CALIFORNIA PHYSICIANS 2002:

Practice and Perceptions

DECEMBER 2002

Kevin Grumbach, MD

Catherine Dower, JD

Sunita Mutha, MD

Jean Yoon, MHS

William Huen

Dennis Keane, MPH

Diane R. Rittenhouse, MD, MPH

Andrew B. Bindman, MD

CALIFORNIA WORKFORCE INITIATIVE

THE CENTER
FOR THE HEALTH PROFESSIONS
University of California, San Francisco

Suggested citation style: Grumbach K, Dower C, Mutha S, Yoon J, Huen W, Keane D, Rittenhouse D, Bindman A. *California Physicians 2002: Practice and Perceptions*. San Francisco, CA: California Workforce Initiative at the UCSF Center for the Health Professions. December 2002.

California Workforce Initiative

The California Workforce Initiative, housed at the UCSF Center for the Health Professions and funded by the California HealthCare Foundation and The California Endowment, is designed to explore, promote and advance reform within the California health care workforce. This multi-year initiative targets supply and distribution, diversity, skill base and regulation of health workers, utilization of health care workforce and health care workers in transition.

CALIFORNIA WORKFORCE INITIATIVE

The Center for the Health Professions

The mission of the Center for the Health Professions is to assist health care professionals, health professions schools, care delivery organizations and public policy makers respond to the challenges of educating and managing a health care workforce capable of improving the health and well being of people and their communities.

The Center is committed to the idea that the nation's health will be improved if the public is better informed about the work of health professionals.

THE CENTER FOR THE HEALTH PROFESSIONS
University of California, San Francisco

California HealthCare Foundation

CHCF, based in Oakland, is an independent philanthropy committed to improving California's health care delivery and financing systems. Formed in 1996, our goal is to ensure that all Californians have access to affordable, quality health care. For more information, visit us online at www.chcf.org.

CALIFORNIA HEALTHCARE FOUNDATION

The California Endowment

The California Endowment, the state's largest health care foundation, was established to expand access to affordable, quality health care for underserved individuals and communities. The Endowment provides grants to organizations and institutions that directly benefit the health and well-being of the people of California.

THE CALIFORNIA ENDOWMENT

Acknowledgments

This report was made possible through the support of the California HealthCare Foundation, which, in partnership with The California Endowment, funds the California Workforce Initiative. Additional support was provided by the Bureau of Health Professions, Health Resources and Services Administration.

The authors are grateful for the significant contributions made to this report by Center staff and surveyors, including Alexandra McConnell-Hill, Tina McRee, Bram Briggance, David Brody, Rosa Hippler, Barbara Westree, Matt Dickow, Elliot Ross, and Cynthia Salinas.

We also acknowledge the organizations who endorsed the survey questionnaire.

- California Medical Association
- American College of Obstetricians and Gynecologists, District IX, California
- California Academy of Family Physicians
- American Academy of Pediatrics, District IX, California
- Golden State Medical Association
- American College of Physicians, California Chapter
- American College of Cardiology, California Chapter
- California Academy of Ophthalmology
- American College of Surgeons, San Diego Chapter
- Association of California Neurologists
- California Orthopedic Association

The findings contained in this report do not necessarily reflect the views of the California HealthCare Foundation, The California Endowment, the Bureau of Health Professions or any co-sponsors of the project.

Design: John Malmquist Design / Berkeley, California

TABLE *of* FIGURES

TABLE *of* CONTENTS

EXECUTIVE SUMMARY

California has always been a bellwether state for managed care. Many policy analysts anticipated that by the 21st century, California would represent a fully mature managed care market: most patients would be enrolled in one of a handful of consolidated HMO plans, and most physicians would be working in large organized medical groups.

The results of the 2001/2002 California Physician Survey conducted by the UCSF Center for the Health Professions suggest that a dramatically different scenario is now playing out in California. This survey of a representative sample of 1033 practicing physicians in urban regions of California found that:

- **Physicians in California are dropping out of managed care.**

  Only 58% of patient care physicians in the state are accepting new patients if the patient has HMO insurance coverage. The percentage of specialists with HMO patients fell from 77% to 62% between 1998 and 2001. The rate of physician participation in private HMO plans is approaching the historically low rate of physician participation in Medi-Cal, the state's insurance plan for low income Californians. *A privately insured HMO patient in California now faces almost as much difficulty as a Medi-Cal patient in obtaining a new patient appointment with a new doctor*. The problem of lack of availability of physicians in many regions of the state is largely due to physicians not accepting patients with certain types of health insurance (or without health insurance altogether) rather than due to an absolute shortage of physicians practicing in California.

- **The "California Model" of loose networks of private practice physicians organized into large managed care practice organizations is unraveling.**

  Almost one half of specialists and one-third of primary care physicians in the state are in solo practice. In addition, fewer physicians in the state are participating in Independent Practice Associations (IPAs), the most common mechanism through which physicians in private practice participate in managed care. Five years ago, three-quarters of all office-based primary care physicians in California participated in an IPA. In 2001, fewer than two-thirds of such physicians participated in an IPA. A little more than half of specialist physicians in California participated in an IPA in 2001, down from two-thirds in 1998.

■ **The managed care organization that appears to have the most "staying power" for California physicians is Kaiser Permanente.**

Physicians working in Kaiser Permanente consistently express more positive opinions about their medical practice organization than do physicians working in IPAs and other types of managed care networks. About 20% of the state's primary care physicians and 15% of specialists work in the Kaiser Permanente system. Compared with office-based physicians, Kaiser Permanente physicians are much more likely to:

- Believe that their practice organization has advantages for shared practice responsibilities and quality of care and not just for obtaining managed care contracts and patient volume,
- Receive financial incentives related to performance based on quality of care and patient satisfaction,
- Rate the practice pattern information they receive from their medical group and health plan as accurate, useful and intended to improve quality of care,
- Work in interdisciplinary teams, and
- Disagree that they experience pressures to limit referrals to specialists or ordering of medical tests.

Other key findings from the 2001/2002 California Physician Survey include:

■ **Compared with a year ago, physicians report a net increase in hours worked per week.**

While the majority of physicians reported no change in the number of hours worked in the past year, almost a third of primary care physicians and a quarter of specialists reported that on average they worked more hours in 2000 than they had the year before. The net change in work effort amounts to an increase of about two hours per week per primary care physician and half an hour per week per specialist.

■ **Most physicians are receiving practice pattern information.**

The majority of physicians reported that they received information about their patients' satisfaction with care, pharmacy prescribing, preventive care service delivery, and disease specific practice patterns. Most physicians said that they found these reports useful when they came from their medical group and less useful when they came from a health plan, IPA, or hospital. Kaiser Permanente physicians rated the utility of these reports higher than did office based physicians.

- **Satisfaction with being a physician has been stable for the past several years.**
  About 80% of California physicians are satisfied with being a physician, similar to the percent reporting satisfaction in past years.

- **Physicians' plans for retirement have not changed over the past several years.**
  About 80% of physicians plan to still be practicing medicine and seeing patients in 3 years, similar to responses from prior surveys.

- **Physicians describe the practice environment in their communities as poor.**
  Although most physicians are still satisfied with being a physician, most nonetheless perceive major problems in recruitment and retention of physicians, payment rates, and overall practice climate in their community.

- **Like many policy analysts, physicians are uncertain about whether there are too many, too few, or just the right number of physicians in their community.**
  About a third of physicians reported that supply was just right; slightly higher percentages felt that the supply was greater than needed and lower percentages thought supply was lower than demand.

- **Most physicians do not feel threatened by legislative expansions of scopes of practice for non-physician clinicians such as nurse practitioners, optometrists, and midwives.**
  Over two-thirds of physicians reported that laws that have increased the scopes of practice for non-physician clinicians have had no effect on physicians' professional security.

- **Many physicians recognize that there are social disparities in access to medical care.**
  In addition to being concerned about how the health care system works for them, physicians also perceive problems in how the system works for certain patient populations. Seventy-seven percent of physicians thought the health care system treated people unfairly based on whether they have insurance, 33% thought the system treated people unfairly based on race and ethnicity and 16% thought the system treated people unfairly based on gender.

INTRODUCTION

As health care in California continues to experience major changes and challenges, it is important to periodically check the pulse of one key group of participants in this system: the state's physicians. How are physicians experiencing the shifting tides of managed care in California? Do physicians feel threatened by the growing numbers of nurse practitioners and other non-physician clinicians in the state? In a state with the nation's most racially and ethnically diverse population, do physicians think that some groups of patients face inequities in access to care due to race, ethnicity, and related characteristics?

In this report, we present the results from the 2001/2002 UCSF California Physician Survey. The report also includes comments made by physicians attending focus groups in the state to enrich the survey data with more qualitative information. The 2001/2002 survey is the third in a series of surveys we have conducted of physicians practicing in urban regions of California, dating back to 1996[1]. The similar methodology used in the surveys allows us to track key trends over time. The 2001/2002 survey and focus groups included questions addressing physician experiences and perceptions in the following areas:

- Managed care
- Physician supply
- Physician satisfaction and retirement plans
- Supply of non-physician clinicians such as nurse practitioners
- Health disparities
- Hospitalists
- Disease management
- Practice Profiles

Managed Care

California has always been a bellwether state for managed care. Many policy analysts anticipated that by the 21st century, California would represent a fully "mature" managed care market: most patients would be enrolled in one of a handful of HMO plans, and most physicians would be working in large organized medical groups. These predictions have been confounded by the "managed care backlash" in the US and a sudden reversal in trends of enrollment in HMOs. For the first time since the introduction of managed care systems in the US, enrollment in health maintenance organizations (HMOs) has begun to

[1] Rural physicians were also surveyed in 2001/2002. Data from the responses of the rural physicians will be presented in future articles and reports.

plateau and even decline. Nationally, HMO enrollment decreased to 23% in 2001, down from a high water mark of 31% in 1996 and its lowest point since 1993 (Kaiser Family Foundation, 2002). In California, the percentage of the state's population enrolled in HMO plans peaked in 1999 at about 65% and dropped to 54% by 2000 (Aventis, 2000; Kaiser Family Foundation, 2002). Patients may not be the only people withdrawing from managed care plans. Reports in the media have featured stories of physicians who are opting out of managed care and refusing HMO contracts. Our study systematically examines whether physician participation in managed care is in fact decreasing in California.

In addition to changing HMO enrollment trends, the managed care backlash has forced many health plans to reconsider policies that have restricted access to referrals and other services. Many managed care plans have relaxed their utilization management controls and begun to offer plan options allowing direct self-referral to specialists. Are these changes in managed care policies translating into changes in physicians' experience of pressures to limit referrals and services?

Many advocates of managed care assert that managed care was developed not only to control costs, but also to improve the quality of medical care. In this view, managed care has stimulated beneficial changes in the organization of care and provided clinicians and health care organizations the tools to improve clinical practice. One development that has featured prominently in the managed care "tool box" is collection and dissemination of information about physician practice patterns-a tool often know as "physician profiling." Although practice profiling may be used to track expenditures as a strategy to control costs, practice profiles may also be used to promote improved care. Profiles may provide information on patients who are not receiving appropriate services (e.g., children who need immunizations or women due for mammograms) or demonstrate whether physicians are achieving desired quality benchmarks (e.g., avoiding surgical complications). Are tools like practice profiles simply the latest in "quality is job #1" rhetoric, or are they being implemented in a manner that successfully engages physicians in quality improvement?

A final issue we addressed in managed care was the differences between HMO models in the state. California has been home to two distinct varieties of HMO, the group model as is found at Kaiser Permanente and the network model (also known as the Independent Practice Association, or IPA, model). Kaiser Permanente is one of the nation's oldest HMOs and represents the traditional form of HMO in which the HMO owns most of its hospitals and contracts with a single physician group (the Permanente Medical Group) closely allied with the HMO. In the alternative network model, HMOs contract with many different hospitals and physician practices. Most physicians in network HMOs remain in independent "office-based" private practice and usually have contracts with

many different HMOs. How do physicians view participation in these two different types of HMO models? As managed care fortunes shift in California, is Kaiser Permanente maintaining greater allegiance among its physicians compared with network HMOs?

Physician Supply

The supply of physicians in California was a major focus of our report *The Practice of Medicine in California: Profile of a Profession* (Dower *et al*., 2001). The data analyzed for that report indicated that the overall supply of physicians per capita in the state was growing throughout the 1990s, but that geographic maldistribution and inadequate physician diversity remained major problems. *The Practice of Medicine in California* provoked considerable comment and debate, with critics disputing the finding that physician supply was increasing in California. On the heels of this report, the California Medical Association issued their own analysis, *And Then There Were None*, suggesting that physicians were fleeing the state in record numbers due to professional dissatisfaction and that California was facing a physician shortage crisis (California Medical Association, 2001). In response to these divergent opinions, our latest 2001/2002 survey asked physicians about their perceptions of the adequacy of physician supply in their community. We also examined trends in physician satisfaction and plans to retire, as well as adding new questions about respondents' experiences with recruitment and retention of physicians in their communities.

Health Disparities

In addition to examining physicians' perceptions about how the health care system is working for them, we explored physicians' perceptions and awareness about how the system works for patients. With the widespread dissemination of its 2001 report on racial disparities in health care, the Institute of Medicine brought new attention to a long-recognized failure of the US health care system (Smedley *et al*., 2002). The report validated and underscored its principal finding, "Racial and ethnic minorities tend to receive a lower quality of healthcare than non-minorities, even when access-related factors, such as patients' insurance status and income, are controlled."

Non-Latino whites now constitute less than half of California's population, making it especially important to examine the attitudes of the state's physicians towards health disparities. Do physicians in the state concur with the findings of the Institute of Medicine about the prevalence of racial and ethnic disparities in health care?

Non-physician Clinicians

Interprofessional disputes over scopes of practice and concerns about competition have long existed among the various health professions. Expanded scopes of practice for non-physician clinicians such as nurse practitioners and optometrists might give patients greater choice of clinicians and might improve access to practitioners, but may also provoke opposing arguments over issues of cost and quality and interprofessional angst and activity. For example, in its 1999–2000 Legislative Report, the California Medical Association reported that it had "...Defeated legislation that would have allowed midwives to practice without supervision from a licensed physician [and] Defeated legislation that would have allowed psychologists to prescribe drugs [but was] not successful defeating ... SB 929 (Palanco) which expands scope of practice for optometrists." (California Medical Association, 2000). Do "rank and file" physicians share the concerns of their professional associations about non-physician clinicians?

Hospitalists and Disease Management Programs

As part of the new environment in which managed care systems have promoted practice reengineering, "hospitalist" and disease management programs continue to evolve in California. The use of hospitalists, physicians who contract with managed care organizations or hospitals to take responsibility for the care of other physicians' hospitalized patients, has taken hold since being introduced a decade ago (Wachter & Goldman, 2002; Wachter & Goldman, 1996). Disease management programs are packages of care for particular diseases, often offered by managed care organizations. Are more physicians in the state working with hospitalists and disease management programs on a regular basis? Are physician attitudes towards hospitalists and disease management programs changing?

A NOTE ON METHODOLOGY

Survey

We mailed self-administered questionnaires to primary care and specialist physicians in the 13 largest urban counties in California (Alameda, Contra Costa, Fresno, Los Angeles, Orange, Riverside, Sacramento, San Bernardino, San Diego, San Francisco, San Mateo, Santa Clara and Solano). The sample physicians were identified from the American Medical Association Physician Masterfile. To be eligible for the survey, physicians had to be listed as providing direct patient care, not in training, and not employed by the federal government. Specialists were eligible who listed their primary specialty as cardiology, endocrinology, gastroenterology, general surgery, neurology, ophthalmology, or orthopedics. Primary care physicians were sampled who listed their primary specialty as family practice, internal medicine, general practice, general pediatrics, or obstetrics and gynecology. Physicians were selected using a probability sample stratified by county and physician race/ethnicity with an oversampling of nonwhite physicians.

We sampled 1096 primary care physicians and 1122 specialist physicians. Sampled physicians were considered ineligible if we found that the physician was deceased, retired, moved out of the study areas, or no longer seeing patients. Completed questionnaires were received from 495 of the 827 eligible primary care physicians (60%) and 538 of the 896 eligible specialist physicians (60%). General demographics on the physicians whose responses are included in this report can be found in appendix A.

Physicians were mailed a five-dollar incentive along with the cover letter, questionnaire and return envelope. Also included was an endorsement letter from supporting physician organizations. Physician professional organizations that endorsed this study include: California Medical Association, American College of Obstetricians and Gynecologists, California Academy of Family Physicians, American Academy of Pediatrics, Golden State Medical Association, American College of Physicians, American College of Cardiology, California Academy of Ophthalmology, American College of Surgeons, California Orthopedic Association, and Association of California Neurologists.

The initial mailing was followed by a second one three weeks later and telephone calls to the office to confirm the address and physician eligibility.

The methodology and selected survey questions used for the 2001 survey were comparable to those used in 1996 and 1998 surveys conducted by the authors,

permitting time trend analyses between 1996 and 2001 for primary care physicians and between 1998 and 2001 for specialists[2]. Analyses were weighted to be generalizable to the overall populations of physicians in the sampled specialties in the 13 study counties. Weights were truncated at the 95th percentile. More information about the 1996 and 1998 surveys can be found in Bindman *et al.*, 1998, and Pena-Dolhun *et al.*, 2001.

Focus Groups

To gain additional insight into results of the survey questions, we conducted five focus groups with California physicians during March and April 2002. The groups were held in the following locations: South San Francisco, Sacramento, Long Beach, San Diego and Fresno. Participants were recruited by local focus group facilities, selecting for licensed physicians who were actively practicing at least two-thirds time, for more than five years, and who had not participated in a focus group in the past six months. Participants were paid an amount ranging from $175 to $250 each, depending on the market, as token of appreciation for their participation.

Each group was one and one-half hours in duration and included 7 to 9 physicians, representing a variety of specialties, practice settings, hospitals, and health care systems. The facilitator had extensive experience in health care, but was not part of the survey team and did not have knowledge of the survey data. The focus group discussion guide addressed the following areas:

- Aspects of practice that physicians liked or disliked
- Experience with recruitment of physicians or other staff
- Attitudes toward and experiences with practice profiling
- Experience with disease management programs
- Opinions about recent reports on health disparities
- Plans for the future of their own practices

Prior to the start of each group, participants completed a short written survey that collected demographic information. For general demographics about the focus group participants, see appendix B. All sessions were audiotaped and transcribed. Representative quotations from these transcriptions are included to help illuminate or highlight quantitative findings from the survey.

[2] In 1998, in addition to surveying a cross-sectional sample of specialists, we also surveyed primary care physicians who had responded to our original 1996 primary care physician survey. Because the primary care physicians studied in 1998 were a longitudinal follow-up sample and not a true cross sectional sample of all primary care physicians in the state in 1998, the responses from the longitudinal sample in 1998 may not be a valid representation of the experiences of all primary care physicians for that year. Therefore, in analyzing in this report trends for primary care physicians, we compare responses for 2001 with the baseline data from the original cross sectional 1996 sample and do not display the 1998 longitudinal data.

Section I INSURANCE

Q: Are California doctors beginning to close their doors to HMO patients?
A: Yes.

California office-based physicians[3] are moving away from Health Maintenance Organization (HMO) participation[4]. Between 1996 and 2001, the percent of office-based primary care physicians with any HMO patients in their practices decreased from 80% to 77%. The percentage of office-based specialists with HMO patients fell more dramatically in a shorter time span, from 77% to 62% between 1998 and 2001. Specialists are also much less likely (13%) than primary care physicians (36%) to have the majority of their patients enrolled in HMOs.[5]

[3] "Office-based" physicians consist of those in private practice and excludes physicians working in the Kaiser-Permanente system

[4] Survey definition of HMO participation included private HMOs and Medi-Cal and Medicare HMOs.

[5] In 1997, 43.8% of California's population was enrolled in HMO plans; this percentage rose to 65% by 1999 and dropped to 54.1% in 2000 (InterStudy 1997; Aventis, 2000; Kaiser Family Foundation, 2002).

