBP)	
159	Proctology	(PRO)	
124	Thoracic Surgery	(TS)	
997	Other (list) -	(USE VERY SPARINGLY; Thank and Terminate)	
998	(DK)	(Thank and Terminate)	
999	(Refused)	(Thank and Terminate)	

(1070 - 1072)

A10. (Continued:)

(If code "2" in S1 [DO-AOA LIST])

301	Abdominal Radiology	AR	
202	AIDS/HIV Specialist		
002	Allergy and Immunology	AI	
003	Allergy-Diagnostic Lab Immunology	ALI	
004	Immunology	IG	
005	Preventive Medicine-Aerospace Medicine	AM	
006	Anesthesiology	AN	
006	Anesthesiology	CAN	
006	Anesthesiology	IRA	
006	Anesthesiology	OBA	
006	Anesthesiology	PAN	
007	Pain Management	APM	
007	Pain Management	PMR	
008	Critical Care-Anesthesiology	CCA	
009	Cardiovascular Diseases-Cardiology	C	
009	Cardiovascular Diseases-Cardiology	CVD	
009	Cardiovascular Diseases-Cardiology	IC	
190	Cardiovascular Surgery	CDS	
191	Craniofacial Surgery	CFS	
010	Pediatric Psychiatry	CHP	
010	Pediatric Psychiatry	PDP	
011	Colon & Rectal Surgery	CRS	
012	Dermatology	D	
015	Emergency Medicine	EM	
014	Diagnostic Radiology	DR	
308	Internal Medicine/Emergency Medicine		MEM
015	Emergency Medicine	EMS	
015	Emergency Medicine	FEM	
015	Emergency Medicine	IEM	
302	Epidemiology	EP	
016	Sports Medicine (Emergency Medicine)		ESM
017	Pediatric Emergency Medicine	PEM	
303	Flex Residents	FLX	
018	Forensic Pathology	FOP	
019	Family Practice	FP	
019	Family Practice	UFP	
020	Geriatrics-General or Family Practice	GFP	
020	Geriatrics-General or Family Practice	GGP	
021	Sports Medicine-Family or General Practice	SFP	
021	Sports Medicine-Family or General Practice	SGP	
022	Gastroenterology	GE	
023	General Practice	GP	

A10. (Continued:)

024	Preventive Medicine	PVM
025	Undersea Medicine	UM
026	Abdominal Surgery	AS
027	Critical Care-Surgery or Trauma	CCS
027	Critical Care-Surgery or Trauma	CCT
028	Other Specialty	OS
029	Surgery-General	S
030	Head & Neck Surgery	HNS
031	Hand Surgery	HS
031	Hand Surgery	HSS
201	Hospitalists	
032	Pediatric Surgery	PDS
033	Traumatic Surgery	TRS
034	Vascular Surgery-General or Peripheral	GVS
034	Vascular Surgery-General or Peripheral	PVS
036	Endocrinology	END
037	Hematology	HEM
039	Cardiac Electrophysiology	ICE
040	Infectious Diseases	ID
041	Diag Lab Immunology-Int Med	ILI
042	Internal Medicine	IM
194	Interventional Cardiology	IC
195	Internal Medicine/Family Practice	IFP
042	Internal Medicine	IP
043	Geriatrics-Internal Medicine	GER
309	Geriatrics-Internal Medicine	GIM
044	Sports Medicine (Physical Medicine & Rehabilitation)	PMM
044	Sports Medicine	ISM
044	Sports Medicine	PMS
044	Sports Medicine	RMS
044	Sports Medicine	SM
045	Nephrology	NEP
046	Nutrition	NTR
047	Oncology	ON
048	Rheumatology	RHU
050	Clinical Cytogenetics	CCG
051	Clinical Genetics	CG
053	Medical Genetics	IMG
054	Pediatric or Child Neurology	CHN
054	Pediatric or Child Neurology	PDN
055	Clinical Neurophysiology	CN

A10. (Continued:)

056	Neurology	N
310	Internal Medicine/Neurology	MN
311	Neurology/Physical Medicine & Rehab	NPR
056	Neurology	NMD
056	Neurology	NP
056	Neurology	NPN
305	Neurology/Diagnostic Radiology/ Neuroradiology	NRN
057	Nuclear Medicine	NI
057	Nuclear Medicine	NM
057	Nuclear Medicine	NV
058	Critical Care-Neuro Surgery	NCC
059	Neurological Surgery	NS
061	Gynecological Oncology	GO
062	Gynecology	GS
062	Gynecology	GYN
063	Maternal & Fetal Medicine	MFM
304	Maxillofacial Radiology	MXR
064	Obstetrics & Gynecology	OBG
064	Obstetrics & Gynecology	OBS
065	Obstetrics	OBS
066	Critical Care-Obstetrics & Gynecology	OCC
067	Reproductive Endocrinology	RE
068	Occupational Medicine	OCM
068	Occupational Medicine	OM
069	Ophthalmology	COR
069	Ophthalmology	OAS
069	Ophthalmology	OCR
069	Ophthalmology	OGL
069	Ophthalmology	OPH
069	Ophthalmology	VRS
070	Hand Surgery-Orthopedic Surg	HSO
071	Adult Reconstructive Orthopedics	OAR
072	Musculoskeletal Oncology	OMO
073	Pediatric Orthopedics	OP
074	Orthopedic Surgery	AJI
074	Orthopedic Surgery	OR
074	Orthopedic Surgery	ORS
075	Sports Medicine-Orthopedic Surgery	OSM
076	Orthopedic Surgery-Spine	OSS
078	Facial Plastic Surgery	OPL
080	Otolaryngology or Rhinology	OTL
080	Otolaryngology or Rhinology	OTR
080	Otolaryngology or Rhinology	RHI
197	Otology/Neurotology	NO

A10. (Continued:)

081	Pediatric Otolaryngology	PDO
082	Psychiatry	P
312	Psychiatry/Family Practice	FPP
313	Psychiatry/Internal Medicine	MP
083	Psychoanalysis	PYA
084	Geriatric Psychiatry	PYG
085	Adolescent Medicine-Family or General Practice	AFP
085	Adolescent Medicine-Family or General Practice	AGP
086	Pediatric Intensive Care	PIC
087	Neonatology	NE
088	Pediatrics	PD
089	Pediatric Allergy & Immunology	PAI
306	Pediatric Anesthesiology (Pediatrics)	PAN
091	Pediatric Pulmology Medicine	PDX
198	Pediatric Cardiothoracic Surgery	PCS
092	Pediatric Gastroenterology	PG
093	Pediatric Hematology-Oncology	PHO
094	Pediatric Diag Lab Immunology	PLI
095	Pediatric Nephrology	PNP
192	Pediatrics/Psychiatry/Child & Adolescent Ps	CPP
096	Pediatric Rheumatology	PPR
097	Sports Medicine - Pediatrics	PSM
098	Pediatric Cardiology	PDC
099	Preventive Medicine, Epidemiology or Public Health	EPI
099	Preventive Medicine, Epidemiology or Public Health	OE
099	Preventive Medicine, Epidemiology or Public Health	PH
099	Preventive Medicine, Epidemiology or Public Health	PHP
199	Pharmaceutical Medicine	PHM
100	Physical Medicine & Rehabilitation	PM
100	Physical Medicine & Rehabilitation	IAR
100	Physical Medicine & Rehabilitation	PDR
314	Internal Medicine/Physical Medicine & Rehabilitation	MPM
100	Physical Medicine & Rehabilitation	RM
200	Physical Medicine & Rehabilitation (Pediatrics)	PMP
101	Hand Surgery-Plastic Surg	HSP
102	Plastic Surgery	OOP
102	Plastic Surgery	PLR
103	Anatomic Pathology	AP

A10. (Continued:)

104	Blood Banking-Transfusion Medicine	BBT
104	Blood Banking-Transfusion Medicine	LBM
105	Clinical Pathology	CLP
106	Dermatopathology	DPT
107	Hematology-Pathology	HEP
108	Medicine Microbiology	MMB
109	Neuropathology	NPT
110	Chemical Pathology	CP
111	Cytopathology	CY
112	Immunopathology	IPT
113	Pediatric Pathology	PP
114	Anatomic/Clinical Pathology	APL
114	Anatomic/Clinical Pathology	PTH
115	Radioisotopic Pathology	RIP
307	Public Health	PH
196	Internal Medicine/Preventive Medicine	IPM
116	Pulmonary Diseases	PUD
116	Pulmonary Diseases	PUL
117	Nuclear Radiology	NR
118	Pediatric Radiology	PRD
119	Radiology	DUS
119	Radiology	R
119	Radiology	RI
119	Radiology	RT
119	Radiology	RTD
120	Neuroradiology	NRA
121	Radiological Physics	RP
122	Angiography & Intervent'l Radiology	ANG
122	Angiography & Intervent'l Radiology	SCL
123	Radiation Oncology	RO
123	Radiation Oncology	TR
124	Cardiovascular or Thoracic Cardiovascular Surgery	CVS
124	Cardiovascular or Thoracic Cardiovascular Surgery	TS
125	Urology	U
125	Urology	URS
126	Pediatric Urology	UP
127	Addictive Diseases	ADD
128	Critical Care-Medicine	CCM
129	Legal Medicine	LM
130	Clinical Pharmacology	PA
131	Unknown Blank	
133	Adolescent Medicine	ADL
134	Orthopedic Foot & Ankle Surg	OFA
135	Forensic Psychiatry	FPS

A10. (Continued:)

136	Hematology & Oncology	HEO
137	Internal Med-Pediatrics	IPD
139	Toxicology	TX
142	Psychosomatic Medicine	PYM
145	Pediatric Infectious Diseases	PID
146	Pediatric Ophthalmology	PO
147	Pulmonary-Critical Care	PUC
153	MOHS Micrographic Surgery	DMS
154	Hair Transplant	HT
155	Osteo Manipulative Treat +1	OM1
156	Osteopathic Manipulative Medicine	OMM
157	Sports Medicine - OMM	OMS
158	Osteo Manipulative Medicine	OMT
159	Proctology	PRO
160	Internship	IN
161	Retired	RET
162	Transitional Year	TY
209	Nuclear Cardiology	NC
210	Developmental & Behavioral Pediatrics	DBP
159	Proctology	PRO
124	Thoracic Surgery	TS
997	Other (list) - (USE VERY SPARINGLY; Thank and Terminate)	
998	(DK) (Thank and Terminate)	
999	(Refused) (Thank and Terminate)	

(1070 - 1072)

(If code "003", "005-007", "013-014", "018", "025", "028", "057", "099", "103-115", "117-122", "129-131", "135", "138-141", "148", "160-162", "209" or "301-307" in #A10,

INTERVIEWER READ:) In this survey, we are only interviewing physicians in certain specialties, and your specialty is not among those being interviewed. So, it appears that we do not need any further information from you at this time, but we thank you for your cooperation. - **(Thank and Terminate)**

(If code "201" in #A10, Skip to #A17)

A11. Are you board-certified in (response in #A10)?

1 Yes - (Skip to #A13)

2 No - (Continue)

8 (DK) (Continue)

9 (Refused) (Continue) _____ (1358)

(There is no #A11a) HOLD _____ 0 (1629)

A12. (If code "2", "8" or "9" in #A11, ask:) Are you board-eligible in (response in #A10)?

1 Yes

2 No

8 (DK)

9 (Refused) _____ (1630)

A13. Are you board-certified in (response in #A8)?

1 Yes - (Skip to #A19)

2 No - (Continue)

8 (DK) (Continue)

9 (Refused) (Continue) _____ (1631)

(There is no #A13a)

HOLD _____ 0 (1632)

(If code "1" in #A12, Skip to #A19;
Otherwise, Continue)

A14. Are you board-eligible in (response in #A8)?

1 Yes

2 No

8 (DK)

9 (Refused) _____ (1633)

(All in #A14, Skip to #A19)

A15. Are you board-certified in (response in #A8)?
(NOTE TO INTERVIEWER: If physician says "Board-
Certified in Internal Medicine" or "Board-
certified in Pediatrics", code as "1")

1 Yes - (Skip to #A19)

2 No - (Continue)

8 (DK) (Continue)

9 (Refused) (Continue) _____ (1634)

(There is no #A15a)

HOLD _____ 0 (1635)

A16. Are you board-eligible in (response in #A8)? (NOTE
TO INTERVIEWER: If physician says "Board-eligible
in Internal Medicine" or "Board-eligible in
Pediatrics", code as "1")

1 Yes

2 No

8 (DK)

9 (Refused) _____ (1636)

(If code "019", "023", "042",
"088", "137" or "201" in #A8, skip to #A19;
Otherwise, Continue)

A17. Are you board certified in any specialty?

- 1 Yes - (Skip to #A19)
- 2 No (Continue)
- 8 (DK) (Continue)
- 9 (Refused) (Continue) _____ (1078)

(If code "1" in #A16, skip to #A19;
Otherwise, Continue)

A18. (If code "2" or "8-9" in #A17, ask:) Are you board eligible in any specialty?

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused) _____ (1079)

A19. Many of the remaining questions are about your practice and your relationships with patients. Before we begin those questions, let me ask you: Thinking very generally about your satisfaction with your overall career in medicine, would you say that you are CURRENTLY (read 5-1)?

- 5 Very satisfied
- 4 Somewhat satisfied
- 3 Somewhat dissatisfied
- 2 Very dissatisfied, OR
- 1 Neither satisfied nor dissatisfied
- 8 (DK)
- 9 (Refused) _____ (1080)

CLOCK:

(1545 - 1548)

SECTION B
UTILIZATION OF TIME

B1. **(If code "2" in #A4, AND code "03-97", "DK" or "RF" in #A4a, OR code "8" or "9" in #A4, ask:)**
Considering all of your practices, approximately how many weeks did you practice medicine during 1999? Exclude time missed due to vacation, illness and other absences. [**(If necessary, say:)** Exclude family leave, military service, and professional conferences. If your office is closed for several weeks of the year, those weeks should NOT be counted as weeks worked.] (Open ended **and code actual number**)

(If code "2" in #A4, AND code "02" in #A4a, ask:)
Considering both of your practices, approximately how many weeks did you practice medicine during 1999? Exclude time missed due to vacation, illness and other absences. [**(If necessary, say:)** Exclude family leave, military service, and professional conferences. If your office is closed for several weeks of the year, those weeks should NOT be counted as weeks worked.] (Open ended **and code actual number**)

(If code "1" in #A4, ask:) Approximately how many weeks did you practice medicine during 1999? Exclude time missed due to vacation, illness and other absences. [**(If necessary, say:)** Exclude family leave, military service, and professional conferences. If your office is closed for several weeks of the year, those weeks should NOT be counted as weeks worked.] (Open ended **and code actual number**)

53-
97 (BLOCK)

DK (DK)
RF (Refused)

(1081) (1082)

B2. (If code "2" in #A4, AND code "03-97", "DK" or "RF" in #A4a, OR code "8" or "9" in #A4, ask:)

Considering all of your practices, during your last complete week of work, approximately how many hours did you spend in all medically related activities? Please include all time spent in administrative tasks, professional activities and direct patient care. Exclude time on call when not actually working. (Open ended and code actual number)

(If code "2" in #A4, AND code "02" in #A4a, ask:)

Considering both of your practices, during your last complete week of work, approximately how many hours did you spend in all medically related activities? Please include all time spent in administrative tasks, professional activities and direct patient care. Exclude time on call when not actually working. (Open ended and code actual number)

(If code "1" in #A4, ask:) During your last

complete week of work, approximately how many hours did you spend in all medically-related activities? Please include all time spent in administrative tasks, professional activities and direct patient care. Exclude time on call when not actually working. (Open ended and code actual number)

169-
997 (BLOCK)

DK (DK)
RF (Refused)

(1083 - 1085)

B3. (If code "001-168" in #B2, ask:) Of these (response in #B2) hours, how many did you spend in direct patient care activities? Direct care of patients includes face-to-face contact with patients, as well as patient record keeping and office work, travel time connected with seeing patients, and communication with other physicians, hospitals, pharmacies, and other places on a patient's behalf. [(If necessary, say:) INCLUDE time spent on patient record keeping, patient-related office work, and travel time connected with seeing patients. EXCLUDE time spent in training, teaching, or research, any hours on-call when not actually working, and travel between home and work at the beginning and end of the work day.] [(If appropriate, say:) INCLUDE ALL PRACTICES, not just the main practice.] (Open ended and code actual number)

(If code "DK" or "RF" in #B2, ask:) About how many hours did you spend in direct patient care activities? [(If necessary, say:) EXCLUDE time spent in training, teaching, or research, any hours on-call when not actually working, and travel between home and work at the beginning and end of the work day.] [(If appropriate, say:) INCLUDE ALL PRACTICES, not just the main practice.] (Open ended and code actual number)

169-
997 (BLOCK)

DK (DK) (Skip to #B6)
RF (Refused) (Skip to #B6)

(1086 - 1088)

(If response in #B3 = response in #B2, Continue;
If response in #B3 > response in #B2, Skip to #B4;
Otherwise, Skip to #B6)

B3a. So, you spent all of your time working in direct patient care activities, is that right?

1 Yes - (Skip to #B6)

2 No - (Continue)

8 (DK) (Skip to #B6)

9 (Refused) (Skip to #B6) _____ (1115)

B3b. (If code "2" in #B3a, ask:) I have recorded that you spent (response in #B2) hours in all medically related activities and (response in #B3) hours in direct patient care. Which of these is incorrect?

