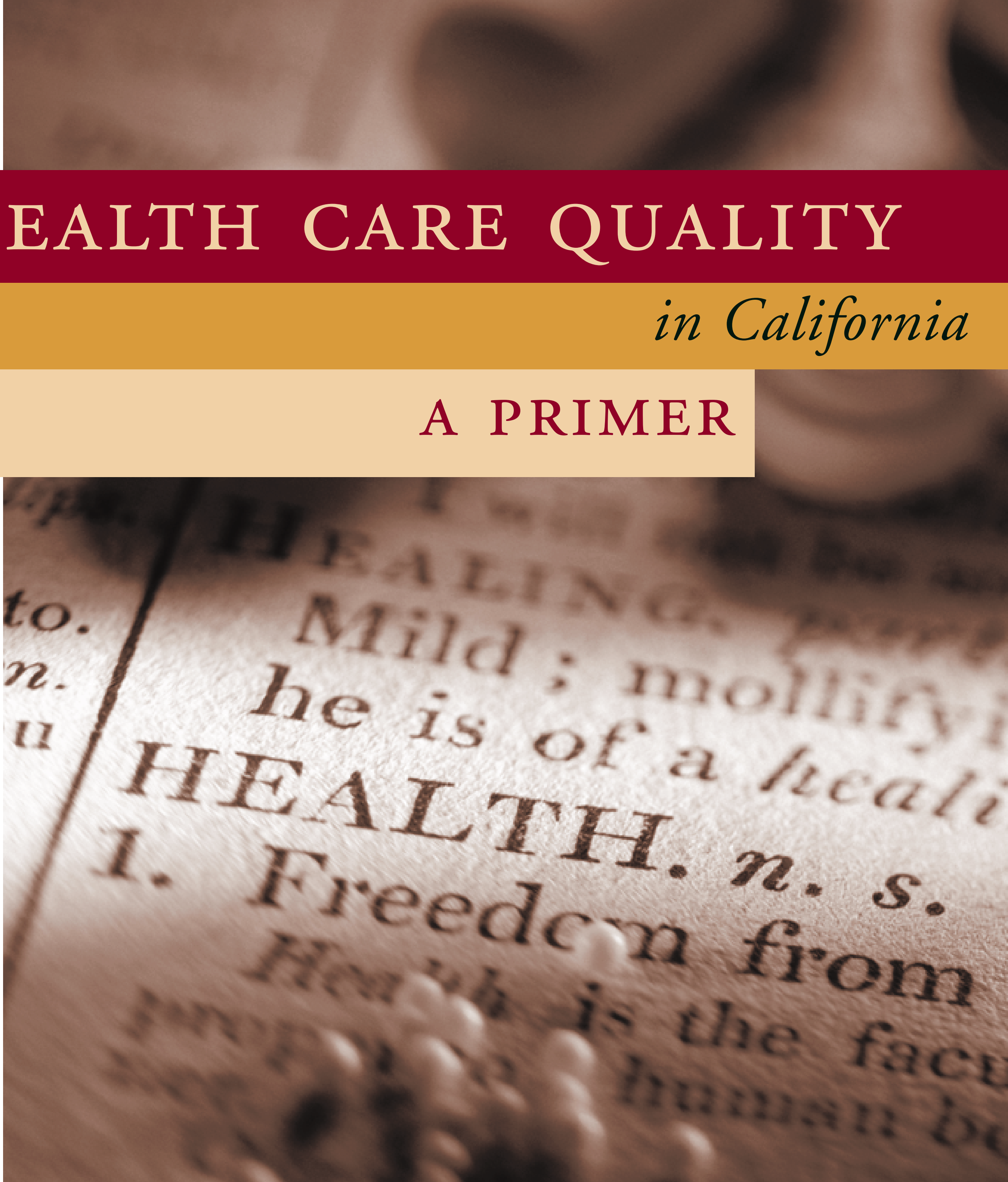
HEALTH CARE QUALITY
in California
A PRIMER



CALIFORNIA
HEALTHCARE
FOUNDATION

JANUARY 2000

Health Care Quality in California: A Primer was prepared for the California HealthCare Foundation's Quality Initiative. It was written by David B. Hansen, and edited by Lise Rybowski of the Severyn Group and Stephen Robitaille of the California HealthCare Foundation's Quality Initiative.

The Quality Initiative seeks to improve the quality of medical care in California, through aggressive public reporting of quality of care measures and support of accountability and improvement efforts. The Initiative, established in 1998, is a program of the California HealthCare Foundation.

The California HealthCare Foundation is a nonprofit philanthropic organization based in Oakland, California. The Foundation was established in May 1996, as a result of the conversion of Blue Cross of California from a nonprofit health plan to WellPoint Health Networks, a for-profit corporation.

The Foundation focuses on critical issues confronting a changing health care marketplace: managed care, California's uninsured, California health policy and regulation, health care quality, and public health. Grants focus on areas where the Foundation's resources can initiate meaningful policy recommendations, innovative research, and the development of model programs.

To order copies of this report, call the Foundation's Publications Line at (510) 587-3199.
The report may also be downloaded in PDF format at www.chcf.org.

California HealthCare Foundation
The Quality Initiative
476 Ninth Street
Oakland, CA 94607

Tel: (510) 238-1040
Fax: (510) 238-1044
e-mail: quality@chcf.org
www.chcf.org

ISBN 1-929008-25-2

Table of Contents

Introduction

Americans, by and large, take the quality of their medical care for granted. They have confidence in our medical care system — more confidence than in almost any other public institution. On average, Americans believe that our health care system is fairly safe and say they are satisfied with their providers.

However, studies have shown many areas where the public should not be so trusting of the health care industry. The reality is that variations in health care quality are often widespread; decades of research have documented that the quality of health care varies widely. For example:

- 10 to 30 percent of laboratory tests are interpreted inaccurately (Wilbur 1997);
- 82 percent of surgeries to remove fatty deposits from a neck artery, called carotid endarterectomies, are found to be of questionable value at best (Wong, et al. 1997);
- Of 586 patients with pregnancy complications requiring treatment, 30 percent went untreated (Murata et al. 1994);
- In a study of 14,839 Medicare heart attack patients who would benefit from use of beta blocker drugs, which can prevent second, often fatal heart attacks, 50 percent did not get them (O'Connor et al. 1999).

Studies such as these have documented the quality issues facing the health care industry. Yet in health care, the public ignores or is unaware of risks that are hundreds, even thousands, of times greater than those of other industries — risks that are aggressively minimized, at great expense.

Unlike many other industries, health care lacks the information systems to track quality accurately and completely. It has been shown that doctors in different parts of the state and country treat identical conditions in vastly differing fashion. And specific, small-scale studies have uncovered evidence of uneven health care quality. Yet overall, we lack comprehensive data that will allow us to gauge who is getting good care and who is not. Without adequate information, the public has little guidance in choosing among health plans, providers, treatment options, hospitals, and long-term care facilities — and in many cases, the health care community is unable to accurately evaluate its own performance.

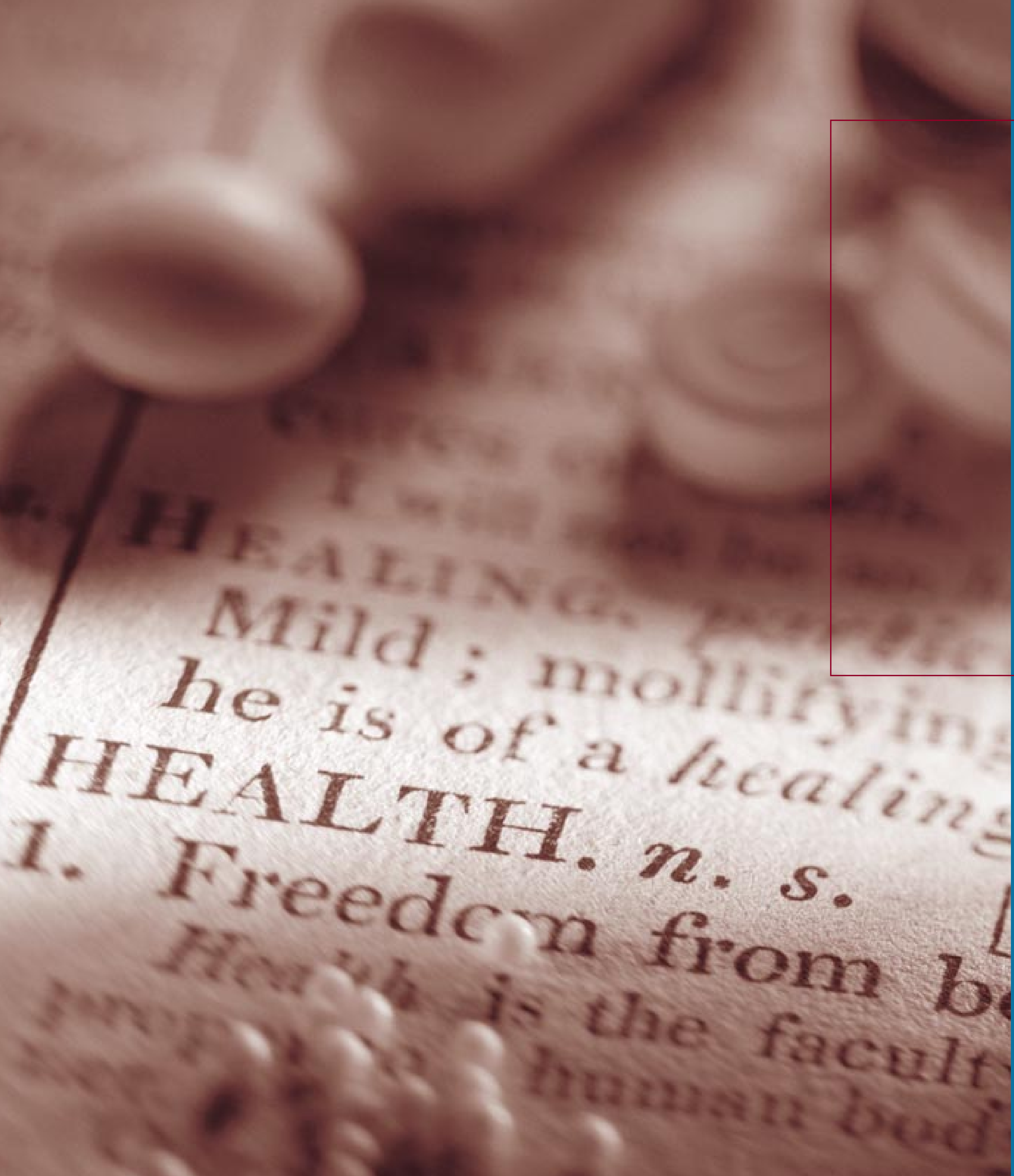
It would be convenient to point to a villain that could bear responsibility for these variations in quality, but no one individual, group or type of organization can be blamed for the quality issues facing our health care system. The roots of uneven quality are systemic, and result from outdated information infrastructures, and a lack of consistency in procedures and teamwork.