FIGURE 1

Average Percentage of Physician's Patients Covered by HMOs, Office-Based Physicians, 2001

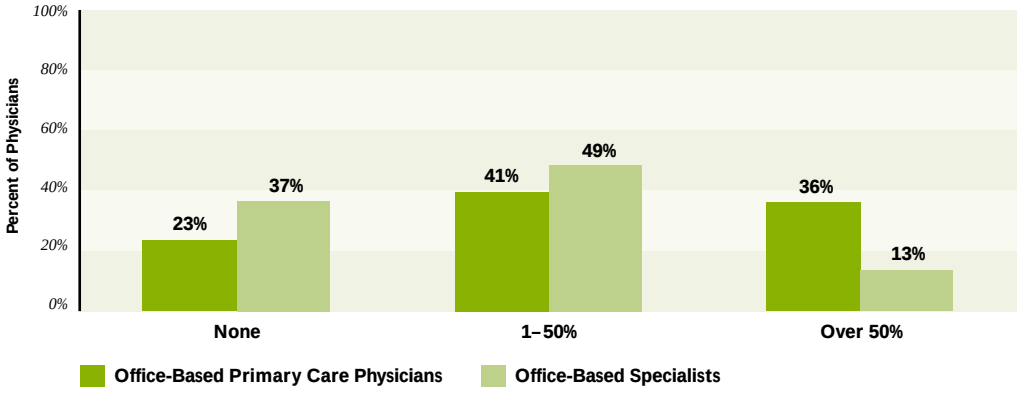


FIGURE 2

Average Percentage of Physician's Patients Covered by HMOs, Office-Based Primary Care Physicians, 1996-2001

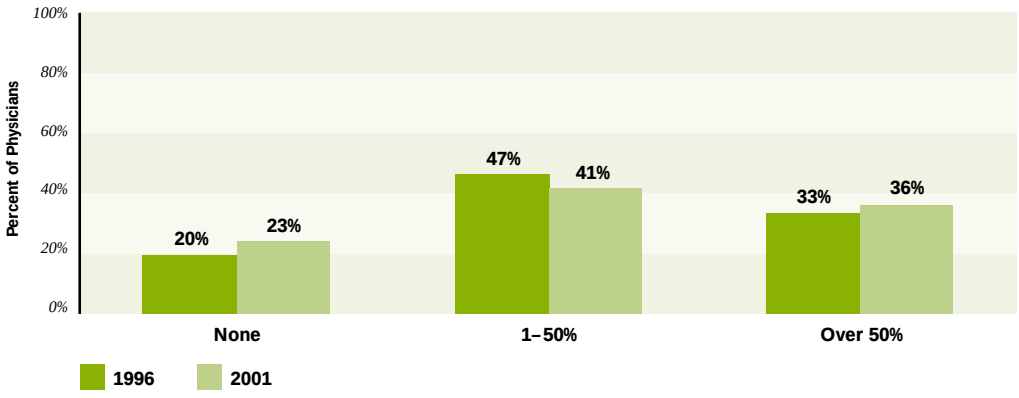
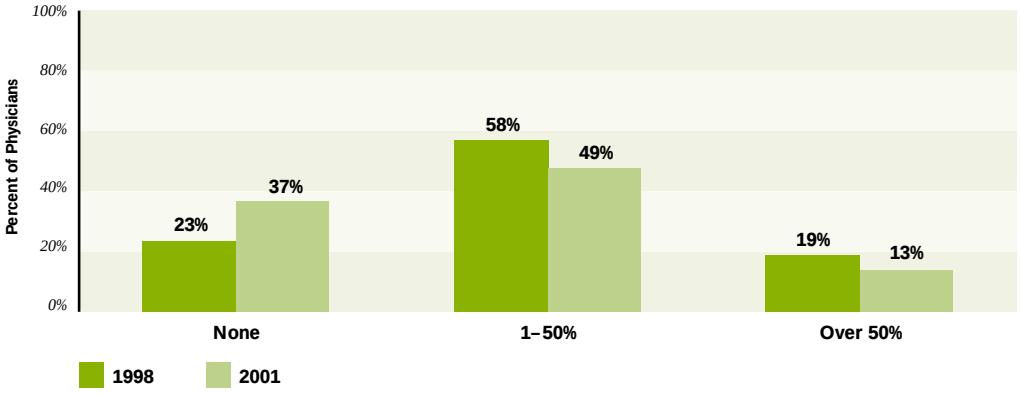


FIGURE 3

Average Percentage of Physician's Patients Covered by HMOs, Office-Based Specialists, 1998-2001



"I was with an internist group. They one day said managed care has to go. They suffered for about six months. And now they're prospering."

"I made the decision too, about four years ago, not to join in any HMOs... And I'm so glad I did. I'm doing financially better. I have happier patients and it's very good."

Although the vast majority (91% of primary care physicians and 95% of specialists) surveyed in 2001 reported that they were accepting new patients, only 58% of primary care physicians and specialists reported accepting new patients covered by HMO plans, effectively limiting access to care for many Californians.[6]

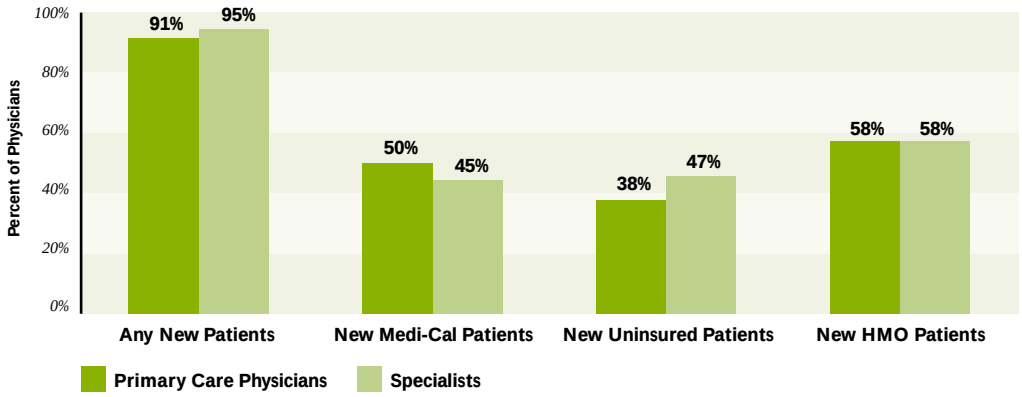
The declining percentages of physicians accepting new HMO patients are approaching the persistently low percentages accepting Medi-Cal patients. In 2001, only 45% of all California specialists reported accepting any new Medi-Cal patients, down from 55% in 1998. Fifty percent of primary care physicians reported accepting new Medi-Cal patients in 2001, down from 54% in 1996.

In the focus groups, physicians underscored the impact that limited numbers of specialists on HMO panels and dwindling numbers of physicians in HMOs has had on access to care for patients.

[6] Of physicians who reported accepting some type of new patients, 54% of primary care physicians and 46% of specialists reported accepting new Medi-Cal patients, 41% of primary care physicians and 48% of specialists reported accepting new uninsured patients who are unable to pay the full fees for services, and 63% of primary care physicians and 60% of specialists reported accepting new HMO patients.

FIGURE 4

Percentage of Physicians Accepting New Patients, by Patient's Type of Insurance, 2001



"*Two years ago I dumped every HMO I ever was associated with and refused to see them anymore. It still is just as bad. So whatever is going on in the administration of healthcare is universal, not just the HMOs.*"

"*You know, some of the doctors that I know, like the dermatologists, ... are very, very selective in who they see. As far as I know, they don't see any HMO patients. And they're very comfortable with their incomes and they have relatively short business hours. And when you call to get an appointment, it might be three months out.*"

"*I'm on a couple of very small HMOs. In the process over the last few years of leaving all the HMOs, I no longer get the referrals from the number of physicians that I used to because they will not refer to me because I [am not] part of the HMO. It's kind of like if you're not going to be part of our club, ... then we're not going to send our non-HMO patients to you.*"

"*I think the HMO affiliations limit who we can use as subspecialists. Like in pediatrics, there's a group of neurologists that do pediatrics and they're not doing Medi-Cal.*"

Section II ORGANIZATION

Participation in IPA

"In a smaller primary care group, is being on an IPA or being on capitated contracts in primary care feasible for the long term? I know that if you're just starting out in practice, it's a great idea to get on all these contracts because at least then, you've got money coming in."

Q: Are doctors abandoning solo practices to join large medical groups?

A: No, many remain in solo practice.

A. Size and setting

Despite predictions that more physicians would leave solo office practice for larger group practices, the proportion of physicians in single-physician offices has remained fairly steady over recent years. In 2001, California physicians practiced in a number of different settings, including multi-physician private offices, clinics and large HMOs such as Kaiser Permanente, but most are in solo or small offices. One third of primary care physicians in the state still practiced in single-physician offices and another quarter practiced in offices of 2-10 physicians. Specialists are even less likely than primary care physicians to practice in larger group practices. Forty-six percent of the state's specialist physicians are in solo practices and almost three-quarters of specialists are in offices with ten or fewer physicians.

FIGURE 5

Primary Care Physicians by Practice Setting, 2001

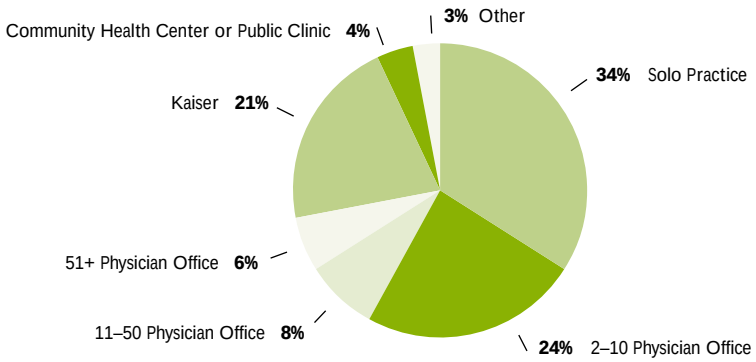
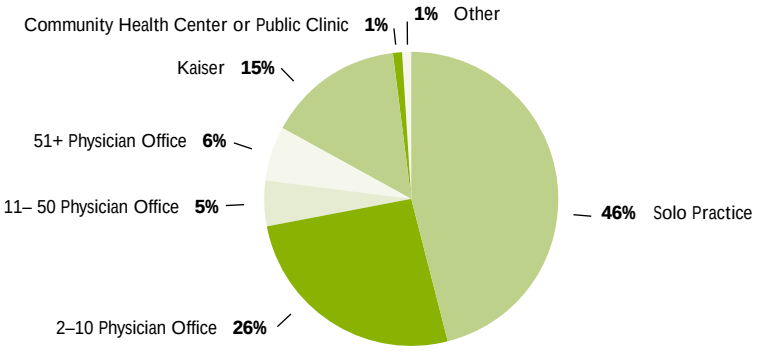


FIGURE 6

Specialists by Practice Setting, 2001



B. Independent Practice Associations

Q: Are more doctors joining IPAs?

A: No, IPA participation is declining.

Although solo and small group practices remain popular, California physicians continue to explore the use of practice affiliations for potential advantages in contracting and other administrative functions. The most common model is the Independent Practice Association (IPA), but there has been a decline in participation in recent years. In 2001, about 62% of office-based primary care physicians participated in IPAs, down from 73% in 1996.

The trend of physicians moving away from IPA participation is even more evident among office-based specialists. California's specialists are considerably less likely than primary care physicians to participate in IPAs and there has been a decrease in IPA participation over time. In 2001, just over half of office-based specialists participated in IPAs, down from 65% in 1998.[7]

"I looked at the contracts of the specialties. It's not feasible to be on some of the lesser IPAs because they're paying as a percentage of Medicare. And it doesn't appear to me that you would be able to pay your rent and pay your staff and actually do business. When I hear of somebody in the primary care field having to sign up for many HMOs, ... it sounds to me like the old story of we lose money on every deal, but we make it up on the volume."

[7] 1996 baseline data are available for primary care physicians; however, only 1998 baseline data are available for specialist physicians.

FIGURE 7

Percentage of Physicians Participating in IPAs, Office-Based Primary Care Physicians, 1996-2001

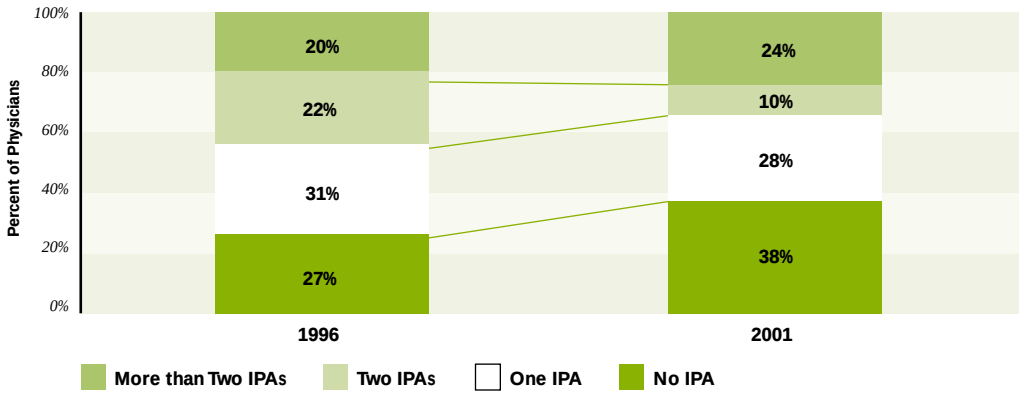
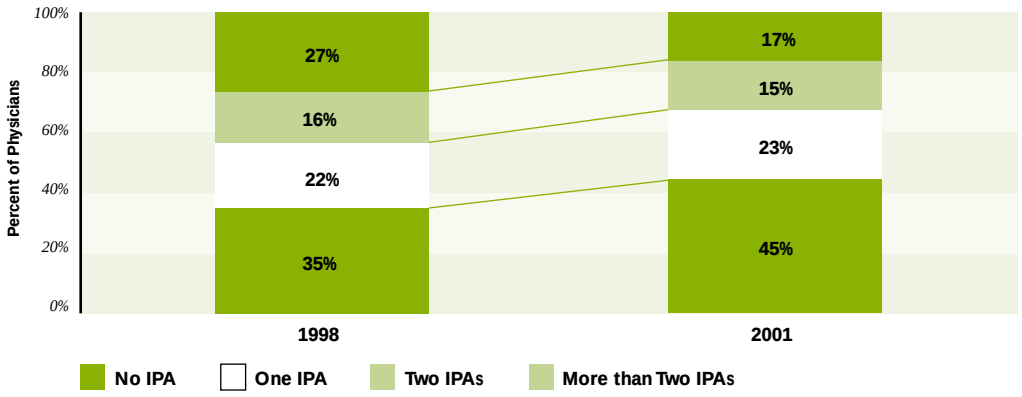


FIGURE 8

Percentage of Physicians Participating in IPAs, Office-Based Specialists, 1998-2001



"I'm out in East County, which has a really high penetration of HMOs. I don't think there's any primary care doctor that cannot be in the HMO environment. I know some who tried it and they have all now joined an IPA."

FIGURE 9

Percentage of Physicians Who Have Terminated a Contract with an IPA or HMO, Office-Based Primary Care Physicians, 2001

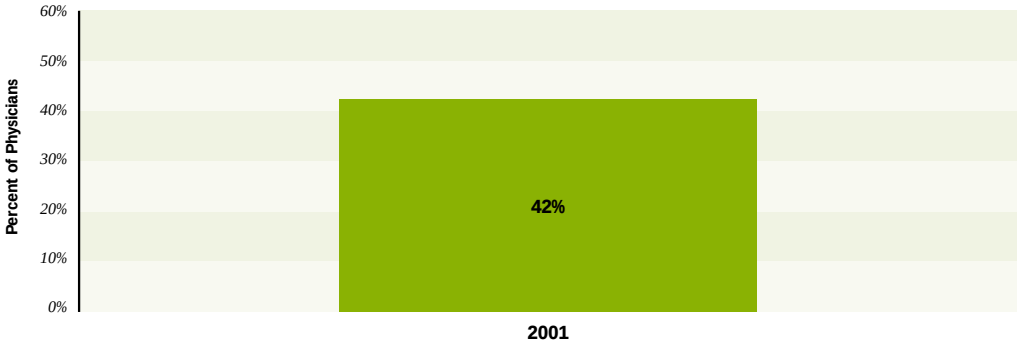
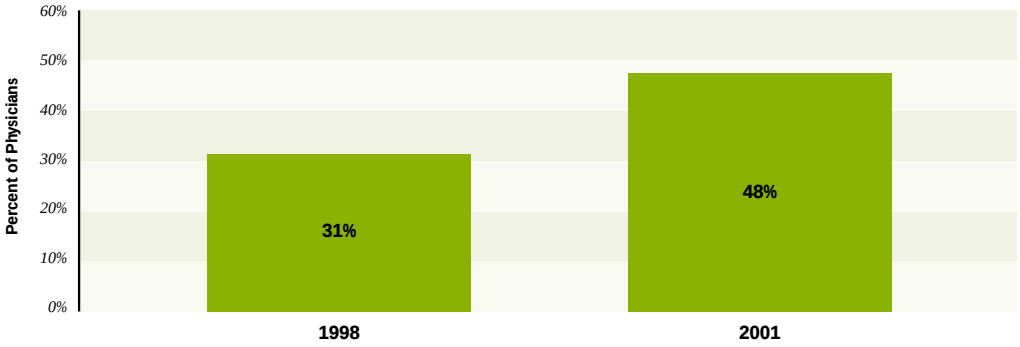


FIGURE 10

Percentage of Physicians Who Have Terminated a Contract with an IPA or HMO, Office-Based Specialists, 1998-2001



Although a few years ago many California physicians were concerned about their ability to secure IPA and HMO contracts, responses from the survey indicate that in 2001, many doctors actively chose to move away from IPA and HMO affiliations. In 2001, 42% of office-based primary care physicians and 48% of office-based specialists reported having terminated a contract with an IPA or an HMO at some point in their careers. The proportion of specialists terminating IPA contracts has significantly increased since 1998, when only 31% reported ever having terminated a contract[8]. Ten and fifteen percent of office-based primary care physicians and specialists respectively reported having ever been denied or having had a contract terminated by an IPA or HMO.

[8] Part of this increase would be explained by predictable cumulative experience over time.

Perceived Value of IPAs

Q: Do IPAs and large medical groups add value?

A: Yes and no. For office-based doctors, responses are mixed; Kaiser Permanente doctors generally say "yes".

Many physicians question the benefits of participation in IPAs or large medical groups. All physicians in the survey, regardless of whether they were affiliated with IPAs or large groups, were asked to rate the value of participating in these organizations in terms of practice income, quality of care, attracting or keeping patients and other elements. The responses varied considerably among office-based physicians: for each area of inquiry (with the exception of quality of care), at least 15% of physicians found IPA participation to be an advantage and at least 15% found IPA participation to be a disadvantage.

Office-based physicians identified contract and fee negotiations with health plans and attracting or keeping patients as the most important advantages of IPA participation. Net practice income and quality of care were most likely to be rated as disadvantages of IPA affiliation. Among office-based physicians, more specialists than primary care physicians rated IPA participation as disadvantageous in every area.

Physicians in the Kaiser Permanente system reported significantly different perceptions of the value of IPA or large medical group participation than office-based physicians. With one exception (impact on net income as reported by Kaiser Permanente specialists), large majorities of Kaiser Permanente doctors reported advantages for every category explored. Moreover, Kaiser Permanente physicians very rarely reported participation to be a disadvantage.