1 All medically related activities hours - (Continue)

2 Direct patient care hours - (Skip to #B3d)

3 (Neither are correct) - (Continue)

4 (Both are correct) (Skip to #B6)

8 (DK) (Skip to #B6)

9 (Refused) (Skip to #B6) _____ (1116)

B3c. (If code "1" or "3" in #B3b, ask:) Thinking of your last complete week of work, approximately how many hours did you spend in all medically related activities? Please include all time spent in administrative tasks, professional activities and direct patient care. Exclude time on call when not actually working. (Open ended and code actual number)

169-
997 (BLOCK)

DK (DK)
RF (Refused)

(1117 - 1119)

(If code "1" in #B3b, Skip to #B6)

B3d. (If code "2" or "3" in #B3b, ask:) Thinking of your last complete week of work, about how many hours did you spend in direct patient care activities? [(If necessary, say:) INCLUDE time spent on patient record-keeping, patient-related office work, and travel time connected with seeing patients. EXCLUDE time spent in training, teaching, or research, any hours on-call when not actually working, and travel between home and work at the beginning and end of the work day.] [(If appropriate, say:) INCLUDE ALL PRACTICES, not just the main practice.] (Open ended and code actual number)

169-
997 (BLOCK)

DK (DK)
RF (Refused)

(1194 - 1196)

(All in #B3d, Skip to #B6)

B4. I may have made a recording mistake. My computer is showing that I've recorded more hours spent in direct patient care than in ALL medical activities. So, during your last complete week of work, approximately how many hours did you spend in ALL medically related activities? Please include all time spent in administrative tasks, professional activities and direct patient care, as well as any hours spent on call when actually working? (Open ended and code actual number)

169-
997 (BLOCK)

DK (DK)
RF (Refused)

(1089 - 1091)

B5. And of those total [(response in #B4)] hours, about how many did you spend in direct patient care activities? [(If necessary, say:) INCLUDE time spent on patient record-keeping, patient-related office work, and travel time connected with seeing patients. EXCLUDE time spent in training, teaching, or research, any hours on-call when not actually working, and travel between home and work at the beginning and end of the work day.] [(If appropriate, say:) INCLUDE ALL PRACTICES, not just the main practice.] (Open ended and code actual number)

169-
997 (BLOCK)

DK (DK)
RF (Refused)

(1092 - 1094)

B6. (If code "8" or "9" in #A4, OR code "03-97", "DK" or "RF" in #A4a, ask:) Again thinking of all your practices, during the LAST MONTH, how many hours, if any, did you spend providing CHARITY care? By this we mean, that because of the financial need of the patient you charged either no fee or a reduced fee. Please do not include time spent providing services for which you expected, but did not receive, payment. (Probe:) Your best estimate would be fine. (Open ended and code actual number)

(If code "02" in #A4a, ask:) Again thinking of both of your practices, during the LAST MONTH, how many hours, if any, did you spend providing CHARITY care? By this we mean, that because of the financial need of the patient you charged either no fee or a reduced fee. Please do not include time spent providing services for which you expected, but did not receive, payment. (Probe:) Your best estimate would be fine. (Open ended and code actual number)

(If code "1" in #A4, ask:) During the LAST MONTH, how many hours, if any, did you spend providing CHARITY care? By this we mean, that because of the financial need of the patient you charged either no fee or a reduced fee. Please do not include time spent providing services for which you expected, but did not receive, payment. (Probe:) Your best estimate would be fine. (Open ended and code actual number)

B6. (Continued:)

(If necessary, say:) EXCLUDE bad debt and time spent providing services under a discounted fee for service contract or seeing Medicare and

(If code "06" in "STATE", say:) MediCAL patients.

(If code "04" in "STATE", say:) AHCCCS ("Access") patients.

(If code "01-03", "05" or "07-56" in "STATE", say:) Medicaid patients.

(If necessary, say:) By the LAST MONTH, we mean the last four weeks.

DK (DK)
RF (Refused)

(2544 - 2546)

B7. During the last month, what percentage of your patients talked about medical conditions, tests, treatments, or drugs they had read or heard about from various sources other than you, such as the Internet, their friends or relatives, TV, radio, books, or magazines? [(If necessary, say:) Your best estimate is fine.] (Open ended and code actual percent)

000 None
101 Less than 1%
102 (DK)
103 (Refused)

(3207 - 3209)

(There is no #B8)

HOLD

0 (3210-3212)

B9. During the last month, for what percentage of your patients did you order tests, procedures, or prescriptions SUGGESTED BY PATIENTS that you would not otherwise have ordered? (Open ended and code actual percent)

- 000 None
- 101 Less than 1%
- 102 (DK)
- 103 (Refused)

(3256 - 3258)

(If code "001-100" in #B7, #B8 or #B9, Continue;
Otherwise, Skip to #B11)

B10. On balance, what do you think is the effect of medical information obtained by your patients from sources other than you on your ability to provide HIGH QUALITY CARE? Would you say it is generally positive, generally negative, or neither?

- 3 Positive
- 2 Neither
- 1 Negative

- 6 (Can't choose/Unsure)
- 8 (DK)
- 9 (Refused)

_____ (3215)

B11. On balance, what do you think is the effect of medical information obtained by your patients from sources other than you on your EFFICIENCY? Would you say it is generally positive, generally negative, or neither.

- 3 Positive
- 2 Neither
- 1 Negative

6 (Can't choose/Unsure)

8 (DK)

9 (Refused)

_____ (3216)

CLOCK:

(2184 - 2187)

SECTION C
TYPE AND SIZE OF PRACTICE

CA. PRACTICE: (Code only)

- 1 (If code "1" in #A4:) Practice
- 2 (If code "2", "8" or "9" in #A4:) Main Practice _____ (11033)

(INTERVIEWER READ:) Now, I would like to ask you a series of questions about the (response in #CA) in which you work.

C1. Are you a full owner, a part owner, or not an owner of this practice? (INTERVIEWER NOTE: A shareholder of the practice in which they work should be coded as "2 - Part owner")

- 1 Full owner (Continue)
- 2 Part owner (Continue)
- 3 Not an owner (Skip to #C3)
- 8 (DK) (Skip to #C3)
- 9 (Refused) (Skip to #C3) _____ (1104)

C2. (If code "1" or "2" in #C1, ask:) Which of the following best describes this practice? Is it (read 06-16, then 01)? (INTERVIEWER NOTE: A free-standing clinic includes non-hospital-based ambulatory care, surgical and emergency care centers)

- 01 OR, something else (list) -
(Skip to #C4)

- 02-
05 HOLD

- 06 A practice owned by one physician (solo practice) - (Skip to "Note" before #C3)

- 07 A two physician-owned practice -
(Skip to #C4)

- 08 A group practice of three or more physicians (see AMA definition on card) - (Continue)

- 09 A group model HMO Skip to #C7)
- 10 A staff model HMO Skip to #C7)

- 11-
15 HOLD

- 16 A free-standing clinic - (Continue)

- 98 (DK) (Skip to #C4)
- 99 (Refused) (Skip to #C4)

(1105) (1106)

C2a. (If code "08" or "16" in #C2, ask:) Is the practice a single-specialty or multi-specialty practice?

- 1 Single-specialty - (Skip to "Note" before #C3)
- 2 Multi-specialty - (Continue)
- 8 (DK) (Skip to "Note" before #C3)
- 9 (Refused) (Skip to "Note" before #C3)

_____ (1637)

(If code "019", "023", "042", "088", "137" or "195" in #A10/#A8, OR if code "2" in #A9a, or code "3" in #A9a, or code "2" in #A9b, or code "3" in #A9b, Skip to #C2c; Otherwise, Continue)

C2b. Are any of the physicians in the practice in primary care specialties? (Probe:) By primary care specialties, we mean general or family practice, general pediatrics, or general internal medicine.

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

_____ (1638)

(All in #C2b, Skip to "Note" before #C3)

C2c. (If code "019", "023", "042", "088", "137" or "195" in #A10/#A8, or if code "2" in #A9a, or code "3" in #A9a, or code "2" in #A9b, or code "3" in #A9b, ask:) Are any of the physicians in the practice in specialties other than general or family practice, general pediatrics or general internal medicine?

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

_____ (1639)

(If code "1" in #C1, AND code "06" in #C2,
Skip to #C7;
Otherwise, Skip to #C4)

C3. (If code "3", "8" or "9" in #C1, ask:) Which of the following best describes your current employer or employment arrangement? Are you employed by (read 06-16, then 01)? (INTERVIEWER NOTE: Stop once response is given) [(If necessary, say:) An EMPLOYER is the entity that pays you and should not be confused with where you work. For instance, your employer could be a group practice even if you work in a hospital]

- 01 OR, something else (do NOT list here) - **(Skip to #C3b)**
- 02-
- 05 HOLD
- 06 A practice owned by one physician (solo practice) - **(Skip to #C5)**
- 07 A two physician-owned practice - **(Skip to #C4)**
- 08 A group practice of three or more physicians (see AMA definition on card) - **(Continue)**
- 09 A group model HMO **(Skip to #C7)**
- 10 A staff model HMO **(Skip to #C7)**
- 12 A medical school or university **(Skip to #C6b)**
- 13 A non-government hospital or group of hospitals **(Skip to #C6b)**
- 14 City, county or state government - **(Skip to #C3a)**
- 16 A free-standing clinic - **(Continue)**
- 98 (DK) **(Skip to #C3b)**
- 99 (Refused) **(Skip to #C3b)**

(1107) (1108)

C3aa. (If code "08 or "16" in #C3, ask:) Is the practice a single-specialty or multi-specialty practice?

1 Single-specialty - (Skip to #C4)

2 Multi-specialty - (Continue)

8 (DK) (Skip to #C4)

9 (Refused) (Skip to #C4)

_____ (1640)

(If code "019", "023", "042", "088", "137" or "195" in #A10/#A8, OR if code "2" in #A9a, or code "3" in #A9a, or code "2" in #A9b, or code "3" in #A9b, Skip to C3ac; Otherwise, Continue)

C3ab. Are any of the physicians in the practice in primary care specialties? (Probe:) By primary care specialties, we mean general or family practice, general pediatrics, or general internal medicine.

1 Yes

2 No

8 (DK)

9 (Refused)

_____ (1641)

(All in #C3ab, Skip to #C4)

C3ac. (If code "019", "023", "042", "088", "137" or "195" in #A10/#A8, or if code "2" in #A9a, or code "3" in #A9a, or code "2" in #A9b, or code "3" in #A9b, ask:) Are any of the physicians in the practice in specialties other than general or family practice, general pediatrics or general internal medicine?

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

_____ (1642)

(All in #C3ac, Skip to #C4)

C3a. (If code "14" in #C3, ask:) Is this a hospital, clinic or some other setting?

- 1 Hospital
- 2 Clinic
- 3 Other (do NOT list)
- 8 (DK)
- 9 (Refused)

_____ (1198)

(All in #C3a, Skip to "Note" before #C7)

C3b. (If code "01", "98" or "99" in #C3, ask:) Are you employed by (read 11-21 22, 25 and 26, as appropriate, then 01)?

- 01 OR, something else (do NOT list here) - **(Continue)**
- 02-
- 10 HOLD
- 11 Other HMO, insurance company or health plan - **(Skip to "Note" before #C7)**
- 15 An integrated health or delivery system - **(Skip to "Note" before #C7)**
- 17 A physician practice management company or other for-profit investment company - **(Skip to "Note" before #C7)**
- 18 Community health center - **(Skip to #C7)**
- 19 Management Services Organization (MSO) - **(Skip to "Note" before #C7)**
- 20 Physician-Hospital Organization (PHO) - **(Skip to "Note" before #C7)**
- 21 Locum tenens - **(Skip to "Note" before #C7)**
- 22 Foundation - **(Skip to #C3ca)**
- 25 Independent contractor - **(Skip to "Note" before #C7)**
- 26 Industry clinic - **(Skip to "Note" before #C7)**
- 98 (DK) **(Skip to #C4)**
- 99 (Refused) **(Skip to #C4)**

(1199) (1200)

C3c. What type of organization do you work for? (Open ended and code, if possible; otherwise, ENTER VERBATIM RESPONSE)

- 01 Other (list) - (Skip to "Note" before #C7)
- 02-
05 HOLD
- 06 A practice owned by one physician (solo practice) - (Skip to #C5)
- 07 A two physician-owned practice - (Skip to #C4)
- 08 A group practice of three or more physicians (see AMA definition on card) - (Skip to #C3ca)
- 09 A group model HMO (Skip to #C7)
- 10 A staff model HMO (Skip to #C7)
- 12 A medical school or university (Skip to #C6b)
- 13 A non-government hospital or group of hospitals (Skip to #C6b)
- 14 City, county or state government - (Skip to #C3d)
- 16 A free-standing clinic - (Skip to #C3ca)
- 17 HOLD
- 18 Community health center - (Skip to #C4)
- 19-
21 HOLD
- 22 Foundation - (Skip to #C3ca)
- 25 Independent Contractor - (Skip to "Note" before #C7)
- 26 Industry Clinic - (Skip to "Note" before #C7)
- 98 (DK) (Skip to #C4)
- 99 (Refused) (Skip to #C4)

(1643) (1644)

C3ca. (If code "08" or "16" in #C3c, or code "22" in #C3b, ask:) Is the practice a single-specialty or multi-specialty practice?

1 Single-specialty - (Skip to #C4)

2 Multi-specialty - (Continue)

8 (DK) (Skip to #C4)

9 (Refused) (Skip to #C4)

_____ (1097)

(If code "019", "023", "042", "088", "137" or "195" in #A10/#A8, OR if code "2" or "3" in #A9a, OR code "2" or "3" in #A9b, Skip to #C3cc; Otherwise, Continue)

C3cb. Are any of the physicians in the practice in primary care specialties? By primary care specialties, we mean general or family practice, general pediatrics or general internal medicine.

1 Yes

2 No

8 (DK)

9 (Refused)

_____ (1098)

(All in #C3cb, Skip to #C4)

C3cc. (If code "019", "023", "042", "088", "137" or "195" in #A10/#A8, OR code "2" or "3" in #A9a, OR code "2" or "3" in #A9b, ask:) Are any of the physicians in the practice in specialties other than general or family practice, general pediatrics or general internal medicine?

1 Yes

2 No

8 (DK)

9 (Refused)

_____ (1099)

C3d. **(If code "14" in #C3c, ask:)** Is this a hospital, clinic, or some other setting?

- 1 Hospital
- 2 Clinic
- 3 Other (do NOT list)

- 8 (DK)
- 9 (Refused)

_____ (1662)

(All in #C3d, Skip to "Note" before #C7)

C4. Do one or more of the other physicians in the practice in which you work have an ownership interest?

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

_____ (1109)

C5. Do any of the following have an ownership interest in the practice in which you work? This ownership interest may include ownership of only the assets or accounts receivable. Does **(read A-D)** have an ownership interest in the practice? [**(If necessary, say:)** Do not include leased equipment.]

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

A. Another physician group _____ (1132)

B. A hospital or group of hospitals _____ (1133)

C. An insurance company, health plan or HMO _____ (1134)

D. Any other organization **(listed on next screen)**
(1135)

(If code "1" in #C5-D, Continue;
If code "2" to ALL in #C5 A-D, Skip to #C6a;
Otherwise, Skip to "Note" before #C6b)

C6. (If code "1" in #C5-D, ask:) What kinds of organizations are these? (Open ended and code)
(ENTER ALL RESPONSES)

			*	
01	Other (list)	1		(1136)
02	(DK)	2		
03	(Refused)	3		
04	No others	4		
05	HOLD	5		
06	Integrated health or delivery system	6		
07	Physician practice management or other for-profit investment company	7		
08	Management Services Organization (MSO)	8		
09	Physician-Hospital Organization (PHO)	9		
10	University/Medical school	0		
11	Medical Foundation or Non-profit Foundation	1		(1137)
12	Other Non-profit or community- based organization	2		
13	Other physicians in this practice	3		
14	Another physician group	4		
15	A hospital or group of hospitals	5		
16	An insurance company, health plan or HMO	6		
		HOLD	0	(1138- 1147)

C6a. (If code "3" in #C1, AND code "2" in #C4, AND code "2" to ALL in #C5 A-D, ask:) Who owns the practice in which you work? (Open ended)

- 01 Other (list)
- 02 (DK)
- 03 (Refused)
- 04 HOLD
- 05 HOLD

(1272) (1273)

(If code "12" or "13" in #C3 or #C3c, Continue;
Otherwise, Skip to "Note" before #C7)

C6b. (If code "12" or "13" in #C3 or #C3c, ask:) In which of the following settings do you spend most of your time seeing patients - in an office practice owned by the hospital or a university or medical school, on hospital staff, in the emergency room, in a hospital clinic, or somewhere else?

- 01 Somewhere else (list)
- 02 (DK)
- 03 (Refused)
- 04 HOLD
- 05 HOLD

- 06 Office practice owned by the
(hospital/university/medical
school)
- 07 On hospital staff
- 08 In emergency room
- 09 In a hospital clinic

(3217) (3218)

(If code "07" or "08" in #C2,
or code "06", "07", "08" or "16" in #C3,
or code "06" in #C6b, Continue;
Otherwise, Skip to #C10)

C7. How many physicians, including yourself, are in the practice? Please include all locations of the practice. (Probe:) Your best estimate would be fine. (Open ended and code actual number)
(INTERVIEWER NOTE: If asked, this includes both full- and part-time physicians)

- 997 997+
- DK (DK)
- RF (Refused)

(1148 - 1150)

C8. How many physician assistants, nurse practitioners, nurse midwives, and clinical nurse specialists are employed by the practice including all locations? Include both full- and part-time employees in your answer. **(Probe:)** Please include only those who fit these categories. Your best estimate would be fine. (Open ended **and code actual number**) **(INTERVIEWER NOTE: Do NOT include office staff or nursing or other personnel who do not fit these categories; examples: LPNs or RNs who are not nurse practitioners or clinical nurse specialists should not be included)**

997 997+
 DK (DK)
 RF (Refused)

_____ (1151 - 1153)

(If code "06" in #C6b, Skip to #C10;
If code "08" in #C2 or #C3 AND
code "025-997" in #C7, Continue;
Otherwise, Skip to #C10)

C9. Is your practice either a group model HMO or organized exclusively to provide services to a group model HMO?

1 Yes
 2 No
 8 (DK)
 9 (Refused)

_____ (1154)

C10. In the last two years, were you part of a practice that was purchased by another practice or organization? **(If necessary, say:)** We are only interested in purchases over the last two years that occurred while you were part of the practice.

1 Yes - **(Continue)**
 2 No **(Skip to #C12)**
 8 (DK) **(Skip to #C12)**
 9 (Refused) **(Skip to #C12)**

_____ (1155)

C11. (If code "1" in #C10, ask:) At the time of the purchase, were you a full owner, a part owner, or not an owner of the practice that was purchased? (INTERVIEWER NOTE: If multiple purchases, ask about the most recent)

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

- 8 (DK)
- 9 (Refused)

_____ (1156)

C12. Next, I am going to list several aspects of a medical practice. Using any number from one to ten, where "1" is not important, and "10" is very important, tell me how important each one is to you. How about (read and rotate A-D)?

- 10 Very important
- 09
- 08
- 07
- 06
- 05
- 04
- 03
- 02
- 01 Not important

- 11 (DK)
- 12 (Refused)

C12. (Continued:)

A.	Control over your working hours	<u>(3219)</u>	<u>(3220)</u>
<hr/>			
B.	Control over your clinical decisions	<u>(3221)</u>	<u>(3222)</u>
<hr/>			
C.	Your potential income	<u>(3223)</u>	<u>(3224)</u>
<hr/>			
D.	Control over your practice's business decisions	<u>(3225)</u>	<u>(3226)</u>
<hr/>			

(Form 1)

H10b. How would you describe your overall personal financial incentives in your practice? On balance, do these incentives favor reducing services to individual patients, favor expanding services to individual patients, or favor neither?