Through this primer, the California HealthCare Foundation's Quality Initiative hopes to introduce a way of thinking objectively about the quality of our health care system, explain the kinds of issues that Californians commonly face and suggest what can be done to improve the system.

- Chapter 1 offers a definition of health care quality, from the perspective of consumers as well as that of industry experts;
- Chapter 2 discusses the problems with quality and why we should be concerned;
- Chapter 3 explains the causes of poor quality;
- Chapter 4 explores strategies for improving the quality of care we all receive.

The Foundation believes access is a fundamental issue facing our nation's health care system; a patient's inability to receive needed services because of insurance status or restrictions on treatment is a serious health care issue. As the Institute of Medicine's recent report on patient safety notes, "When access is threatened, the ability to make a threshold change in quality is also threatened." While recognizing that issues of access and quality are often inextricably bound, the Initiative has chosen to focus on the issue of health care quality in California.

Although the issues associated with health care quality call for complex solutions, there is little question that California can construct a system that promotes high-quality care. While many elements of such a system have been developed, there are still opportunities to improve measurement methods, set universal standards and report publicly on the performance of the state's health care industry. With the efforts of the health care system's diverse stakeholders, a quality-driven health care marketplace can be forged.



What Is Health Care Quality?

The term "quality" means different things to different people — especially when the subject is health care. This chapter discusses the ways in which lay audiences define health care quality, as well as the approach taken by experts in the health care field. It also offers some context for this primer by providing an overview of the health care system in California.

How Consumers Define Quality

For most consumers, the quality of health care is based on a subjective, personal perception, drawn primarily from personal experience or those of family and friends. Consumers judge quality by personal interactions with providers and organizations. Choice often serves as a proxy for quality, based on the assumption that a wide selection of providers will guarantee access to the best in their field (California HealthCare Foundation, 1999).

In many ways, consumers frame quality issues in terms of access:

- Do I (or my child, parent, or spouse) get the care I need when and where I want it?
- Do providers answer patients' questions, and do they seem knowledgeable?
- Are patients treated with respect, consideration, and empathy?

In the public forum, policy discussions also have centered on issues of access, such as whether managed care is inappropriately denying access to expensive specialists or procedures, and how to make medical care available for the uninsured. Far less attention is given to understanding and addressing the issue of quality gaps in the health care industry.

How the "Experts" Define Quality

Those who study health care regard quality somewhat differently from consumers. According to the Institute of Medicine, "Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." This definition takes account of both the science of medicine and other criteria individual consumers may value:

- How well patients function in daily life;
- The level of emotional and informational support patients receive;
- The health care outcomes of both treated patients and those who are ignored by the health care system;
- Universal best practices over local standards of care.

According to this definition, the bottom line for quality is the outcome of care: whether care enables patients to live longer and better.

With this definition in mind, researchers have developed measures of quality that can be tracked, compared, and applied across providers and organizations. Rather than looking at how well the health care system meets one individual's needs and desires, these researchers focus on determining whether care was actually delivered according to best medical practices, in a way that maximized the health of all patients.

To make that assessment, information is gathered on three critical properties of health care: the *structure* in which care is delivered, the *process* by which care is delivered, and the *outcomes* of the care.

STRUCTURE

Structure refers to the availability of the facilities, staff, equipment, and expertise required to deliver care appropriately. For example, typical structural measures might include the qualifications of physicians in a medical group, the level of staff training, and infection control procedures in a same-day surgery center. Until recently, much of quality measurement in health care has emphasized structural issues, which readily lend themselves to documentation and review.

PROCESS

Process refers to what was actually done in the course of care; measures of process are usually derived from expert-recommended guidelines for delivering care. Examples of process measures include the percentage of heart attack victims who receive beta blocker drugs, which can prevent second, often fatal heart attacks, the percentage of diabetes patients who receive foot or eye exams, and the percentage of children who receive timely immunizations.

OUTCOMES

Outcomes measures reflect the short- or long-term results of health care, where results include not only survival but also whether the patient regained his or her ability to function physically and emotionally. Examples include the mortality rate for heart surgery patients and the percentage of chronically ill elders who are able to take care of themselves. Outcomes tell whether patients survived and whether they had an improved or degraded quality of life as a result of a particular procedure or treatment.

Table 1: KEY PARTICIPANTS IN CALIFORNIA'S MEDICAL CARE INDUSTRY

Kinds of health organizations	Examples	Key roles that shape health care quality
Primary care physicians in independent or small group practices	Internists, family practitioners, pediatricians, etc.	They provide common treatments and, to some extent, coordinate care.
Specialists	Cardiologist, dermatologist	They provide care focused on specific clinical areas only.
Large medical groups	Multi-specialty group practices and Independent Provider Associations (IPAs), such as Brown & Toland and Mullikin Medical Group	Many provide full care coordination and quality monitoring, but some have limited coordination roles.
Hospitals, outpatient clinics and medical centers	Publicly held hospital chains, such as Humana; medical centers, such as Cedars-Sinai Medical Center; and same-day surgery centers	These facilities provide support for physicians, but only a few have direct control over medical decisions.
Long-term care facilities	Convalescent homes, skilled nursing facilities	These facilities provide extended nursing care or permanent residence/assistance with daily functions.
Special-focus provider organizations	Cancer centers, disease management companies for diabetics	These organizations frequently assume full responsibility for coordination of care for their patients.
Closed-network health plans	Health Maintenance Organizations (HMOs), and Exclusive Provider Organizations (EPOs), offered by a wide range of insurance companies such as PacifiCare, HealthNet and Universal Care	These plans assume full responsibility for coordinating and monitoring care for their patients. Some plans negotiate with medical groups to take on responsibility for patient care coordination.
Open-network health plans	Medicare, Preferred Provider Organization (PPO) plans, traditional indemnity plans, Point-of-Service (POS) plans; PPO and POS plans are offered by a wide range of insurance companies, such as Aetna US Healthcare, Lifeguard and Blue Shield of California	These plans make decisions regarding what procedures they will pay for and what utilization review protocols they will use.
Utilization review organizations	California Medical Review, Inc. (CMRI)	These organizations make case-by-case decisions regarding the appropriateness of expensive procedures.
Community Clinics	Free clinics, such as Haight Ashbury Free Clinic, and community-based non-profit clinics, such as T.H.E. Clinic	These provide primary care for Medi-Cal and uninsured patients.

California's Health Care System

Health care services are delivered by many kinds of service providers, including hospitals, neighborhood pharmacies, university medical centers, rural primary care doctors, highly specialized surgeons, and long-term care facilities. In California, the health care marketplace has become increasingly complex over the past decade.

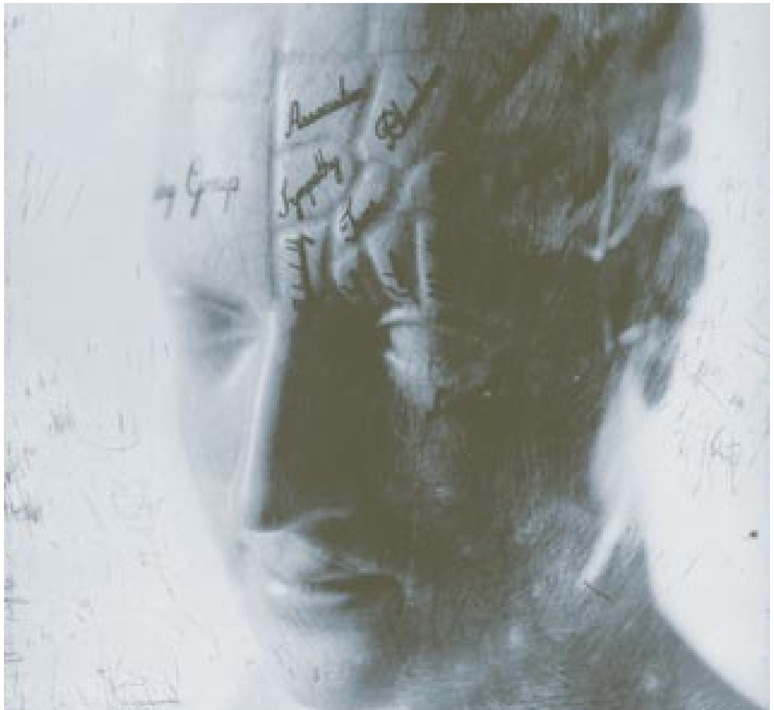
HOW HEALTH CARE ORGANIZATIONS SHARE RESPONSIBILITIES

In California, most consumers receive care through an employer-sponsored health plan that contracts with several large medical groups (or one group, in the case of Kaiser and the Permanente Medical Group). Each of these groups takes responsibility for delivering care to a specific set of patients and steering them to other health care services as needed. Hospitals contract with health plans and sometimes with medical groups to provide inpatient services. Long-term care facilities, including those that provide skilled nursing services, contract with plans, group practices, and hospitals; some are owned by the hospital system with which they are most closely associated.

However, there is no structure that is typical of all of California. The shape of the health care industry varies among regions and within individual communities.

WHERE TO EVALUATE QUALITY

Since all providers and health care organizations have some impact on the quality of care that consumers receive, they all bear partial responsibility for overall health care quality in the health care system. Moreover, individual roles can vary widely depending on the community, the type of patient, the procedure being performed, and the patient's insurance coverage. The best strategy is to match monitoring with accountability; that is, evaluate the ability of each level of the health care system to deliver the services for which it is most responsible, and measure there.



Most Americans like to think that the quality of health care in our nation is the best in the world. In many ways — technological capabilities and medical education, for example — that is true. But achievements in medical science do not mean that the health care system is free of quality issues. This chapter serves as an introduction to the problems that the health care system faces and the seriousness with which these issues should be regarded.

Quality: How Bad Is It?

> *“Millions of Americans do not receive proven effective interventions that save lives and prevent disability. Perhaps an equal number suffer needlessly because they are exposed to the harms of unneeded health care services. Large numbers are injured because of preventable harm from medical treatment.”*
>
> Institute of Medicine, 1998

Two-Fold Issue: Variable Quality, Inadequate Information

In some cases, it is clear that care is inadequate or inappropriate. Perhaps the deeper issue is that we often lack sufficient information about quality, so there is no way of knowing whether it’s good or bad.

Most of what is known comes from in-depth studies of the medical records of a specific number of patients, over a certain period of time. These studies have documented wide variations in health care quality. As demonstrated in Table 2, the number of patients receiving inadequate or inappropriate care ranges greatly.