FIGURE 11

Value of Participating in IPAs or Large Medical Groups, Office-Based Primary Care Physicians, 2001

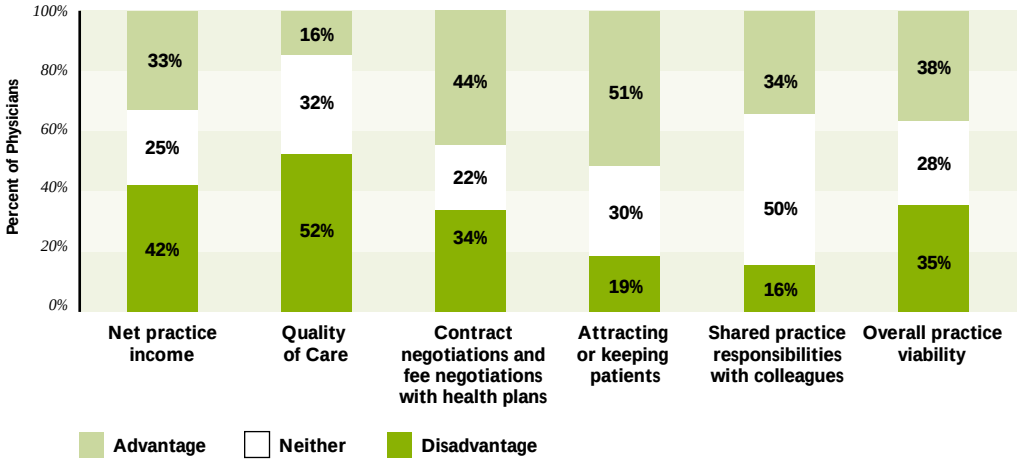


FIGURE 12

Value of Participating in IPAs or Large Medical Groups, Kaiser Permanente Primary Care Physicians, 2001

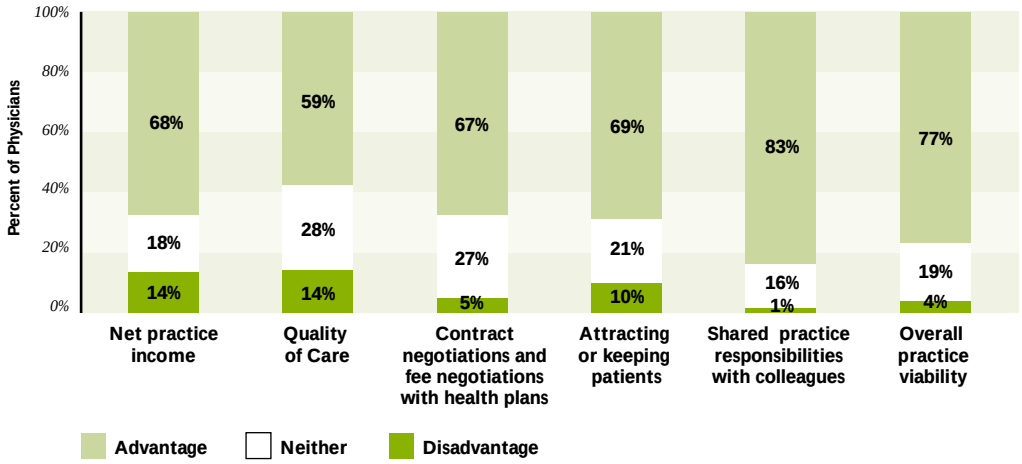


FIGURE 13

Value of Participating in IPAs or Large Medical Groups, Office-Based Specialists, 2001

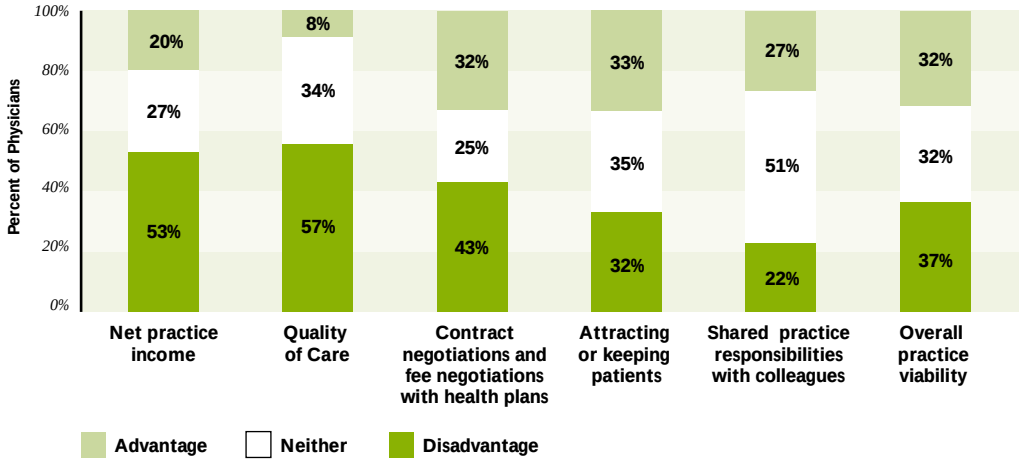
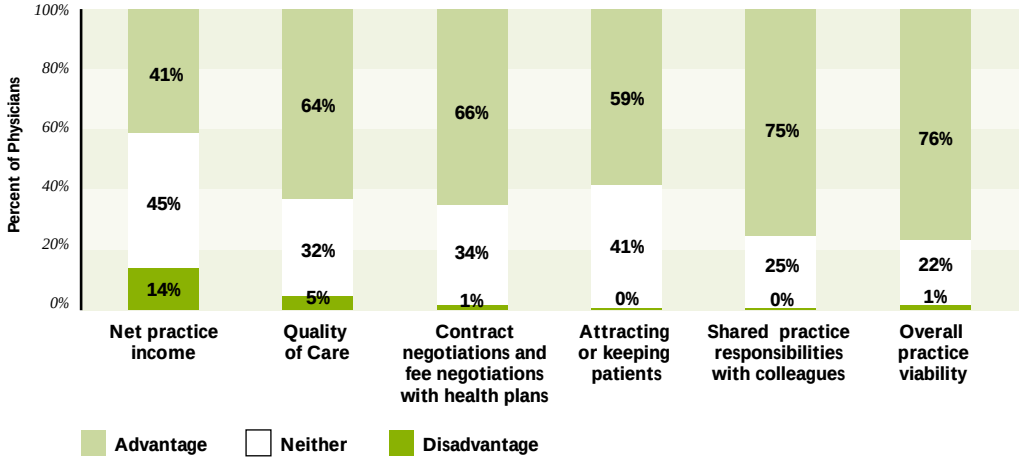


FIGURE 14

Value of Participating in IPAs or Large Medical Groups, Kaiser Permanente Specialists, 2001



Section III PAYMENT

How paid

Q: Are most doctors paid on a capitated basis in California?

A: No. A small minority of physicians are directly capitated.

In 2001, 45% of primary care physicians and 32% of specialists reported being salaried.[9] These percentages have increased slightly for specialists, 26% of whom were salaried in 1998[10].

Among physicians who are not salaried, fee-for-service reimbursement is much more common than capitation. Only 21% of all primary care physicians and 7% of all specialists derive the majority of their income through capitation.

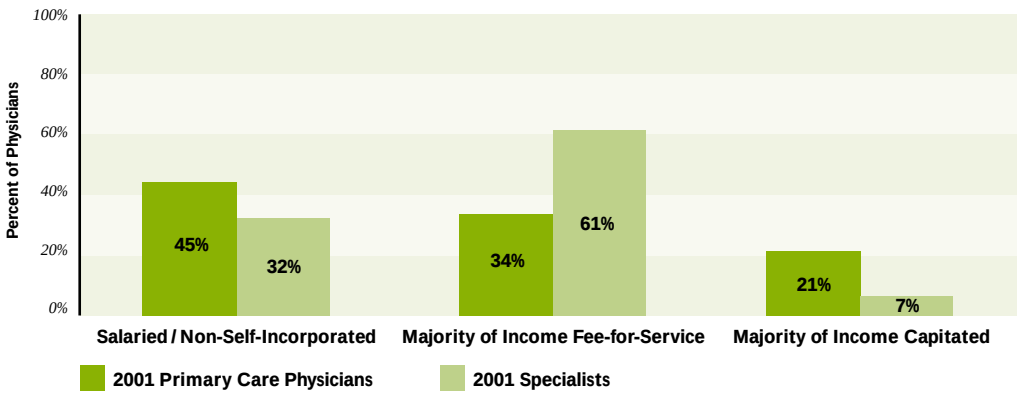
"I have no capitated patients and most of my patients are Medicare as a cardiologist. So it's just sort of put up with what Medicare gives you and there's not much discussion."

[9] Some individual physicians who reported to be "salaried" may be in small groups that receive payments through HMO capitation contracts. See sidebar on following the flow of payment.

[10] Comparable trend data for primary care physicians not available.

FIGURE 15

Predominant Method of Payment, Primary Care Physicians and Specialists, 2001



Physician Payment — Follow the Money

Money to pay for physician services flows through many hands before finally arriving at the final destination of physicians' take home income. Each step in this financial process adds complexity to the understanding of the incentives and methods associated with physician payment. In many cases, there are 3 distinct transactions that occur.

1. Payment from the health plan to an IPA or other physician network organization.
2. Payment from the IPA to the physician's small practice group, which is often an incorporated partnership among several physicians.
3. Payment from the small group partnership to the individual physician.

Payments from step 1 to step 2 usually take the form of capitation payments, as do payments from step 2 to step 3 for primary care physicians. In 1999-2000, 80% of California IPA revenue from health plans was in the form of capitation, and 87% of IPAs used capitation as their predominant method of base compensation for primary care physician practices (Rosenthal *et al*., 2002). At the final payment step, individual physician practice groups may use a variety of payment methods to compensate individual physicians in the group. Some may pay physicians a "salary" based on a share of practice revenue. Others may simply pass along the capitation and fee-for-service revenue that each physician individually generates for the partnership, deducting a portion to pay for shared practice expenses.

A physician's experience of financial incentives depends on the type of payment method and the size of the practice group. The incentives and methods are clearest when a solo physician is paid directly by the health plan without any IPA or office partnership intermediaries. Other situations are more complicated. For example, in a small physician partnership that pays its physicians salaries, the incentives associated with the payment from the IPA or health plan to the partnership are probably transmitted to the individual physicians. If the practice earns most of its revenues from capitation, the physicians will be aware of the fact that scheduling more visits for patients in the practice will not bring in more practice revenue. "Upstream" capitation or fee-for-service incentives will be much more weakly transmitted to a physician in a very large practice group who is an employee, and not an owner, and is paid by salary. In this case, the individual physician's salaried income will not be as obviously linked to the payment methods that bring revenue to the large group organization. Further complicating the payment picture is the fact that most physicians have revenues from a variety of different types of plans that use different methods of payment (e.g., fee-for-service from Medicare and capitation from HMOs).

The relatively large proportion of physicians in our survey who report being paid by salary is in part explained by the many physicians in small groups who report that they are paid on a salaried basis. Although we excluded physicians from our counts of salaried physicians if the physician was in a self-incorporated practice and paid himself or herself a salary from this self-incorporated practice entity, we did not exclude physicians who work in small office groups with an incorporated partnership among the physicians in the office group. This fact also probably explains why the amount of income primary care physicians attribute to capitation is much lower than the proportion of "upstream" payments that are reported to occur by capitation at the IPA and health plan level in California. Even though many physicians do not report that their individual income is in the form of capitation, capitation continues to play a dominant role in transactions among health plans and physician networks in California. As a result, many physicians in the state are at least indirectly affected by this payment method.

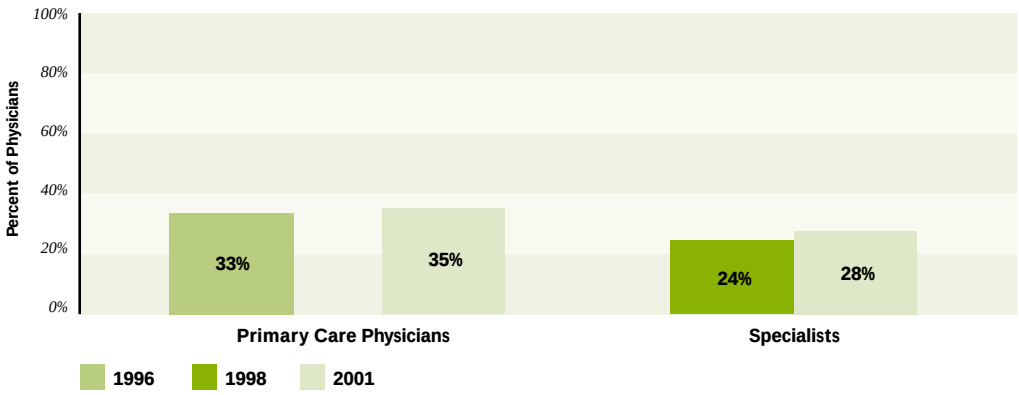
Bonuses, withholds, incentives

Q: Are doctors receiving financial incentives for quality of care?
A: Yes, if they work in the Kaiser Permanente system.

In 2001, 35% of primary care physicians and 28% of specialists reported that their practice income depended on bonus payments, withheld payments or similar incentives over and above base salary, capitation or fee-for-service income payments. Overall, these figures have remained fairly stable in recent years.

FIGURE 16

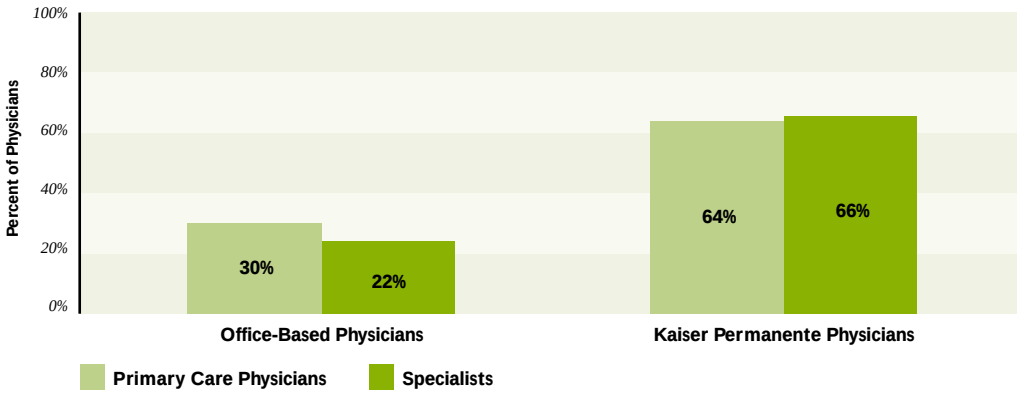
Percentage of Physicians Receiving Incentive Bonus 1996– 2001



Primary care and specialist physicians working in Kaiser Permanente were more likely to report that that their incomes were in part dependent on financial incentives. Sixty-four percent of Kaiser Permanente primary care physicians reported receiving incentive payments compared to 30% of office-based primary care physicians. Compared to 66% of Kaiser Permanente specialists, only 22% of office-based specialists reported receiving financial incentives.

FIGURE 17

Percentage of Physicians Receiving Incentive, Office-Based and Kaiser Permanente Physicians, 2001



Quality of care and patient satisfaction are the major factors used to calculate bonuses and incentive payments for Kaiser Permanente physicians. Fifty-four percent of Kaiser Permanente primary care physicians reported that their bonuses were based on quality of care. In contrast, only ten percent of office-based primary care physicians reported quality of care to be a factor. Office-based physicians who received financial incentives reported that productivity and profit-sharing were often factors in determining the amount of the financial incentives.

FIGURE 18

Factors Affecting the Calculation of Incentives, Office-Based and Kaiser Permanente Primary Care Physicians, 2001

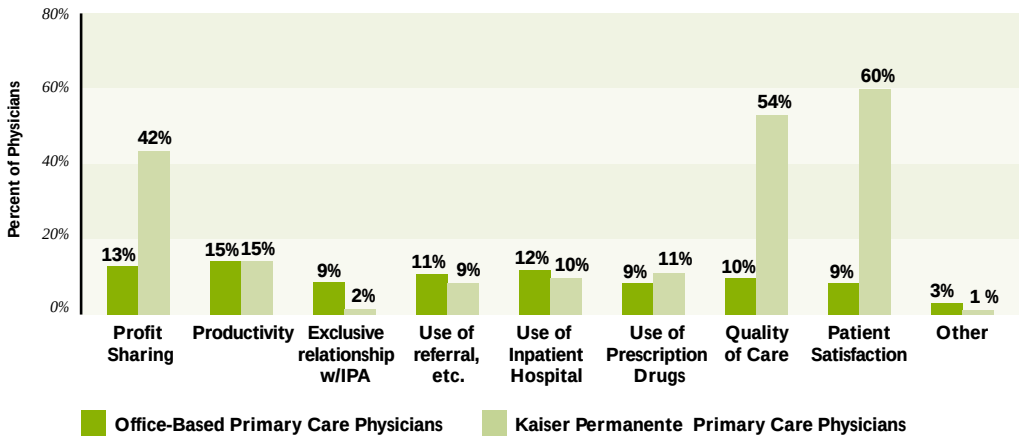
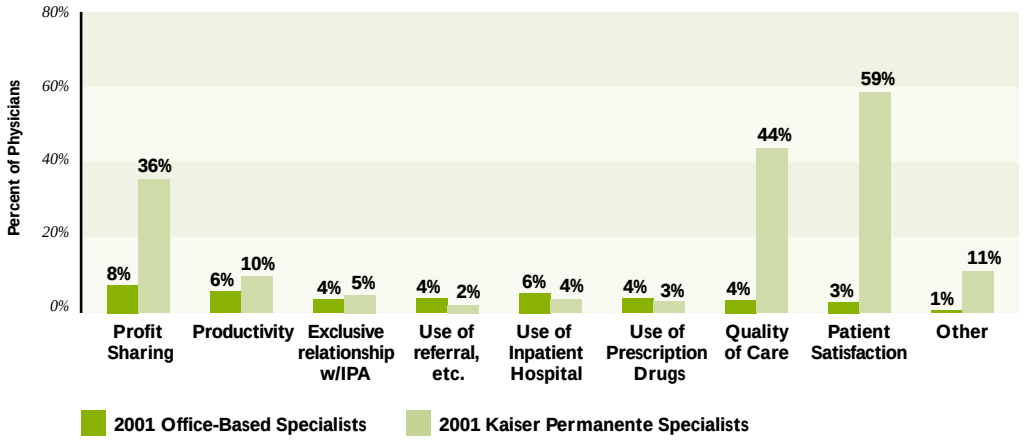


FIGURE 19

Factors Affecting the Calculation of Incentives, Office-Based and Kaiser Permanente Specialists, 2001



Among all primary care physicians (including Kaiser Permanente), the use of profit sharing as a factor in determining bonuses increased significantly in recent years; in 2001, 18% of primary care physicians reported the use of profit sharing, up from only 2% in 1996. The use of quality of care and patient satisfaction as determinants of bonuses also appears to have increased slightly. Among specialist physicians, no significant changes were detected between 1998 and 2001.

FIGURE 20

Factors Affecting the Calculation of Incentives, Primary Care Physicians, 1996-2001

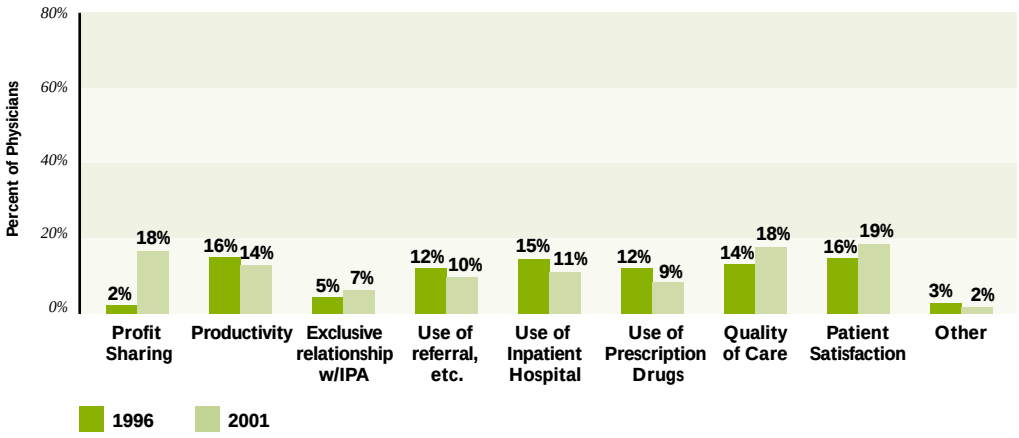
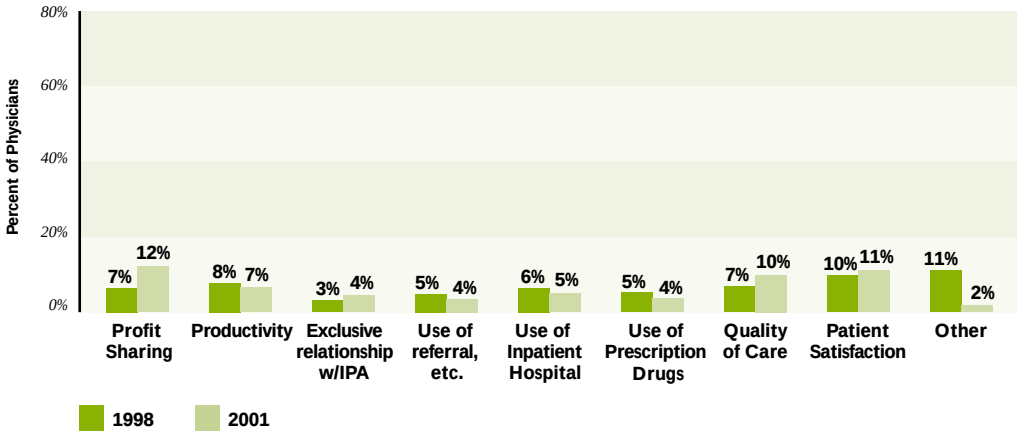


FIGURE 21

Factors Affecting the Calculation of Incentives, Specialists, 1998-2001



Payment/Incentive

"Our medical group does [patient satisfaction reports]. And they're done on a quarterly basis. We get a lot of feedback on that. That's actually an important aspect of the bonuses that we get."