1	Reducing services to individual patients	(Continue)	
2	Expanding services to individual patients	(Continue)	
3	Favor neither	- (Skip to "Section D")	
8	(DK)	(Skip to "Section D")	
9	(Refused)	(Skip to "Section D")	<u>(3271)</u>

(Form 1)

H10b-1. (If code "1" or "2" in #H10b, ask:) Have these incentives [(if code "1" in #H10b, say:) reduced/(if code "2" in #H10b, say:) expanded] services a little, a moderate amount, or a lot?

- 1 A little
- 2 A moderate amount
- 3 A lot

- 4 (None)
- 8 (DK)
- 9 (Refused)

_____ (3272)

CLOCK:

_____ (2192 - 2195)

SECTION D
MEDICAL CARE MANAGEMENT

MANAGEMENT STRATEGIES

D1. The next question is about the use of computers and other forms of information technology, such as hand-held computers, in diagnosing or treating your patients. In your (main) practice, are computers or other forms of information technology used **(read and rotate A-G)?**

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

- A. To obtain information about treatment alternatives or recommended guidelines _____ (3227)
- B. To obtain information on formularies _____ (3228)
- C. To generate reminders for you about preventive services _____
- D. To access patient notes, medication lists, or problem lists _____ (3230)
- E. To write prescriptions _____ (3231)
- F. For clinical data and image exchanges with other physicians _____ (3232)
- G. To communicate about clinical issues with patients by e-mail _____ (3233)

D2. Do you have access to the Internet at the place where you provide most of your patient care? [**(If necessary, say:)** Patient care includes face-to-face contact with patients, as well as patient record keeping and office work, travel time connected with seeing patients, and communication with other physicians, hospitals, pharmacies, and other places on a patient's behalf.]

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

_____ (3234)

(There are no D2a and D2b)

HOLD

_____ 0 (3235-
3236)

D3. Next, what percentage of your patients have prescription coverage that includes the use of a formulary? **(NOTE TO INTERVIEWER: A formulary is a restriction on the types of prescription drugs insurance companies will cover)** (Open ended **and code actual percent)**)

- 000 None
- 101 Less than 1%
- 102 (DK)
- 103 (Refused)

_____ (3237 - 3239)

(INTERVIEWER READ:) Now, I would like to ask you a series of questions about various medical care management techniques or strategies that are sometimes used to manage the care physicians provide to their patients. For each, I'll ask you how large an effect they have on your practice of medicine. The choices are: a very large effect, large, moderate, small, very small, or no effect at all. **(If code "2", "8" or "9" in #A4, say:)** As you answer, please think only about your main practice.

D4. At present, **(read and rotate A-C)**? Would you say that (it has/they have) a **(read 5-0)**?

- 5 Very large
- 4 Large
- 3 Moderate
- 2 Small
- 1 Very small, OR
- 0 No effect at all

- 8 (DK)
- 9 (Refused)

D4. (Continued:)

A. How large an effect does your use of FORMAL, WRITTEN practice guidelines such as those generated by physician organizations, insurance companies or HMOs, or government agencies have on your practice of medicine **(INTERVIEWER NOTE: Exclude guidelines that are unique to the physician.) [(If physician says that s/he uses his/her own guidelines, say:)** In this question, we are only interested in the use of formal, written guidelines such as those generated by physician organizations, insurance companies or HMOs, or other such groups.]

A1. **(If code "0" in #D4-A, ask:)** Is that because you are not aware of guidelines that pertain to conditions you typically treat, or because you are aware of them, but they have no effect on conditions you treat?

- 1 Not aware
- 2 Aware, no effect

- 8 (DK)
- 9 (Refused)

_____ (1158)

D4. (Continued:)

B. How large an effect do the results of practice profiles comparing your pattern of using medical resources to treat patients with that of other physicians have on your practice of medicine? [**(If necessary, say:)** A practice profile is a report that is usually computer generated which compares you to other physicians on things like referrals to specialists, hospitalizations, or other measures of cost-effectiveness.] **(INTERVIEWER NOTE: We are not interested in informal feedback, but only specific, quantified information about the physician's practice patterns.)**

_____ (3242)

B1. **(If code "0" in #D4-B, say:)** Is that because you are not aware of practice profiling, or you are aware of it, but it has no effect on your practice of medicine? **(If necessary say:)** A practice profile is a report that is usually computer generated, which compares you to other physicians on things like referrals to specialists, hospitalizations, or other measures of cost effectiveness.

- 1 Not aware
- 2 Aware, but no effect

- 8 (DK)
- 9 (Refused)

_____ (3243)

D4. (Continued:)

C. How large an effect does feedback from patient satisfaction surveys have on your practice of medicine?

C1. (If code "0" in #D4-C, ask:) Is that because patient satisfaction surveys are not used in your practice, or because they are used, but they have no effect on your practice of medicine?

1 Not used
2 Used, but no effect

8 (DK)

9 (Refused)

_____ (3245)

D5. On balance, would you say the effect of (read and rotate A-E, as appropriate) on your ability to provide efficient and high-quality care is generally positive, generally negative, or neither?

- 3 Positive
- 2 Neither
- 1 Negative

- 6 (Can't choose/Unsure)
- 7 (Not applicable)
- 8 (DK)
- 9 (Refused)

(There is no A)	HOLD	<u>0</u>	(3246)
B. <u>(If code "001-100" in D3, ask:)</u> Prescription drug formularies		<u> </u>	(3247)
C. <u>(If code "3-5" in D4a, ask:)</u> Practice guidelines		<u> </u>	(3248)
D. <u>(If code "3-5" in D4b, ask:)</u> Practice profiles		<u> </u>	(3249)
E. <u>(If code "3-5" in D4c, ask:)</u> Patient's satisfaction surveys		<u> </u>	(3250)
(There is no D6)	HOLD	<u>0</u>	(3251-3255)

(If code "019-020", "023", "043",
"085", "133" or "195" in #A10/#A8, OR
If code "1", "8" or "9" in #A9, OR
If code "042", "088" or "137" in #A10, OR
If code "2" or "3" in #A9a, OR
If code "2" or "3" in #A9b, Continue;
Otherwise, Skip to "Interviewer
Read" before #D11)

(INTERVIEWER READ:) Now, I would like to ask you a couple of questions about the range and complexity of conditions you treat without referral to specialists.

D7. During the last two years, has the complexity or severity of patients' conditions for which you provide care without referral to specialists (read 5-1)? (INTERVIEWER NOTE: If respondent says he/she has not been practicing medicine for two years, ask about time since he/she started.)

5 Increased a lot
4 Increased a little
3 Stayed about the same
2 Decreased a little, OR
1 Decreased a lot

8 (DK)
9 (Refused)

_____ (1169)

D8. In general, would you say that the complexity or severity of patients' conditions for which you are currently expected to provide care without referral is (read 5-1)?

5 Much greater than it should be
4 Somewhat greater than it should be
3 About right
2 Somewhat less than it should be, OR
1 Much less than it should be

8 (DK)
9 (Refused)

_____ (1170)

D9. During the last two years, has the number of patients that you refer to specialists (read 5-1)?

- 5 Increased a lot
- 4 Increased a little
- 3 Stayed about the same
- 2 Decreased a little, OR
- 1 Decreased a lot

8 (DK)

9 (Refused)

_____ (1171)

D10. Some insurance plans or medical groups REQUIRE their enrollees to obtain permission from a primary care physician before seeing a specialist. For roughly what percent of your patients do you serve in this role? (Open ended and code actual percent)

[(If necessary, say:) The term "gatekeeper" is often used to refer to this role.]

[(If necessary, say:) Include only those patients for whom it is required, not for patients who choose to do so voluntarily.]

000 None (Skip to "Section F")

001 1% or less (Skip to "Section F")

002-
100 (Skip to "Section F")

DK (DK) (Continue)

RF (Refused) (Continue)

_____ - _____
(1172 - 1174)

D10a. (If code "DK" or "RF" in #D10, ask:) Would you say you serve in this role for (read 1-2)?

1 Less than 25 percent of your patients, OR - (Skip to #D10c)

2 25 percent or more of your patients - (Continue)

8 (DK) (Skip to "Section F")
9 (Refused) (Skip to "Section F") _____ (1175)
D10b. (If code "2" in #D10a, ask:) Would you say
for (read 1-2)?

1 Less than 50 percent of your patients

OR

2 50 percent or more of your patients

8 (DK)

9 (Refused) _____ (1176)

(All in #D10b, Skip to "Section F")

D10c. (If code "1" in #D10a, ask:) Would you say
for (read 1-2)?

1 Less than 10 percent of your patients

OR

2 10 percent or more of your patients

8 (DK)

9 (Refused) _____ (1177)

(All in #D10c, "Skip to Section F")

(INTERVIEWER READ:) Now, I would like to ask you a couple of questions about the range and complexity of conditions you treat.

D11. During the last two years, has the complexity or severity of patients' conditions at the time of referral to you by primary care physicians **(read 5-1)?** **(NOTE TO INTERVIEWER: If Emergency Department Physician is confused by the question, code as "8", NOT "9")**

- 5 Increased a lot
- 4 Increased a little
- 3 Stayed about the same
- 2 Decreased a little, OR
- 1 Decreased a lot

- 8 (DK)
- 9 (Refused)

_____ (1178)

D12. In general, would you say that the complexity or severity of patients' conditions at the time of referral to you by primary care physicians is **(read 5-1)?** **(NOTE TO INTERVIEWER: If Emergency Department Physician is confused by the question, code as "8", NOT "9")**

- 5 Much greater than it should be
- 4 Somewhat greater than it should be
- 3 About right
- 2 Somewhat less than it should be, OR
- 1 Much less than it should be

- 8 (DK)
- 9 (Refused)

_____ (1179)

D13. During the last two years, has the number of patients referred to you by primary care physicians (read 5-1)? (NOTE TO INTERVIEWER: If Emergency Department Physician is confused by the question, code as "8", NOT "9")

- 5 Increased a lot
- 4 Increased a little
- 3 Stayed about the same
- 2 Decreased a little, OR
- 1 Decreased a lot

8 (DK)

9 (Refused)

_____ (1180)

CLOCK:

_____ (2200 - 2204)

(There is no Section E)

SECTION F
PHYSICIAN-PATIENT INTERACTIONS

F1. Next I am going to read you several statements. For each, I'd like you to tell me if you agree strongly, agree somewhat, disagree somewhat, disagree strongly, or if you neither agree nor disagree. [**(If code "2" or "8-9" in #A4, say:)** As you answer, please think only about your main practice.] **(Read and rotate A-E and H, then F and G)** Do you **(read 5-1)?** [**(If necessary, say:)** We'd like you to think across all patients that you see in your practice.]

- 5 Agree strongly
- 4 Agree somewhat
- 3 Disagree somewhat
- 2 Disagree strongly, OR
- 1 Do you neither agree nor disagree

- 7 (Doctor does not have office) [A only]
- 7 (Doctor does not have continuing relationship with patients) [H only]
- 8 (DK)
- 9 (Refused)

A. I have adequate time to spend with my patients during their office visits? **(INTERVIEWER NOTE: Do not further differentiate the level of visit, that is, whether brief, intermediate, etc.) (If necessary, say:)** We would like you to answer in general or on AVERAGE over all types of visits.
 (1308)

B. **(If code "7" in #F1-A, ask:)** I have adequate time to spend with my patients during a typical patient visit **(INTERVIEWER NOTE: This does not include surgery)** _____ (1351)

C. I have the freedom to make clinical decisions that meet my patients' needs _____ (1309)

D. It is possible to provide high quality care to all of my patients _____ (13)

F1. (Continued:)

E. I can make clinical decisions in the best interests of my patients without the possibility of reducing my income _____ (1311)

F. (If code "019-020", "023", "043", "085" or "133" or "195" in #A10/#A8, OR if code "1", "8" or "9" in #A9, or if code "042", "088" or "137" in #A10, OR if code "2" or "3" in #A9a, OR If code "2" or "3" in #A9b, ask:) The level of communication I have with specialists about the patients I refer to them is sufficient to ensure the delivery of high quality care _____ (1312)

G. (If "Blank" in F1-F, ask:) The level of communication I have with primary care physicians about the patients they refer to me is sufficient to ensure the delivery of high quality care _____ (13

H. It is possible to maintain the kind of continuing relationships with patients over time that promote the delivery of high quality care _____

(There are no #F2-#F7)

F8. Now, I'm going to ask you about obtaining certain services for patients in your (response in #CA) when you think they are medically necessary. How often are you able to obtain (read and rotate A, B and E, then read and rotate C and D, then read and rotate F and G, as appropriate) when you think (they are/it is) medically necessary? Would you say (read 6-1)? [(If physician says it depends on which patients, say:)] We'd like you to think across all the patients that you see in your (response in #CA) and tell us how often you are able to obtain these services when you think they are medically necessary.]

- 6 Always
- 5 Almost always
- 4 Frequently
- 3 Sometimes
- 2 Rarely, OR
- 1 Never

- 7 (Does not apply)
- 8 (DK)
- 9 (Refused)
- 0 (Facility/Service not available in my area)

- A. [(If code "019", "020", "023", "043", "085", "133" or "195" in #A10/#A8, OR code "1", "8" or "9" in #A9, or if code "042", "088" or "137" in #A10, OR code "2" or "3" in #A9a, OR code "2" or "3" in #A9b, ask:)] Referrals to specialists of high quality/(Otherwise, ask:) Referrals to other specialists of high quality] _____ (1315)
- B. High quality ancillary services, such as physical therapy, home health care, nutritional counseling and so forth _____ (1316)
- C. Non-emergency hospital admissions _____ (1317)
- D. Adequate number of inpatient days for your hospitalized patients _____ (1318)
- E. High quality diagnostic imaging services _____ (1319)

F8. (Continued:)

F. (If code "010", "019", "020", "023", "043", "062", "064-065", "082-085", "127", "132", "133", "210", "312", "313", "192" or "195" in #A10/#A8, OR code "1", "8" or "9" in #A9, or code "2" or "3" in #A9a, or code "042", "088" or "137" in #A10, OR code "2" or "3" in #A9b, ask:) High quality inpatient mental healthcare _____ (1320)

G. (If code "010", "019", "020", "023", "043", "062", "064-065", "082-085", "127", "132", "133", "210", "312", "313", "192" or "195" in #A10/#A8, OR code "1", "8" or "9" in #A9, or code "2" or "3" in #A9a, or code "042", "088" or "137" in #A10, OR code "2" or "3" in #A9b, ask:) High quality OUTPATIENT MENTAL health services _____ (1321)

(If code "0", "1" or "4-9" to ALL of #F8-A, #F8-C and #F8-G, Skip to #F9; Otherwise, Continue)

F8a. I am now going to read some reasons why you might be unable to obtain various services. Using any number from one to ten, where "1" is not important, and "10" is very important, rate each of the following reasons for your being unable to obtain (read A, C or G, as appropriate), when you think it is medically necessary. (Read and rotate a-c)

- 10 Very important
- 09
- 08
- 07
- 06
- 05
- 04
- 03
- 02
- 01 Not important

98 (DK)

99 (Refused)

F8a. (Continued:)

A. (If code "2" or "3" in #F8-A, ask:) [(If code "019", "020", "023", "043", "085", "133" or "195" in #A10/#A8, OR code "1", "8" or "9" in #A9, or if code "042", "088" or "137" in #A10, OR code "2" or "3" in #A9a, OR code "2" or "3" in #A9b, ask:)] Referrals to specialists of high quality/(Otherwise, ask:) Referrals to other specialists of high quality]

a. There aren't enough qualified service providers or facilities in my area

(2245) (2246)

b. Health plan networks and administrative barriers limit patient access

(2247) (2248)

c. Patients lack health insurance or have inadequate insurance coverage

(2249) (2250)

(There is no B)

F8a. (Continued:)

C. (If code "2" or "3" in #F8-C, ask:) Non-emergency hospital admissions

a. There aren't enough qualified service providers or facilities in my area

(2251) (2252)

b. Health plan networks and administrative barriers limit patient access

(2253) (2254)

c. Patients lack health insurance or have inadequate insurance coverage

(2255) (2256)

(There are no D-F)

G. (If code "2" or "3" in #F8-G, ask:) High quality OUTPATIENT MENTAL health services

a. There aren't enough qualified service providers or facilities in my area

(2257) (2258)

b. Health plan networks and administrative barriers limit patient access

(2259) (2260)

c. Patients lack health insurance or have inadequate insurance coverage

(2261) (2262)

F9. Now, I'd like to ask you about new patients the practice in which you work might be accepting. Is the practice accepting all, most, some, or no (read A-C and G)? (INTERVIEWER NOTE: Refers to entire practice not just to physician's own patients. Medicaid and Medicare beneficiaries who are enrolled in managed care plans should be included in A or B, respectively.)

- 4 All
- 3 Most
- 2 Some
- 1 No new patients/None

- 8 (DK)
- 9 (Refused)

A. New patients who are insured through Medicare, including Medicare managed care patients _____ (1323)

B. (If code "06" in "STATE", ask:) New patients who are insured through MediCAL, including MediCAL managed care patients

(If code "04" in "STATE", ask:) New patients who are insured through AHCCCS ("Access")

(If code "01-03", "05" or "07-56" in "STATE", ask:) New patients who are insured through Medicaid, including Medicaid managed care patients _____ (1322)

C. New patients who are insured through private or commercial insurance plans including managed care plans and HMOs with whom the practice has contracts (If necessary, say:) This includes both fee for service patients and patients enrolled in managed care plans with whom the practice has a contract. It excludes Medicaid or Medicare managed care _____ (1324)

G. New uninsured patients who are unable to pay your fees _____ (3269)

F10. Is the practice accepting any new patients under Capitated contracts; under capitation, a fixed amount is paid per patient per month regardless of services provided? [(If respondent requests clarification, ask:) Is the practice accepting any new patients under existing capitated contracts?]