Defining the Problems with Quality

Experts in the health care field have been paying increasing attention to the question of quality. Generally, they conclude that the system needs improvement. To better define the factors that contribute to uneven quality, researchers divide them into these categories:

- Overuse
- Underuse
- Misuse

OVERUSE

Overuse occurs when patients receive surgeries, drugs, tests, or treatments that are unnecessary, risky, and costly. For example, one study found that 16 percent of hysterectomies were inappropriate (Bernstein, et al. 1993). Most estimates suggest that 15 to 25 percent of care is unnecessary or inappropriate.

UNDERUSE

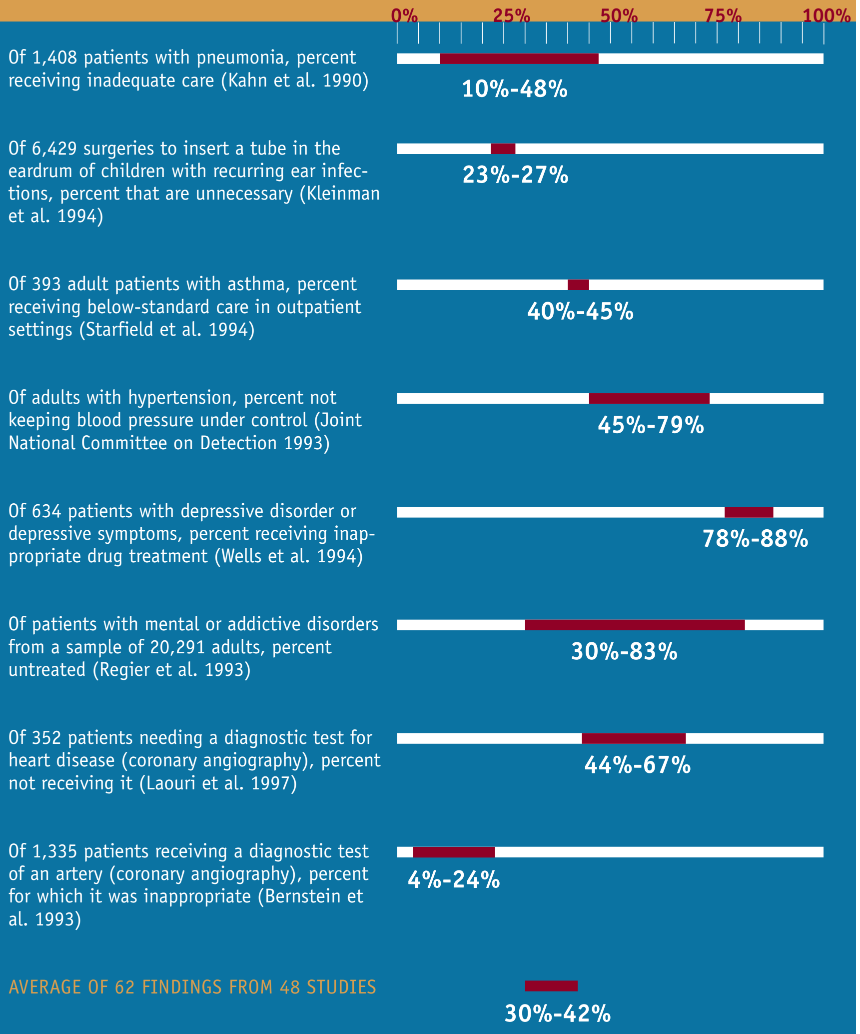
Underuse occurs when patients do not receive important preventive care, diagnostic tests, or necessary treatments. For example, an estimated 18,000 heart patients die prematurely each year due to treatment underuse (Soumerai 1997). Studies also show inadequate treatment for 40 to 60 percent of patients with depression and hypertension (Chassin 1997).

MISUSE

Misuse, or medical error, occurs when diagnoses are missed or delayed; it also refers to mistakes with medications and treatments. For example, a 1999 study by the Institute of Medicine estimated that between 44,000 and 98,000 Americans die each year from medical errors (Kohn et al 1999).

Table 2: Rates of Poor Quality Medical Care Documented in Research Studies

These estimates are derived from a 1998 review of 48 studies published in medical journals between 1987 and 1997 (Schuster et al. 1998). The figures show the extent to which patients are experiencing the problems cited in each of these studies.



Of 1,408 patients with pneumonia, percent receiving inadequate care (Kahn et al. 1990)	10%-48%
Of 6,429 surgeries to insert a tube in the eardrum of children with recurring ear infections, percent that are unnecessary (Kleinman et al. 1994)	23%-27%
Of 393 adult patients with asthma, percent receiving below-standard care in outpatient settings (Starfield et al. 1994)	40%-45%
Of adults with hypertension, percent not keeping blood pressure under control (Joint National Committee on Detection 1993)	45%-79%
Of 634 patients with depressive disorder or depressive symptoms, percent receiving inappropriate drug treatment (Wells et al. 1994)	78%-88%
Of patients with mental or addictive disorders from a sample of 20,291 adults, percent untreated (Regier et al. 1993)	30%-83%
Of 352 patients needing a diagnostic test for heart disease (coronary angiography), percent not receiving it (Laouri et al. 1997)	44%-67%
Of 1,335 patients receiving a diagnostic test of an artery (coronary angiography), percent for which it was inappropriate (Bernstein et al. 1993)	4%-24%
AVERAGE OF 62 FINDINGS FROM 48 STUDIES	30%-42%

VARIATIONS IN PRACTICE PATTERNS

The term "variations in practice patterns" means that providers in different parts of the state and country deliver different treatments to patients for the same conditions. Studies have found that patterns of care for similar patients vary widely across the United States. For example:

- Medicare beneficiaries in San Diego are almost four times more likely than those living in New York City to undergo back surgery (Dartmouth Atlas of Health Care, 1992-1993);
- Women living in the West are 3.5 times more likely than those in the Northeast to get hormone replacement therapy (Stafford et al. 1997);

Competency Must Include Understanding of Language and Culture

In a state that will soon boast a minority majority populace, cultural differences between patient and provider can still have an impact on the quality of care. Success as a physician requires good communication with patients. Yet physicians, especially in California, face language and cultural barriers daily. For example, one third of Californians primarily speak a language other than English at home. This makes cultural and linguistic competence an important issue. Beyond basic language barriers are less obvious cultural communication problems. Every culture has distinct mechanisms to express emotions and self-worth when discussing personal health issues; the problem is that these mechanisms differ across cultures. This includes views on health and health care, the involvement of families in health care decisions, diets, use of alternative treatments, susceptibility to specific diseases, and what is considered acceptable behavior in patient-provider interactions.

Health care organizations can create a support infrastructure for their providers by offering translators, education, information on cultures and patients' backgrounds, and provider teams that represent diverse cultures.

- A female Medicare beneficiary in Flint, Michigan, is three times more likely than a woman living in El Paso, Texas, to be screened for breast cancer with a mammogram (Dartmouth Atlas of Health Care, 1992-1993).

These inconsistencies go beyond those that can be explained by differences in age, gender and race. While variation does not in itself point to poor quality care, it raises questions about whether one set of practices is better than another. If the outcomes of care differ, the more effective treatment ought to be the one that patients get. On the other hand, if the outcomes are the same, some patients may be getting care that isn't necessary.

Quality problems in health care would be fairly easy to resolve if the problems were simply caused by a handful of incompetent providers. It also is tempting to hold managed care responsible for the weaknesses in our system of care today. However, the causes of poor quality are complex. This chapter discusses the primary causes of quality problems.

What Causes Problems With Quality?

Core Causes: Inadequate Information and Support Systems

Uneven health care quality has been an issue for a long time, even if it has not always gotten much publicity. To a large extent, the issue arises from the lack of information on cost and quality that would allow consumers, providers, and industry stakeholders to make well-informed, rational decisions on health care — as is done with a host of other important purchasing decisions. The causes of uneven health care quality can be encapsulated in two issues:

- Little information about the quality of medical care is publicly reported, and what is available is often not enough for stakeholders to make informed decisions;
- There is a lack of systems to help providers deliver the best care possible at all times.

YOU CAN'T MANAGE WHAT YOU DON'T MEASURE

For quality to improve, it must be managed — but for quality to be managed, it must be measured and tracked objectively and systematically. Japanese manufacturers learned this lesson in the 1960s, followed two decades later by American manufacturers and service industries. But this concept has been slow to penetrate the health care industry.

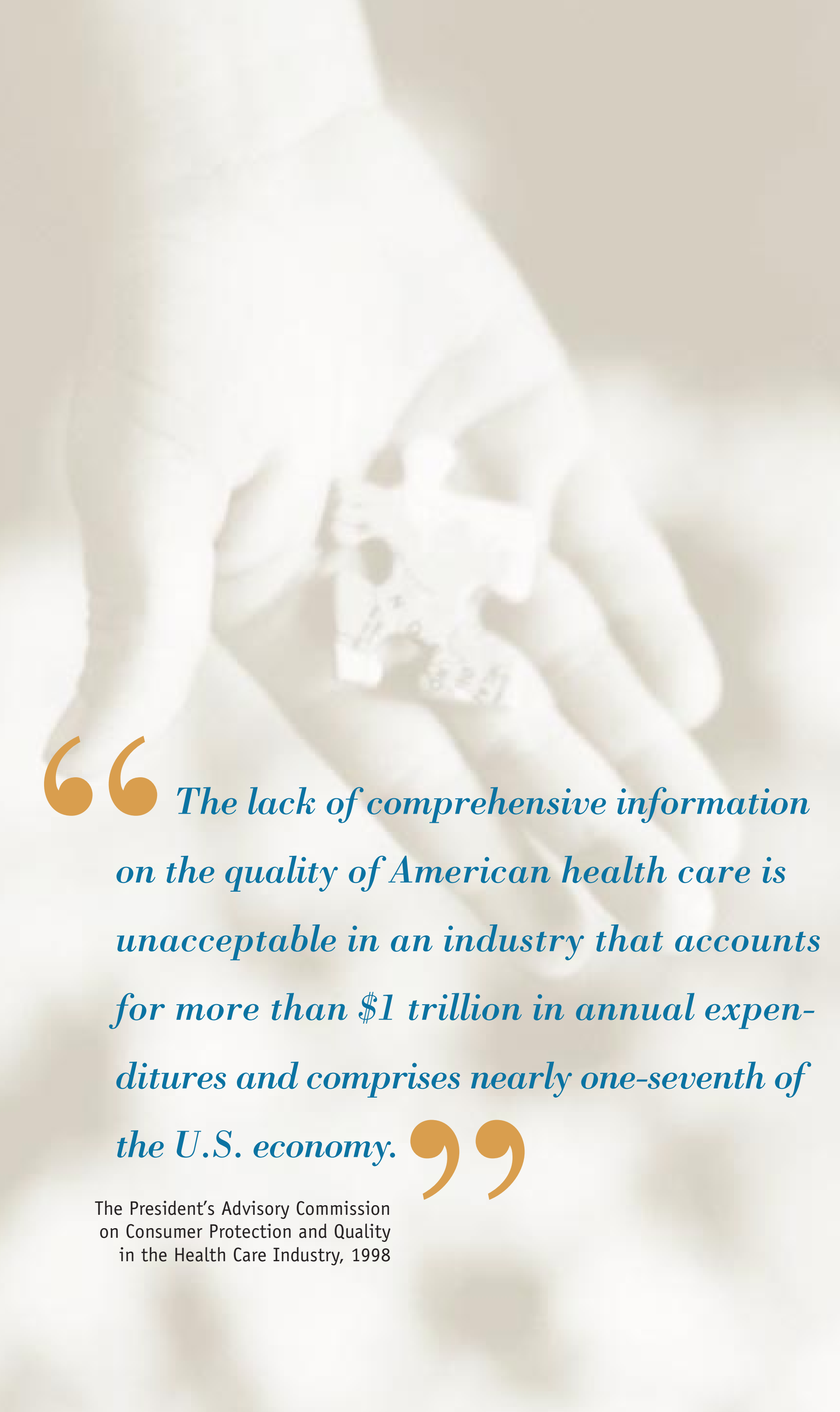
In the absence of comprehensive, standardized information about the delivery and outcomes of health care, it is hard to know whether the care is relatively good or bad. Without that knowledge, consumers and purchasers cannot make informed choices. As a result, consumers base their decisions on anecdotal information from families, friends, and co-workers — regardless of whether that advice is well-founded. And purchasers base their decisions largely on cost and member satisfaction — which is based on this anecdotal information.