"Kaiser has been very careful. Nothing tied to a dollar [cost-containment] affects your bonus or your pay. But the satisfaction scores [can affect] your bonus."

"There are some groups who will try and limit things and they will even hand out what they call incentives... if you restrict your referrals and if you restrict their costs."

"In the beginning, they were going to withhold or give you less money per patient [based on practice profiles]. Now it has changed. Those who do better will get a bonus."

Income

Q: Have incomes plummeted for doctors in California?
A: No, not overall.

In 2001, a quarter of the primary care physicians reported earning $100,000 or less per year, 55% earned between $100,001 and $200,000, and a fifth earned over $200,000[11]. Twenty percent of all primary care physicians reported annual incomes exceeding $200,000 in 2001, compared with 13% in 1996[12].

Overall, specialists reported higher incomes than primary care physicians. In 2000, only 15% of specialists earned $100,000 or less; 31% earned between $100,001 and $200,000; 32% earned between $200,001 and $300,000; and 21% earned more than $300,000. There has been a slight trend towards higher incomes for specialists over the past few years. Fewer specialists reported earning $200,000 or less in 2001 compared to 1998 (down from 52% to 46%). In 2001, 21% of specialists reported earning more than $300,000 per year, compared to 15% in 1998.

Qualitative data collected during the focus groups included many comments about low reimbursement rates and compensation fees for the amount or level of intensity of work being done.

[11] For purposes of these surveys, income was defined as total net income for the year just prior to the survey after practice expenses but before taxes.

[12] Because income data were collected in ranges (not absolute amounts), all numbers in text and charts are in unadjusted dollars. Due to inflation, a physician would have to make $113,000 in 1996 and $107,000 in 1998 to have the same amount of purchasing power as $100,000 provided in 2000.

Compensation

"The number one problem [is] the pay is way too low. I'm not talking about 20 percent or 30 percent too low. If somebody doubled my fees I might be willing to see a lot more patients."

"It's pretty much across the board. If you look at the complexity and difficulty of cases that I ... see, the fees that managed care and Medicare want to pay us are absurd. They're ridiculous."

"Really, you don't know how little some of these family practitioners are paid by medical clinics. Some of their salaries are cut. And they got one more kid to feed. It's not the Grapes of Wrath, but it's not as good as you think."

FIGURE 22

Physician Income, 2001

Income	Primary Care Physicians	Specialists
< $60,000	*8%*	*9%*
$60,001 – $80,000	*7%*	*3%*
$80,001 – $100,000	*8%*	*3%*
$100,001 – $120,000	*14%*	*10%*
$120,001 – $140,000	*15%*	*4%*
$140,001 – $160,000	*14%*	*5%*
$160,001 – $180,000	*6%*	*6%*
$180,001 – $200,000	*7%*	*6%*
$200,001 – $250,000	*12%*	*21%*
$250,001 – $300,000	*4%*	*11%*
$300,001 – $350,000	*1%*	*10%*
$350,001 – $400,000	*1%*	*3%*
$400,001 – $450,000	*0%*	*1%*
$450,001 – $500,000	*1%*	*3%*
> $500,000	*1%*	*4%*

FIGURE 23

Physician Income, 1996-2001

Income	Primary Care Physicians		Income	Specialists	
	1996	**2001**		**1998**	**2001**
< $60,000	*8%*	*8%*	< $100,000	*13%*	*15%*
$60,001 – $80,000	*9%*	*7%*	$100,001 – $200,000	*39%*	*31%*
$80,001 – $100,000	*12%*	*8%*	$200,001 – $250,000	*21%*	*21%*
$100,001 – $120,000	*16%*	*14%*	$250,001 – $300,000	*12%*	*11%*
$120,001 – $140,000	*14%*	*15%*	$300,001 – $350,000	*7%*	*10%*
$140,001 – $160,000	*12%*	*14%*	$350,001 – $400,000	*2%*	*3%*
$160,001 – $180,000	*8%*	*6%*	$400,001 – $450,000	*1%*	*1%*
$180,001 – $200,000	*9%*	*7%*	> $450,000	*5%*	*7%*
> $200,000	*13%*	*20%*			

"It's much, much worse year-by-year to try to maintain the income you think you ought to be having. The increased effort is becoming maximal."

" ...when I was interviewing the new graduates, none of them really wanted to work as so much as we're used to working. But everybody wanted the higher compensation. And it is so difficult to try to make that money; just dealing with the reimbursement here is lower."

Section IV WORK ACTIVITIES

Q: Compared to a year ago, are doctors working fewer hours per week?

A: No, overall weekly work hours have increased.

Many California physicians work more than 40 hours per week. Specialists in particular work long hours; in 2001, over 70% of the specialist physicians spent more than 40 hours per week performing patient care activities. While slight majorities of physicians reported no recent change in the number of hours spent each week on patient care activities, almost a third of the primary care physicians and a quarter of the specialists reported in 2001 that they had worked more hours than they had the year before. The net change in work effort amounts to an increase of 2.1 hours per week per primary care physician and 0.4 hours per week per specialist.

FIGURE 24

Average Work Hours Per Week, Primary Care Physicians and Specialists, 2001

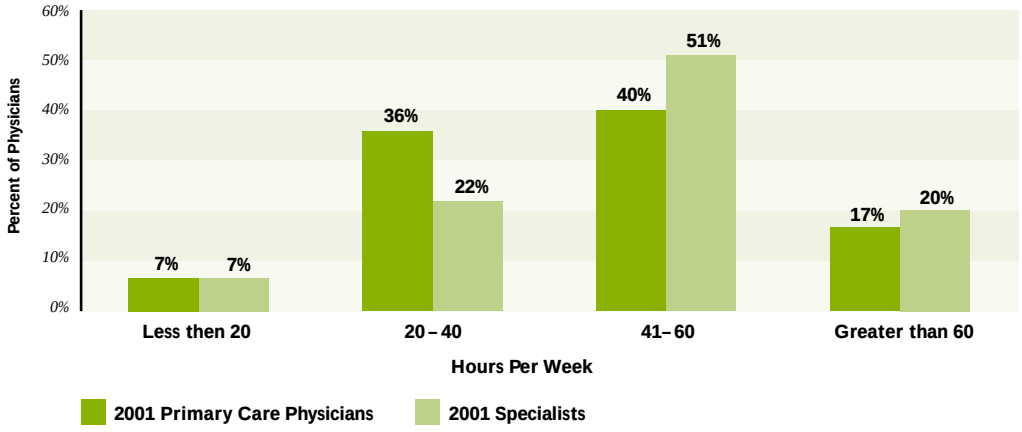


FIGURE 25

Change in Hours, Primary Care Physicians, 2001

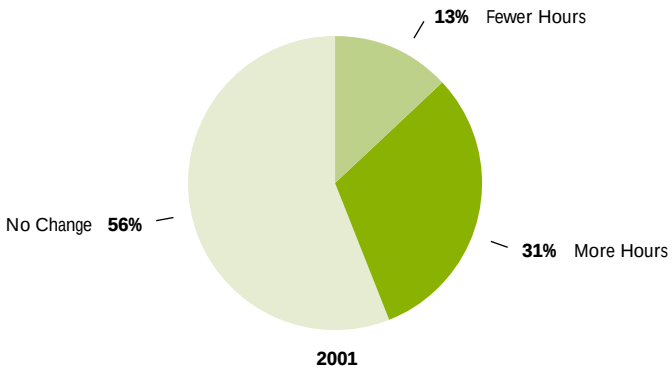


FIGURE 26

Change in Hours, Specialists, 2001

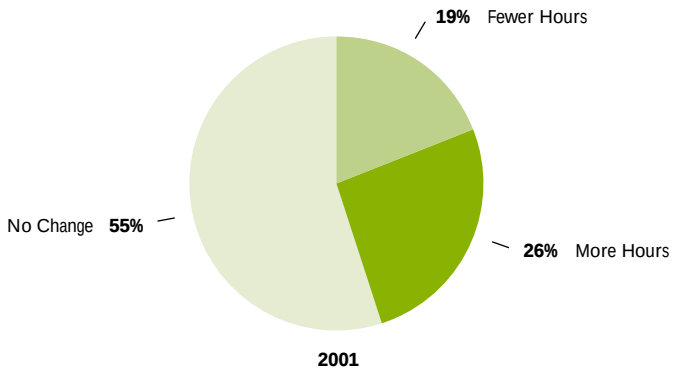


FIGURE 27

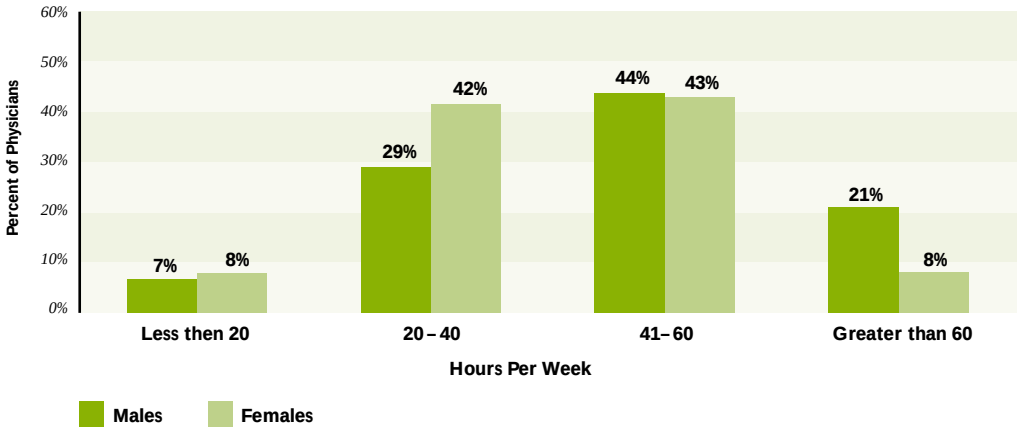
Mean Change in Hours among Physicians with a Change in Work Hours, Primary Care Physicians and Specialists, 2001

	Primary Care Physicians		Specialists	
	% MDs	Average Change in Hours	% MDs	Average Change in Hours
Fewer Hours	*13%*	*-9.3 Hrs*	*19%*	*-7.8 Hrs*
No Change	*56%*	*0.0*	*55%*	*0.0*
More Hours	*31%*	*+10.6 Hrs*	*26%*	*+7.3 Hrs*

Male and female physicians reported slightly different work patterns. Compared to male physicians, female physicians were more likely to work 40 hours or less per week and less likely to work more than 60 hours per week. After adjusting for age and specialty, male physicians worked 51 hours per week on average; female physicians worked 42 hours per week on average.

FIGURE 28

Work Hours Per Week by Physician Sex, 2001



Change in Scope of Practice

Q: Are physicians changing their scope of practice?

A: Yes, fewer are delivering babies and taking ER call.

To better understand changing practice patterns, physicians were asked to rate the degree to which their involvement with selected activities had changed during the previous two years. The activities included obstetrical care, performing surgery, performing non-surgical procedures, caring for children, legal consultation, treating Worker's Compensation patients, and on-call availability for hospital emergency room. Overall, not much change was reported with the exception of obstetric care and on-call emergency room availability.

Almost half of the surveyed obstetricians/gynecologists reported that they had eliminated or decreased their involvement with obstetric care during the past two years. Only 15% of the obstetrician/gynecologists reported having increased their involvement. Similarly, higher percentages of family practice physicians reported eliminating or decreasing their obstetric care compared to the percentages reporting increases.[13]

In addition, many physicians reported having eliminated or reduced their availability for on-call emergency room (ER) responsibilities. In 2001, only 6% of primary care physicians reported an increase to their ER on-call activities during the two prior years while a quarter of the primary care physicians reported having decreased or eliminated their ER call. A slightly higher percentage of all specialists have decreased or eliminated their ER on-call activities than have increased these activities. However, shifts over time vary considerably within individual specialties.

[13] Between 1995 and 2000, the total annual number of births in California decreased from 551,226 to 531,285 (CA DHS Advance Report: California Vital Statistics, 1999; California Department of Health Services, Birth Records, 2000).

FIGURE 29

Percentage of Physicians Who Have Changed Obstetric Workload, 2001

Delivering babies	Eliminated	Decreased	No Change	Increased	Not applicable
Family Practice	24%	2%	31%	2%	41%
Obstetrics	13%	32%	37%	15%	3%
total	20%	14%	33%	7%	26%

FIGURE 30

Percentage of Physicians Who Have Changed ER On-Call Availability, 2001

On-call for ER	Eliminated	Decreased	No Change	Increased	Not applicable
Primary Care					
Family Practice	13%	16%	30%	5%	36%
Internal Medicine	10%	19%	33%	5%	34%
Obstetrics/Gynecology	13%	14%	46%	12%	16%
Pediatrics	4%	11%	40%	3%	42%
total	10%	15%	36%	6%	33%
Specialists					
Cardiology	2%	9%	46%	21%	22%
Endocrinology	4%	6%	19%	3%	67%
Gastroenterology	1%	11%	35%	15%	39%
General Surgery	2%	10%	55%	16%	18%
Neurology	11%	9%	54%	5%	20%
Ophthalmology	11%	7%	65%	3%	13%
Orthopaedic Surgery	14%	18%	43%	13%	13%
total	7%	11%	48%	12%	23%

To assess one type of nonclinical activity physicians might undertake to supplement their incomes, they were asked how many hours, if any, they spend doing legal consultation. Most physicians do not do legal consultation, and Kaiser Permanente physicians are even less likely than office-based physicians to engage in this activity. About 15% of primary care physicians and a quarter of all specialists reported doing regular legal consultation, but the total hours per week spent on this activity are few.

FIGURE 31

Hours Per Week of Legal Consultation Performed by Physicians, 2001

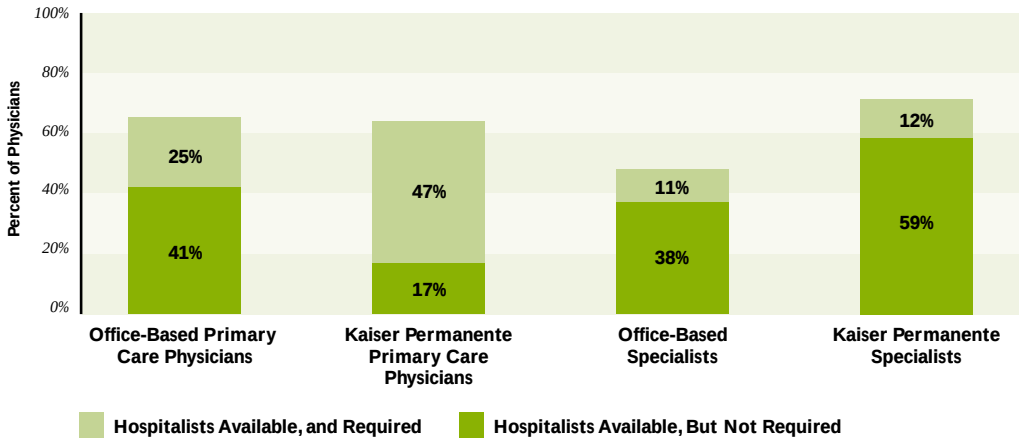
	Primary Care Physicians			Specialists		
	All	Office	Kaiser	All	Office	Kaiser
0	86%	85%	91%	72%	69%	91%
1	7%	7%	3%	12%	13%	7%
2	2%	2%	0%	7%	8%	0%
3	2%	2%	3%	1%	1%	0%
>3	4%	4%	3%	8%	9%	1%

Hospitalists

Although the use of "hospitalists"—physicians under contract with managed care organizations or hospitals who take responsibility for the care of hospitalized patients—is a relatively new concept (Wachter & Goldman, 2002; Wachter & Goldman 1996), it appears well-ensconced today in California. Almost two-thirds of primary care physicians and over half of specialists reported that hospitalists were available to care for their hospitalized patients. Primary care physicians were more likely than specialists to report that the use of hospitalists was required; 29% of primary care physicians and only 13% of specialists reported that they were required to turn the care of their hospitalized patients over to hospitalists. Use of hospitalists is particularly common within the Kaiser Permanente system. Almost half of primary care physicians at Kaiser Permanente reported that they were required to turn the care of their hospitalized patients over to hospitalists.

FIGURE 32

Percentage of Physicians Reporting Hospitalists Available, According to Whether Use of Hospitalists Required, 2001



Disease Management

Q: Are disease management programs available to doctors?

A: Yes, for most primary care physicians.

Many managed care organizations have developed and offered disease management programs to physicians with whom they contract. These programs offer packages of care for patients with particular diseases. In 2001, almost two-thirds of primary care physicians and one-third of specialists were offered disease management programs by organizations with which they were affiliated. Primary care physicians and specialists at Kaiser Permanente were significantly more likely than office-based physicians to be offered disease management programs.

FIGURE 33

Percentage of Physicians Reporting Disease Management Offered, Primary Care Physicians and Specialists, 2001

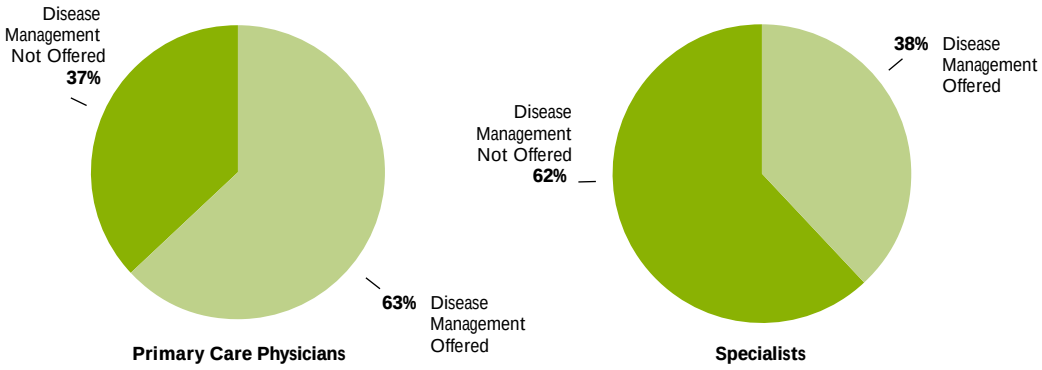
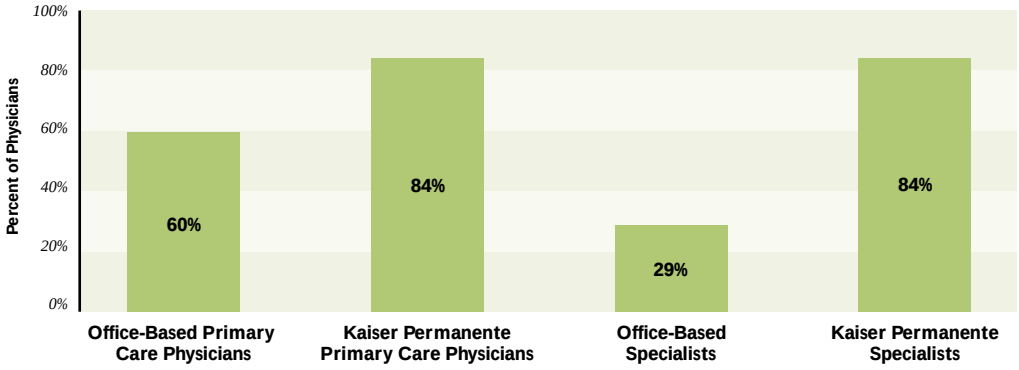


FIGURE 34

Percentage of Physicians Reporting Disease Management Offered, Office-Based and Kaiser Permanente Physicians, 2001



"And if you can get a good case manager [with a disease management program] who will give [the patient] the time, ... the case managers are wonderful. A good case manager is worth their weight in gold."