1 Yes

2 No

3 (No capitated contracts in the area)

8 (DK)

9 (Refused)

_____ (3270)

CLOCK:

(2216 - 2219)

SECTION G
PRACTICE REVENUE

G1. Now, I'm going to ask you some questions about the patient care revenue received by the **(response in #CA)** in which you work. Approximately what percentage of the PRACTICE REVENUE FROM PATIENT CARE would you say comes from **(read A-B)**? (Open ended **and code actual percent)** **(Probe:)** Your best estimate will be fine. [**(If necessary, say:)** We're asking about the patient care revenue of the practice in which you work, not just the revenue from the patients YOU see.] **(INTERVIEWER NOTE: "Other public insurance" includes Champus, Champva and Tricare)**

000 None
001 1% or less
DK (DK)
RF (Refused)

A. Payments from all Medicare plans, including Medicare managed care

 -
(1325 - 1327)

B. **(If code "06" in "STATE", ask:)** Payments from MediCAL or any other public insurance, including Medical managed care

(If code "04" in "STATE", ask:) Payments from AHCCCS ("Access") or any other public insurance

(If code "01-03", "05" or "07-56" in "STATE", ask:) Payments from Medicaid or any other public insurance, including Medicaid managed care

 -
(1328 - 1330)

(There are no C and D)

(If response in #G1-A + response
in #G1-B > 100, Continue;
Otherwise, Skip to "Note" before #G3)

G1a. I have recorded that the combined practice revenue from Medicare and Medicaid is greater than 100 percent, can you help me resolve this? Approximately what percentage of the practice's revenue from patient care comes from (read A-B)? (INTERVIEWER NOTE: Revenue from patients covered by both Medicare and Medicaid should be counted in MEDICARE ONLY) (Open ended and code actual percent) (Probe:) Your best estimate will be fine. [(If necessary, say:) We're asking about the patient care revenue of the practice in which you work, not just the revenue from the patients YOU see.]

000 None
001 1% or less
DK (DK)
RF (Refused)

A. Payments from all Medicare plans, including Medicare managed care

(1334 - 1336)

B. (If code "06" in "STATE", ask:) Payments from Medical or any other public insurance, including Medical managed care

(If code "04" in "STATE", ask:) Payments from AHCCCS ("Access") or any other public insurance

(If code "01-03", "05" or "07-56" in "STATE", ask:) Payments from Medicaid or any other public insurance, including Medicaid managed care

(1337 - 1339)

(There is no #G2)

(If code "3" in #F10, Autocode "000" in #G3,
and skip to #G6;
Otherwise, Continue)

G3. Now, again thinking about the patient care revenue from ALL sources received by the practice in which you work, what percentage is paid on a capitated or other prepaid basis? [(If necessary, say:) Under capitation, a fixed amount is paid per patient per month regardless of services provided.] (Probe:) Your best estimate would be fine. (Open ended and code actual percent)
(INTERVIEWER NOTE: Includes payments made on a capitated or other prepaid basis from Medicare or Medicaid)

000 None
001 1% or less
002-
100
DK (DK)
RF (Refused)

(2438 - 2440)

(There are no #G3a-#G5)

G6. Thinking again about the practice in which you work, we have a few questions about contracts with managed care plans such as HMOs, PPOs, IPAs and Point-Of-Service plans. First, roughly how many managed care contracts does the practice have? **(Probe:)** Your best estimate would be fine. [**(If necessary, say:)** Managed care includes any type of group health plan using financial incentives or specific controls to encourage utilization of specific providers associated with the plan. Direct contracts with employers that use these mechanisms are also considered managed care.] **(INTERVIEWER NOTE: Include Medicare managed care, Medicaid managed care, and other government managed care contracts but not traditional Medicare or Medicaid.)** (Open ended and code actual number)

- 00 None - (Skip to #G7)
- 01-
- 19 (Skip to #G8)
- 20-
- 97 (Skip to #G6b)
- 98 98+ contracts (Skip to #G6b)
- DK (DK) (Continue)
- RF (Refused) (Continue)

(2458) (2459)

G6a. **(If code "DK" or "RF" in #G6, ask:)** Would you say less than 3 contracts, 3 to 10, or more than 10 contracts?

- 0 (None) - (Skip to #G7)
- 1 Less than 3 (1 or 2) (Skip to #G8)
- 2 3 to 10 (Skip to #G8)
- 3 More than 10 (11+) (Skip to #G8)
- 8 (DK) (Skip to #G8)
- 9 (Refused) (Skip to #G8)

(2460)

G6b. (If code "20-97" in #G6, ask:) Just to be sure, is this the number of contracts, or patients?

1 Contracts - (Skip to #G8)

2 Patients - (Continue)

8 (DK) (Skip to #G8)

9 (Refused) (Skip to #G8)

_____ (1340)

G6c. (If code "2" in #G6b, ask:) In this question, we are asking about contracts. So, roughly how many managed care CONTRACTS does the practice have? (Open ended and code actual number)

00 None - (Continue)

01-

97 (Skip to #G8)

DK (DK) (Skip to #G8)

RF (Refused) (Skip to #G8)

_____ (1341) _____ (1342)

G7. (If code "00" in #G6, or code "0" in #G6a, or code "00" in #G6c, ask:) What percentage, if any, of the patient care revenue received by the practice in which you work comes from all managed care combined? Please include ALL revenue from managed care including, but not limited to, any payments made on a capitated or prepaid basis. (Probe:) Your best estimate will be fine. [(If necessary, say:) Managed care programs include, but are not limited to those with HMOs, PPOs, IPAs, and point-of-service plans.] [(If necessary, say:) Managed care includes any type of group health plan using financial incentives or specific controls to encourage utilization of specific providers associated with the plan. Direct contracts with employers that use these mechanisms are also considered managed care.] (Open ended and code actual percent)

000 None
001 1% or less
DK (DK)
RF (Refused)

(1343 - 1345)

(If code "00" in #G6,
and #G7 is LESS THAN response in #G3, Continue;
If code "00" in #G6a or #G6c,
And #G7 is LESS THAN response in #G3, Continue;
Otherwise, Skip to "Section H")

G7a. I may have recorded something incorrectly. I recorded that the percentage of practice revenue from all managed care is less than the percentage of practice revenue that is paid on a capitated or other prepaid basis. This seems inconsistent, so let me ask you again, what percent of patient care revenue received by the practice in which you work comes from all managed care combined? (Open ended and code actual percent) (SURVENT: Show response in #G7)

000 None
101 Less than 1%
DK (DK)
RF (Refused)

(2548 - 2550)

G7b. Let me also ask you again, thinking about the patient care revenue from ALL sources received by the practice in which you work, what percentage is paid on a capitated or other prepaid basis? (Open ended and code actual percent) (SURVENT: Show response in #G3)

000 None
101 Less than 1%
DK (DK)
RF (Refused)

(2551 - 2553)

(All in #G7b, Skip to "Section H")

G8. (If code "02-97" in #G6c, or code "1-3" in #G6a, or code "02-97" in #G6, ask:) What percentage of the patient care revenue received by the practice in which you work comes from these (response in #G6c/#G6a/#G6) managed care contracts combined? [(If code "001-100", "DK" or "RF" in #G3, say:) Please include ALL revenue from these contracts including, but not limited to, any payments made on a capitated or prepaid basis.] (Probe:) Your best estimate will be fine. [(If necessary, say:) Managed care contracts include, but are not limited to those with HMOs, PPOs, IPAs, and point-of-service plans.] [(If necessary, say:) Managed care includes any type of group health plan using financial incentives or specific controls to encourage utilization of specific providers associated with the plan. Direct contracts with employers that use these mechanisms are also considered managed care.] (Open ended and code actual percent)

(If code "01" in #G6c or #G6, ask:) What percentage of the patient care revenue received by the practice in which you work comes from this managed care contract? [(If code "001-100", "DK", or "RF", say:) Please include ALL revenue from this contract including, but not limited to, any payments made on a capitated or prepaid basis.] (Probe once lightly:) Your best estimate will be fine. [(If necessary, say:) Managed care contracts include, but are not limited to those with HMOs, PPOs, IPAs, and point-of-service plans.] [(If necessary, say:) Managed care includes any type of group health plan using financial incentives or specific controls to encourage utilization of specific providers associated with the plan. Direct contracts with employers that use these mechanisms are also considered managed care.] (Open ended and code actual percent)

G8. (Continued:)

(If code "DK" or "RF" in #G6c, or code "8" or "9" in #G6a, ask:) What percentage of the patient care revenue received by the practice in which you work comes from all of the practice's managed care contracts combined? [**(If code "001-100", "DK", or "RF", say:)** Please include ALL revenue from these contracts including, but not limited to, any payments made on a capitated or prepaid basis.] **(Probe once lightly:)** Your best estimate will be fine. [**(If necessary, say:)** Managed care contracts include, but are not limited to those with HMOs, PPOs, IPAs, and point-of-service plans.] [**(If necessary, say:)** Managed care includes any type of group health plan using financial incentives or specific controls to encourage utilization of specific providers associated with the plan. Direct contracts with employers that use these mechanisms are also considered managed care.] (Open ended **and code actual percent**)

000	None	(Continue)
001	1% or less	(Continue)
002-		
100		(Continue)
DK	(DK)	(Skip to "Section H")
RF	(Refused)	(Skip to "Section H")

(2462 - 2464)

(If response in #G8 is less than
response in #G3, Continue;
If response in #G3 + response
in #G8="0", Skip to "Section H";
If response in G8 > "000", Skip to #G8d)

G8a. (If response in #G8 is less than response in #G3,
ask:) I have recorded that your revenue from all
managed care contracts is less than the amount you
received on a capitated or prepaid basis. We would
like you to include all capitated payments in
estimating managed care revenue. Would you like to
change your answer of (read 1-2)?

1 (Response in #G8) percent from all
managed care contracts - (Continue)

OR

2 (Response in #G3) percent received on a
capitated or prepaid basis - (Skip to
#G8c)

3 (Both) - (Continue)

4 (Neither) (Skip to "Note" before #G9)

8 (DK) (Skip to "Note" before #G9)

9 (Refused) (Skip to "Note" before #G9)

_____ (2465)

(If code "01-19" in #G6, Skip to #G8b;
 If code "20-97" in #G6,
 AND code "1" in #G6b, Skip to #G8b;
If code "8", "9" or "Blank" in #G6a, AND
code "DK", "RF" or "BLANK" in #G6c,
 Skip to #G8d;
 Otherwise, Continue)

G8b. (If code "1" or "3" in #G8a, ask:)

(If code "02-97" in #G6c, or code "1-3" in #G6a or
code "02-97" in #G6, ask:) So, what percentage of
the practice's revenue from patient care would you
say comes from all of these managed care contracts
combined? (Open ended and code actual percent)

(If code "01" in #G6c or #G6, ask:) So, what
percentage of the practice's revenue from patient
care would you say comes from this managed care
contract? (Open ended and code actual percent)

000 None - (Skip to "Section H")

001 1% or less

DK (DK)

RF (Refused)

(2466 - 2468)

G8c. (If code "2" or "3" in #G8a, ask:) So what percentage of patient care revenue received by the practice in which you work is paid on a capitated or other prepaid basis? [(If necessary, say:) Under capitation, a fixed amount is paid per patient per month regardless of services provided.] (Probe:) Your best estimate would be fine. (Open ended and code actual percent)

000 None
001 1% or less

002-
100

DK (DK)
RF (Refused)

(1352 - 1354)

G8d. (If "specific" response in #G8b/#G8 = "specific" response in #G8c/#G3, ask:) So, all of the practice's managed care revenue is paid on a capitated, or prepaid basis, is this correct?

1 Yes - (Skip to "Note" before #G9)
2 No - (Continue)
8 (DK) (Skip to "Note" before #G9)
9 (Refused) (Skip to "Note" before #G9)

_____ (1346)

G8e. (If code "2" in #G8d, ask:) I have recorded that (response in #G8b/#G8) percent of the practice revenue is from managed care and that (response in #G8c/#G3) percent of the practice revenue is paid on a capitated or prepaid basis. Which of these is incorrect?

- 1 Revenue from managed care - **(Continue)**
- 2 Revenue paid on capitated or prepaid basis - **(Skip to #G8g)**
- 3 Both are correct - **(Skip to "Note" before #G9)**
- 4 Neither are correct - **(Continue)**
- 8 (DK) **(Skip to "Note" before #G9)**
- 9 (Refused) **(Skip to "Note" before #G9)**

_____ (1347)

G8f. (If code "1" or "4" in #G8e, ask:)

(If code "02-97" in #G6c, or #G6 or code "1-3" in #G6a, ask:) What percentage of the patient care revenue received by the practice in which you work comes from these [(response in #G6c/#G6)] managed care contracts combined? (If code "001-100", "DK" or "RF in #G3, say:) Please include ALL revenue from these contracts including, but not limited to, any payments made on a capitated or prepaid basis. (Probe:) Your best estimate will be fine. [(If necessary, say:) Managed care contracts include, but are not limited to those with HMOs, PPOs, IPAs, and point-of-service plans.] [(If necessary, say:) Managed care includes any type of group health plan using financial incentives or specific controls to encourage utilization of specific providers associated with the plan. Direct contracts with employers that use these mechanisms are also considered managed care.] (Open ended and code actual percent)

G8f. (Continued:)

(If code "01" in #G6c or #G6, ask:) What percentage of the patient care revenue received by the practice in which you work comes from this managed care contract? Please include ALL revenue from this contract including, but not limited to, any payments made on a capitated or prepaid basis. (Probe:) Your best estimate will be fine. [(If necessary, say:) Managed care contracts include, but are not limited to those with HMOs, PPOs, IPAs, and point-of-service plans.] [(If necessary, say:) Managed care includes any type of group health plan using financial incentives or specific controls to encourage utilization of specific providers associated with the plan. Direct contracts with employers that use these mechanisms are also considered managed care.] (Open ended and code actual percent)

(If code "DK" or "RF" in #G6c or code "8" or "9" in #G6a, ask:) What percentage of the patient care revenue received by the practice in which you work comes from all of the practice's managed care contracts combined? Please include ALL revenue from these contracts including, but not limited to, any payments made on a capitated or prepaid basis. (Probe:) Your best estimate will be fine. [(If necessary, say:) Managed care contracts include, but are not limited to those with HMOs, PPOs, IPAs, and point-of-service plans.] [(If necessary, say:) Managed care includes any type of group health plan using financial incentives or specific controls to encourage utilization of specific providers associated with the plan. Direct contracts with employers that use these mechanisms are also considered managed care.] (Open ended and code actual percent)

G8f. (Continued:)

000 None - (Skip to "Section H")

001 1% or less (Continue)

002-
100 (Continue)

DK (DK) (Continue)

RF (Refused) (Continue)

(1348 - 1350)

G8g. (If code "2" or "4" in #G8e, ask:) Now thinking about the patient care revenue from ALL sources received by the practice in which you work, what percentage is paid on a capitated or other prepaid basis? [(If necessary, say:) Under capitation, a fixed amount is paid per patient per month regardless of services provided.] (Probe:) Your best estimate would be fine. (Open ended and code actual percent) (INTERVIEWER NOTE: Includes payments made on a capitated or other prepaid basis from Medicare or Medicaid)

000 None
 001 1% or less

002-
 100

DK (DK)
 RF (Refused)

(1191 - 1193)

(There are no #G9-#G10)

(There is no #G11) HOLD 0 (2508)

(There is no #G12)

CLOCK:

(2224 - 2227)

SECTION H
PHYSICIAN COMPENSATION METHODS
AND INCOME LEVEL

(If code "1" in #C1, AND code "06" in #C2,
Skip to #H9;
Otherwise, Continue)

(INTERVIEWER READ:) Now, I'm going to ask you a few questions about how the practice compensates you personally. [(If code "2" or "8-9" in #A4, say:) Again, please answer only about the main practice in which you work.]

H1. Are you a salaried physician?

- 1 Yes - (Skip to #H3)
- 2 No (Continue)
- 8 (DK) (Continue)
- 9 (Refused) (Continue) _____ (2510)

H2. (If code "2", "8" or "9" in #H1, ask:) Are you paid in direct relation to the amount of time you work, such as by the shift or by the hour?

- 1 Yes - (Skip to #H4)
- 2 No (Skip to #H7)
- 8 (DK) (Skip to #H7)
- 9 (Refused) (Skip to #H7) _____ (2511)

H3. (If code "1" in #H1, ask:) Is your base salary a fixed amount that will not change until your salary is re-negotiated or is it adjusted up or down during the present contract period depending on your performance or that of the practice? [(If necessary, say:) Adjusted up or down means for example, some practices pay their physicians an amount per month that is based on their expected revenue, but this amount is adjusted periodically to reflect actual revenue produced.] (INTERVIEWER NOTE: Base salary is the fixed amount of earnings, independent of bonuses or incentive payments.)

1 Fixed amount - (Continue)

2 Adjusted up or down - (Skip to #H7)

8 (DK) (Continue)

9 (Refused) (Continue)

_____ (2512)

H4. (If code "1" in #H2, OR code "1", "8" or "9" in #H3, ask:) Are you also currently eligible to earn income through any type of bonus or incentive plan? (INTERVIEWER NOTE: Bonus can include any type of payment above the fixed, guaranteed salary)

1 Yes

2 No

8 (DK)

9 (Refused)

_____ (2513)

H5. I am going to read you a short list of factors that are sometimes taken into account by medical practices when they determine the compensation paid to physicians in the practice. For each factor, please tell me whether or not it is EXPLICITLY considered

(If code "1" in #H1, AND code "2" or "8-9" in #H4, ask:) When your salary is determined, does the (response in #CA) consider (read A-D)?

(If code "1" in #H1 AND code "1" in #H4, ask:) When either your base salary or bonus is determined, does the (response in #CA) consider (read A-D)?

(If code "1" in #H2, AND code "2", "8" or "9" in #H4, ask:) When your pay rate is determined, does the (response in #CA) consider (read A-D)?

(If code "1" in #H2, AND code "1" in #H4, ask:) When either your pay rate or bonus is determined, does the (response in #CA) consider (read A-D)?

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

- A. Factors that reflect your own productivity [(If necessary, say:) Examples include the amount of revenue you generate for the practice, the number of relative value units you produce, the number of patient visits you provide, or the size of your enrollee panel] _____ (2514)
- B. Results of satisfaction surveys COMPLETED BY YOUR OWN PATIENTS _____ (2515)
- C. Specific measures of quality of care, such as rates of preventive care services for your patients _____ (2516)

H5. (Continued:)

D. Results of practice profiling comparing your pattern of using medical resources to treat patients with that of other physicians (INTERVIEWER NOTE: A practice profile is a report that is usually computer generated, which compares you to other physicians on things like referrals to specialists, hospitalizations and other measures of cost effectiveness.)