Thanks to the efforts of many different organizations, the amount of useful information available to consumers and purchasers has grown in the past several years. But there are still substantial gaps in the data.

Why the Lack of Good Information?

There are a number of reasons why there is so little information. Despite a great deal of progress over the past decade in generating useful data, the measurement and reporting of health care quality data faces a number of challenges:

- Quality measurement is a young, complex science, and collecting data can be costly;
- Programs to measure and report health care quality are often not coordinated within a community, resulting in duplications of effort;
- Unless appropriate adjustments are made, quality measurement and reporting can lead to unfair assessments of those health care organizations that treat sicker or older patients;
- There is still institutional resistance among substantial segments of the health care industry to public reporting of quality information;
- Health care organizations have few incentives to share information on their performance with the public.



> *The lack of comprehensive information on the quality of American health care is unacceptable in an industry that accounts for more than $1 trillion in annual expenditures and comprises nearly one-seventh of the U.S. economy.*

The President's Advisory Commission
on Consumer Protection and Quality
in the Health Care Industry, 1998

MEASUREMENT IS NEW AND COSTLY

The measurement of health care quality is a relatively new field, with much debate among experts as to which measures are the best yardsticks for evaluating performance and which measurement formulas can provide accurate, legitimate information. Quality information also can be expensive to collect, which impedes the rapid development of comprehensive monitoring programs. In many cases, collecting data and calculating quality measures is time-consuming and labor-intensive.

MEASUREMENT EFFORTS LACK COORDINATION

Uncoordinated data requests from different purchasers, health plans, and quality monitoring agencies can compound expenses. This is a common issue, especially for organizations that have to respond to multiple demands for information. For example, one California medical group reported that it had 53 separate on-site audits in one year.

MAKING ADJUSTMENTS FOR THE HEALTH STATUS OF THE PATIENTS BEING STUDIED

To measure performance fairly, it is critical to calculate providers' results in a way that takes into account the health status of the patients they serve. Not surprisingly, sicker patients are more likely than healthy ones to die or have bad reactions to the same procedure. It may sometimes be appropriate to take into account other patient characteristics, such as age and education level, that have been shown to have an impact on outcomes. Otherwise, those organizations that take on the most serious cases will be penalized unfairly. This kind of calculation, called risk adjustment, requires sophisticated technical expertise, and is still controversial in the health care community.

> One of the basic issues in the current medical care system is that it relies extensively on human recall, with few checks to ensure that this memory is accurate and complete.

INDUSTRY RESISTANCE TO PUBLIC REPORTING

One reason behind the lack of comparative quality information is that some health care industry organizations are reluctant to provide the data. For example, employers in Cleveland, Ohio, established a public reporting program for hospitals in the early 1990s, having convinced all stakeholders that public reporting of comparable performance data was good for both purchasers and consumers. However, the project died in 1999 after one of the area's largest hospital systems pulled out.

Health plans also have been known to balk at public release of data. For example, the National Committee on Quality Assurance, the main accrediting body for HMOs, collects the results of performance measures of the health plans that it reviews. But while all participating plans allow their results to go into NCQA's database, an increasing number are refusing to participate in NCQA's voluntary public reporting program. In 1996, all but a small number of plans allowed their data to be published. Just two years later, more than one third of all results were being kept secret.

FEW INCENTIVES TO REPORT ON QUALITY

It can be difficult to push for public reporting of quality measurement when there are few incentives for the health care system to participate in these activities. Purchasers, such as employers, generally make their health care decisions based on cost, not quality. In turn, the health plans that contract with purchasers don't pay the providers in their networks (medical groups, hospitals, etc.) based on quality. And consumers don't push purchasers to give weight to

Timeline of Medical Quality Measurement

1830
Pierre-Charles-Alexandre Louis uses a clinical trial and numerical methods to prove that blood letting, a common treatment of the time, makes patients sicker.

1859
Florence Nightingale proposes use of statistics to track outcomes of hospital care, but receives little support.

1913
The American College of Surgeons accepts Ernest Codman's proposal for monitoring hospital performance, but it is dropped for lack of support.

1919
A report given by the American College of Surgeons shows that 692 of 791 hospitals fail minimum quality standards. The report is burned.

1937
Congress amends the Food, Drug and Cosmetic Act to require that drugs be proven safe.

1948
The first randomized clinical trial in Britain proves the effectiveness of streptomycin on tuberculosis.

1951
The Joint Commission for Accreditation of Health Organizations is established to accredit hospitals.

1952
Medical auditing to compare hospital quality is proposed by New York State Department of Health epidemiologist Paul Lembcke, but gains limited support.

New York Program Spurs Quality in Heart Bypass Surgery

New York was the first state to collect and publish mortality rates on heart bypass surgery for individual surgeons. To convince the surgeons to pay attention to the data, New York worked hard to develop risk-adjustment methodologies that physicians would accept. As a result of its initiative, the state saw a 50 percent decline in mortality rates in the first five years following its publication of provider outcomes. Today, New York has the safest bypass surgery system in the nation (Department of Health and Human Services 1998).

quality in selecting health plans for them. Thus, there is little demand created for quality measurement information in any part of the health care system.

ISSUE: PROVIDERS LACK ADEQUATE SUPPORT SYSTEMS

While there are always a few “bad apples” in any organization, the bigger problem is that providers lack systems to support them in their efforts to deliver the right care at the right time.

Consider the demands placed on physicians, who stand at the center of most important medical decisions. On a daily basis, they are expected to:

- Make critical decisions for large numbers of patients, under tight time pressures and with limited information;
- Work independently, with limited support from other physicians or coordinated information support systems;
- Quickly assess nuances of patients’ physiological and psychological differences;
- Develop personal relationships with and knowledge of the background of each patient;

1953
Vergil Slee, a professor at the University of Michigan, plans a national, computer-based tracking of patient care quality, but the project ends after a successful pilot because of inadequate support.

1962
The Thalidomide tragedy leads Congress to change the Food, Drug and Cosmetic Act to require that medicines be not only safe, but effective.

1968
The National Halothane Study documents large numbers of excess deaths at hospitals.

1976
A Stanford study validates the results of the 1968 study, but the results are not published.

1986
The Hospital Corporation of America spearheads the use of Continuous Quality Improvement techniques in health care.

1989
Congress establishes the Agency on Health Care Policy and Research (AHCPR) under Public Law 101-239 (Omnibus Budget Reconciliation Act of 1989). It is the lead agency charged with supporting research designed to improve the quality of health care, reduce its cost, and broaden access to essential services.

1990
The National Committee for Quality Assurance (NCQA) begins accrediting managed health care plans.

- Be familiar with the intricacies and implications of recent medical research;
- Perform their tasks completely error-free;
- Participate in measurement activities with little rewards for doing so.

Their world is complex, and this complexity is increasing rapidly. Today's physician is confronted with thousands of new treatments, diagnostic procedures and medications.

There is also resistance to the collection and reporting of health care quality data among substantial segments of the provider community, who question the validity of data collection and reporting methods.

THE EXPONENTIAL GROWTH IN MEDICAL SCIENCE

The science of medicine is expanding exponentially in terms of available procedures and pharmaceutical products, as well as in the base of scientific evidence to support medical decisions. For example, randomized clinical trials are an important source of information about the effectiveness of new treatments. In 1966, researchers published the results of approximately 125 randomized control trials. As shown in the chart on the next page, nearly 10,000 such research projects were published in 1995, an annual growth rate of 17 percent.

1991
New York State becomes the first to release physician-specific outcomes data for heart bypass surgery.

1991
The Institute for Healthcare Improvement is founded to promote the use of Total Quality Management approaches throughout the health care industry.

1991
The NCQA issues HEDIS 1.0 as a tool for collecting and reporting indicators of HMO quality.

1996
The Foundation for Accountability releases its first endorsed measures for breast cancer, depression and diabetes.

1996
The NCQA releases its first Quality Compass, a computerized "report card" on the health plans that agree to release their HEDIS data to the public.

1996
The Pacific Business Group on Health launches the Healthscope handbook and web site, with comparisons of West Coast health plans and providers.

1997
JCAHO announces new requirements for accredited organizations to incorporate performance-based measures into their operations.

1997
AHCPR publishes CONQUEST, providing access to hundreds of tested health care quality measures.

One of the basic issues in the current medical care system is that it relies extensively on human recall, with few checks to ensure that this memory is accurate and complete. No other high-risk industry does so to the same extent. Instead, these industries have developed fault-resistant support systems as well as strategies for monitoring quality on an ongoing basis. Unfortunately, the health care industry has yet to use such decision-support systems on a universal basis.