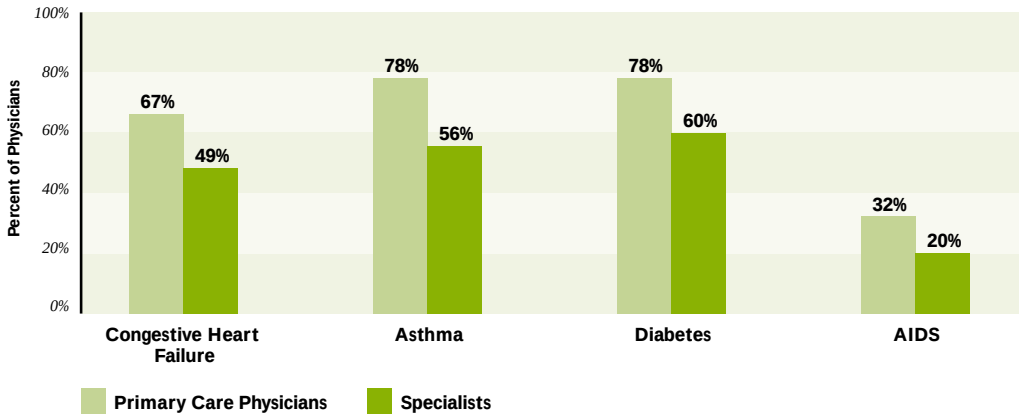
"I think there's a couple that work actually pretty well. There's a couple of corporate entities out there that will take over overseeing your severe congestive heart failure patients. And it actually works out very well. It cuts down admissions significantly. It's very cost effective. Good for the patient."

"Most of us feel [asthma disease management] is counter-productive. In the first place, I already know this. The disease management of asthma has pretty much been pushed on HMOs... by pharmaceutical firms that sell inhaled steroids. They hire physicians who go around and talk about disease management. They are all paid for by pharmaceutical firms."

Physicians were asked whether they were offered disease management programs for congestive hearth failure, asthma, diabetes, AIDs or other conditions. For all physicians surveyed, asthma and diabetes were the two diseases most likely to be the focus of disease management programs. Seventy-eight percent of primary care physicians who were offered any disease management programs were offered asthma and diabetes programs.

FIGURE 35

Percentage of Physicians Reporting Disease Management Offered by Type of Condition, 2001



Note: Includes only physicians reporting being offered at least one type of disease management program.

"One of the problems is that if [the disease management program is] sponsored by the health plan, there are like 50 health plans. So not every patient that has asthma can go on that thing because their health plan might not have it. So it's difficult for me to get in the habit of [using this] with 20 other asthma patients... The problem is it's guided basically by whatever health plan you're on. So it's not consistent."

"I actually find them pretty helpful... the ones I'm most involved with are pharmacy run Coumadin clinic, which takes a lot of work off of us. And probably the best example is our AIDS practice: all the antiretroviral drug prescribing and monitoring is done by a battery of pharmacists. And they actually know more about drug interactions than we do in a lots of cases. And the patients get better care because of it. I think I'd be spending a lot more weekend afternoons there doing things if it weren't for these people."

Section V PRACTICE PROFILES

Physicians were also surveyed about their experiences with practice pattern information or "practice profiles". These profiles, often prepared by a health plan, IPA, medical group/practice or hospital with which a physician is affiliated, focus on various aspects of an individual physician's practice. In 2001, the vast majority (nearly 80%) of primary care physicians and just over half of the specialists received practice pattern information. For both primary care physicians and specialists, health plans were the most likely source of these practice profiles.

FIGURE 36

Percentage of Physicians Receiving Any Practice Pattern Information, Primary Care Physicians and Specialists, 2001

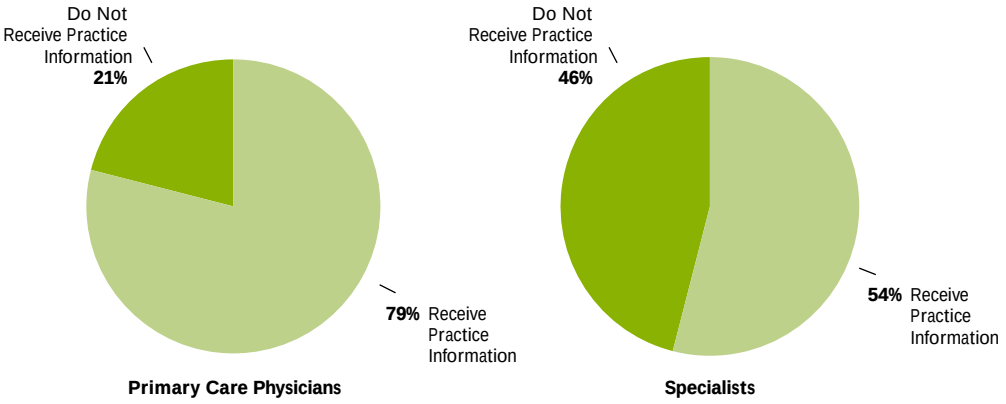
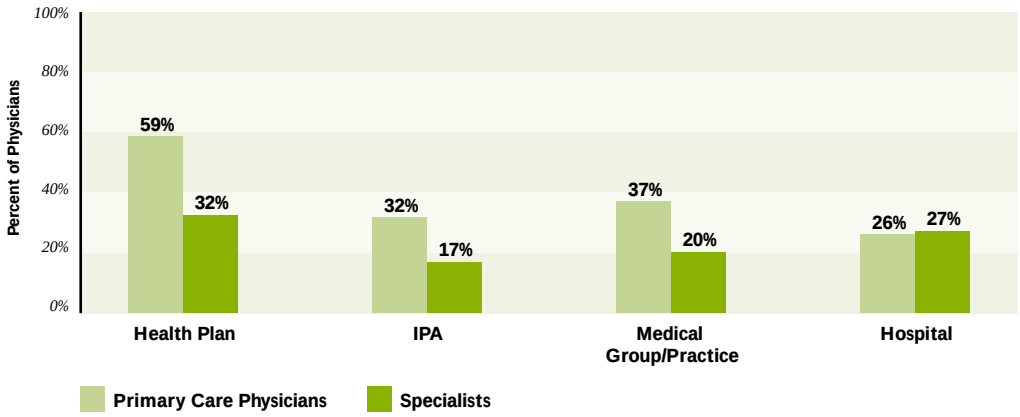


FIGURE 37

Source of Practice Pattern Information, 2001



Note: Physicians can receive information from more than one type of source.

Response to Profiles

"... I was the only one taking care of HIV patients. So my costs were higher, much higher. And I asked them to take that out of the equation and just look at others. And they wouldn't. So I was constantly in the outliers. I started about three years ago to throw them away. I haven't seen any [since then]."

"The insurance [reports] come from parts totally unknown. Who the heck is this and why did they send us — well, I guess I know why they sent the letter to me. But should I care? I don't care whatsoever."

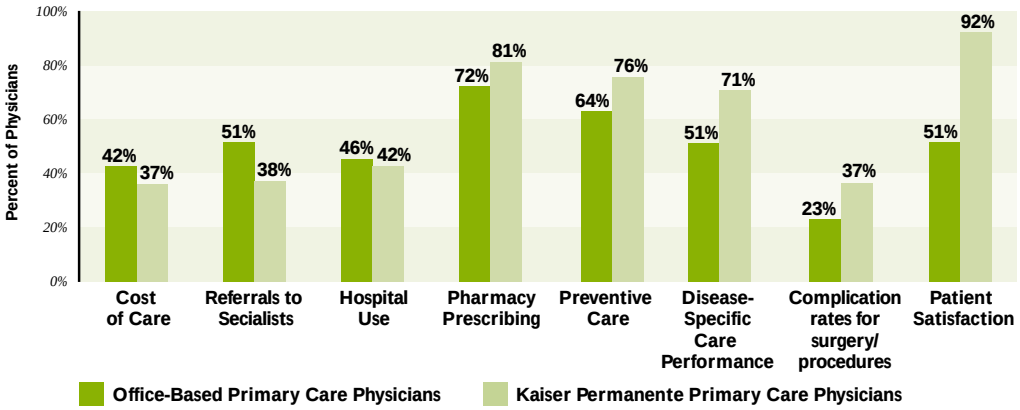
"They tied together the data of the laboratory and encounter data and all that. And what they've done, for example, we get little postcards on all our diabetics that they show have not had a diabetic eye exam in the past year. And so we got all these little postcards with mailing label around it. We thought, this is crazy. We all do this. And we all pulled out all the charts and sure enough, we didn't do them. You know. Okay. We mailed out these postcards. We actually did something good. We provided good care."

Physicians were asked to indicate the types of practice pattern information they received. Responses varied between primary care physicians and specialists, and between Kaiser Permanente and office-based physicians. Kaiser Permanente primary care physicians were most likely to receive information about patient satisfaction (92%), pharmacy prescribing (81%), preventive care (76%), and measures of disease specific care (71%). In contrast, office-based primary care physicians received information about pharmacy prescribing (72%), preventive care (64%), measures of disease-specific care (51%), and patient satisfaction (51%).

Kaiser Permanente specialists reported receiving information about patient satisfaction (88%), pharmacy prescribing patterns (58%), preventive care (48%) practices, and measures of disease-specific care (46%). In contrast, 42% of non-Kaiser, office-based specialists reported receiving information about pharmacy prescribing, 31% received patient satisfaction information, and 27% received information about their hospital-related care.

FIGURE 38

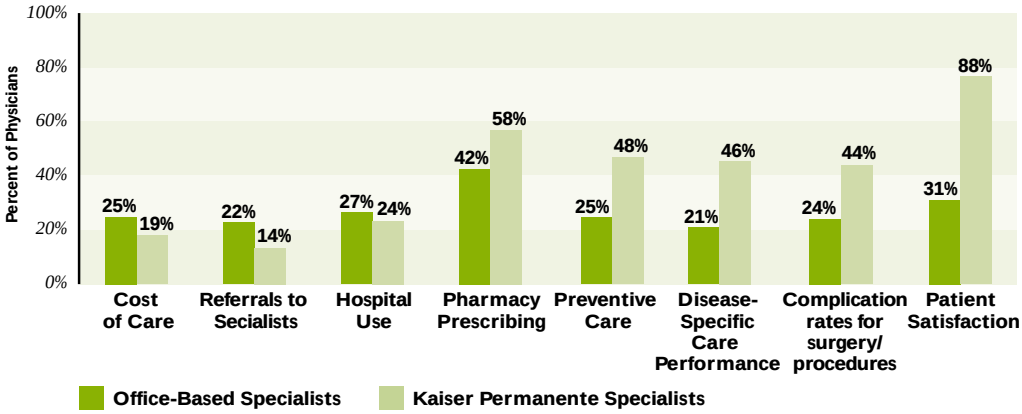
Percentage of Physicians Receiving Practice Pattern Information, by Type of Information, Primary Care Physicians, 2001



Note: Includes only physicians receiving some type of information.

FIGURE 39

Percentage of Physicians Receiving Practice Pattern Information, by Type of Information, Specialists, 2001



Note: Includes only physicians receiving some type of information.

Q: Do doctors find practice profiles useful?

A: Yes, if they come from medical groups.

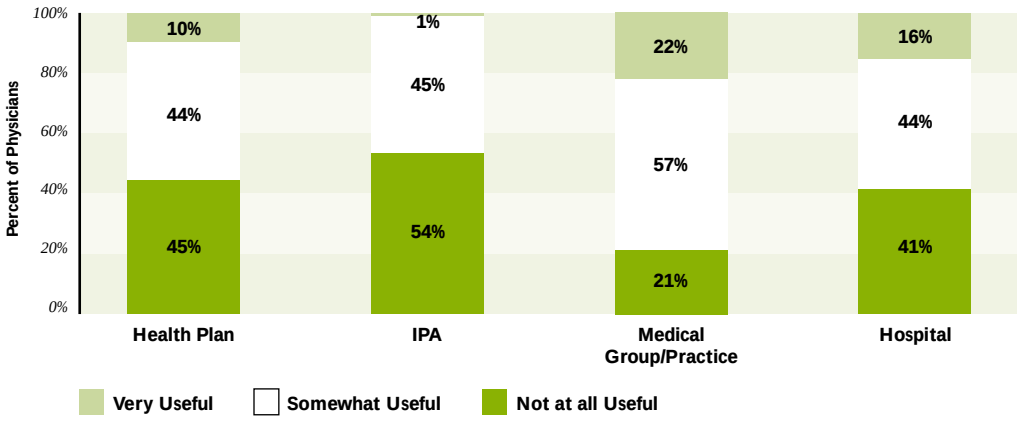
The usefulness of practice pattern information varied considerably depending on the source of the information. Among physicians receiving practice pattern information, almost 80% of primary care physicians and over 70% of specialists found information from their medical groups or medical practices to be useful. Information from health plans, IPAs and hospitals was rated to be less useful. Compared to office-based physicians, Kaiser Permanente physicians gave higher rating for the utility of practice pattern information. Nearly all Kaiser Permanente physicians found practice profiles very or somewhat useful. In contrast, smaller proportions of office-based practitioners found practice profiles useful.

The perceived usefulness of practice pattern information might depend on perceptions of accuracy and motivation behind the development of the information. Compared to office-based practitioners, physicians in the Kaiser Permanente system thought the practice pattern information they received was more accurate and more likely to be motivated by desire to improve quality than lower costs (data not shown).

"I don't see anything about patient satisfaction or any of these other things. I see a lot about percentage of generics that you give, percentage of formulary/non-formulary drugs. All cost related things. And how you stack up against your peers cost-wise. Not anything as far as patient satisfaction, outcome or anything like that. It's all cost."

FIGURE 40

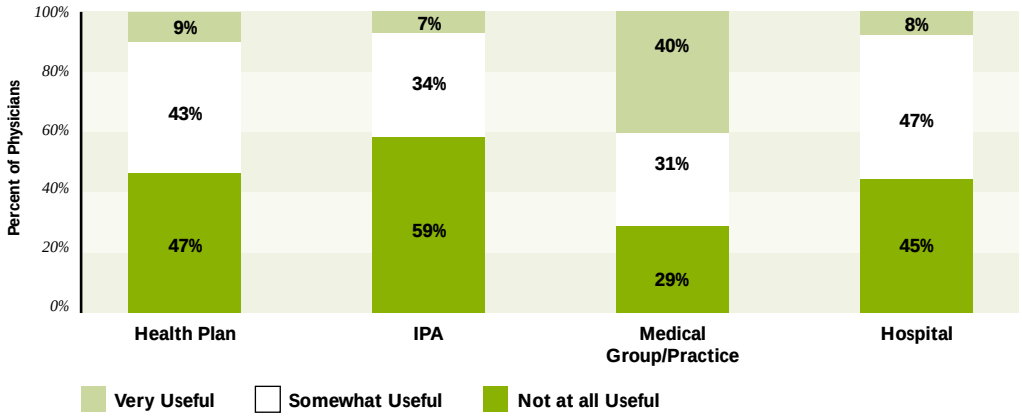
Usefulness of Practice Pattern Information, All Primary Care Physicians, 2001



Note: Includes only physicians receiving some type of information.

FIGURE 41

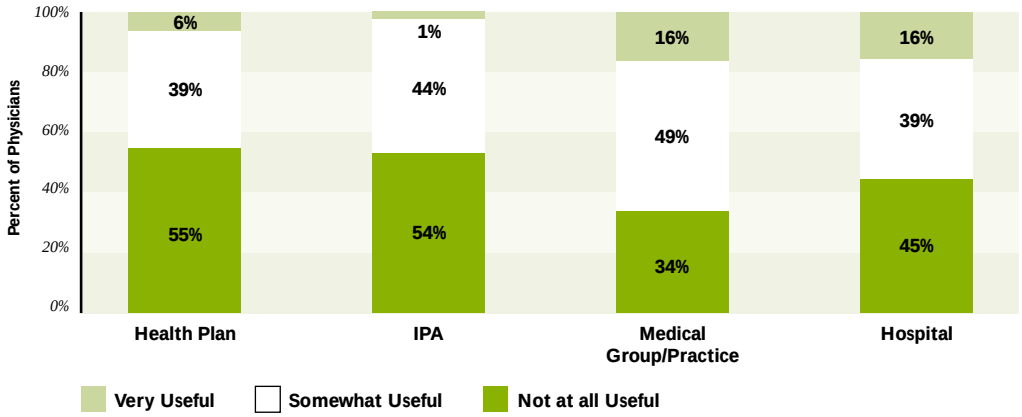
Usefulness of Practice Pattern Information, All Specialists, 2001



Note: Includes only physicians receiving some type of information.

FIGURE 42

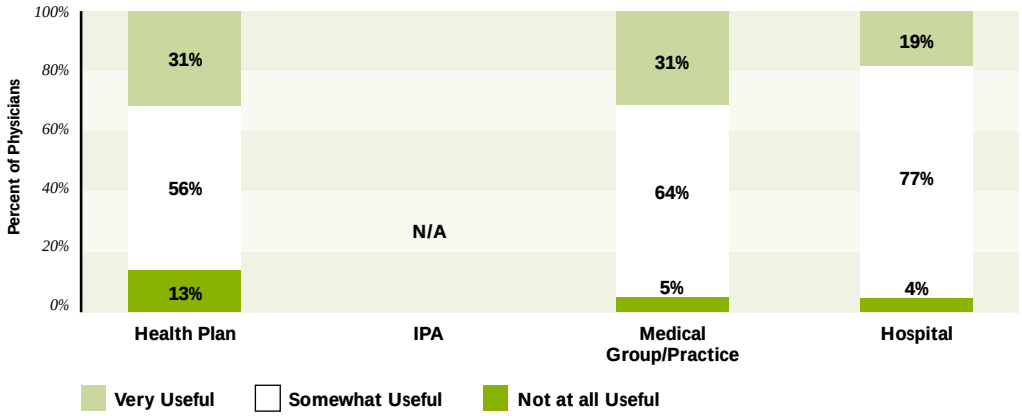
Usefulness of Practice Pattern Information, Office-Based Primary Care Physicians, 2001



Note: Includes only physicians receiving some type of information.

FIGURE 43

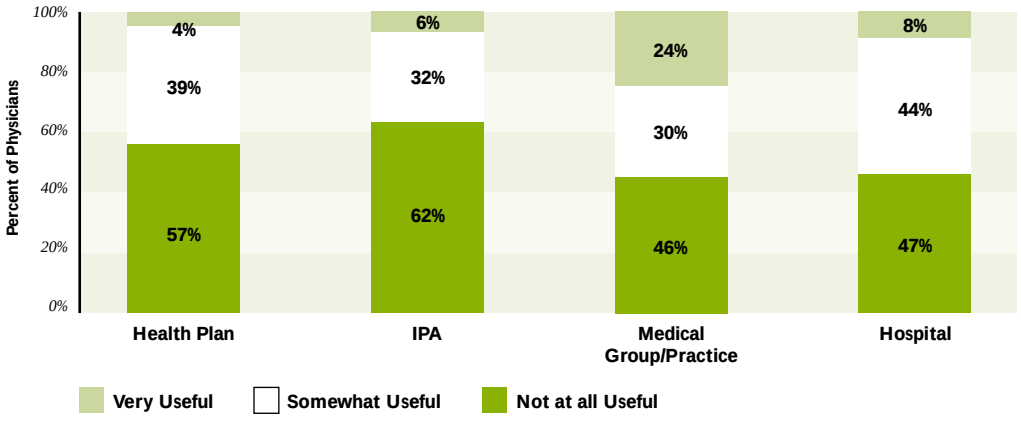
Usefulness of Practice Pattern Information, Kaiser Permanente Primary Care Physicians, 2001



Note: Includes only physicians receiving some type of information.

FIGURE 44

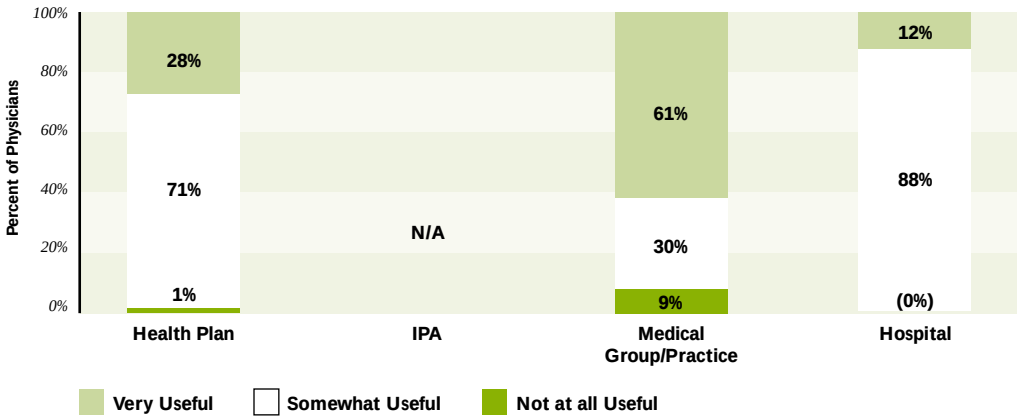
Usefulness of Practice Pattern Information, Office-Based Specialists, 2001



Note: Includes only physicians receiving some type of information.