_____ (2517)

(If code "2", "8" or "9" in #H5-D,
Skip to #H9;
Otherwise, Continue)

H6. (If code "1" in #H5-D, ask:) Are these profiles risk-adjusted to consider the health status of your patients or the severity of their illnesses? (INTERVIEWER NOTE: Other than by age and gender)

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

_____ (2518)

(All in #H6, Skip to #H9)

H7. (If code "2", "8" or "9" in #H2, or code "2" in #H3, ask:) I am now going to read you a short list of factors that are sometimes taken into account by medical practices when they determine the compensation paid to physicians in the practice. For each factor, please tell me whether or not it is EXPLICITLY considered when your compensation is determined. Does the (response in #CA) in which you work consider (read A-D)?

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

- A. Factors that reflect YOUR OWN productivity [(If necessary, say:) Examples include the amount of revenue you generate for the practice, the number of relative value units you produce, the number of patient visits you provide, or the size of your enrollee panel] _____ (2519)
- B. Results of satisfaction surveys COMPLETED BY YOUR OWN PATIENTS _____ (2520)
- C. Specific measures of quality of care, such as rates of preventive care services for your patients _____ (2521)
- D. Results of practice profiles comparing your pattern of using medical resources to treat patients with that of other physicians (INTERVIEWER NOTE: A practice profile is a report that is usually computer generated, which compares you to other physicians on things like referrals to specialists, hospitalizations and other measures of cost effectiveness) _____ (2522)

(If code "2", "8" or "9" in #H7-D,
Skip to #H9;
Otherwise, Continue)

H8. (If code "1" in #H7-D, ask:) Are these profiles risk-adjusted to consider the health status of your patients or the severity of their illnesses? (INTERVIEWER NOTE: Other than by age and gender)

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

_____ (2547)

H9. Of your total income from your (response in #CA) during calendar year 1999, approximately what percent would you estimate was earned in the form of bonuses, returned withholds, or other incentive payments based on your performance? (INTERVIEWER NOTE: Do not include income based on productivity, only specific incentives or returned withholds/bonuses.) (Open ended and code actual percent)

- 000 None - (Continue)
- 001 1% or less - (Skip to #H10)
- 002-
100 (Skip to #H10)
- DK (DK) (Skip to #H10)
- RF (Refused) (Skip to #H10)

_____ - _____
(2523 - 2525)

H9a. (If code "000" in #H9, ask:) Were you eligible to earn any bonuses or other performance-based payments in 1999? (INTERVIEWER NOTE: This question is asking about eligibility to earn bonuses in 1999. Earlier question (#H4) asked about whether the physician is eligible to earn a bonus at the time of the interview.)

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

_____ (2526)

H10. During 1999, what was your own net income from the practice of medicine to the nearest \$1,000, after expenses but before taxes? Please include contributions to retirement plans made for you by the practice and any bonuses as well as fees, salaries and retainers. Exclude investment income. [(If code "2" in #A4, say:)] Also, please include earnings from ALL practices, not just your main practice.] [(If necessary, say:)] We define investment income as income from investments in medically related enterprises independent of a physician's medical practice(s), such as medical labs or imaging centers.] [(If "Refused", say:)] This information is important to a complete understanding of community health care patterns and will be used only in aggregate form to ensure your confidentiality of the information.] (Open ended and code actual number) (If response is > \$1 million, verify)

0000000-
9999999 (Skip to #H10b)

DK (DK) (Continue)
RF (Refused) (Continue)

_____ - _____
(2527 - 2533)

H10a. (If code "DK" in #H10, ask:) Would you say that it was (read 01-04)?

(If code "RF" in #H10, ask:) Would you be willing to indicate if it was (read 01-04)?

- 01 Less than \$100,000
- 02 \$100,000 to less than \$150,000
- 03 \$150,000 to less than \$250,000
- 04 \$250,000 or more

- 98 (DK)
- 99 (Refused)

(2534) (2535)

(Form 2)

H10b. How would you describe your overall personal financial incentives in your practice? On balance, do these incentives favor reducing services to individual patients, favor expanding services to individual patients, or favor neither?

- 1 Reducing services to individual patients (Continue)
- 2 Expanding services to individual patients (Continue)
- 3 Favor neither - (Skip to #H10c)
- 8 (DK) (Skip to #H10c)
- 9 (Refused) (Skip to #H10c)

_____ (3271)

(Form 2)

H10b-1. (If code "1" or "2" in #H10b, ask:) Have these incentives [(if code "1" in #H10b, say:) reduced/(if code "2" in #H10b, say:) expanded] services a little, a moderate amount, or a lot?

- 1 A little
- 2 A moderate amount
- 3 A lot

- 4 (None)
- 8 (DK)
- 9 (Refused)

_____ (3272)

H10c. The next question deals with your perception of competition among physicians. By competition among physicians, we mean pressure to undertake various activities to attract and retain patients. Now, thinking about your practice specifically, how would you describe the competitive situation your practice faces? Would you say very competitive, somewhat competitive, or not at all competitive?

- 3 Very competitive
- 2 Somewhat competitive
- 1 Not at all competitive

- 8 (DK)
- 9 (Refused)

_____ (3273)

H11. Do you consider yourself to be of Hispanic origin, such as Mexican, Puerto Rican, Cuban, or other Spanish background? [**(Probe for refusals with:)** I understand this question may be sensitive. We are trying to understand how physicians from different ethnic and cultural backgrounds perceive some of the changes that are affecting the delivery of medical care.]

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

_____ (1659)

H12. What race do you consider yourself to be? [**(If respondent hesitates, read 06-09)**] [**(Probe for refusals with:)** I understand this question may be sensitive. We are trying to understand how physicians from different ethnic and cultural backgrounds perceive some of the changes that are affecting the delivery of medical care.] (Open ended and code) [**(NOTE TO INTERVIEWER: If respondent specifies a mixed race or a race not pre-coded, code as "01 - Other")**]

- 01 Other (list)
- 02-
- 05 HOLD
- 06 White/Caucasian
- 07 African-American/Black
- 08 Native American (American Indian)
or Alaska Native
- 09 Asian or Pacific Islander
- 98 (DK)
- 99 (Refused)

_____ (1660) _____ (1661)

CLOCK:

_____ (2233 - 2236)

(NOTE TO SURVENT: If code "2" in S6a, Autocode "2" in I0)

I0. (If code "1" in S6a, ask:) Our records indicate that you have already received your \$25 honorarium check. Did you receive the check?

- 1 Yes
- 2 No
- 8 (DK)
- 9 (Refused)

_____ (3275)

SECTION I
ENDING

I1. Let me verify that your name and address are (read information from "Fone" file/S4)? (ENTER ALL THAT ARE INCORRECT)

- 1 First name is incorrect
- 2 Last name is incorrect
- 3 Address is incorrect
- 4 City is incorrect
- 5 State is incorrect
- 6 Zip code is incorrect
- 7 All information correct

*
_____ (2554)

1ST NAME:

_____ (1772 - 1780)

LAST NAME: (Display from "Fone" file)

_____ (1781 - 1800)

ADDRESS #1: (Display from "Fone" file)

_____ (1841 - 1879)

ADDRESS #2: (Display from "Fone" file)

_____ (3013 - 3037)

I1. (Continued:)

CITY: (Display from "Fone" file)

_____ (2682 - 2694)

STATE: (Display from "Fone" file)

_____ (2707) (2708)

ZIP CODE: (Display from "Fone" file)

_____ (2709 - 2713)

(There are no #I1a-#I2)

I3. Is the address of the practice we have been talking about during this interview (read 1-2)?

1 (Address from "Fone" file) -
 (Skip to "Note" before #I5)

2 (If code "3-6" in #I1, say:) (Address in #I1)
 - (Skip to "Note" before #I5)

3 No/Neither - (Continue)

8 (DK) (Skip to "Note" before #I5)

9 (Refused) (Skip to "Note" before #I5)

_____ (1356)

I4. Will you please give me the address of the practice we have been talking about during this interview? (Open ended)

STREET ADDRESS #1:

(2732 - 2761)

STREET ADDRESS #2:

(3088 - 3117)

CITY:

(2762 - 2786)

STATE:

(2787) (2788)

ZIP:

(2789 - 2793)

(If code "08", "09" or "10" in
#C2, #C3 or #C3c, Continue;
If code "1" or "2" in #C3a, Continue;
Otherwise, Skip to #J4)

I5. What is the name of the practice we have been talking about during this interview? Include the names of government clinics as eligible responses to this question. [(If necessary, say:) This information will help us to better understand the nature of physician organizations in your region.] (Open ended)

00001 Other (list)
00002 HOLD
00003 HOLD
00004 No/Yes mind giving
00005 HOLD

99998 (DK)
99999 (Refused)

(2812 - 2816)

(If code "2" in S1c, Continue;
Otherwise, Skip to #J4)

I6. Are you with the same medical practice that you were with in July, 1998, or have you changed practices since then? [(If respondent asks, say:) We will consider you as being in the same practice if your practice changed addresses, clinics, offices, or partners, BUT kept the same parent organization. OR, if your old practice changed ownership; for example, if the practice was sold to an outside organization, but you stayed on under the new ownership. A new practice would be one where you terminated your relationship and joined a different one.] [(If respondent has multiple practices and changed one but NOT all of them, say:) We are interested in whether you are with the same main medical practice that you were with in July, 1998. By main practice, we mean the practice where you spend most of your time.]

1 Yes, same practice - (Skip to #J4)

2 No, changed practice - (Continue)

8 (DK) (Skip to #J4)

9 (Refused) (Skip to #J4)

_____ ()

I7. (If code "2" in I6, ask:) In what month and year did you change medical practice? (Open ended and code month and year)

MONTH:

- 01 January
- 02 February
- 03 March
- 04 April
- 05 May
- 06 June
- 07 July
- 08 August
- 09 September
- 10 October
- 11 November
- 12 December

- 13 (DK)
- 14 (Refused)

() ()

YEAR:

- 9998 (DK)
- 9999 (Refused)

(-)

(There are no #I8-#I9)

CLOCK:

(2229 - 2232)

SECTION J
SWEEP-UP

(There are no #J1-#J3)

J4. This concludes the survey unless you have any brief comment you would like to add. (Open ended)

0001 Other (list)

0002-

0003 HOLD

0004 No/Nothing

9998 (DK)

9999 (Refused)

(2555 - 2558)

J5. INTERVIEWER CODE ONLY: (INTERVIEWER NOTE: Do NOT offer to send study report to respondent. Encourage use of Center's Website, www.hschange.org, and encourage them to put their name on the Center's mailing list by using the Website) Did respondent ask any of the following?

1 Yes

2 No

A. Center's Website address so they can access it themselves _____ (28

B. To be placed in the Center's mailing list
(2821)

(There is no C)

HOLD

0 (2822)

J6. INTERVIEWER COMMENTS:

(3118) (3119)

(INTERVIEWER READ:) Again, this is _____, with The Gallup Organization of Lincoln, Nebraska. I'd like to thank you for your time. Our mission is to "help people be heard", and your opinions are important to Gallup in accomplishing this.

(VALIDATE PHONE NUMBER AND THANK RESPONDENT)

INTERVIEWER I.D.# _____ (571-574)

CLOCK:

_____ (2204 - 2207)

DESCRIPTIVE NAMES ONLY: NEED ACTUAL "FONE" FILE NAMES AND NUMBER OF COLUMNS!

1. MEDICAL EDUCATION: (Code from "Fone" file)

_____ ()

2. PHYSICIAN NAME: (Code from "Fone" file)

_____ ()

3. GENDER: (Code from "Fone" file)

_____ ()

4. PREFERRED PROFESSIONAL MAILING ADDRESS: (Code from "Fone" file)

_____ ()

5. GEOGRAPHIC CODES (STATE, COUNTY, ZIP, MSA, CENSUS REGION OR DIVISION): (Code from "Fone" file)

____ - ____
(-)

6. BIRTH DATE: (Code from "Fone" file)

____ - ____
(-)

7. BIRTH PLACE: (Code from "Fone" file)

____ - ____
(-)

8. CITIZENSHIP AND VISA: (Code from "Fone" file)

____ - ____
(-)

9. LICENSURE DATE: (Code from "Fone" file)

____ - ____
(-)

10. NATIONAL BOARD COMPLETION DATE: (Code from "Fone" file)

____ - ____
(-)

11. MAJOR PROFESSIONAL ACTIVITY: (Code from "Fone" file)

____ - ____
(-)

12. PRIMARY SPECIALTY: (Code from "Fone" file)

____ - ____
(-)

13. SECONDARY SPECIALTY: (Code from "Fone" file)
 _____ (_____ - _____)
14. PRESENT EMPLOYMENT: (Code from "Fone" file)
 _____ (_____ - _____)
15. AMERICAN SPECIALTY BOARD CERTIFICATION: (Code from "Fone" file)
 _____ (_____ - _____)
16. CURRENT AND FORMER MEDICAL TRAINING -
 (INSTITUTION, SPECIALTY, TRAINING DATES): (Code from "Fone" file)
 _____ (_____ - _____)
17. CURRENT AND FORMER GOVERNMENT SERVICE: (Code from "Fone" file)
 _____ (_____ - _____)
18. ECFMG CERTIFICATE: (Code from "Fone" file)
 _____ (_____ - _____)
19. TYPE OF PRACTICE: (Code from "Fone" file)
 _____ (_____ - _____)
20. TELEPHONE NUMBER: (Code from "Fone" file)
 _____ (_____ - _____)
21. FAX NUMBER: (Code from "Fone" file)
 _____ (_____ - _____)

REVISIONS

7/17/00

Revised wording in B8, B10, B11, D4-A1, D4-B1, D4-C1 and D5

Added "Note" before B10

Revised "If" condition on D5-B, D5-C, D5-D and D5-E

7/25/00

Revised "Note" before #B3a, #B3d and #G1a

Revised "Note" after #B3d

Revised "Skips" on #B3a and #B3b,

Deleted #B5a, #B5b, #B8, D2a, D2b, D5-A and D6

Revised wording in #B10, #B11, #D5 and #F8a

Revised codes in #B10, #B11 and #D5

Deleted "Skips" on #D2

Added code "7" to #D5

Added "Note" before #G3

Moved #H10b and #H10b-1 after #H10a to before #H1

Deleted #H10c

7/26/00

Added #H10c back in

Added #H10b and #H10b-1 (Form 1) after #C12

Moved #H10b and #H10b-1 back to after #H10a and changed to "Form 2"

Revisions (Continued:)

8/10/00

Added S6a and #I0

Added code "3", "4" and "5" to #A1

Added code "4" to #H10b-1 and #H10b-1

Added code "0" to #F8

Revised "Note" before #F8a

Revised wording in #F8a

Revised "If" condition on #F8a-A, #F8a-C and #F8a-G

8/29/00

Added "Note to Interviewer" to D3

Added "If" condition to F8-F

Revised web site address in J5

10/16/00

Revised codes in A8

1/8/01

Added verbiage to F10

Added I6 and I7

Revisions (Continued:)

5/3/01

Revised "Note" after C3a and C3d

Revised "Skip" on code "11", "15", "17", "19",
"20", "21", "25" and "26" in C3b

Revised "Skip" on code "01", "25" and "26" in C3c

Revised "Note" before C6b and C7

APPENDIX B

EQUATIONS USED FOR ROUND THREE INCLUSION PROBABILITIES

AND

ESTIMATION OF SITE-LEVEL COUNTS OF ELIGIBLE PHYSICIANS

A. EQUATIONS USED FOR ROUND THREE INCLUSION PROBABILITIES

1. Background

The background presented in Section B of Chapter V is repeated here to understand the appendix, along with the detailed equations. The basic sampling weights (weights based on selection probabilities of the fielded sample, before nonresponse adjustments) vary in complexity. To provide a simple example, the calculation of the probabilities for basic weights is simple single-stage process for the Round One supplemental sample and the product of conditional and unconditional probabilities for the Round One site sample (that is, the probability of a site selection multiplied by the probability of a physician selection *given* that the assigned site was selected)¹. In Round Two, Round Three, and subsequent rounds, these calculations must reflect not only probabilities relating to the current round but also probabilities at previous rounds that describe the entire path that the sample physician followed to the current sample. Inclusion probabilities of a physician depend on which path is involved.

For the Round Three, the situation can be viewed in several ways. To understand how the adopted method evolved, first consider that a physician could be included in the Round Three sample via any one of several paths conditional on Round Two status:

- Physician was selected in Round Two, was eligible and completed the interview, and was selected for the Round Three sample (a *Round Two interview*)
- Physician was selected in Round Two, did not complete the interview (for example, was ineligible, could not be located, or refused), but was selected for the Round Three sample (a *Round Two noninterview*)
- Physician was not selected in Round Two (but was in the Round Two frame), and was selected for the Round Three sample (a *Round Two frame physician*)

¹ For this discussion of basic probabilities, the adjustments for geographic error on location of practice and the random assignment of some sites to high-intensity study are presented later.

- Physician was not in the Round Two frame, and was selected for the Round Three sample from the Round Three frame (a *Round Three new frame* physician)

The probabilities for the four sampling paths are different for the primary care physicians and the specialists. Therefore, we have eight separate paths.

In addition, if we consider the chain of events for the sample units representing the respondent domain of the Round Three population (relative to Round One and Round Two), we have seven possible routes. The first four relate to physicians that were on the Round One frame and the last three cover those that were new to the frame at Round Two or Round Three. These routes are:

1. In the Round One frame and:
 - a. selected in Round One, Round Two, and Round Three,
 - b. selected in Round One, not selected in Round Two, and selected in Round Three,
 - c. selected in Round Two, not selected in Round One, and selected in Round Three,
 - d. selected in Round Three, and not selected in Round One and Two; and
2. Not in the Round One frame and:
 - e. selected in Round Two and Round Three,
 - f. selected in Round Three, and not selected in round Two, and
 - g. selected in Round Three, and was not in the Round Two frame.

These seven possible routes along with survey disposition status are taken into account when computing the probabilities of being selected in Round Three.

2. Round Three Computational Methods

In this section, the method used to calculate the Round Three weights is outlined, with the proposition that no restrictive assumptions are required.

a. Basic Inclusion Probabilities

At this point we should summarize some terminology used for the sample design and selection. Within the primary geographic stratification for the supplemental sample or the site for the site sample, four substrata were defined: primary care physicians or specialists crossed with *old* or *new* (*old* are those physicians on the previous survey frame and *new* refers to those that are new to the frame since the previous survey). For the physicians in the old stratum, we further define three *sampling classes*, from which independent samples are selected. These classes refer to three of the paths described above as Round Two Interview, Round Two Noninterview, and Round Two Frame and not selected for Round Two. When we refer to eight sampling classes, we are emphasizing that independent samples are selected for primary care physicians and specialists with four sampling classes each.