Managed Care: Making Things a Little Better, a Little Worse

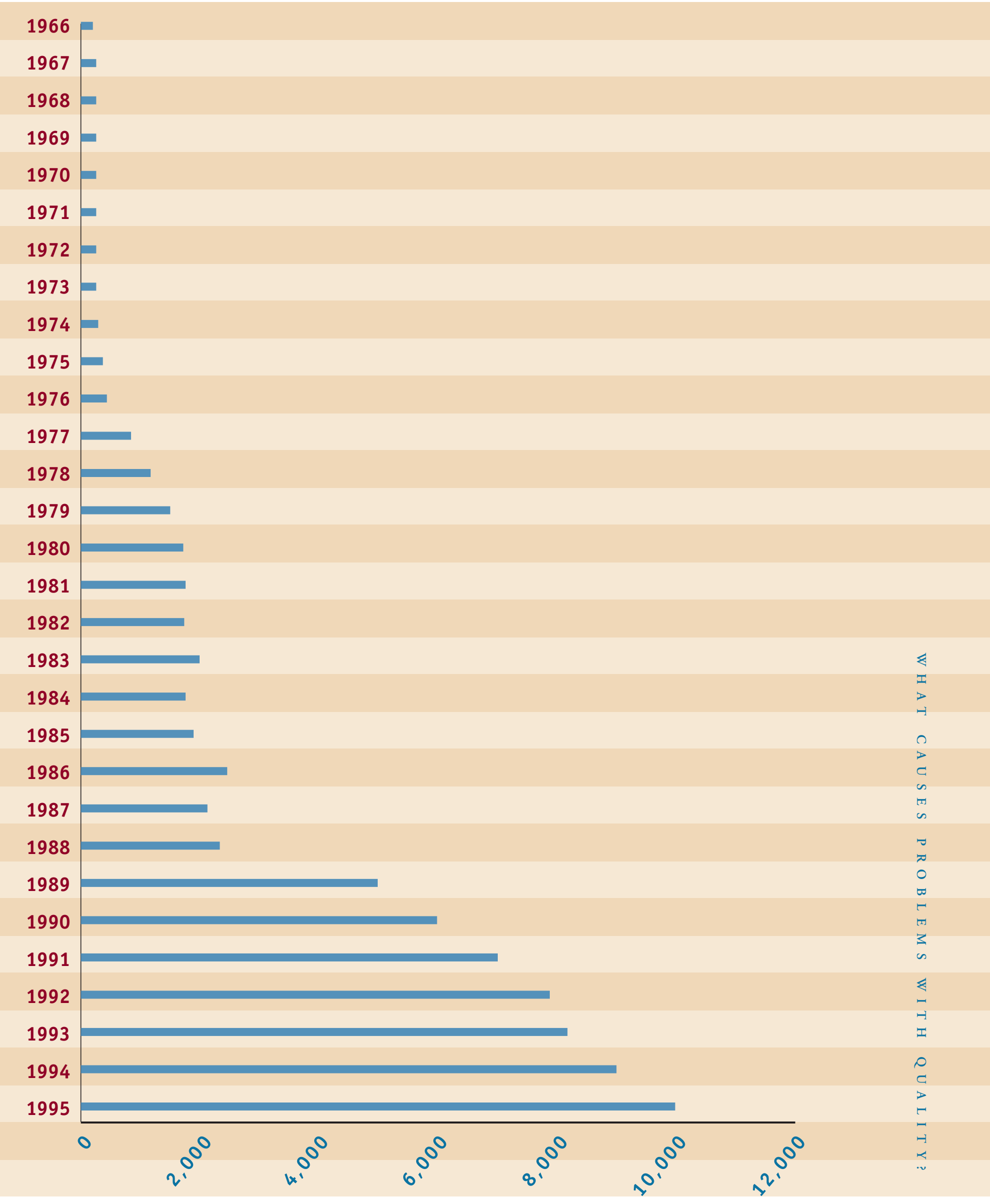
Managed care has come under heavy criticism in many quarters as undermining quality by limiting access to medical care. Quality was an issue long before these recent health care system changes. Studies done in prior decades point to problems that were as prevalent then as now. For example, research conducted in the late 1960s and early 1970s — in the golden era of traditional fee-for-service medicine and before modern managed care — exposed wide differences among hospitals in their mortality rates after common types of surgeries (Moses and Mosteller 1968, Stanford Center for Health Care Research 1976). Studies in the 1950s also found large numbers of inappropriate tonsillectomies and hysterectomies; such practices continued for decades after being reported (Millenson 1997).

1997
The NCQA releases HEDIS 3.0, which contains 75 measures of health plan performance.

1998
In partnership with the American Medical Association and the American Association of Health Plans, AHCPR launches the National Guideline Clearinghouse to disseminate evidenced-based clinical guidelines over the Internet.

1998
A Presidential Advisory Commission issues a report documenting serious quality gaps in health care and calling for initiatives to improve health care quality.

Articles Published from Randomized Control Trials, 1966-1995



Source: M. Chassin, *JAMA*, 2/1999

A FAIR TARGET: THE EMPHASIS ON COSTS

Critics of managed care raise an important point: the market now focuses excessively on costs rather than overall value. Value requires a balance between quality and cost. For example, rather than buy the cheapest car, most consumers buy the one that offers the best value by meeting their individual demands for quality at an acceptable price. The same should be true for health care, but it is not. One reason is that consumers do not have the same kind of comparative information on health care choices as on the quality of cars. Without the kind of information that can reliably steer consumers toward better health care quality, cost becomes the primary factor on which to base purchasing decisions. And information is not always available on areas where consumers are able to make a choice, so the information is not relevant to them. A second — and perhaps more significant — reason is that consumers and purchasers of care are often unaware of the problems of health care quality. Understanding the extent to which quality can differ is the first step towards making value-based decisions.

Finally, the health care industry is just like other industries when it comes to giving customers what they want. When customers make decisions based on cost alone, plans and provider organizations behave just like any other providers of products and services: they do what they have to do to meet the demand.

Envision a future where the quality of health care services is well-documented and publicly reported, providing information that consumers and purchasers can use to make sound choices. For this to become a reality, there needs to be a greater emphasis on monitoring, reporting and improving the quality of care, to ensure that it is consistent with the best medical knowledge available.

How Do We Spur Quality?

> *"At its best, health care in the United States is the finest in the world. Unfortunately, it is very often not at its best. Americans bear a great burden because of these failures — a burden that is measured in lives lost, reduced functioning, and wasted resources. Addressing these problems vigorously should be among our very highest priorities in health care."*
>
> Mark R. Chassin, M.D., M.P.P., M.P.H. in a statement before the U.S. Senate Labor Committee, Mar. 6, 1997

This chapter reviews the current state of quality measurement and reporting, the challenge of using information to promote an emphasis on quality, and the opportunity to harness our technological and scientific know-how to improve quality. It also offers an overview of organizations in California that are playing an active role in the quality arena.

Key Features of Quality-Driven Health Care

A systematic approach to delivering high-quality care will boost the health care industry's capacity to safeguard the health of individuals and communities. A quality-driven health care system should pursue the following three strategies:

- Embrace the tracking and public reporting of health care quality;
- Promote the use of that information to draw attention to and reward those who excel at delivering care;
- Take steps to implement quality improvement and measurement systems, and to apply evidence-based medicine in health care organizations.

STRATEGY: TRACKING AND REPORTING QUALITY

Around the country, health care purchasers and other public and private organizations are beginning to revolutionize the marketplace by making available information on the quality of care. These initiatives are advancing our ability to distinguish good quality from poor.

Until fairly recently, health care quality monitoring centered around the process of accreditation, in which third-party auditors evaluate organizations' structure and procedures. The accreditation of hospitals and HMOs is well established. Hospitals representing approximately 96 percent of patient stays and health plans representing 75 percent of HMO enrollees have sought accreditation. Hospital

The NCQA's Set of Quality Measures

In the early 1990s, NCQA made substantive advances in the measurement of health plan quality with the launch of the Health Plan Employer Data and Information Set, commonly known as HEDIS. Perhaps the most significant nationwide quality measurement initiative to date, HEDIS has evolved over the past decade into a tool that enables health plans to address employers' and, to some extent, consumers' concerns about quality. The current version of HEDIS contains more than 50 performance measures.

accreditation comes from the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), a non-profit organization, founded in 1951. HMO accreditation primarily comes from the National Committee for Quality Assurance (NCQA), a non-profit organization that has been accrediting health plans since 1990.

The stakeholders in the health care industry now realize that neither structural, process nor outcomes measures can by themselves represent overall quality. Because health care is so complex, quality monitoring systems are starting to use a combination of multiple measures to capture the "big picture." This includes a movement away from the traditional focus on structural issues and a greater emphasis on outcomes and process information.

Measuring Where It Counts

The employers and other purchasers that have been pioneers in this area have focused most of their measurement efforts on health plans. But many health care decisions are made at the individual physician and medical group level — and much of the choice that consumers have is also found at these levels. Thus, it is important that measures be developed to evaluate performance at these levels, so patients can compare and choose providers accordingly.

To move quality measurement beyond health plans, several California organizations are developing programs to measure the quality of care provided by large medical groups, independent provider associations, and hospitals. For many consumers, these are the providers that have the greatest impact on their care.

These initiatives include the following:

- The California Cooperative Healthcare Reporting Initiative (CCHRI), which helps produce the Healthscope handbook and web site for Pacific Business Group on Health (PBGH), conducts regular surveys of California health care that help consumers evaluate their experiences with health plans. CCHRI also uses the Physician Value Check program to gauge patient experience with physician groups in California and the Pacific Northwest. CCHRI is managed by PBGH, a purchasing coalition of 33 West Coast employers.
- Patients' Evaluation of Performance in California (PEP-C) is a statewide patient experience survey for hospitals. Data collection is currently under way, with initial results scheduled for public release in 2001. PEP-C is sponsored by the California Institute for Health Systems Performance, with funding from the California HealthCare Foundation.
- The California CABG Mortality Reporting Program, whose members include the California Office of Statewide Health Planning and Development, PBGH and an advisory panel of California heart surgeons, cardiologists, physicians, and health services researchers, is scheduled later this year to publish comparisons of outcomes of heart bypass surgery by hospital.
- The Assessing the Quality of Medical Groups in California project is a performance rating program for medical groups based on patient conditions. This project, under development by RAND Health, will rate medical groups for 55 common conditions for which patients seek a doctor's care, such as asthma, diabetes and lower back pain. It is sponsored by the California HealthCare Foundation.

Some health plans, including PacifiCare of California, HealthNet and Blue Cross of California, also have published a broad set of performance data on the physician groups with which they contract.

MAKING MEASUREMENT MEANINGFUL TO CONSUMERS

Early efforts to evaluate quality of care were driven by purchasers, especially large national employers. As a result, measures tended to be couched in the institutional formats with which purchasers were comfortable. When they shared this information with consumers, the response tended to be unenthusiastic. For that reason, there is a trend toward making measures more relevant to consumers. Researchers are working to develop measures that resonate with consumers and enable them to make more informed decisions about their health care.