FIGURE 45

Usefulness of Practice Pattern Information, Kaiser Permanente Specialists, 2001



Note: Includes only physicians receiving some type of information.

Report Cards

Q: Do doctors want the public to see health care system report cards?
A: Maybe, if the information is about hospitals and health plans.

We queried physicians on their opinions about giving performance measures (report cards) to the public about elements of the health care system. About half of physicians favored making report cards about health plans and hospitals available to the public. However, only a third or fewer of physicians favored providing performance measures about individual physicians to the public.

FIGURE 46

Primary Care Physicians' Opinions on Public Report Cards, 2001

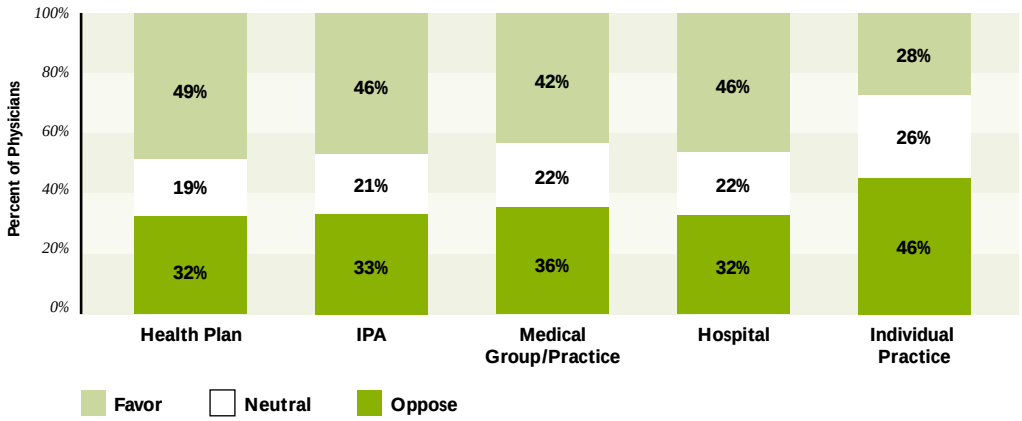
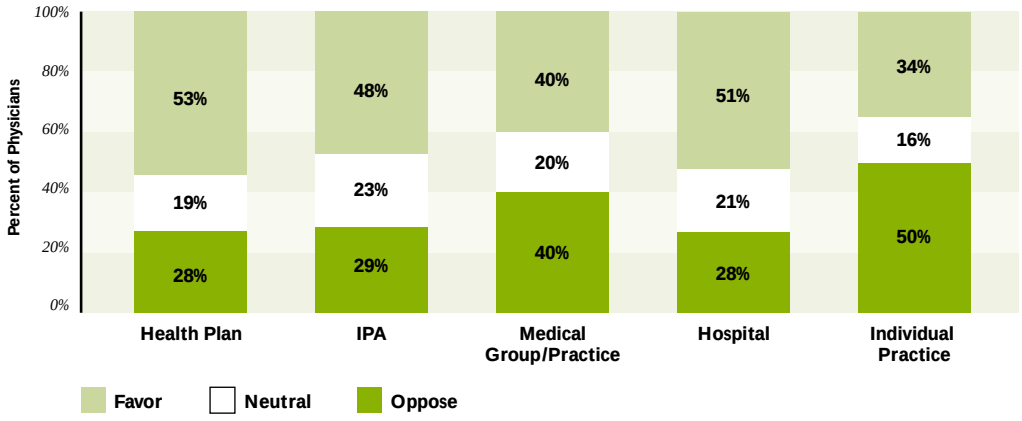


FIGURE 47

Specialists' Opinions on Public Report Cards, 2001



Hospital Report Cards

"It's a marketing ploy."

"It improves care, the report card. They're more conscious and they want to do a good job. It improves quality of care delivered."

"We find it very ludicrous. And I'll tell you why we find it ludicrous. You know, we provide for PacifiCare, Cigna, InterValley, Health Net, Aetna, Blue Shield, Blue Cross. So who does a better job of ordering mammograms? It has nothing to do with whether it's PacifiCare, Aetna, Blue Shield, Blue Cross. It has to do with the physicians. And so it's creating distinctions that aren't — now maybe if you want to compare Kaiser to something, that's a legitimate distinction."

"I think it's legitimate if you break it down ...coronary bypass, for instance. I think that's legitimate to compare a small community hospital that does 100 of them, 50 of them a year, compared to a large institution that does [a lot]. I think that's fair information that the public ought to know, the benefit, the value of going to an institution that has [low] mortality rates."

"...this is only really valuable if it's accurate and people have a choice. And it seems to me that the accuracy is very questionable on most of these things for reasons we stated. And there's no choice, so what do you get out of it. You get people who know, oh I get to go to the crappiest hospital in town or one that's not the best. Because there's only going to be one best and that's where everybody wants to go."

Section VI

PRACTICE PERCEPTIONS

Satisfaction

Q: Are doctors becoming more dissatisfied with medicine?

A: No, satisfaction rates have remained about the same in recent years.

In 2001, most physicians (79% of primary care physicians and 84% of specialists) reported that they were somewhat or very satisfied with being a physician. Rates of satisfaction and dissatisfaction have remained fairly stable over the past five years, with a slight trend among specialists toward higher levels of satisfaction.

Physicians in the focus groups commented extensively on the sources of their professional satisfaction and dissatisfaction.

FIGURE 48

Satisfaction with Being a Physician, Primary Care Physicians 1996-2001.

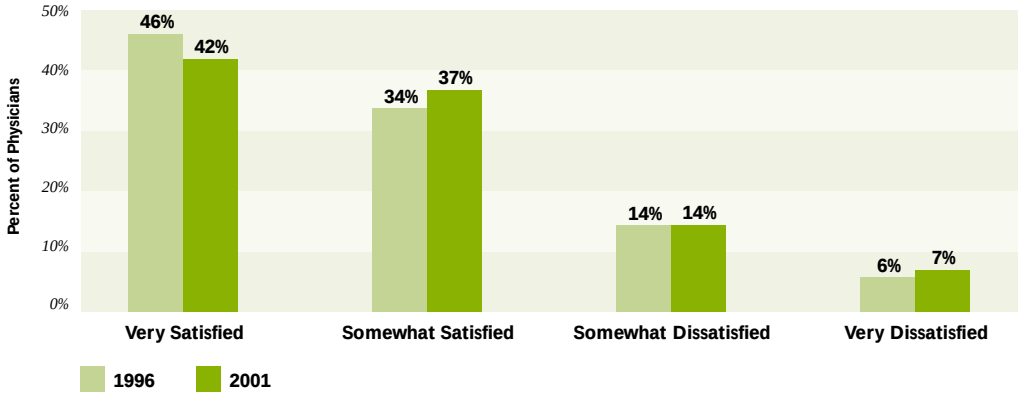
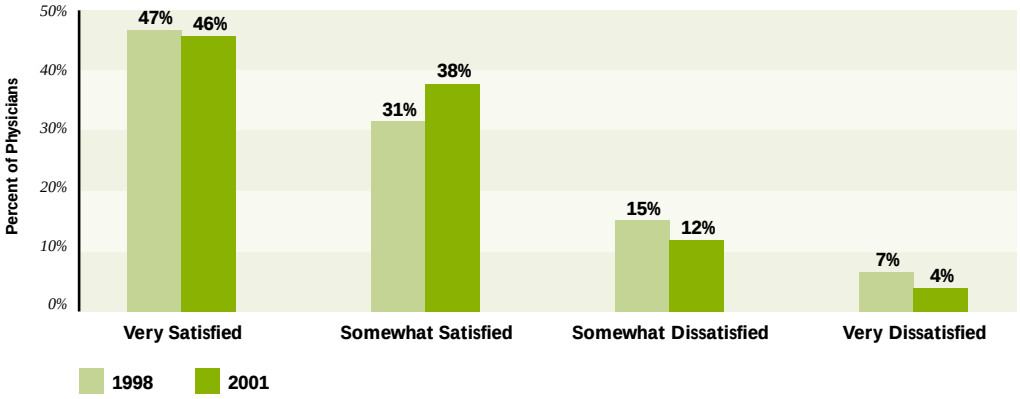


FIGURE 49

Satisfaction with Being a Physician, Specialists 1998-2001.



Sources of Satisfaction

"It's a different person in the chair every day. The routine might seem the same but for me, I look at each person, even though they're coming back a year later for routine care, something's changed about it. And so it's always different, always changing."

"One is the challenge of problem solving...is very intriguing, a lot of fun, and I offer patients something that is unique that they really can't get somewhere else....To be able to see people that you've taken care of who have done really well for that length of time that might not have done that well if they didn't see you."

"Practicing medicine you have that feedback ...from patients... and the satisfaction you get when they come back and tell you that they've been cured or they're doing better. So just that interpersonal contact and care [is satisfying]."

"I think the reason why I'm in it is it's just really to take care of patients. I mean I enjoy talking with them, knowing what their lives are like, seeing if I can help in any particular way. But pretty much everything else I dislike."

"I like that it's lucrative still. That I'm in charge. Nobody can fire me. I'm in my own business. Freedom to do what you want. I find my work gratifying."

"It's fun. It's intellectually stimulating. It has been rewarding at whatever level we think it would be rewarding. And I get a lot of personal feedback from it."

Sources of Dissatisfaction

"Loss of autonomy is probably the most frustrating. It's due to insurance companies. It's due to managed care. You know, it's very difficult. You've gone and had the training and then you have the insurance companies telling you, no, you can't do that; no you can't give this drug. Or the patient says, no, I got this on the Internet...Just too many other outside interfering forces."

"[There has been a] decay...of what used to be medical ethics. The payment by drug companies to teach you about medicine. The payment by orthopedic equipment companies to go and play golf with them and learn how to use their prostheses. The gross commercialism of the advertisements, bulletin boards about totally ineffective medication that you should come to my clinic and get to make your joints work better. All that, some of which in the modern world has to occur. I think it's costing us a hell of a lot."

"One of the most frustrating thing is the enormous burden of paperwork due to managed care. All of that bureaucracy is awful."

"I love doing pediatrics. It's a real hard job. You work real, real hard and you get paid pretty good. We all [have] houses and cars and whatever. But you don't get as much respect. I mean, it seems like you work really, really hard right now and it's not as much fun ...."

"It's a bad business but wonderful profession."

"I think one of the big problems is there's been a fundamental change in the relationship between physicians and patients. Medicine is a commodity now. I always blame it on the banks. When you can call your bank 24-hours a day, that was the end of medicine because expectations changed."

"Documentation requirements [are a source of dissatisfaction]. I spend a good 25 percent of my day just documenting. Sometimes I spend more time documenting on a patient than I do actually seeing the patient."

Intent in Three Years

Q: Are doctors more likely than a few years ago to leave practice?
A: No, plans to leave practice haven't changed.

Some recent reports have suggested that greater numbers of California physicians are leaving medicine. We asked physicians about their practice intentions in three years. In 2001, over three-quarters of both primary care physicians and specialists reported they intended to still be practicing clinical medicine in California.

Time trends indicate that the numbers of physicians intending to continue practicing medicine is increasing slightly. In 2001, 80% of primary care physicians reported that they would still be seeing patients in three years, up from 77% in 1996. Similarly, 84% of specialists in 2001 reported that they intended to still be practicing in three years, up from 77% in 1998.

In 2001, physicians were also asked a new question about whether they intended to leave California to practice elsewhere in the next three years. Three percent of primary care physicians and eight percent of specialists thought they would leave California to practice elsewhere.

FIGURE 50

Physicians' Intent to Practice in Three Years, Primary Care Physicians, 2001

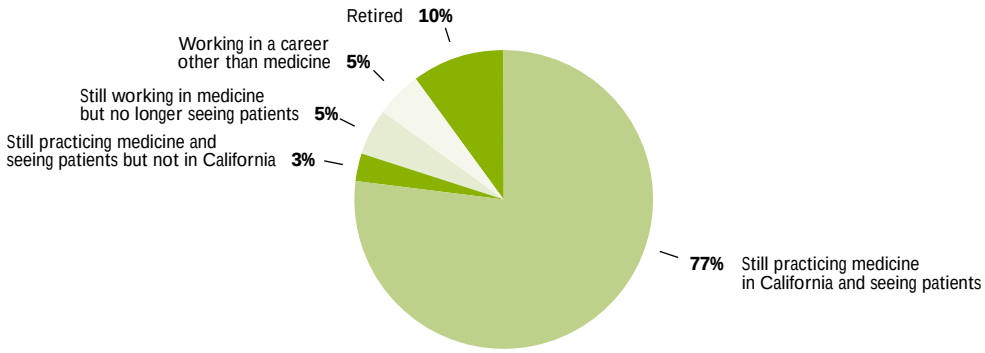


FIGURE 51

Physicians' Intent to Practice in Three Years, Specialists, 2001

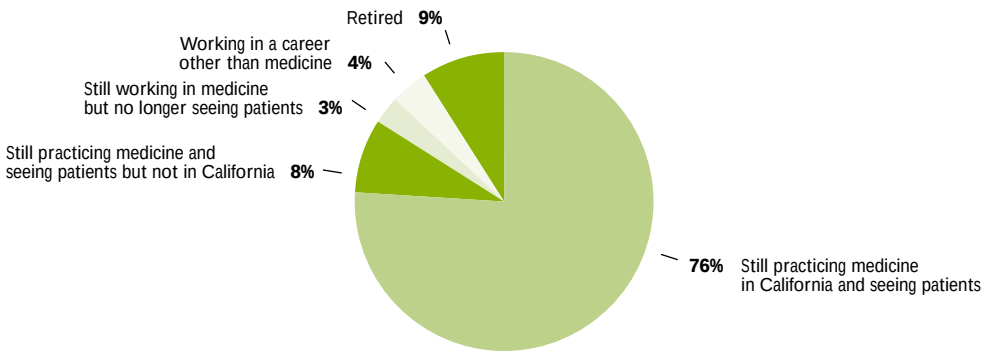


FIGURE 52

Physicians' Intent to Practice in Three Years, Primary Care Physicians, 1996-2001

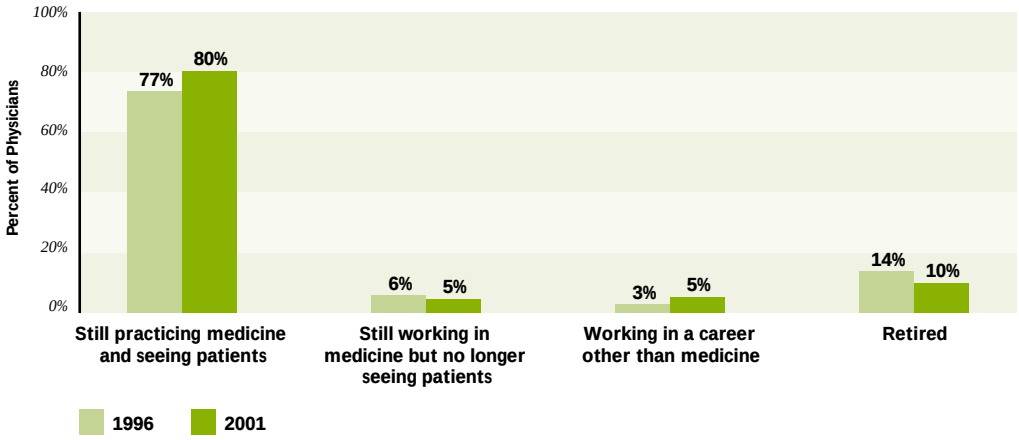
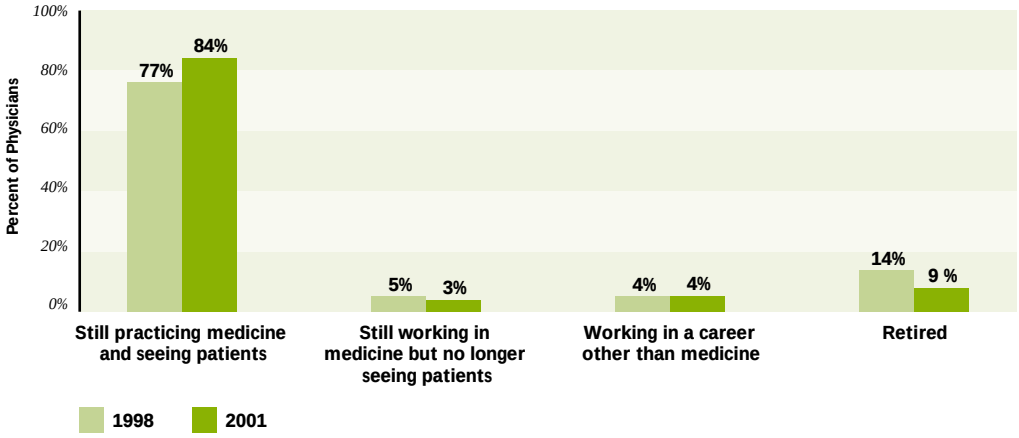


FIGURE 53

Physicians' Intent to Practice in Three Years, Specialists, 1998-2001



Practice Pressures

Many physicians perceived that early managed care efforts increased pressures to see more patients per day, limit the number of tests ordered, limit the number of referrals to specialists, and limit what physicians could tell patients about treatment options. Concerns from a number of different fronts have tried to address these pressures. In the survey, physicians were asked to report whether they experienced these pressures and if so, whether they affected their practices. The vast majority of physicians either did not experience these pressures or experienced them but did not think they adversely affect care. Relatively small minorities experienced these pressures and thought they compromised care.

These numbers have remained fairly stable for primary care physicians between 1996 and 2001. One noteworthy change was the increase, from 43% to 56%, of primary care physicians who reported not experiencing any pressure to limit the number of referrals to specialists. Time trends for specialists between 1998 and 2001 show fewer specialists experiencing the pressures to limit referrals and tests, probably reflecting a relaxation of utilization review and other restrictions on their practice.

Kaiser Permanente physicians (both primary care and specialists) were more likely than office-based physicians to report pressure to see more patients per day; up to a quarter of them reported that this pressure compromises care. On the other hand, Kaiser Permanente physicians were less likely than office-based physicians to feel pressure to limit tests, referrals to specialists, or what they tell patients about treatment options. Among Kaiser Permanente physicians who experienced any of these three pressures, only very small (3% or less) percentages reported that they compromised care.