The Round Three weights were calculated using the fact that the probability of any physician being included from the Round Three frame was the sum of the probability of a physician being selected in Round Two plus the probability of his or her not being selected in Round Two times their respective conditional probabilities of selection in Round Three (this is valid for physicians for all sampling classes in the Round Three frame, except the new physicians in the Round Three frame). That is, the conditional probabilities for the eight sampling classes can be written as ²:

$$P_{31} = P_{2j} * P_{S31} + (1 - P_{2j}) * P_{S33}$$

$$P_{32} = P_{2j} * P_{S32} + (1 - P_{2j}) * P_{S33}$$

² The conditional reference relates to (a) conditional on the site containing the physician's address was selected for the site sample or (b) conditional on the geographic stratum for the supplemental sample.

$$P_{33} = P_{2j} * P_{S_{3,1-2}} + (1 - P_{2j}) * P_{S_{33}}$$

$$P_{34} = P_{S_{34}}$$

$$P_{35} = P_{2j} * P_{S_{35}} + (1 - P_{2j}) * P_{S_{37}}$$

$$P_{36} = P_{2j} * P_{S_{36}} + (1 - P_{2j}) * P_{S_{37}}$$

$$P_{37} = P_{2j} * P_{S_{3,5-6}} + (1 - P_{2j}) * P_{S_{37}}$$

$$P_{38} = P_{S_{38}},$$

where the conditional probabilities are defined as P_{ij} , i relates to Round One, Round Two, or Round Three ($i=1, 2, 3$) and j relates to the sampling class of the physician in round i . ($j=1,2,3,4$ for primary care physicians and 5 through 8 for specialists). Note, that for P_{31} (the probability of selection in Round Three of a primary care physician who was a respondent in Round Two), a primary care physician could have been selected in Round Two from any of four sampling classes.

For P_{3j} (the conditional probability of selecting the physician at Round Three for the sampling class j in Round Three) we have

- $j = 1$ or 5 if the physician had a completed interview in Round Two [these belong to cases a, c, and e of the previous section],
- $j = 2$ or 6 if the physician was a Round Two noninterview [cases a, c, and e],
- $j = 3$ or 7 if the physician was in the Round Two frame and not selected in Round Two [cases b, d, and f], or
- $j = 4$ or 8 if the physician was new in the Round Three frame [case g].

There were also eight sampling classes in Round Two, depending on physician specialty classification and if the physician was selected in Round One and completed the interview or did not complete the interview, if the physician was in the Round One frame and was not selected, or

if they were new in the Round Two frame³. Therefore, P_{2j} is the conditional probability of selecting the physician at Round Two for the sampling class j in Round Two with

- $j = 1$ or 5 if the physician had a complete interview in Round One [cases a and b],
- $j = 2$ or 6 if the physician was a noninterview in Round One [cases a and b],
- $j = 3$ or 7 if the physician was in the Round One frame and not selected in Round One [cases c and d], or
- $j = 4$ or 8 if the physician was in the Round Two frame and was not in the Round One frame [cases e and f]

Note that case g is not included because these physicians are not on the frame until Round Three.

For the Round One probabilities, P_{1j} is the conditional probability of selecting the physician at Round One. We used only two strata in this round: primary care physicians ($j = 1$) and specialists ($j = 2$).

Within the specific sampling classes, the $P_{s_{ij}}$ are the sampling probabilities in each round ($i=1, 2, 3$), and sampling class j in Round i ($j=1, \dots, 8$ for Rounds Two and Three and $j=1, 2$ for Round One). The $P_{s_{ij}}$ are computed

$$P_{s_{ij}} = n_{ij} / N_{ij}$$

where n_{ij} are the sampled cases in round i and sampling class j , and N_{ij} are the population counts for round i and sampling class j .

$P_{s_{i,1-2}}$ is the weighted mean of the sampling probabilities of Round i and sampling classes 1 and 2 (sampled physicians classified by response status). This modification was required

³Two of these sampling groups (4 and 8) are strata in the classical stratified sampling sense, but they are being referred to here as sampling classes. The primary care and specialist physicians are also valid strata, and each contain the four sampling classes, which are a classification based on survey outcome for purposes of varying sampling rates.

because physicians selected from sampling classes 3 and 7 involve an unknown probability of selection (that is if the physician was selected, he or she could have been either a respondent or a noninterview and subject to different sampling rates). The weighted mean of the two possibilities is used because the actual path is not known.

$$P_{S_{i,1-2}} = (n_{i1} + n_{i2})^{-1} * (n_{i1} * P_{S_{i1}} + n_{i2} * P_{S_{i2}})$$

For Round Two, we had computed P_{2j} for all physicians selected in Round Two; but we needed probabilities for those physicians selected in Round Three who were in the Round Two frame and were not selected in Round Two. These probabilities are:

$$P_{21} = P_{11} * P_{S_{21}} + (1 - P_{11}) * P_{S_{23}}$$

$$P_{22} = P_{11} * P_{S_{22}} + (1 - P_{11}) * P_{S_{23}}$$

$$P_{23} = P_{11} * P_{S_{2,1-2}} + (1 - P_{11}) * P_{S_{23}}$$

$$P_{24} = P_{S_{24}}$$

$$P_{25} = P_{12} * P_{S_{25}} + (1 - P_{12}) * P_{S_{27}}$$

$$P_{26} = P_{11} * P_{S_{26}} + (1 - P_{12}) * P_{S_{27}}$$

$$P_{27} = P_{11} * P_{S_{2,5-6}} + (1 - P_{12}) * P_{S_{27}}$$

$$P_{28} = P_{S_{28}}.$$

For the final set of conditional probabilities, P_{1j} had been computed for all physicians sampled in Round One and for those selected in Round Two (because the Round Two probabilities are a product of conditional probabilities in both rounds). For physicians selected in Round Three who were in the Round One frame and not selected for Round One, the probabilities are the simple selection probabilities:

$$P_{11} = P_{S11},$$

$$P_{12} = P_{S12}.$$

b. Estimation Of Site-Level Counts Of Eligible Physicians

Site-level estimates of the number of physicians were relatively imprecise because of the relatively small sample sizes for the low intensity sites and sometimes extremely unequal weights associated with physicians who were assigned to the site after being selected in another site. Of course, unbiased estimates of total counts of eligible physicians can be obtained by summing the non-response adjusted sampling weights for eligible physicians. However, these estimates have relatively large variances, especially for the low-intensity sites in which the sample sizes are small and a few large sampling weights. In Round One and Round Two, we used various measures to determine acceptable site-level estimates of eligible physicians. One method was to trim excessively large weights without redistribution of values trimmed. However, this estimate introduces inconsistent bias among the sites. It reduces estimated totals for sites with large weights more than estimated totals for other sites: for example, the estimated totals for sites with large numbers of in-movers tend to be more seriously downward biased using this estimator. Without a reliable count for post-stratification at the site level, we developed a series of ratio estimators to seek estimated totals that were consistent with estimates from prior rounds and the frame counts. Ratio estimators also are biased but the bias is typically small considering the potential for improved precision.

The numbers of eligible physicians for the Round Three Physician Survey at the site level were predicted by five different estimators. These five estimators ($n_{3,1}, n_{3,2}, \dots, n_{3,5}$) use three different estimated percentages of eligible physicians by site and physician classification (PCP or specialist) as a percentage of frame counts. The estimates of the related ratios, R_i , are:

- R_{tk} the proportion of the Round Three frame physicians who are eligible physicians, by site and physician classification (PCP or specialist), ($k=1, 2, \dots, 120$; 60 sites by two strata)
- R_{ok} the proportion of eligible physicians among the physicians on the Round Two frame, by site and physician classification (PCP or specialist)
- R_{nk} the proportion eligible physicians among those who were new to the frame in Round Three, by site and PCP/specialist.

The calculations of the estimated proportions (ratios) of the total Round Three frame count

(t) who are eligible physicians, for a specific site and for PCPs, are:

$$\hat{R}_{tk} = \frac{\sum_l W_{kl} X_{kl}}{\sum_l W_{kl}}$$

Where W_{kl} = Adjusted weight for site and PCP (k) and physician(l) and

X_{kl} = 1 if eligible and 0 otherwise

The calculation of the estimated proportions for the Round Two sample (o), for a specific site and for PCPs, is:

$$\hat{R}_{ok} = \frac{\sum_l W_{kl} X_{kl}}{\sum_l W_{kl}}$$

Where W_{kl} = Adjusted weight for site and PCP (k) and physician(l) and

X_{kl} = 1 if eligible and is in Round Two frame and 0 otherwise

The calculation of the estimated proportions for the new sample (n), say for a specific site and for PCPs are:

$$\hat{P}_{nk} = \frac{\sum_l W_{kl} X_{kl}}{\sum_l W_{kl}}$$

Where W_{kl} = Adjusted weight for site and PCP (k) and physician(l) and

X_{kl} = 1 if eligible and is a new doctor in Round Three frame and 0 otherwise

The five estimators of the number of eligible physicians in Round Three by site and PCP/specialist are listed. The definitions for notation are:

- N_{ik} is the number of physicians listed on the sampling frame in Round i ($i=1,2,3$) by site and PCP ($k=1,2\dots 120$) and
- n_{ik} is the number of eligibles previously estimated for Round i by site and physician classification (PCP or specialist).

For background information, the frame counts for each site increased from Round One to Round two (with four exceptions) and they increased again from Round Two to Round Three. But the number of eligible physicians decreased for a substantial number of the sites from Round One to Round Two. In total, the number of PCP physicians on the frame increased by 8.4 percent from Round One to Round Two and by 13.2 percent for Round Two to Round Three. For specialists, the increases were 10 percent and 12.5 percent, respectively.

The estimators to predict the number or eligible physicians by site and PCP/specialist are:

- $n_{3,1k}$: predicts the number of eligible physicians in Round Three by site and physician classification (PCP or specialist) by multiplying the frame counts in Round Three by the overall percentage of eligible physicians

$$n_{3,1k} = N_{3k} \hat{P}_{tk}$$

- $n_{3,2k}$: predicts the number of eligible physicians in Round Three by classifying the frame counts into two groups: the physicians in the frame in Round One and the new physicians in the frame from Round Two and Round Three. This estimator assumes that the number of eligible physicians in Round One frame is n_{1i} (the number estimated in Round One) and the number of eligible physicians from the new physicians in the frame in Round Two and Round Three are estimated by the percentage of eligible physicians among the physicians new on the frame since Round One.

$$n_{3,2k} = n_{1k} + (N_{3k} - N_{1k}) \hat{P}_{nk}$$

- $n_{3,3k}$: the same structure as the last one ($n_{3,2k}$), but it does not assume that the number of eligible physicians in Round One who are eligible in Round Three is still n_{1i} . It estimates the number of eligible physicians in Round One by the percentage of eligible physicians among the Round Three physicians who were on the Round Two frame. The number of eligible physicians new in the frame from Round Two and Round Three is estimated as previously.

$$n_{3,3k} = N_{1k} \hat{P}_{ok} + (N_{3k} - N_{1k}) \hat{P}_{nk}$$

- **n_{3,4k}**: adds to the Round Two eligible physicians an estimate of the number of eligible physicians among those who are new to the frame in Round Three (the second term on the right hand side of the equation). This will tend to have some upward bias because no direct allowance is made for the n_{2k} eligible physicians who may no longer be eligible in the site (for example death, retirement, and outmovers). Hence, this model relies on a ratio adjustment to all sites (post-stratification) to produce essentially unbiased estimators; that is, we assume proportional attrition among sites.

$$n_{3,4k} = n_{2k} + (N_{3k} - N_{2k}) \hat{P}_{nk}$$

- **n_{3,5k}**: the same structure as the last one ($n_{3,4k}$), but it uses a current estimate of eligible physicians who were on the Round Two frame rather than the actual value as of Round Two. The advantage this equation seems to have over $n_{3,4}$ is that we now have an explicit allowance for attrition of eligible physicians in Round Two frame.

$$n_{3,5k} = N_{2k} \hat{P}_{ok} + (N_{3k} - N_{2k}) \hat{P}_{nk}$$

- **n_{3,6k}**: this estimator is the *direct expansion* estimator. It is the sum of the response-adjusted weights for the Round Three eligible physicians. This is an unbiased estimator, but has relatively large variance. Because of larger variability in weights associated to non-response adjustments and in-movers, this estimator produces undesirable large totals for some sites.

$$n_{3,6k} = \sum_l W_{kl} X_{kl}$$

- Where W_{kl} = response-adjusted weight for site and physician type (k) and physician (l) and $X_{kl} = 1$ for eligible physicians and $X_{kl} = 0$ otherwise.

The adjustments needed for aligning to national-level estimates was larger than ideal, around ten percent downward. The site weights were poststratified to the national total of eligible physicians for each estimator before taking the average number of physicians in each site. The total number of estimated eligible physicians in each site was again compared to the national

number of eligible physicians after computing the average number of physicians in each site by physician classification (PCP or specialist) from the first five described estimators.

APPENDIX C
NONRESPONSE ANALYSIS

A. OVERVIEW

Weighted logistic regression models were used to compute propensity scores to adjust the survey weights for (1) locating the physician; and (2) interview response, defined as either “completed interview” or “determined to be ineligible.” For the site and supplemental samples, we developed separate locating and response models for the three subgroups: (1) Round Two interviews (*reinterviews*); (2) Round Two *noninterviews*, and (3) physicians who were new to the Round Three frame sample and physicians who were in the Round Two frame but not sampled in Round Two (*new*). The models are described in Chapter V. Here, we describe the main findings of the nonresponse analysis to illustrate various design, practice-related, and demographic factors that affected our ability to locate and interview physicians.

B. CODING OF SURVEY DISPOSITIONS FOR WEIGHTING PURPOSES

The CATI tracking system maintained a history of the outcome of each attempt to reach a physician who had a known telephone number. In addition, a separate tracing file maintained the results of cases that did not go to the Telephone Center because they were ineligible or because an address or telephone number could not be found. We used data on the CATI and tracing files to prepare a final disposition code for each physician. Table C.1 provides a summary of call outcomes for the released sample for the site, supplemental, and combined samples.

The distributions for the site and supplemental samples were similar, because both were representative of the 48 contiguous states and the District of Columbia. Completed interviews comprised about 48 percent of the weighted counts of the site sample and 47 percent of the supplemental sample, and ineligible physicians comprised about 11 percent of the weighted counts of the site sample and 10 percent of the supplemental sample. Located nonrespondent physicians comprised about 35 percent of the weighted counts of the site sample and 37 percent

TABLE C.1

CLASSIFICATION OF CALL OUTCOMES FOR SURVEY WEIGHTING PURPOSES

Classification for Weighting	Site Sample				Supplemental Sample				Combined Samples ^a			
	Cases Attempted	Unweighted Percent	Initial Weighted Count	Weighted Percent	Cases Attempted	Unweighted Percent	Initial Weighted Count	Weighted Percent	Cases Attempted	Unweighted Percent	Initial Weighted Count	Weighted Percent
Total Sample	22,588	100	482,665	100	2,352	100	482,665	100	24,940	100	482,665	100
Completed Eligible	11,238	49.8	231,198	47.9	1,168	49.7	228,792	47.4	12,406	49.8	230,971	47.9
Total Ineligible	2,428	10.7	52,128	10.8	232	9.9	48,531	10.1	2,660	10.7	51,789	10.7
Retired	557	2.5	12,286	2.6	45	1.9	9,794	2.0	602	2.4	12,406	2.5
Deceased	98	0.4	1,507	0.3	11	0.5	2,320	0.5	109	0.4	1,584	0.3
Other ineligible ^b	1,773	7.8	38,335	7.9	176	7.5	36,416	7.5	1,949	7.8	38,154	7.9
Located Non-Respondent	7,463	33.0	171,069	35.4	822	35.0	178,286	36.9	8,285	33.2	171,750	35.6
AMA refusal ^c	381	1.7	8,156	1.7	43	1.8	9,885	2.1	424	1.7	8,319	1.7
Study refusal	3,734	16.5	90,458	18.7	350	14.9	80,620	16.7	4,084	16.4	89,530	18.6
Illness/language barrier	34	0.2	660	0.1					34	0.1	598	0.1
End of study ^d	2,596	11.5	56,518	11.7	283	12.0	61,841	12.8	2,879	11.5	57,020	11.8
No contact/answering machine	632	2.8	13,715	2.8	136	5.8	23,948	5.0	768	3.1	14,680	3.0
Other	86	0.4	1,561	0.3	10	0.4	1,992	0.4	96	0.4	1,602	0.3
Unlocatable	1,459	6.5	28,269	5.9	130	5.5	27,056	5.6	1,589	6.4	28,155	5.8

^aThe combined weight is a weighted average of the initial weight for the site and supplemental samples based on the proportion of the total sample from each of them (90.6 percent for the site sample and 9.4 percent for the supplemental sample).

^bOther ineligible include Federal employees, practicing less than 20 hours/week in patient care, resident or fellow, ineligible specialty, or no longer practicing in U.S.

^cPhysician notified AMA that he or she did not want to be contacted for any surveys; if sampled, their cases are not contacted but included as located nonrespondents.

^dPhysician was contacted but did not respond with a hard refusal. This category may include “soft” refusals, which were coded as callbacks.

of the supplemental sample. Physicians for whom neither an address nor a telephone number could be found comprised about 6 percent of the site sample and 5 percent of the supplemental sample.

Compared with Round Two, the fraction of the combined site and supplemental samples represented by completed interviews remained about the same (49 percent in Round Two compared with 48 percent in Round Three), and the fraction represented by ineligibles also remained the same (11 percent in each round). However, the fraction represented by located nonrespondents increased from 32 to 36 percent, while the fraction of unlocatables declined from 8 to 6 percent. While we increased the fraction of the sample that could be located, this was offset by a slightly higher nonresponse rate.

In the next section, we show how geographic, demographic, practice, and survey characteristics affect the ability to locate physicians, and if they are located, the likelihood that they would agree to be interviewed.

C. FACTORS RELATED TO LOCATION AND RESPONSE

1. Background

Two factors determined physician participation. First, because this was a CATI survey, we had to obtain an office or home telephone number for the sampled physician. Second, the physician had to agree to complete the survey. Here, we examine three sets of characteristics that may be related either to locating a physician or to completing an interview with one:

1. Geographic differences
2. Demographic and practice differences based on data available from the American Medical Association (AMA) and American Osteopathic Association (AOA) sampling frames for nearly all sampled physicians
3. Round Two characteristics of reinterview and noninterview physicians

To develop procedures for adjusting for nonresponse, we analyzed the relationships between these characteristics and our ability to locate and interview physicians (see Chapter V). Here, we summarize locating and response patterns that might be helpful in planning future rounds of the survey.