A second effort has been the development of measures that are useful for consumers with chronic problems, not just those who are healthy.

Communicating to Consumers: FACCT Finds a Way

The Foundation for Accountability (FACCT), a non-profit education and research organization based in Portland, Oregon, has developed the Consumer Information Framework, a communications tool that presents quality measures in consumer-friendly fashion. The FACCT framework has proved to be effective in helping consumers use health care quality information and is being implemented in a number of consumer outreach efforts nationwide.

To date, the majority of measures have focused on preventive care. This doesn't meet the needs of the consumers with chronic illnesses, who have specific information issues and use the health care system the most. Several organizations are developing measures to help patients gauge quality for specific conditions.

PATIENT GUIDELINES HELP CONSUMERS

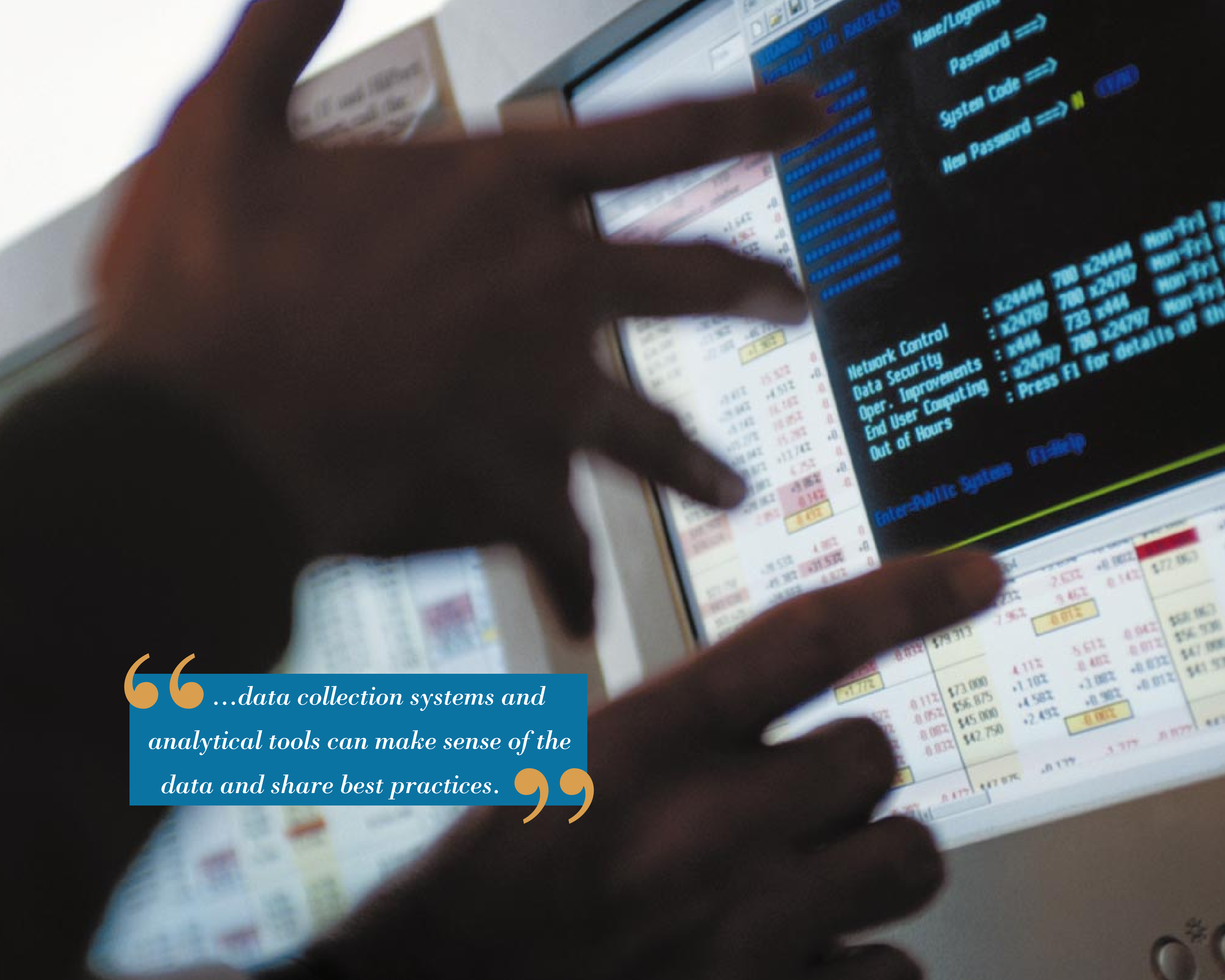
Finally, there is a trend toward developing a new type of consumer health education information. These patient-focused "consumer guidelines" help people navigate the health care system, better understand specific medical conditions, and become more effective advocates for their health care. The movement is an offshoot of clinical treatment guidelines, which help to guide the decisions of physicians and other providers on specific conditions and diseases. It has been fueled in large part by the explosion of health care information on the Internet. For example, a parent whose child has been diagnosed with asthma can get a sheet of questions to ask the pediatrician, to be sure that the suggested treatment regimen is consistent with the best current professional knowledge. Cancer patients can log onto a web site that will provide them with detailed information on their condition, along with questions to ask the doctor about treatment options. Health care system aids include items such as checklists for consumers seeking a long-term care facility for themselves or a family member, and "how-to" guides for HMO enrollees seeking to get access to a particular treatment.

STRATEGY: PROMOTE THE USE OF INFORMATION

In a quality-driven health care market, consumers will need to know that information on quality exists and have it available to them when they make health care decisions. They also need to believe that it comes from a credible source.

Expanding Availability

Although reports on quality are produced by a growing number of public and private organizations, they are still not widely available to the public. To date, large employers have been the primary proponents of efforts to accelerate the use of quality measures in health care. They, along with purchaser coalitions, have been instrumental in distributing quality scores to the public. However, substantial



> *…data collection systems and analytical tools can make sense of the data and share best practices.*

numbers of consumers report that they have never seen information on quality. One reason for this is that proponents lack the resources, expertise, or motivation required for this effort. Another related concern is that many consumers are not aware that this information is important, so they have no interest in using it to make decisions.

There is still no consensus among measurers on how to present quality information in a format that consumers will readily understand and incorporate into their health care decisions. Studies show that consumers are keenly interested in receiving quality information, but that the report cards and other outreach efforts currently on the market often fail to deliver this information in a consumer-friendly fashion.

Employees Move Toward High-Quality, Low-Cost Plans

In Minnesota, an employer insurance purchasing co-op called the Buyers Health Care Action Group (BHCAG) publishes quality report cards on health plans for member employees, which include both plan quality rankings and how much employees must pay as plan members. For example, between 1997 and 1998, BHCAG reported enrollment drops of up to 20 percent for high-cost, low-quality plans.

However, sustained efforts have raised consumer awareness. A 1998 NCQA study of report cards in St. Louis and Denver found that roughly half of all employees who got the report cards remembered seeing them; of that total, 82 percent found the reports helpful in learning about health plan quality.

Furthermore, researchers have identified a “sunshine effect,” in which the publishing of performance reports leads to system improvements even if few consumers use the information to make decisions.

Building Credibility

One of the biggest obstacles to the use of quality information is public and provider skepticism. Despite their experiences to the contrary, many consumers stubbornly believe that they are getting high-quality care. Many providers also deny that serious system-wide quality issues exist. But breaking through these ingrained perceptions requires more than mere facts; the public must trust the source of quality information. This information also must be credible to providers, who have much to lose from the public reporting of poorly developed quality measures. Many providers, concerned about inaccuracies in some past initiatives, are understandably skeptical of new quality measures.

Rewarding the Top Performers

Purchasers have begun to promote the health care quality movement through marketplace incentives. For example, PBGH requires the HMOs with which it contracts to set aside two percent of their premium dollar, which the plans can keep only if they meet specific standards for customer service, clinical quality, data collection, and other areas of performance (Department of Health and Human Services 1998). In addition, PBGH publicly rewards its top performing health plans and physician groups through its annual "Blue Ribbon Award" program.

STRATEGY: IMPLEMENTING SUPPORTIVE SYSTEMS AND EVIDENCE-BASED SOLUTIONS

The third strategy required for a quality-driven health care market is the development of systems and tools that support the efforts of providers and plans to deliver care effectively and efficiently. Generally speaking, the health industry has limped its way into the information age; investments in technology are substantially less than in other industries, despite the critical role of information in health care. Health care organizations need sophisticated data collection systems and analytical tools that can help them make sense of the data and share their best practices. Given the rapid developments in the science and technology of the health care industry, they also need decision-support systems that can help them make well-informed decisions when providing care.

Many public and private organizations have been working to develop such systems and promote their use in the health care industry. New technological and scientific developments are also helping health care organizations to improve their quality of care.

Open System Reviews Versus Closed System Improvements

Within the health care industry, there is substantial controversy over the effectiveness of public release of performance data versus that of closed, "blame-free" systems of quality improvement. While public reporting has in some cases yielded dramatic improvements in health care quality, there also have been equally dramatic successes posted by quality improvement systems that shield participants from publicity and legal liability.

Proponents of this "no-fault" system of quality improvement, which has long been used in health care, cite examples such as those in anesthesiology (see sidebar) and the Federal Aviation Administration's air safety efforts as proof that quality improvement programs can be effective. They have voiced fears over adverse publicity and lawsuits in regard to the public release of entity-specific data, saying this could spur providers to conceal important issues and cause quality improvement efforts to suffer.

Critics of closed quality improvement programs contend that the public has a right to know about health care quality and where they can go to get the best health care. Critics say that current quality improvement systems are too protective of the industry and may in part be responsible for the current state of health care quality. Progress in this system is often too slow, and best practices may not get the kind of system-wide implementation that is needed for large-scale improvements in quality.

The art of medicine, the intuitive approach that physicians must use to devise practical procedures out of an imperfect science, is increasingly finding a support structure in best medical practices, also called evidence-based medicine. Researchers have found that 65 to 93 percent of medical decisions in four areas — general medicine, psychiatry, elective surgery and emergency surgery — could be based on convincing scientific criteria (J.A. Muir Gray, 1997). However, many health care organizations lack the information systems to realize these potentials.

Conclusions: What Can Be Done to Improve Quality

California is fortunate to be the home of sophisticated purchaser groups, providers, and consumer representatives, as well as some of the country's best thinkers on health care quality issues. With these resources, the state can become a showcase of a quality-driven health industry.

CONSUMERS CAN SPUR QUALITY BY DEMANDING INFORMATION AND VALUE

Consumer demand can be a key impetus for better health care quality. To that end, consumers can play an active role in determining the course of their health care. This means seeking information on health care quality, asking questions of providers, and paying greater attention to the medical care that is delivered.