FIGURE 54

Percentage of Physicians Experiencing Practice Pressures, Primary Care Physicians, 1996-2001

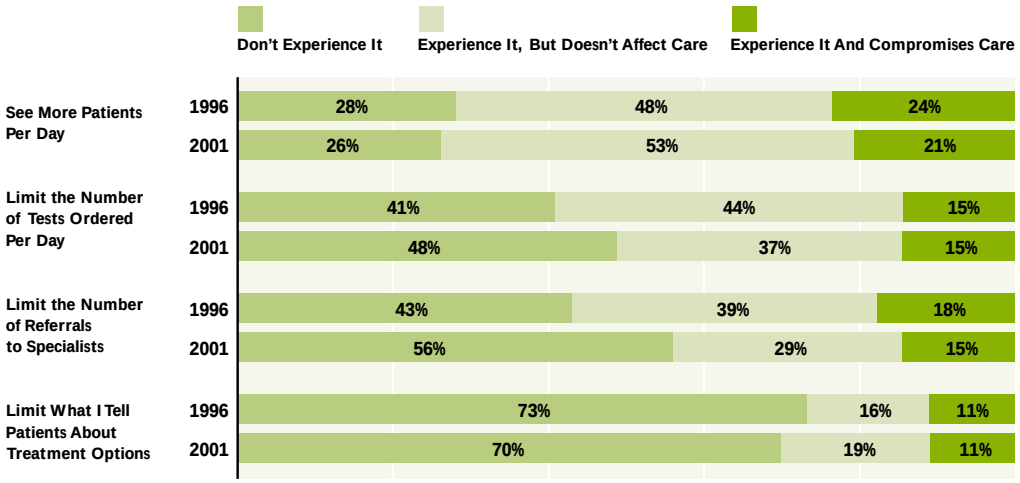


FIGURE 55

Percentage of Physicians Experiencing Practice Pressures, Specialists, 1998- 2001

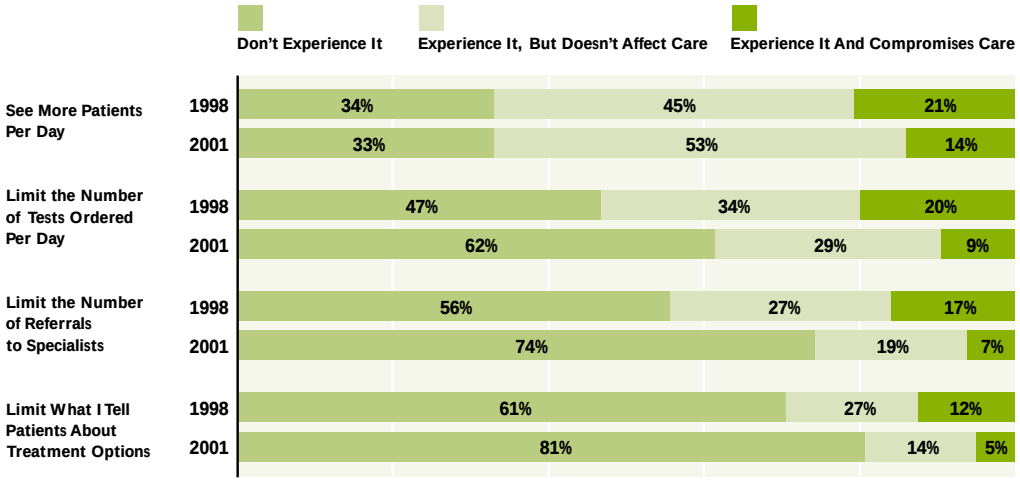


FIGURE 56

Percentage of Physicians Experiencing Practice Pressures, Office-Based and Kaiser Permanente Primary Care Physicians, 2001

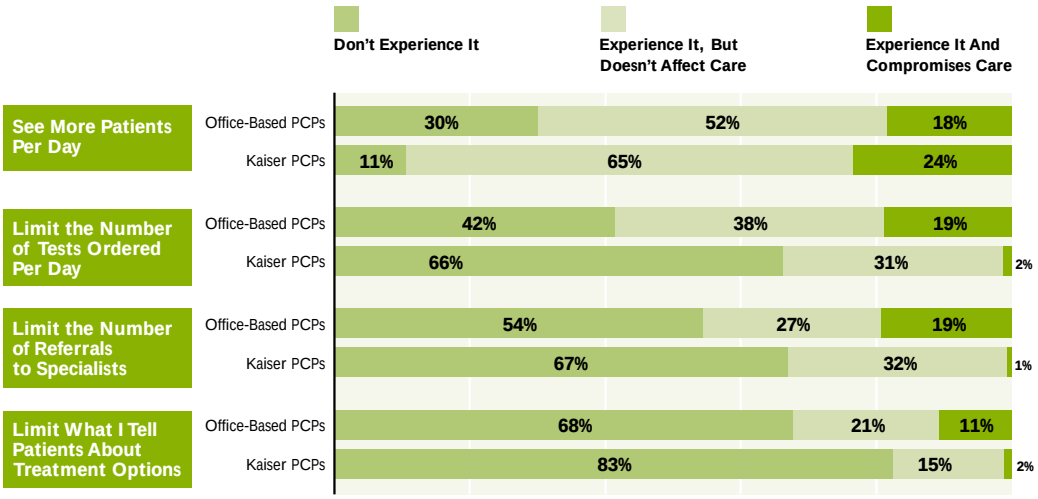
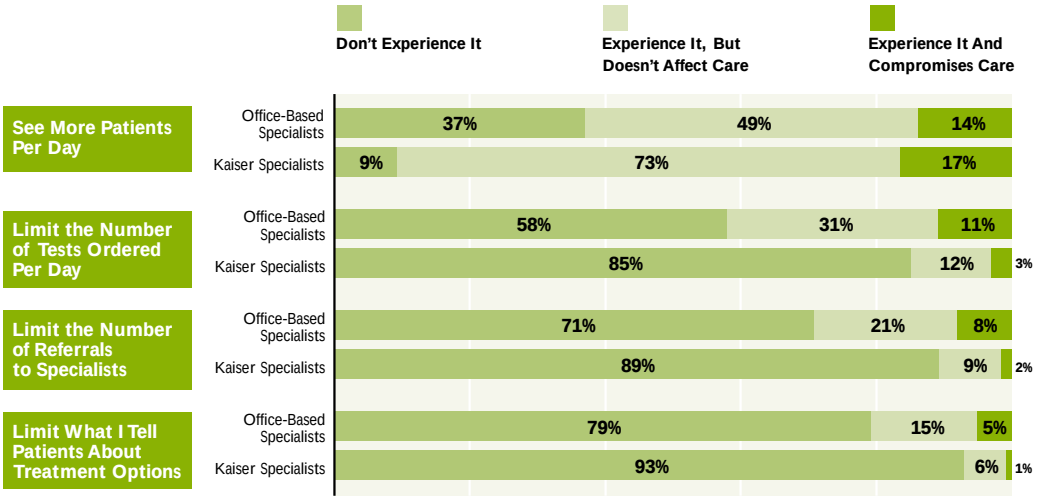


FIGURE 57

Percentage of Physicians Experiencing Practice Pressures, Office-Based and Kaiser Permanente Specialists, 2001



"One of the most frustrating thing is the enormous burden of paperwork due to managed care. Every time you want to send a patient to a specialist or an expensive test, you have to file an application with the insurance company and some clerk either approves it or disapproves. Rarely, disapproves it. But you just have to go through the song and dance of filling out paper, and faxing it in, and waiting for a response, and having a patient call wanting to know where the referral is."

Section VII WORKFORCE

Overall Supply of Physicians

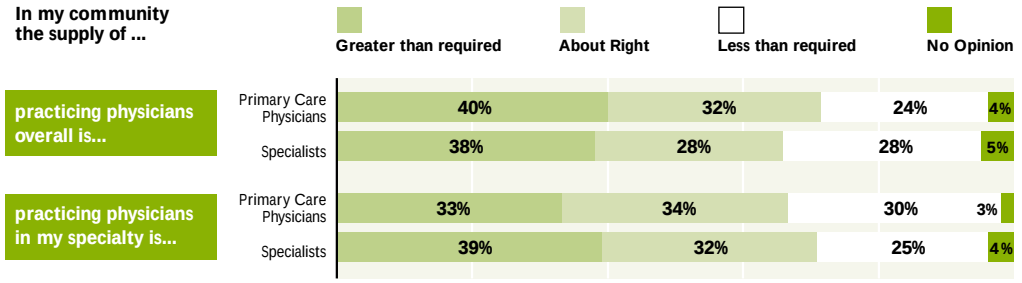
Q: Is there a consensus among doctors about whether there are too many or too few doctors in California?

A: No, doctors' views vary tremendously.

Purported oversupplies and shortages of physicians continue to be debated. Several groups have recently raised the specter of looming shortages — particularly of specialists — in California. Physicians were asked to rate their community's supply of practicing physicians overall and in their specialty. Mirroring the disparity of opinions on this topic, physicians' responses were spread fairly equally across the possible ratings. About a third of physicians thought the supply of physicians in their community was about right. Slightly higher percentages thought supply was greater than required compared to those who thought supply was less than required.

FIGURE 58

Physicians' Perceptions of Physician Supply in Their Communities, 2001



Practice Climate

"The cost of living is probably one of the highest in the United States. Our reimbursement level is probably one of the lowest in managed care."

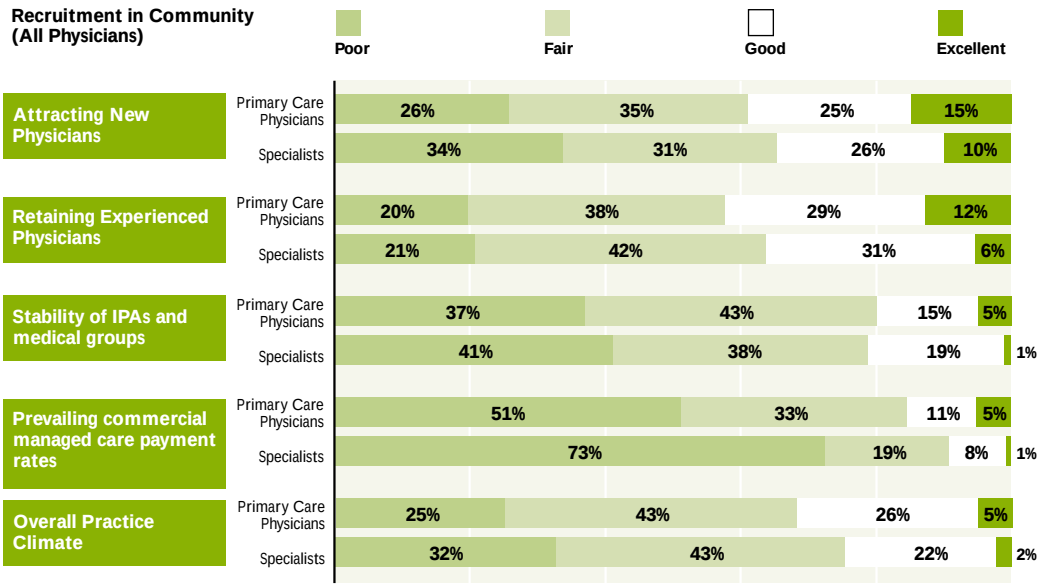
"We've tried to create an incentive program in which the amount of time that they work is less and they take less on-call. You know ...create something for them to be able to know that they're not going to be overworked.... Some of the newer graduates are concerned about the money, but ...a lot of them really don't worry that much about the money. Money is becoming a secondary issue. The quality of life, well we're beginning to find out that it's important to some of the newer graduate students."

Physicians were asked to share their views of their community's overall practice environment. Many physicians reported that it was hard to recruit and retain physicians in their communities and that IPAs and medical groups were unstable and in turmoil. Notably, one quarter of primary care physicians and one third of specialists rated the overall practice climate in their communities as poor. Fifty-one percent of primary care physicians and 73% of specialists ranked prevailing commercial managed care payment rates as poor. The responses to these questions are among the most negative of all the issues we surveyed. Even though most physicians remained generally satisfied with medicine as a profession, most expressed strongly negative opinions of their communities' practice environments.

When the negative opinions about community practice environment were explored in the focus groups, the most common issues of concern were local housing costs and cost-of-living.

FIGURE 59

Physicians' Perceptions of Practice Climate in Their Communities, 2001



"Housing is a big issue. I know some of the larger medical groups give interest free loans for down payments and stuff because who wants to come and start a medical practice in an area that you can't buy a house. Being part of the community is, I think, part of wanting to work in the area."

"When a doctor retires in this area, it's very hard to get a new one in.... I think we're going to go through a period where there's going to be, at least in this area, a shortage of physicians, access will be difficult."

"We can't even recruit a good physician in California...to recruit a [general] internist now, is like a needle in a haystack. All the internists are now going to the hospital program, which is a completely different specialty. It's a very good paying job. You know, we have two or three [hospitalists] and what we do is we make them work one week, they're off next week.... They say they love their jobs. That's the kind of lifestyle — you know, it's a reasonable pay. You want a job that [pays] you some good money, but you don't overwork yourself and you have enough people to support you."

"I found the demands of the new graduates [difficult], I have [had] three people come and go from my practice. They want an income that's difficult to guarantee in solo practice trying to expand to two. And it's very difficult to give them the benefits. And [there's] very little willingness on their part to build a practice. They want it kind of now. They don't want to work the hours that I work. They look at my hours and they say, well no way. They want to have an 8 to 5 type of job."

"[There were] two women [in our group] who were both very good physicians and had kids and didn't want to work full time. We [scheduled] them ... to make one full-time doctor. It worked out actually very well. Together they equal one full-time doctor and they cover each other. As far as the patients see, they have a choice of two doctors."

Non-physician clinicians

Significant numbers of physicians reported working with non-physician health care professionals in their offices or clinics. Generally, primary care physicians were more likely than specialists to report working with non-physician clinicians. For example, 46% of primary care physicians reported that nurse practitioners worked in their offices compared to 20% of specialists. For specialists in the aggregate, the most common non-physician clinician working in the same office was a physician assistant (20%).

We were also interested in the likelihood that physicians in particular specialties would work with non-physician clinicians in particular professions. In specialty-specific analyses, 35% of obstetrician/gynecologists reported working with certified nurse-midwives and 46% of ophthalmologists reported working with optometrists in their practices.

Physicians in the Kaiser Permanente system were much more likely than office-based physicians to work with non-physician clinicians. For example, 88% of Kaiser Permanente primary care physicians worked with nurse practitioners compared to only 34% of office-based primary care physicians. The numbers were even more dramatic for eye care. At Kaiser Permanente, 62% of primary care physicians and 49% of specialists work with optometrists compared to seven percent and eight percent of office-based primary care physicians and specialists, respectively.

FIGURE 60

Percentage of Physicians Working with Non-Physician Clinicians in Same Office, 2001

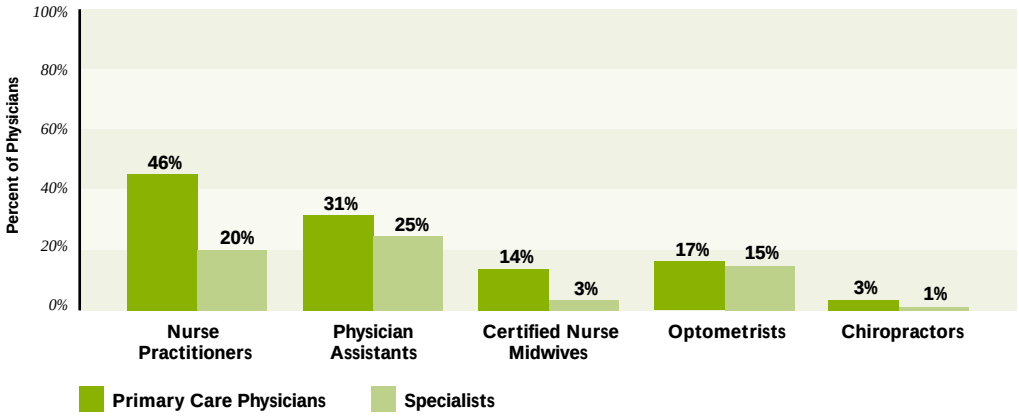
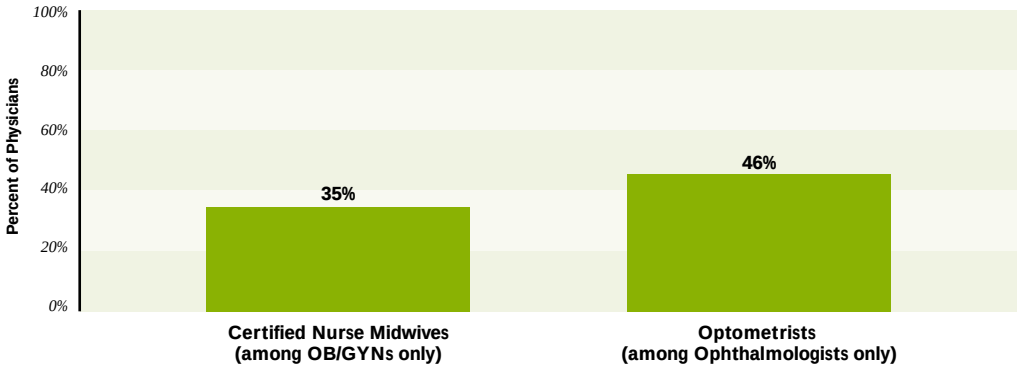


FIGURE 61

Percentage of Selected Specialists Working with Selected Non-Physician Clinicians, 2001



Recruiting nonphysician clinicians

"We were hiring a nurse practitioner for urgent care. And we had quite a difficult time finding the right person for the position and had to let a few go. It wasn't an easy process."

"Some of the nurse practitioners are looking for the same thing that the physicians are looking for. They want to work less hours and they want to make more money... we interview [applicants from] every possible source like the Internet or the nurse practitioner database.... Then [we] create a incentive bonus package for them that the more you work, the more you get paid."

"I have [worked with the same] physician's assistant ... for years. I get resumes probably every three to four months from either a nurse practitioner or PA who would like to come and practice in this area."

FIGURE 62

Percentage of Primary Care Physicians Working with Non-Physician Clinicians, Office-Based and Kaiser Permanente, 2001

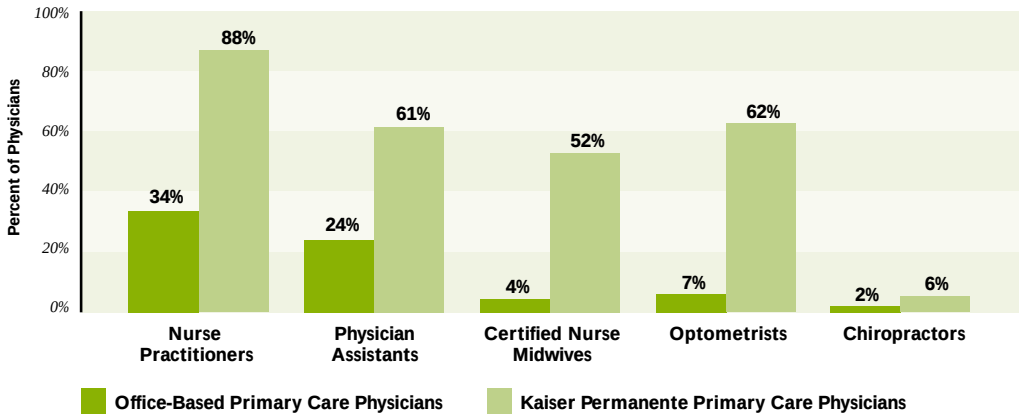
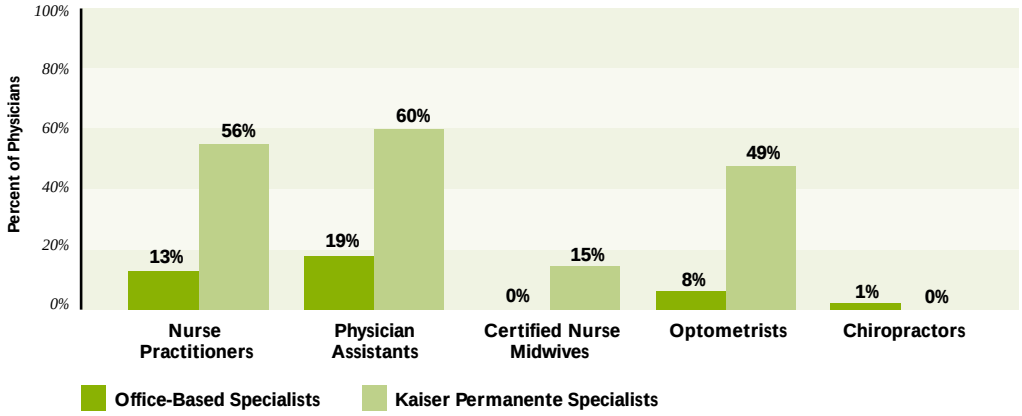


FIGURE 63

Percentage of Specialists Working with Non-Physician Clinicians, Office-Based and Kaiser Permanente, 2001



Q: Do doctors think there are too many nurse practitioners and physician assistants?
A: Yes, some do, but many do not.

In response to questions about the supplies of nurse practitioners, physician assistants and other health care professionals who may be seen as competitors, physicians' answers varied. Many physicians had no opinion about non-physician workforce supply in their communities. However, 34% of primary care physicians and 28% of specialists thought that the supply of nurse practitioners and physician assistants was about right. Among primary care physicians, 21% thought the supply was greater than required and an almost equal amount (19%) thought the supply was less than required. In contrast, only 12% of

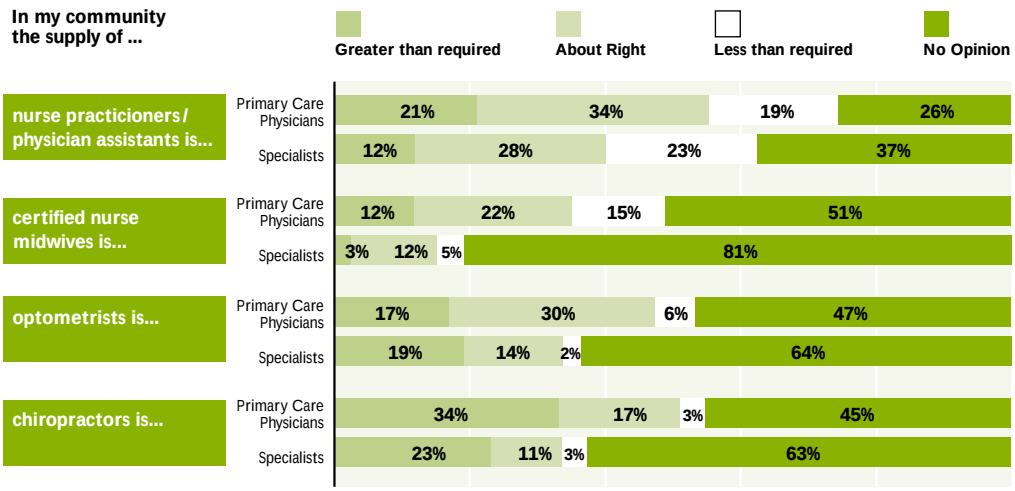
specialists thought the supply was greater than required and 23% thought the supply of nurse practitioners and physician assistants should be increased to meet community needs.