For the nonresponse analysis, we selected the following characteristics from the AMA and AOA sample databases:

- Region¹
- Metropolitan Statistical Area (MSA)
- Age
- Board certification in primary specialty
- Country of graduation from medical school: USA/Canada and others
- Gender
- Type of Practice (from AMA)²
- Specialty (coded)³
- Income for physicians who responded in Round Two (reinterview physicians)
- Disposition Code in Round Two for the physicians who were sampled in Round Two who did not complete the interview⁴

¹Region was based in the four census areas of the country: Northeast, North Central, South, and West.

²Present employment was based on the last time the physician provided this information to the AMA. Consequently, this variable would have been out of date for many physicians. Furthermore, a substantial fraction of physicians were coded by the AMA in a nonspecified “other” category, rather than the coded categories of solo practitioner, partner, group practice member, or HMO employee. Present employment was coded as solo or partnership practice, group practice, and other.

³Table C.2 shows the specialty codes used to group physicians for nonresponse and weighting adjustments; the groups we chose were general and family practice, general internal medicine, pediatrics, surgery, psychiatry, and other specialties.

⁴The disposition code for Round Two of the noninterview physicians: ineligible, refusals, and unknown location.

TABLE C.2

CLASSIFICATION OF SPECIALTY CODES INTO CLASSES FOR NONRESPONSE ADJUSTMENTS
FOR THE ROUND THREE SURVEY

Collapsed Specialty	Specialty Code	Collapsed Specialty	Specialty Code	Collapsed Specialty	Specialty Code	Specialty Code	Specialty Code
General/Family Practice	FP	Surgeons	AS	Other specialties	A	ICE	PDA
	FPG		CCA		AI	ID	PDC
	GP		CCS		BRH	IG	PDE
	IMG		CDS		C	MFM	PDI
	NTR		CRS		CCM	MG	PDO
			CTS		CCP	MP	PDP
			FPS		CD	MPM	PDS
			GS		CHN	N	PEM
			HNS		CN	NEP	PG
			HSO		D	NO	PHO
Internal Medicine	AM		HSP	DIA	NPM	PLM	
	AN		NS	DR	OAR	PM	
	BBK		ORS	EM	OBG	PMD	
	DBP		PS	END	OBS	PN	
	IM		S	FSM	OGS	PO	
	LM		SO	GE	OM	PPR	
	MPH		TRS	GER	ON	PSM	
	NM		TS	GO	OP	PUD	
	PTH		VS	GPM	OPH	PYA	
	RNR			GYN	OS	R	
	US	Psychiatry	ADM	HEM	OSM	REN	
			ADP	HEP	OSS	RHU	
			CHP	HMP	OTO	RM	
			P	HO	OTR	RO	
			PFP	HS	PCC	U	
			PYG			UP	
			SM				

Note: Specialty code is taken from AMA or AOA Masterfile in 2000.

In Tables C.4 and C.5, we summarize the response and location rate by sample. The rest of this appendix describes the response pattern for the three subgroups (*reinterviews*, *noninterviews*, and *new physicians*).

2. Location and Response Rates by Subgroup

Location and response rates vary by subgroup (reinterviews, noninterviews, and new) (Table C.3). Here, we define the location rate as the ratio of the weighted sample count for located physicians to the weighted sample count for all attempted cases. The weighted percentage completed, *among located physicians*, is the weighted sum of physicians who completed the interview or were screened out as ineligible divided by the weighted sample count of located physicians. The weighted percentage completed, among all physicians for whom an interview was attempted, is the weighted sum of physicians who completed the interview or were screened out as ineligible divided by the weighted sample count of all attempted cases. We used the weighted sum of eligible and ineligible physicians, because both represented successful interviewing end points.

Since reinterviewed physicians had participated in the second round of the survey, nearly all were located. The location rate for the reinterview subgroup was 98.5 percent for the site sample and 98.6 percent for the supplemental sample. The location rates for Round Two noninterviews and new sample are similar, varying from 90 to 91 percent in both strata and samples. We used the logistic regression models for location to compute propensity scores for the physicians who were located. The adjustment factors had to adjust for less than 10 percent of the sampled physicians who were not located.

Among subgroups, response rates vary more than location rates. The response rates for reinterview physicians that are located are 81.2 percent for the site sample and 82.9 percent for the supplement sample, while the response rates for new physicians that are located are 60.0

TABLE C.3

WEIGHTED LOCATION AND RESPONSE RATES BY SURVEY AND SUBGROUP

Subgroups ^a	Survey	Total Sampled Attempted	Weighted Total	Weighted Located	Weighted Completes	Percent Located	Percent Complete Among Located	Weighted Percent Complete
Totals	Site	22,588	482,665	454,395	283,326	94.1	62.3	58.7
	Supplemental	2,352	482,665	455,609	277,323	94.4	60.9	57.5
Reinterviews	Site	10,345	211,936	208,693	169,530	98.5	81.2	80.0
	Supplemental	1,049	195,269	192,619	159,662	98.6	82.9	81.8
Noninterviews	Site	6,682	171,782	156,466	60,282	91.1	38.5	35.1
	Supplemental	633	166,942	153,363	58,575	91.9	38.2	35.1
New	Site	5,561	98,947	89,236	53,514	90.2	60.0	54.1
	Supplemental	670	120,454	109,627	59,086	91.0	53.9	49.0

^aThe three subgroups are based on their Round Two interview status: “reinterviews” are the physicians who completed the Round Two interview; “noninterviews” are the physicians who were selected for the Round Two sample but who did not complete the interview (nonlocated, refusals, or ineligible); “new” are the physicians in the Round Three frame who were not selected for the Round Two sample.

TABLE C.4

WEIGHTED LOCATION AND RESPONSE RATES FOR THE SITE SAMPLE, BY PHYSICIAN CHARACTERISTICS

Characteristic	Total Sample Attempted	Total Located Physicians	Total Completes	Weighted Sample Attempted Count	Weighted Sample Located Count	Weighted Completes	Weighted Percentage Located	Weighted Percentage Complete/ Located	Weighted Percentage Complete
Total	22,588	21,129	13,666	482,665	454,395	283,326	94.1	62.4	58.7
Gender									
Male	16,341	15,459	9,959	367,271	348,439	216,819	94.9	62.2	59.0
Female	6,247	5,670	3,707	115,393	105,956	66,508	91.8	62.8	57.6
Medical School									
USA	16,668	15,728	10,398	361,792	343,646	218,760	95.0	63.7	60.5
Other	5,920	5,401	3,268	120,874	110,749	64,566	91.6	58.3	53.4
Age Category									
Less than 40	5,186	4,636	2,941	92,827	83,958	52,764	90.4	62.8	56.8
40-49	7,544	7,062	4,516	163,621	153,429	93,874	93.8	61.2	57.4
More than 50	9,858	9,431	6,209	226,216	217,009	136,687	95.9	63.0	60.4
Specialty									
General/family practice	6,157	5,786	3,738	78,916	73,800	45,952	93.5	62.3	58.2
Internal medicine	6,016	5,490	3,304	75,152	68,611	39,637	91.3	57.8	52.7
Pediatrics	3,202	2,963	2,075	38,070	34,983	23,621	91.9	67.5	62.0
Specialist	7,213	6,890	4,549	290,527	277,003	174,117	95.3	62.9	59.9
Region									
Northeast	4,948	4,662	3,136	123,472	116,767	75,036	94.6	64.3	60.8
North Central	4,554	4,286	2,791	90,046	85,061	53,132	94.5	62.5	59.0
South	7,567	7,100	4,447	167,955	159,118	96,096	94.7	60.4	57.2
West	5,519	5,081	3,292	101,194	93,450	59,063	92.3	63.2	58.4
MSA									
MSA	20,920	19,541	12,573	428,671	403,170	249,144	94.1	61.8	58.1
Nonmetropolitan	1,668	1,588	1,093	53,994	51,225	34,183	94.9	66.7	63.3
Board-Certified									
Board-certified	15,855	15,048	9,862	351,003	335,421	209,335	95.6	62.4	59.6
Not board-certified	6,733	6,081	3,804	131,662	118,975	73,992	90.4	62.2	56.2
Present Employment									
Solo or 2 practice	5,698	5,512	3,434	125,661	121,415	72,158	96.6	59.4	57.4
Group practice	5,332	5,126	3,497	112,561	109,385	70,421	97.2	64.4	62.6
Other	11,558	10,491	6,735	244,444	223,597	140,747	91.5	62.9	57.6

TABLE C.5

WEIGHTED LOCATION AND RESPONSE RATES FOR THE SUPPLEMENTAL SAMPLE, BY PHYSICIAN CHARACTERISTICS

Characteristic	Total Sample Attempted	Total Located Physicians	Total Completes	Weighted Sample Attempted Count	Weighted Sample Located Count	Weighted Completes	Weighted Percentage Located	Weighted Percentage Complete/ Located	Weighted Percentage Complete
Total	2,352	2,222	1,400	482,665	455,609	218,328	94.4	47.9	45.2
Gender									
Male	1,775	1,700	1,091	365,997	350,520	173,963	95.8	49.6	47.5
Female	577	522	309	116,667	105,089	44,454	90.1	42.3	38.1
Medical School									
USA	1,784	1,707	1,081	365,835	350,319	168,050	95.8	48.0	45.9
Other	568	515	319	116,828	105,290	50,364	90.1	47.8	43.1
Age Category									
Less than 45	865	797	477	167,877	155,109	60,334	92.4	38.9	35.9
45 or more	1,487	1,425	923	314,788	300,499	158,086	95.5	52.6	50.2
Specialty									
PCP	1,007	942	609	192,138	179,810	84,734	93.6	47.1	44.1
Specialist	1,345	1,280	791	290,527	275,799	133,685	94.9	48.5	46.0
Region									
Northeast	561	525	322	117,686	110,045	49,825	93.5	45.3	42.3
North Central	546	523	330	106,852	102,332	49,172	95.8	48.1	46.0
South	763	720	460	159,651	150,334	73,560	94.2	48.9	46.1
West	482	454	288	98,475	92,897	46,042	94.3	49.6	46.8
MSA									
MSA	1,958	1,845	1,158	406,330	382,685	180,791	94.2	47.2	44.5
Nonmetropolitan	394	377	242	76,335	72,924	37,631	95.5	51.6	49.3
Board-certified									
Board-certified	1,651	1,589	1,006	343,721	330,082	163,077	96.0	49.4	47.4
Not board-certified	701	633	394	138,945	125,526	55,339	90.3	44.1	39.8
Present Employment									
Solo or 2 practice or Group practice	1,198	1,163	751	252,094	244,345	128,265	96.9	52.5	50.9
Other	1,154	1,059	649	230,570	211,262	90,157	91.6	42.7	39.1

percent for the site sample and 53.9 percent for the supplement sample. For the noninterview physicians that are located, the response rates are only 38.5 percent for the site sample and 38.2 percent for the supplement sample.

Tables C.6 through C.11 provide location and completion rates by type of sample (site and supplemental) and subgroup, for the physician characteristics available for the entire sample. Tables C.6, C.7, and C.8 provide these data for the site sample and Tables C.9, C.10, and C.11 for the supplemental sample.

3. Locating Physicians

The following discussion focuses on two of the three subgroups for the site sample: (1) noninterview, and (2) new (Tables C.7 and C.8). (For the reinterview subgroup, the percentage of physicians who were located exceeds 97 percent, and there was little variation.) In the supplemental sample, the results (Tables C.9 and C.11) are similar, but subgroup sample sizes were small and are not discussed. Across both subgroups, we located approximately 90 percent of the released site sample. Differences in location rates were generally small. They are described below:

- **Region:** Location rates in the west (88 percent for both noninterviews and new physicians) were slightly lower than in other regions, where they varied from 90 to 93 percent.
- **MSA:** For the new-physician subgroup, it was slightly easier to locate a physician in the nonmetropolitan areas (92 percent) than in the MSAs (90 percent). The location rate for both areas was 91 percent for noninterview sample.
- **Age:** Young physicians (under 40), who generally are more mobile than older ones, were slightly more difficult to locate (less than 90 percent located in both subgroups). Location rates increased with age, with physicians 50 and older easiest to locate.

TABLE C.6

WEIGHTED LOCATION AND RESPONSE RATES FOR THE REINTERVIEW SITE SAMPLE, BY PHYSICIAN CHARACTERISTICS

Characteristic	Total Sample Attempted	Total Located Physicians	Total Completes	Weighted Sample Attempted Count	Weighted Sample Located Count	Weighted Completes	Weighted Percentage Located	Weighted Percentage Complete/ Located	Weighted Percentage Complete
Total	10,345	10,160	8,341	211,936	208,693	169,530	98.5	81.2	80.0
Gender									
Male	7,830	7,713	6,327	167,097	164,905	134,003	98.7	81.3	80.2
Female	2,515	2,447	2,014	44,839	43,788	35,528	97.7	81.1	79.2
Medical School									
USA/Canada	7,805	7,681	6,404	161,692	159,593	131,479	98.7	82.4	81.3
Other	2,540	2,479	1,937	50,244	49,099	38,051	97.7	77.5	75.7
Age Category									
Less than 40	1,256	1,211	984	21,519	20,883	16,778	97.0	80.3	78.0
40-49	3,901	3,813	3,103	79,995	78,134	62,001	97.7	79.4	77.5
More than 50	5,188	5,136	4,254	110,422	109,676	90,751	99.3	82.7	82.2
Specialty									
General/family practice	2,727	2,677	2,227	31,086	30,540	25,579	98.2	83.8	82.3
Internal medicine	2,154	2,106	1,698	23,199	22,705	18,263	97.9	80.4	78.7
Pediatrics	1,488	1,457	1,233	15,507	15,187	12,805	97.9	84.3	82.6
Specialist	3,976	3,920	3,183	142,144	140,260	112,885	98.7	80.5	79.4
Region									
Northeast	2,400	2,368	1,985	54,237	53,712	44,371	99.0	82.6	81.8
North Central	2,160	2,132	1,740	41,796	41,301	33,313	98.8	80.7	79.7
South	3,342	3,269	2,636	72,699	71,227	57,062	98.0	80.1	78.5
West	2,443	2,391	1,980	43,205	42,453	34,784	98.3	81.9	80.5
MSA									
MSA	9,518	9,345	7,655	187,396	184,513	149,199	98.5	80.9	79.6
Nonmetropolitan	827	815	686	24,540	24,180	20,332	98.5	84.1	82.9
Board-Certified									
Board-certified	7,871	7,740	6,405	166,129	163,856	133,733	98.6	81.6	80.5
Not board-certified	2,474	2,420	1,936	45,807	44,837	35,797	97.9	79.8	78.2
Type of Practice									
Solo or 2 practice	3,014	2,972	2,409	61,989	61,370	49,278	99.0	80.3	79.5
Group practice	2,961	2,927	2,478	58,124	57,647	48,553	99.2	84.2	83.5
Other	4,370	4,261	3,454	91,824	89,676	71,699	97.7	80.0	78.1
Income (at Round 2)									
Less than \$100,000	2,210	2,142	1,818	37,795	36,781	30,981	97.3	84.2	82.0
\$100,000-\$150,000	3,492	3,420	2,802	58,534	57,479	46,919	98.2	81.6	80.2
More than \$150,000	4,643	4,598	3,721	115,606	114,433	91,631	99.0	80.1	79.3

TABLE C.7

WEIGHTED LOCATION AND RESPONSE RATES FOR THE NONINTERVIEW SITE SAMPLE, BY PHYSICIAN CHARACTERISTICS

Characteristic	Total Sample Attempted	Total Located Physicians	Total Completes	Weighted Sample Attempted Count	Weighted Sample Located Count	Weighted Completes	Weighted Percentage Located	Weighted Percentage Complete/ Located	Weighted Percentage Complete
Total	6,682	5,999	2,332	171,782	156,466	60,282	91.1	38.5	35.1
Gender									
Male	4,836	4,427	1,656	131,257	120,969	45,375	92.2	37.5	34.6
Female	1,846	1,572	676	40,524	35,497	14,907	87.6	42.0	36.8
Medical School									
USA/Canada	4,825	4,410	1,783	127,449	117,896	47,582	92.5	40.4	37.3
Other	1,857	1,589	549	44,333	38,571	12,701	87.0	32.9	28.7
Age Category									
Less than 40	876	752	308	17,445	15,334	6,666	87.9	43.5	38.2
40-49	2,371	2,113	779	60,163	54,176	20,115	90.1	37.1	33.4
More than 50	3,435	3,134	1,245	94,173	86,957	33,501	92.3	38.5	35.6
Specialty									
General/family practice	1,923	1,740	669	29,537	26,653	10,270	90.2	38.5	34.8
Internal medicine	1,960	1,740	648	29,721	26,538	9,874	89.3	37.2	33.2
Pediatrics	888	756	352	13,151	11,266	5,230	85.7	46.4	39.8
Specialist	1,911	1,763	663	99,372	92,010	34,908	92.6	37.9	35.1
Region									
Northeast	1,451	1,318	516	43,870	40,221	16,307	91.7	40.5	37.2
North Central	1,349	1,215	455	31,768	28,925	10,225	91.1	35.4	32.2
South	2,169	1,966	752	58,439	54,193	20,056	92.7	37.0	34.3
West	1,713	1,500	609	37,705	33,127	13,695	87.9	41.3	36.3
MSA									
MSA	6,259	5,614	2,177	153,145	139,409	53,113	91.0	38.1	34.7
Nonmetropolitan	423	385	155	18,637	17,057	7,169	91.5	42.0	38.5
Board-Certified									
Board-certified	4,773	4,366	1,701	128,014	118,950	44,868	92.9	37.7	35.1
Not board-certified	1,909	1,633	631	43,768	37,516	15,415	85.7	41.1	35.2
Type of Practice									
Solo or 2 practice	1,931	1,819	620	50,330	47,402	15,794	94.2	33.3	31.4
Group practice	1,570	1,470	576	41,421	39,569	14,560	95.5	36.8	35.2
Other	3,181	2,710	1,136	80,031	69,496	29,928	86.8	43.1	37.4
R2 Panel									
Ineligible	787	715	497	19,580	18,152	12,733	92.7	70.1	65.0
Refusal	4,688	4,549	1,375	123,270	120,058	36,098	97.4	30.1	29.3
Not located	1,207	735	460	28,931	18,256	11,452	63.1	62.7	39.6