In recent years, consumers have taken an increasingly proactive stance regarding their own care, and this wave of activism is likely to continue. Thanks particularly to the explosion of health care information on the Internet, it is becoming more common for patients to see themselves as active participants in their health care.

CONSUMER GROUPS CAN LEGITIMIZE THE QUALITY EFFORT, EDUCATE THE PUBLIC

Consumer organizations can contribute greatly to the quality effort by lending their credibility and their expertise in policy and community organizing to public outreach efforts. Consumer groups can deliver a potent message to the public on health care quality in a way that cannot be duplicated by government, the health care industry, or the media.

Anesthesiologists Employ Systematic Approaches to Slash Mortality Rates

In the 1980s, death rates related to anesthesia were 25 to 50 patients per million — representing thousands of avoidable deaths in the United States each year. Today, rates have fallen to five per million or less.

Anesthesiologists leveraged both new technologies and better systems to radically improve quality. New technologies have included items such as the pulse oximeter, which was commercialized in the early 1980s; because it provided more reliable observations of the patient's oxygen levels than previous monitoring equipment, it helped to minimize a primary cause of death from anesthesia. New anesthetic drugs have also reduced risks. In addition, the profession has been quick to embrace system-wide changes, including practice guidelines and enhanced training (Lunn and Devlin 1987; Eichhorn 1989; Orkin 1993).

PATIENT ORGANIZATIONS CAN BRIDGE COMMUNICATION GAPS

Patient advocacy and disease-specific organizations can help consumers, providers, and plans focus on system-wide initiatives to monitor and improve care. They can bridge communication gaps among specialists, quality experts and patients by helping to develop patient-friendly educational materials, guidelines, and quality measures that reflect the needs of specific patient groups. These organizations can alert patients to quality issues, share relevant information and connect their constituents to quality information. They also can analyze policy and work to effect changes in policy.

QUALITY MEASURERS CAN EDUCATE AND COMMUNICATE

Measurers can emphasize the issues people care about and use for key decisions, presenting information in an easy-to-understand format that consumers can readily understand. To minimize the kind of consumer confusion that comes when multiple organizations produce information on quality, measurers can keep each other informed and work together to standardize measures and report consistent data.

PURCHASERS CAN LEVERAGE BUYING POWER

Employers and other purchasers can incorporate health care quality into their decision making, by contracting with providers that participate in measurement activities and are high-quality performers. They can offer beneficiaries a choice among plans and providers, distribute consumer-friendly information on quality, and provide incentives for members to choose quality.

Purchasers also can work with government and provider organizations on standardization of measures and data collection procedures, which will reduce measurement costs, and support public reporting efforts.

PROVIDERS CAN INVEST IN SERVICE IMPROVEMENT, PARTICIPATE IN MEASUREMENT ACTIVITIES

To help quality emerge as a driving force, providers can invest in decision-support tools, quality tracking systems and quality improvement efforts to improve performance. They can hone patient communication skills and ensure that the care they provide is culturally appropriate. They can join with other like-minded providers to take the lead in supporting health care quality efforts.

PROVIDER ASSOCIATIONS CAN SUPPORT THEIR MEMBERS' EFFORTS

Providers can work through their associations, which can represent their perspectives and have the resources to pursue quality-related goals. Organizations representing providers can work with their constituents toward a quality-driven marketplace that will create a more rewarding competitive environment. Organizations can help develop standards for quality measurement systems that are helpful to consumers and purchasers, and are consistent with providers' expectations for scientific excellence. Finally, these groups can support providers in their efforts to build practice styles that are in tune with evolving quality requirements.

HEALTH PLANS CAN PARTICIPATE IN MEASUREMENT ACTIVITIES, REWARD TOP PERFORMERS

Health plans can participate in measurement projects and support public reporting of health care quality information. They can compete in the marketplace on those items over which they have control, and can choose providers that participate in measurement activities and are high-quality performers.

POLICY MAKERS AND REGULATORS CAN PROTECT CONSUMERS AND ARTICULATE A STRONG VISION OF QUALITY

The state and federal government can use their power in the marketplace to make health care purchases based on quality. They can set clear legislative and regulatory priorities on the provision of high-quality care and the public reporting of quality information. And government can support standardization of measures and data collection procedures, which will reduce measurement costs.

Glossary of Terms

Accreditation

A review process in which an outside agency evaluates a health care organization to assess whether it meets specific standards.

Consumer Surveys

Questionnaires intended to reveal consumers' experiences with care and their level of satisfaction with the services that were provided.

Continuous Quality Improvement

A set of methodologies for improving existing operations, where teams use statistical analysis to identify causes of quality problems and introduce remedies.

Cultural and Linguistic Competency

The ability of organizations and individuals to work effectively in cross-cultural or multicultural interactions.

Disenrollment

Percentage of members in managed care plans that leave the plan each year.

Evidence-based Medicine

Medical approaches supported by scientific evidence of good outcomes, with the evidence preferably from multiple high-quality random control trials.

Functional Outcomes

Measures of a patient's ability to perform everyday activities (e.g., returning to work or climbing stairs) following treatment for a disease or condition.

Grievance and Complaint Data

Information on complaints filed by patients or health plan members regarding health services.

Health Care Quality

According to the Institute of Medicine, the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.

Health Maintenance Organization (HMO)

A state-licensed health plan that offers prepaid, comprehensive coverage for both hospital and physician services, but also restricts members to using only health care providers affiliated with the plan. A group/staff model HMO uses either one multispecialty physician group (group model) or its own employees (staff model) for its provider network. A network or IPA model HMO is an HMO that contracts with several networks of physicians, medical groups, and/or IPAs to provide services to their members.

Independent Practice Association (IPA)

An association of independent physicians who have joined together to negotiate managed care contracts; a provider network consisting entirely of independent physicians who practice in their own offices.

Insensitivity

Failing to be guided by a patient's values, needs or circumstances.

Medical Error

When diagnoses are missed or delayed, or mistakes are made in medications and treatments.

Outcomes Measures

Measures of the results of care, including survival, complications, and physical and mental health status.

Overuse

When patients receive surgeries, drugs, tests or treatments that are unnecessary, risky and costly.

Performance Measurement System

An inter-related set of structural, process, and outcome measures that facilitates comparisons of an organization's performance as well as the monitoring of progress over time.

Point of Service (POS) Plan

An HMO that offers members the option to visit a provider outside of the network if the patient pays a higher share of fees.

Preferred Provider Organization (PPO)

A discounted fee-for-service health plan in which members can use any provider, but pay less out-of-pocket if they use an affiliated network of physicians, hospitals and other providers.

Process Measures

Measures that capture what providers do when taking care of patients or health plan members (e.g., such as the percentage of patients receiving vaccinations or the percentage of pregnant women receiving prenatal care).

Purchasers

Public and private organizations — such as employers, government agencies, and unions — that purchase health care benefits on behalf employees, retirees, and other consumers, including Medicaid recipients and Medicare beneficiaries.

Randomized Clinical Trial

A scientific approach to testing the value of a treatment, by which one group of randomly selected patients receives the treatment while another group does not.

Report Cards

Presentations for consumers or providers of the results of a variety of quality measures in a standardized format that facilitates comparisons.

Risk Adjustment

Statistical steps taken to adjust outcomes measures so that they more accurately reflect the provider's role in producing results, rather than reflecting factors that the provider cannot influence (e.g., adjustments for the severity of illness or the age of the patient).

Structural Measures

Measures of an organization's resources and capacity to support the delivery of health care services (e.g., the number of providers with specialty board certification).

Total Quality Management

An organizational management approach that fosters a quality focus through specific methodologies for strategic planning, new product and service planning, continuous quality improvement, and quality control.

Underuse

When patients do not receive important preventive care, diagnostic tests or necessary treatments.

Key Organizations in California's Health Care Quality Landscape

PURCHASERS

California Department of Health Services (DHS)

DHS purchases medical benefits and regulates the Medi-Cal program, with federal oversight, which provides health benefits for low-income families, the disabled, and indigent seniors. A comprehensive quality report on Medi-Cal HMOs is scheduled for release in late 2000 or early 2001.

California Public Employees Retirement Program (CalPERS)

CalPERS is a state agency that purchases health benefits on behalf of nearly one million state and local government employees. It has worked on its own and in partnership with PBGH to measure and improve quality.

Health Care Financing Administration (HCFA)

HCFA, a federal agency, purchases benefits for and regulates Medicare and is a co-purchaser and oversight agency for Medicaid (Medi-Cal in California) programs. In addition to establishing certain requirements for quality, HCFA monitors the quality of health plans and providers and publishes certain results on the Internet for consumers.

Federal Employees Health Benefits (FEHB) Program

FEHB purchases and administers benefits programs for Federal employees. It offers a selection of health plans and provides employees and retirees with comparative quality information to guide their choices.

Managed Risk Medical Insurance Board (MRMIB)

MRMIB, a state agency, purchases benefits and provides oversight for the Healthy Families program, a state and federally funded health coverage program for low-income children with family incomes above the level eligible for Medi-Cal.

Pacific Business Group on Health (PBGH)

PBGH is a coalition of 33 private and public purchasers of health benefits for 3.5 million employees in California and Arizona. It has launched a number of quality measurement, education, and promotion programs.

CONSUMER/PATIENT ORGANIZATIONS

American Cancer Society (ACS)

ACS is a national education, research and advocacy organization. Services include the development and dissemination of patient guidance materials for cancer.

American Heart Association (AHA)

AHA is a national education, research and advocacy organization. Services include the development and dissemination of patient guidance materials for a range of heart-related diseases.

American Lung Association (ALA)

ALA is a national education, research and advocacy organization. Services include the development and dissemination of patient guidance materials for a range of lung diseases.

California Advocates for Nursing Home Reform (CANHR)

A San Francisco-based non-profit information and advocacy organization, CANHR maintains data on nursing homes statewide, including profiles of services and actions taken against homes by state regulators.

California Health Advocates

The California Health Insurance Counseling and Advocacy Program (HICAP) Association

HICAP provides state and federally funded counseling services on Medicare, Medicare Supplemental Insurance (Medigap), and Long Term Care Insurance to Medicare beneficiaries and their families.

California Pan Ethnic Health Network (CPHEN)

CPHEN is a California-based network of more than 50 multicultural health care organizations, which works to improve health care access and eliminate health status disparities in California's communities of color. CPHEN also monitors quality issues in the Healthy Families program.

Center for Health Care Rights (CHCR)

CHCR is a California non-profit dedicated to assuring consumer access to quality health care through information, education, counseling, advocacy, and research programs.

Community Health Councils, Inc. (CHC)

CHC is a Los Angeles-based non-profit organization that in 1999 developed a report card on Medi-Cal managed care plans that operate in Los Angeles County; the report card was produced under a statewide collaborative called the Medi-Cal Community Assistance Project.