Even fewer physicians expressed opinions about supply of certified nurse-midwives, optometrists and chiropractors. Of those that did, a minority of physicians thought supplies were about right in their communities. A slightly higher percentage of physicians thought that the supply of nurse-midwives was less than required in their community compared to those who thought that the supply was greater than required. Among obstetrician/gynecologists, 19% thought the supply of nurse-midwives was less than required, 15% thought the supply was greater than required, 31% thought the supply was about right, and 36% had no opinion.

Perspectives on supply of non-physician clinicians were more dramatically different for some specialists. For example, 30% of primary care physicians and 14% of all specialists thought the supply of optometrists was about right; less than 20% of each group thought the supply was greater than needed. However, 80% of ophthalmologists thought the supply of optometrists was greater than required in their communities, 15% thought it about right, none thought supply was less than required and only 4% had no opinion.

FIGURE 64

Physicians' Perceptions of Non-Physician Workforce Supply, 2001



Most physicians reported that the supply of non-physician clinicians in their communities had no effect on their professional security. However, 20% of primary care physicians and 14% of specialists felt their professional security was threatened by non-physician clinicians. Few physicians reported that the supply of non-physician clinicians in their communities enhanced their professional security.

FIGURE 65

Percentage of Primary Care Physicians Who Think Supply of Non-Physician Clinicians Affects Physicians' Professional Security, 2001

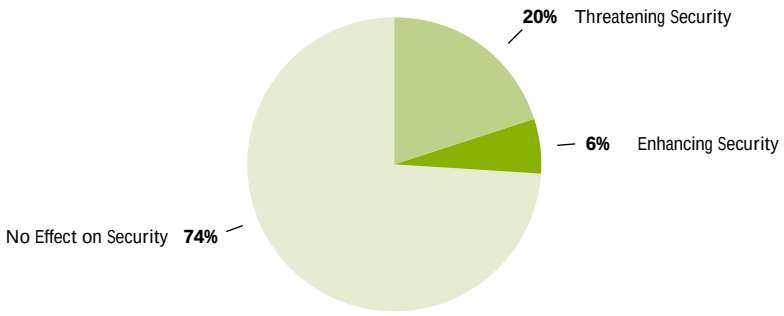
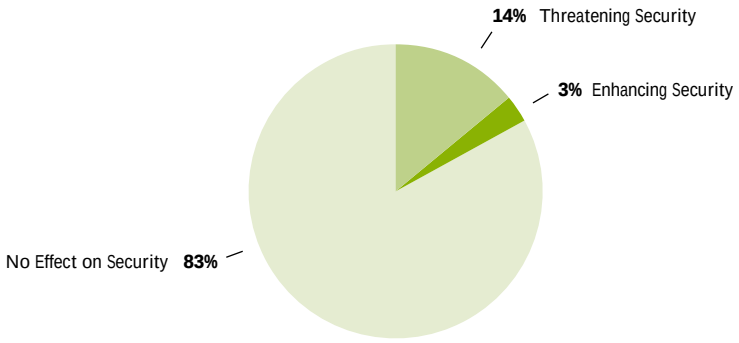


FIGURE 66

Percentage of Specialists Who Think Supply of Non-Physician Clinicians Affects Physicians' Professional Security, 2001



Twenty-seven percent of primary care physicians and 29% of specialists felt threatened by expanded scope-of-practice laws for other health care professionals. However, most physicians did not report feeling threatened by more liberal scope of practice laws for non-physician clinicians.

FIGURE 67

Percentage of Primary Care Physicians Who Think Expanded Scopes of Practice for Non-Physician Clinicians Affect Physicians' Professional Security, 2001

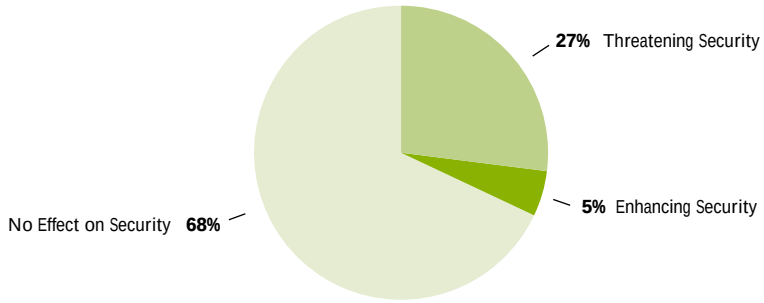
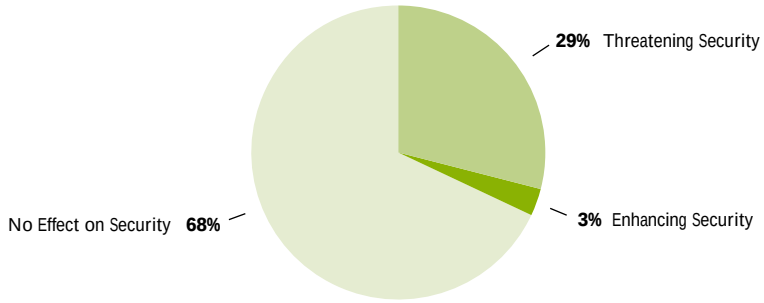


FIGURE 68

Percentage of Specialists Who Think Expanded Scopes of Practice for Non-Physician Clinicians Affect Physicians' Professional Security, 2001



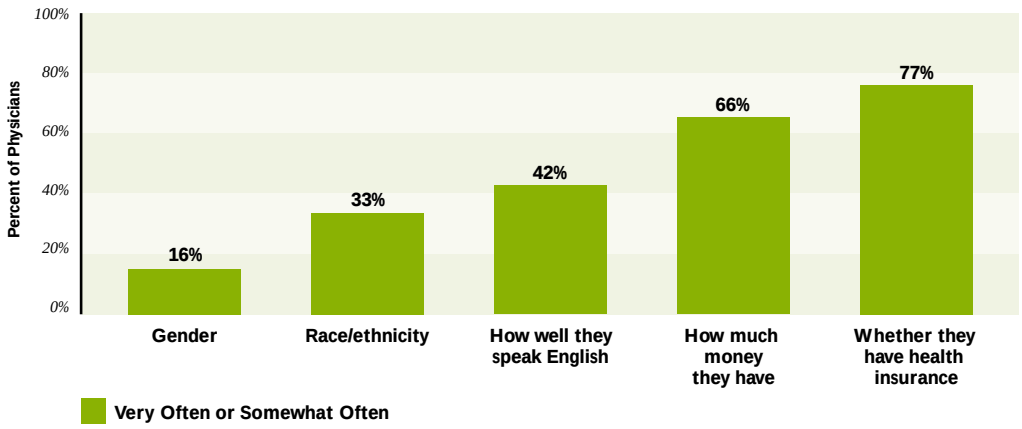
Section VIII DISPARITIES

Q: Do doctors perceive that the health care system treats people unfairly?
A: Yes, many do.

There is growing evidence that there are substantial disparities in health care in the U.S. associated with patient race, ethnicity and other characteristics (Smedley *et al*., 2002). In addition to the many survey questions addressing physicians' own practice experiences, we queried physicians about whether they thought the health care system was treating patients fairly. Physicians were asked whether the health care system treats people unfairly based on gender, race/ethnicity, how well they speak English, how much money they have, and whether they have heath insurance. The majority of California physicians reported that the system treats people unfairly based on how much money they have and whether they have health insurance. A smaller proportion thought the system treats people unfairly based on race or ethnicity.

FIGURE 69

Percentage of Physicians Who Think the Health Care System Treats People Unfairly, 2001



More detailed questions about the impact of race and ethnicity on a person's ability to access and obtain health care revealed that about one third of physicians think that race and ethnicity affects a person's ability to obtain necessary routine medical care, necessary specialty care, and health insurance. Compared to white and Asian physicians, higher percentages of Latino and African American physicians think that race and ethnicity affects health care.

FIGURE 70

Percentage of Physicians Who Think Race or Ethnicity Affects a Patient's Access to Health Care, 2001

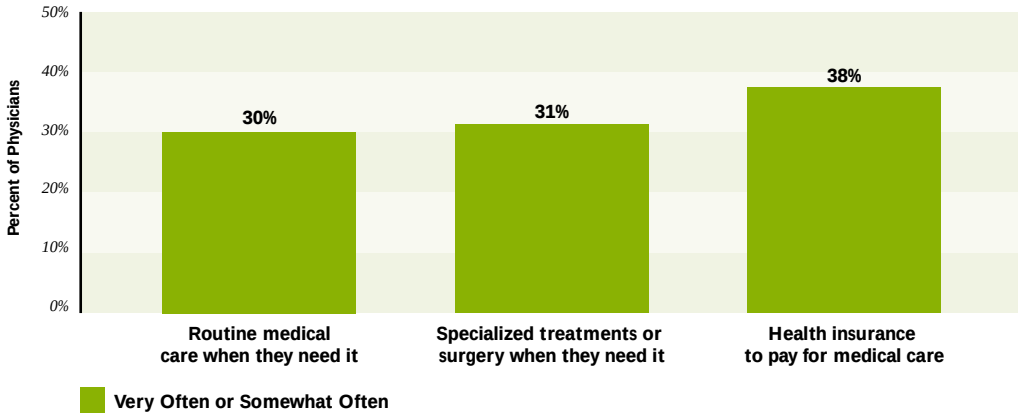
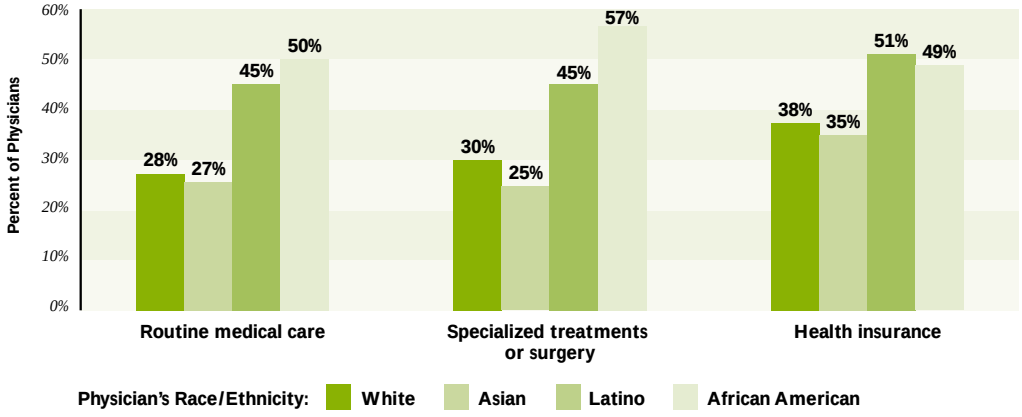


FIGURE 71

Percentage of Physicians Who Think Race or Ethnicity Affects a Patient's Access to Health Care, by Physician Race/Ethnicity, 2001



Health Disparities

"It's the U.S.A. Of course, whites get better care. ...It's an inherent bias in our society."

"Sometimes when I do get a black patient, I ask them, how did you find out about me, how did you come? And most often they tell me it's ... because we wanted to see a black physician. I say, "Why do you want to see a black physician? Every one of us takes an oath to provide the best possible medical care for our patients. It shouldn't really matter who you go to, whether black or white." They say, "I just feel more comfortable with black physicians. I feel I'm going to get what's rightfully mine from a black physician."

"I cannot imagine any one having a person come in the room and thinking in their head, you're black so I'm going to treat you this way. If you're white, I'm going to treat you this way. ... unless it was the deep South in 1952, I just think it's impossible. To me it's just impossible."

"Minority [status] doesn't really matter .... It's income level. If you are well to do, you are getting good care."

Language skills of physicians and office staff may mitigate some of the potential for limited access to care that can contribute to health care disparities. Over a quarter of primary care physicians and 17% of specialists reported that they were fluent in Spanish. Significant majorities (84% of primary care physicians and 68% of specialists) reported that they or their staffs were fluent in Spanish.

FIGURE 72

Percentage of Physicians with Selected Language Skills, 2001

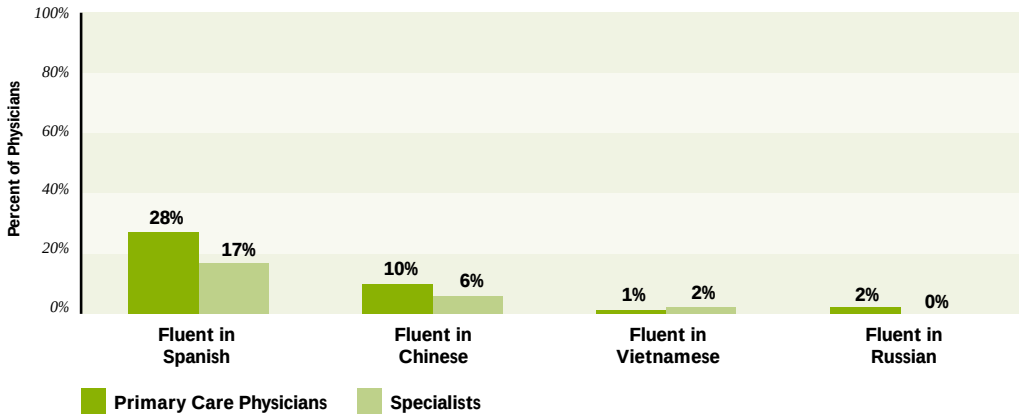
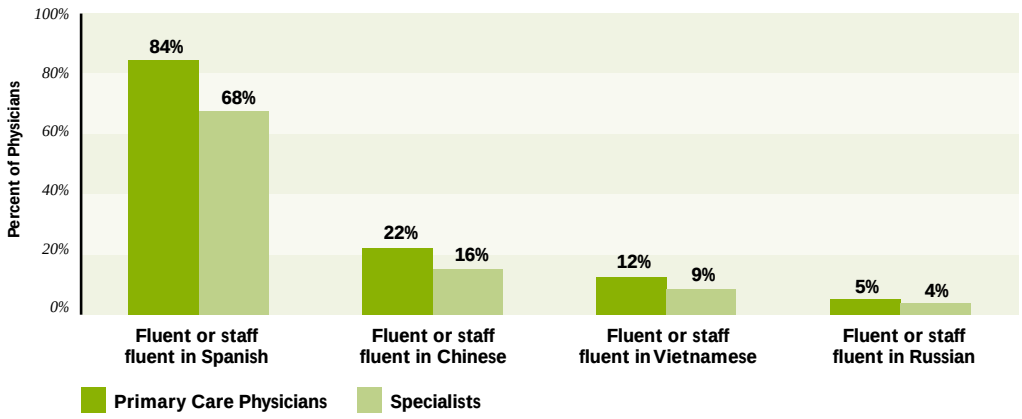


FIGURE 73

Percentage of Physician Offices (physicians or staff) with Selected Language Skills, 2001



"There are cultural issues in the care of patients. In family support, in how people view medical care and medication taking, and things like that."

"But my patients that speak English, they're walking by me as they're going in for their chemotherapy. They'll say, "Hey doc. I'm throwing up all the time. Can you help me with this? Or my pain is a little bit worse. What should I do about it?" Whereas you can't get an interpreter for every hall interaction with somebody. And I don't know if we, me as a Caucasian doctor, really understand all the issues that are going on in their minds and their family's minds."

"I just think those studies are so flawed and based on looking at one thing and then trying to base a conclusion on the fact that it's doctor-based. It's not doctor-based."

APPENDIX A: Demographic Statistics for Respondents To 2001 Survey of California Physicians

	Primary Care Physicians	Specialists
Total number	495	538
Age		
<35	3%	1%
35-44	25%	15%
45-54	39%	42%
55-64	22%	29%
65+	11%	12%
Gender		
Male	68%	87%
Female	32%	13%
Race/Ethnicity *		
African-American	17%	9%
Asian	26%	30%
Latino	18%	12%
White	35%	47%
Other	3%	2%
County		
Alameda	8%	7%
Contra Costa	4%	6%
Fresno	7%	6%
Los Angeles	20%	18%
Orange County	9%	11%
Riverside	6%	7%
Sacramento	5%	7%
San Bernadino	6%	6%
San Diego	13%	9%
San Francisco	6%	5%
San Mateo	3%	6%
Santa Clara	6%	8%
Solano	5%	4%
Specialty		
Family Practice	25%	
Internal Medicine	22%	
Obstetrics/Gynecology	25%	
Pediatrics	28%	
Cardiology		12%
Endocrinology		14%
Gastroenterology		15%
General Surgery		15%
Neurology		14%
Ophthalmology		16%
Orthopaedic Surgery		14%

Note: African Americans and Latinos were oversampled and therefore represented in greater numbers than their true percentages of the California physician population. All results displayed in this report are "weighted" so that data from African American and Latino physicians reflect the actual proportion of these groups in California.

APPENDIX B: Selected Characteristics of Focus Group Participants (N=42)

	Number	Percent
Average age	50.8 years	—
Gender		
Male	32	—
Female	7	—
No Response	3	—
Race/Ethnicity		
Caucasian, non-Hispanic White	24	57 %
Asian-American/Asian	9	21 %
East Indian	3	7 %
Other*	3	7 %
No response	3	7 %
Practice specialty		
Primary Care	19 (total)	45 %
Internal Medicine	8	—
Family Practice	5	—
Pediatrics	4	—
Obstetrics/Gynecology	2	—
Specialists	23 (total)	55 %
Cardiology	5	—
Orthopedic surgery	3	—
Psychiatry	3	—
Neurology	2	—
Allergy	2	—
Other**	8	—
Practice Settings		
Solo	18	43 %
Multispecialty	12	29 %
Single specialty	7	17 %
Kaiser Permanente	2	5 %
Other	3	7 %

* Other includes African-American/Black, Hispanic/Latino, and Pacific Islander

** Other includes Dermatology, Endocrinology, Gastroenterology, Medical Oncology, Ophthalmology, Plastic Surgery, and Rheumatology

REFERENCES

Aventis Pharmaceuticals, Inc. HMO Penetration by State. Managed Care Digest Series. 2000. Retrieved 10/07/02 at http://www.managedcaredigest.com/edigests/hm2000/hm2000c01s07g01.html

Bindman A, Grumbach K, Vranizan K, Jaffe D, Osmond D. Selection and exclusion of primary care physicians by managed care organizations. *Journal of the American Medical Association*, 1998. 279(9), 675–679.

California Medical Association. 1999-2000 Legislative report. 2000. Retrieved 9/10/02 at http://www.cmanet.org/download2.cfm/general538.pdf.

California Medical Association. *And Then There Were None: The Coming Physician Supply Problem*. San Francisco, CA: California Medical Association. 2001.

Dower C, McRee T, Grumbach K, Briggance B, Mutha S, Coffman J, Vranzian K, Bindman A, O'Neil E. *The Practice of Medicine in California: A Profile of the Physician Workforce*. San Francisco, CA: California Workforce Initiative at the UCSF Center for the Health Professions. February 2001.

InterStudy Competitive Edge: HMO Industry Report 7.2. October 1997.

Kaiser Family Foundation. Trends and Indicators in the Changing Health Care Marketplace, Chartbook May 2002.

Pena-Dolhun E, Grumbach K, Vranizan K, Osmond D, Bindman AB. Unlocking specialists' attitudes toward primary care gatekeepers. *Journal of Family Practice*. 2001 Dec; 50(12):1032–7.

Rosenthal MB, Frank RG, Buchanan JL, Epstein AM. Transmission of financial incentives to physicians by intermediary organizations in California. *Health Affairs* 2002;21(4):197–205.

Smedley BD, Stith AY, Nelson AR, eds. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington DC: Institute of Medicine. 2002.

Wachter R, Goldman L. The hospitalist movement fiver years later. *Journal of the American Medical Association*. 2002. Jan 23–30; 287 (4):487–94

Wachter R, Goldman L. The emerging role of "hospitalists" in the American health care system. *New England Journal of Medicine*. 1996. Aug 15; 335(7):514–7.