TABLE C.8

WEIGHTED LOCATION AND RESPONSE RATES FOR THE NEW SITE SAMPLE, BY PHYSICIAN CHARACTERISTICS

Characteristic	Total Sample Attempted	Total Located Physicians	Total Completes	Weighted Sample Attempted Count	Weighted Sample Located Count	Weighted Completes	Weighted Percentage Located	Weighted Percentage Complete/ Located	Weighted Percentage Complete
Total	5,561	4,970	2,993	98,947	89,236	53,514	90.2	60.0	54.1
Gender									
Male	3,675	3,319	1,976	68,917	62,565	37,441	90.8	59.8	54.3
Female	1,886	1,651	1,017	30,030	26,671	16,073	88.8	60.3	53.5
Medical School									
USA/Canada	4,038	3,637	2,211	72,651	66,157	39,699	91.1	60.0	54.6
Other	1,523	1,333	782	26,297	23,079	13,814	87.8	59.9	52.5
Age Category									
Less than 40	3,054	2,673	1,649	53,863	47,741	29,320	88.6	61.4	54.4
40-49	1,272	1,136	634	23,463	21,119	11,758	90.0	55.7	50.1
50-59	542	502	244	9,850	9,094	4,624	92.3	50.8	47.0
60 or more	693	659	466	11,771	11,282	7,811	95.8	69.2	66.4
Specialty									
General/family practice	1,507	1,369	842	18,293	16,607	10,103	90.8	60.8	55.2
Internal medicine	1,902	1,644	958	22,232	19,368	11,500	87.1	59.4	51.7
Pediatrics	826	750	490	9,412	8,530	5,586	90.6	65.5	59.4
Specialist	1,326	1,207	703	49,011	44,733	26,324	91.3	58.8	53.7
Region									
Northeast	1,097	976	635	25,365	22,834	14,358	90.0	62.9	56.6
North Central	1,045	939	596	16,482	14,835	9,594	90.0	64.7	58.2
South	2,056	1,865	1,059	36,817	33,698	18,978	91.5	56.3	51.6
West	1,363	1,190	703	20,284	17,870	10,584	88.1	59.2	52.2
MSA									
MSA	5,143	4,582	2,741	88,130	79,248	46,832	89.9	59.1	53.1
Nonmetropolitan	418	388	252	10,817	9,988	6,682	92.3	66.9	61.8
Board-Certified									
Board-certified	3,211	2,942	1,756	56,860	52,615	30,734	92.5	58.4	54.1
Not board-certified	2,350	2,028	1,237	42,087	36,622	22,780	87.0	62.2	54.1
Type of Practice									
Solo or 2 practice	753	721	405	13,342	12,643	7,086	94.8	56.0	53.1
Group practice	801	729	443	13,016	12,169	7,308	93.5	60.1	56.2
Other	4,007	3,520	2,145	72,589	64,425	39,120	88.8	60.7	53.9

TABLE C.9

WEIGHTED LOCATION AND RESPONSE RATES FOR THE REINTERVIEW IN THE SUPPLEMENTAL SAMPLE,
BY PHYSICIAN CHARACTERISTICS

Characteristic	Total Sample Attempted	Total Located Physicians	Total Completes	Weighted Sample Attempted Count	Weighted Sample Located Count	Weighted Completes	Weighted Percentage Located	Weighted Percentage Complete/ Located	Weighted Percentage Complete
Total	1,049	1,035	858	195,269	192,619	159,662	98.6	82.9	81.8
Gender									
Male	849	840	698	158,627	156,915	130,370	98.9	83.1	82.2
Female	200	195	160	36,641	35,704	29,291	97.4	82.0	79.9
Medical School									
USA/Canada	784	774	659	146,096	144,195	122,600	98.7	85.0	83.9
Other	265	261	199	49,172	48,424	37,062	98.5	76.5	75.4
Age Category									
Less than 45	292	288	242	54,038	53,286	44,734	98.6	84.0	82.8
45 or more	757	747	616	141,231	139,333	114,928	98.7	82.5	81.4
Specialty									
General/family practice	179	176	151	31,035	30,526	26,244	98.4	86.0	84.6
Internal medicine	145	145	118	25,233	25,233	20,545	100.0	81.4	81.4
Pediatrics	98	98	88	17,013	17,013	15,273	100.0	89.8	89.8
Specialist	627	616	501	121,988	119,847	97,600	98.2	81.4	80.0
Region									
Northeast	260	254	206	48,302	47,166	38,211	97.7	81.0	79.1
North Central	241	240	200	44,507	44,305	36,893	99.6	83.3	82.9
South	334	329	275	62,684	61,747	51,686	98.5	83.7	82.5
West	214	212	177	39,776	39,400	32,871	99.1	83.4	82.6
MSA									
MSA	840	828	693	156,609	154,296	129,137	98.5	83.7	82.5
Nonmetropolitan	209	207	165	38,660	38,324	30,525	99.1	79.6	79.0
Board-Certified									
Board-certified	781	771	638	145,831	143,915	119,091	98.7	82.8	81.7
Not board-certified	268	264	220	49,438	48,704	40,570	98.5	83.3	82.1
Type of Practice									
Solo or 2 practice	331	328	270	61,608	61,054	50,247	99.1	82.3	81.6
Group practice	287	284	243	53,372	52,776	45,207	98.9	85.7	84.7
Other	431	423	345	80,288	78,789	64,207	98.1	81.5	80.0
Income									
Less than \$100,000	194	191	162	35,617	35,087	29,718	98.5	84.7	83.4
\$100,000-\$150,000	287	284	222	52,232	51,626	40,295	98.8	78.1	77.2
More than \$150,000	568	560	474	107,420	105,906	89,649	98.6	84.6	83.5

TABLE C.10

WEIGHTED LOCATION AND RESPONSE RATES FOR THE NONINTERVIEW SUPPLEMENTAL SAMPLE,
BY PHYSICIAN CHARACTERISTICS

Characteristic	Total Sample Attempted	Total Located Physicians	Total Completes	Weighted Sample Attempted Count	Weighted Sample Located Count	Weighted Completes	Weighted Percentage Located	Weighted Percentage Complete/ Located	Weighted Percentage Complete
Total	633	581	221	166,942	153,363	58,575	91.9	38.2	35.1
Gender									
Male	471	443	165	123,557	116,542	43,501	94.3	37.3	35.2
Female	162	138	56	43,385	36,821	15,074	84.9	40.9	34.7
Medical School									
USA/Canada	480	453	172	126,284	119,308	45,357	94.5	38.0	35.9
Other	153	128	49	40,658	34,055	13,218	83.8	38.8	32.5
Age Category									
Less than 45	169	157	58	44,576	41,351	15,513	92.8	37.5	34.8
45 or more	464	424	163	122,366	112,012	43,062	91.5	38.4	35.2
PCP Status									
PCP	244	220	87	63,992	57,784	22,582	90.3	39.1	35.3
Specialist	389	361	134	102,950	95,579	35,993	92.8	37.7	35.0
Region									
Northeast	142	130	41	40,127	36,849	11,525	91.8	31.3	28.7
North Central	145	134	49	35,706	33,128	12,186	92.8	36.8	34.1
South	217	198	81	57,382	52,262	21,782	91.1	41.7	38.0
West	129	119	50	33,727	31,124	13,081	92.3	42.0	38.8
MSA									
MSA	558	513	193	147,320	135,697	51,563	92.1	38.0	35.0
Nonmetropolitan	75	68	28	19,622	17,665	7,012	90.0	39.7	35.7
Board-Certified									
Board-certified	471	441	165	124,073	116,104	43,891	93.6	37.8	35.4
Not board-certified	162	140	56	42,870	37,259	14,684	86.9	39.4	34.3
Type of Practice									
Solo or 2 practice	209	197	71	54,998	51,965	18,887	94.5	36.3	34.3
Group practice	155	146	52	40,699	38,354	13,827	94.2	36.1	34.0
Other	269	238	98	71,245	63,043	25,862	88.5	41.0	36.3
R2 Panel									
Ineligible and refusals	524	509	173	138,114	134,219	45,680	97.2	34.0	33.1
Not located	109	72	48	28,828	19,144	12,895	66.4	67.4	44.7

TABLE C.11

WEIGHTED LOCATION AND RESPONSE RATES FOR THE NEW SUPPLEMENTAL SAMPLE,
BY PHYSICIAN CHARACTERISTICS

Characteristic	Total Sample Attempted	Total Located Physicians	Total Completes	Weighted Sample Attempted Count	Weighted Sample Located Count	Weighted Completes	Weighted Percentage Located	Weighted Percentage Complete/ Located	Weighted Percentage Complete
Total	670	606	321	120,454	109,627	59,086	91.0	53.9	49.1
Gender									
Male	455	417	228	83,813	77,063	42,877	92.0	55.6	51.2
Female	215	189	93	36,641	32,564	16,210	88.9	49.8	44.2
Medical School									
USA/Canada	520	480	250	93,455	86,816	46,164	92.9	53.2	49.4
Other	150	126	71	26,998	22,811	12,923	84.5	56.7	47.9
Age Category									
Less than 45	404	352	177	69,263	60,472	31,371	87.3	51.9	45.3
45 or more	266	254	144	51,191	49,154	27,715	96.0	56.4	54.1
PCP Status									
PCP	341	303	165	54,865	49,254	27,481	89.8	55.8	50.1
Specialist	329	303	156	65,589	60,373	31,605	92.1	52.3	48.2
Region									
Northeast	159	141	75	29,257	26,030	14,047	89.0	54.0	48.0
North Central	160	149	81	26,639	24,899	13,923	93.5	55.9	52.3
South	212	193	104	39,585	36,325	19,641	91.8	54.1	49.6
West	139	123	61	24,972	22,373	11,475	89.6	51.3	46.0
MSA									
MSA	560	504	272	102,401	92,692	50,523	90.5	54.5	49.3
Nonmetropolitan	110	102	49	18,053	16,935	8,564	93.8	50.6	47.4
Board-Certified									
Board-certified	399	377	203	73,817	70,063	37,927	94.9	54.1	51.4
Not board-certified	271	229	118	46,637	39,563	21,159	84.8	53.5	45.4
Type of Practice									
Solo or 2 practice or group practice	216	208	115	41,417	40,196	22,491	97.1	56.0	54.3
Other	454	398	206	79,037	69,430	36,595	87.9	52.7	46.3

- **Board Certification in Primary Specialty:** Board-certified physicians were easier to locate than non-board-certified ones. For the “new” sample, 93 percent of board-certified and 87 percent of non-board-certified physicians were located; for noninterview physicians, the location rates were 93 and 86 percent, respectively.
- **Country of Medical School:** Graduates of US/Canadian medical schools were somewhat easier to locate (91 percent of new physicians and 93 percent of noninterview physicians) than graduates from schools in other countries (88 percent of new and 87 of noninterview physicians).
- **Gender:** Because name changes can increase the difficulty of locating female physicians, it is not surprising that men were easier to locate (92 percent of noninterview physicians, 91 percent of new physicians) than women (88 percent of noninterview physicians, 89 percent of new physicians).
- **Type of Practice:** For most physicians, this variable was not specified in the AMA Masterfile, so we classified the majority in the “other” category. Not surprisingly, physicians classified as “other” were more difficult to locate, since they had not contacted the AMA with current employment information. We located only 87 percent of physicians in the noninterview stratum and 89 percent of those in the new subgroup. In these subgroups, location rates ranged from 94 to 96 percent for physicians who were classified by type of practice.
- **Specialty:** For both subgroups, specialists were slightly easier to locate than PCPs (general and family practice, general internal medicine, and pediatrics).
- **Disposition Code in Round Two for the Noninterview Physicians:** The physicians who refused to be interviewed in Round Two were the easier ones to locate among the noninterview subgroup, with a location rate of 97 percent. The most difficult to locate in this stratum were the physicians who could not be located in Round Two, with a rate of only 63 percent.

4. Response Rate

Overall, the response rate for the site sample was 58.7 percent, and the rate for the supplemental sample was 57.5 percent (Table C.3). However, for the nonresponse analysis, we defined the *conditional* response rate as the ratio of the weighted percentage of physicians who were ineligible or completed an interview divided by the weighted percentage of physicians who were located. This rate is a weighted estimate of the conditional probability of obtaining a

response among located physicians. For ease of exposition, we will refer to the conditional response rate as simply the response rate in this section.

The response rate among the located physicians was 62 percent for the site sample and 61 percent for the supplement sample. Variation in site sample response rates, by geographic differences, demographic and practice differences, and Round Two characteristics, is discussed below. Patterns for the supplemental sample are similar, but sample sizes for most subgroups were very small and are not discussed.

- **Region:** The percentage of physicians who completed the interview varied by subgroup. Among reinterview physicians, response rates ranged from 80 to 83 percent. The response rates for noninterview physicians ranged from 35 percent to 41 percent. Response rates of new physicians ranged from 56 percent to 65 percent. There were no clear regional response patterns across subgroup.
- **MSA:** It was easier to get an interview with physicians in nonmetropolitan areas (response rates of 84 percent among the reinterviews, 42 percent among the noninterviews, and 67 percent among the new physicians) than in MSAs (81 percent for the reinterviews, 38 percent among noninterviews, and 59 percent among the new physicians). This pattern was also observed in the household survey.
- **Age:** Middle-aged physicians (from 40 to 49) had the lowest response rates in the three subgroups. There is an indication that location and response patterns differ by age. On the one hand, middle-aged physicians had the lowest response rates among all the other age categories; on the other hand, the lowest location rates were among the youngest physicians.
- **Board-Certification in Primary Specialty:** Response rates varied among the subgroups. For reinterviewed physicians, response rates differed by less than 2 percentage points. However, for both the new and the noninterview strata, board-certified physicians who were not board-certified were more likely to respond by 3 and 4 percentage points, respectively.
- **Country of Medical School:** Graduates of US medical schools had somewhat higher response rates (82 percent for the reinterview physicians, 40 percent for the noninterview physicians) than graduates from other countries (78 percent for the reinterview physicians, 33 percent for the noninterview physicians). The new physicians had the same response rate of 60 percent for the two categories.

- **Gender:** It was slightly easier to locate men than women, but for noninterview physicians it was slightly easier to obtain a complete interview from women, once they were located (42 percent response rate), than for men (38 percent response rate). However, gender differences for the new and reinterview subgroups are negligible.
- **Specialty:** Pediatricians had the highest response rates (84 percent for reinterview physicians, 46 percent for the noninterview physicians, and 66 percent for the new physicians), followed by the general and family practice physicians. Response rates were lower for internists and specialists.
- **Income for Reinterview Physicians⁵:** It was easier to locate a physician with higher income, but the response rate was slightly higher for physicians with lower incomes. Reinterviewed physicians who reported less than \$100,000 per year for the Round Two survey had an 84 percent response rate for Round Three, compared with 82 percent for those reporting \$100,000 to \$150,000 and 80 percent for those reporting more than \$150,000.
- **Disposition Code in Round Two for the Noninterview Physicians:** Noninterview physicians who refused to be interviewed in Round Two were easier to locate but harder to interview (response rate of 30 percent). The highest interview rates in this stratum (70 percent) were for the physicians who were ineligible in Round Two.

5. Summary

We were able to compare location and response rates for several variables: board certification in primary specialty, country of graduation from medical school, gender, type of practice, specialty, income (for reinterview physicians), and Round Two disposition code (for noninterviewed physicians). After controlling for subgroups (reinterview, noninterview, and new sample), we found differences in these rates to be generally very small and sometimes balanced out (with lower location rates balanced by higher response rates). Therefore, we conclude that despite an overall response rate of approximately 58 percent within the subgroups, there was little evidence of a systematic underrepresentation among the demographic and

⁵This variable was based on the Round 2 interview and was not available for noninterview or new sample.

practice characteristics available for all physicians from the AMA Masterfile. Moreover, these differences were controlled for by nonresponse adjustments applied to sample weights.

APPENDIX D

CONCEPTUAL FRAMEWORK FOR COMBINED-SAMPLE ESTIMATES

For computing survey estimates, $Est(Y)$, combined across the two sample components, separate estimates can be computed for each sample component and combined using the equation:

$$(1) \quad Est(Y) = \lambda Y(Site) + (1 - \lambda) Y(Supp),$$

where $Y(Site)$ is the survey estimate from the site sample, $Y(Supp)$ is the survey estimate from the supplemental sample, and λ (lambda) is an arbitrary constant between 0 and 1. For the sampling variance, $V(Y)$, the estimate is computed using the equation:

$$(2) \quad V(Y) = \lambda^2 V(Y(Site)) + (1 - \lambda)^2 V(Y(Supp)),$$

where $V(Y(Site))$ is the sampling variance for the estimate from the site sample, and $V(Y(Supp))$ is the sampling variance for the estimate from the supplemental sample. Any value of λ would result in an unbiased estimate of the survey estimate, but not necessarily an estimate with the minimum sampling variance. A lambda value producing a sampling variance at its minimum value would result in the shortest confidence interval and, by implication, the most accurate point estimate.

A value of lambda can be computed in an optimal (minimum variance) sense as:

$$(3) \quad \lambda = 1/V(Y(Site)) / [1/V(Y(Site)) + 1/V(Y(Supp))]$$

$$= V(Y(Supp)) / [V(Y(Site)) + V(Y(Supp))].$$

In this case, the minimum variance is:

$$(4) \quad V(Y) = [V(Y(Site)) * V(Y(Supp))] / [V(Y(Site)) + V(Y(Supp))].$$

To compute the combined-sample estimate with minimum variance, survey estimates are derived by first computing the estimates for each sample component, computing a value of λ for each pair of estimates, and then combining the point and variance estimates. Although it produces the minimum variance estimates, the process is computer intensive and results in some inconsistencies among estimates for percentages and proportions because of differing values among levels of a categorical variable.

The alternative approach is to identify one or more values of lambda and compute combined-sample weights. To compute the combined weight for physicians in the site sample:

$$(5) \quad WT(Combined) = WT(trimmed \text{ site sample weight}).$$

For units in the supplemental sample:

$$(6) \quad WT(Combined) = (1 - \lambda) WT(trimmed \text{ supplemental weight}).$$

After the combined-sample weight is computed, point and variance estimates can be computed directly using the SUDAAN survey data analysis software. The SUDAAN program code incorporates the estimation structure for the site sample and the supplemental sample as separate sets of strata.