Consumers Union

Consumers Union is a national non-profit organization that provides consumers with information to help them select products and services. It is the publisher of *Consumer Reports* magazine, which has run several articles comparing HMOs and discussing health quality issues.

National Health Law Program (NHeLP)

NHeLP is a national public interest law firm that provides specialized assistance to low-income people on a wide range of health care issues; services include litigation, counseling, technical assistance, research, policy analysis and advocacy.

GOVERNMENT REGULATORS

California Department of Corporations (DoC)

Currently, the DoC regulates and monitors health plans in California and produces consumer complaint rates for HMOs. As of July 1, 2000, the new Department of Managed Care will assume responsibility for managed care health plan oversight and regulation.

California Department of Managed Care/ Office of the Patient Advocate (DMC)

This newly formed agency assumed oversight and regulation responsibilities for managed care health plans as of July 1, 1999. DMC will include an Office of the Patient Advocate, which is charged with producing a statewide HMO report card.

California Office of Statewide Health Planning and Development (OSHPD)

OSHPD mandates the collection and publishing of hospital outcomes information on a range of procedures.

ACCREDITORS/MEASURERS

Accreditation Association for Ambulatory Health Care, Inc. (AAAHC)

The AAAHC is best known for accrediting ambulatory surgical centers.

American Accreditation HealthCare Commission (AHCC/URAC)

The AHCC accredits primarily utilization review firms, but it also offers standards for practitioner credentialing as well as organizations such as workers compensation networks and utilization management services.

American Association for Accreditation of Ambulatory Surgery Facilities (AAASF)

AAASF accredits outpatient surgery centers.

American Medical Accreditation Program (AMAP)

Launched recently by the American Medical Association, AMAP aims to set uniform national standards for evaluating physicians' qualifications and performance.

California Cooperative Healthcare Reporting Initiative (CCHRI)

CCHRI is a collaborative of health care purchasers, plans, and providers that has come together to ensure that health plans are evaluated fairly and accurately. Participants include PBGH members as well as 16 health plans, representing 95% of the commercial HMO population in California. CCHRI also undertakes quality improvement projects.

California Institute for Health Systems Performance (CIHSP)

CIHSP is an affiliate of the California Healthcare Association, the state's hospital industry trade association. It is seeking to establish comprehensive, standardized health care measurement systems for California.

California Medical Review, Inc. (CMRI)

CMRI is a peer review organization, designated by HCFA as the quality improvement organization for California Medicare providers. CMRI's work focuses on educational campaigns and provider quality improvement initiatives.

COLA

COLA is the primary organization that accredits clinical and community hospital laboratories.

The Foundation for Accountability (FACCT)

FACCT is a leading organization in the development and promotion of consumer-oriented measures of the performance of health care organizations.

Institute for Medical Quality (IMQ)

IMQ, a subsidiary of the California Medical Association, accredits ambulatory surgery centers, student health centers, medical offices, medical groups, outpatient settings in certain circumstances, and independent review entities.

Joint Commission on Accreditation of Healthcare Organizations (JCAHO)

JCAHO is best known for its accreditation of hospitals and other health care facilities, although it has started to release standards for related organizations as well, such as Preferred Provider Organizations (PPOs). JCAHO recently began publishing its accreditation results; it is also incorporating quality measures into its accreditation process.

National Committee for Quality Assurance (NCQA)

NCQA accredits health maintenance organizations nationwide and publishes data that purchasers and consumers can use to compare the performance of HMOs.

U.S. Agency for Healthcare Research and Quality (AHRQ)

AHRQ promotes quality and evidence-based medicine through research, data collection, education and development of quality measures such as the Consumer Assessment of Health Plans (CAHPS).

References

Bates, D.W., D.J. Cullen, N. Laird, et al. 1995. Incidence of Adverse Drug Events and Potential Adverse Drug Events. *Journal of the American Medical Association* 274:29-34.

Bentley, J.M. and D.B. Nash 1998. How Pennsylvania Hospitals Have Responded to Publicly Released Reports on Coronary Artery Bypass Graft Surgery. *Joint Committee Journal of Quality Improvement* 24(1):40-9.

Bernstein, S.J., L.H. Hilborne, L.L. Leape, et al. 1993. The Appropriateness of Use of Coronary Angiography in New York State. *Journal of the American Medical Association* 269:766-9.

Bernstein, S.J., E.A. McGlynn, A. L. Siu, et al. 1993b. The Appropriateness of Hysterectomy: A Comparison of Care in Seven Health Plans. *Journal of the American Medical Association* 269:2398-402.

Bodenheimer, T. 1999. The American Health Care System — The Movement for Improved Quality in Health Care. *New England Journal of Medicine* 340:488-492.

Brennan, T.A., L.L. Leape, N.M. Laird, et al. 1991. Incidence of Adverse Events and Negligence in Hospitalized Patients. *New England Journal of Medicine* 324:370-6.

Brook R.H., E.A. McGlynn, P.D. Cleary 1996. Measuring quality of care. *New England Journal of Medicine* 335:966-70.

Brook, R.H. 1997. Managed Care is Not the Problem, Quality Is. *Journal of the American Medical Association* 278(19):1612-1614.

California HealthCare Foundation. 1999. *California Consumers Talk About Health Care Quality*. Report of findings of focus groups conducted by Peter D. Hart Research Associates, Inc.

Chassin, M.R. 1997. “Measuring and Improving the Quality of Health Care.” Statement Submitted to the Senate Labor Committee, March 6, 1997.

Chassin, M.R. 1998. Is health care ready for six sigma quality? *Milbank Quarterly* 76:565-91.

Consumer Reports, October 1998. In Search of Quality HealthCare.

Coye, M.J. and D.E. Detmer 1998. Quality at a Crossroads. *Milbank Quarterly* 76(4).

Department of Health and Human Services 1998. The Challenge and Potential for Assuring Quality Health Care for the 21st Century. www.ahcpr.gov/qual/21stcena.

Donabedian, A. Evaluating the Quality of Medical Care. *Milbank Quarterly* 44:166-203, July (part 2) 1966.

Donabedian, A. The Quality of Medical Care. How Can It Be Assessed? *Journal of the American Medical Association* 260:1743-1748, 1988b.

Donaldson, M., ed. 1999. *Measuring the Quality of Health Care*. National Academy Press.

Eddy, D.M. 1998. Performance measurement: problems and solutions. *Health Affairs* 17(4):7-25.

Eichhorn, J.H. 1989. Prevention of Intraoperative Anesthesia Accidents and Related Severe Injury through Safety Monitoring. *Anesthesiology* 70:572-7.

Fowles, J.B. and T.J. Beebe 1998. Failure to immunize the elderly: a systems problem or a statement of personal values? *Joint Committee Journal of Quality Improvement* 24(12):704-10.

Goldman, J. and Z. Hudson 1999. *Promoting Health/Protecting Privacy: A Primer.* Report for the California HealthCare Foundation and the Consumers Union.

Gray, J.A. Muir 1997. *Evidence-Based Healthcare*. Churchill Livingstone.

Hannan, E.L., D. Kumar, M. Racz, et al. 1994. New York State’s Cardiac Surgery Reporting System: four years later. *Annals of Thoracic Surgery* 58: 1852-1857.

Health Care Outlook, Institute for the Future, Louis Harris and Associates, Inc., and Harvard School of Public Health 1995. M3: Medicare and Medicaid Managed Care.

Hunkeler, E. 1999. Presentation April 21, 1999. Kaiser Permanente Department of Research, Oakland, California.

Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure. 1993. The Fifth Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure (JNC V). *Archives of Internal Medicine* 153:154-83.

Kahn, K.L., W.H. Rogers, L.V. Rubenstein, et al. 1990. Measuring Quality of Care with Explicit Process Criteria Before and After Implementation of the DRG-Based Prospective Payment System. *Journal of the American Medical Association* 264:1969-73.

Kleinman, L.C., J. Kosecoff, R.W Dubois, and R.H. Brook. 1994. The Medical Appropriateness of Tympanostomy Tubes Proposed for Children Younger than 16 Years in the United States. *Journal of the American Medical Association* 271:1250-5.

Kohn, L.T., J.M. Corrigan and M.S. Donaldson, ed. 1999. *To Err Is Human: Building a Safer Health System*. Washington, D.C.: National Academy Press.

Laouri, M., R.L. Kravitz, S.J. Bernstein, et al. 1997. Underuse of Coronary Angiography: Application of a Clinical Method. *International Journal for Quality in Health Care* 9(1):5-22.

Leape, L.L. 1994. Error in medicine. *Journal of the American Medical Association* 272:1851-7.

Lesar, T.S., L. Briceland and D.S. Stein 1997. Factors Related to Errors in Medication Prescribing. *Journal of the American Medical Association* Jan 22-29, 1997;277(4):312-17.

Longo, D.R., G. Land, W. Schramm, J. Fraas, B. Hoskins, and V. Howell 1997. Consumer reports in health care: do they make a difference in patient care? J*ournal of the American Medical Association* 278:1579-84.

Lunn, J.N. and H.B. Devlin 1987. Lessons from the Confidential Enquiry into Perioperative Deaths in Three NHS Regions. *Lancet* (Dec. 12):1384-7.

McGlynn, E.A. 1998. “Assessing Appropriateness and Quality of Care in Hospitals.” Presentation July 1998 to the American Hospital Association in Washington, D.C.

Millenson, M.L. 1997. *Demanding Medical Excellence.* Chicago: University of Chicago Press.

L. Moses and F. Mosteller, 1968. Institutional Differences in Postoperative Death Rates: Commentary on Some of the Findings of the National Halothane Study. *Journal of the American Medical Association* Feb. 12, 1968; 203(7):150-52.

Murata, P.J., E.A. McGlynn, A.L. Siu, et al. 1994. Quality Measures for Prenatal Care: A Comparison of Care in Six Health Care Plans. *Archives of Family Medicine* 3(1):41-9.

National Committee for Quality Assurance (NCQA) and Health Research Center, Health-System Minnesota 1998. Do Consumers Use Health Plan Report Cards? *The Commonwealth Fund*.

National Committee for Quality Assurance 1998. The State of Managed Care Quality.

National Institute for Health Care Management 1998. "The Role of Government in Health Care Management." Proceedings from a forum held July 17, 1998.

New Jersey Department of Health and Senior Services. 1999. *Cardiac Surgery in New Jersey*, 1996-1997.

O'Connor, G.T., H.B. Quinton, N.D. Traven, L.D. Ramunno, T.A. Dodds, T.A. Marciniak, and J.E. Wennberg 1999. Geographic Variation in the Treatment of Acute Myocardial Infarction: The Cooperative Cardiovascular Project. *Journal of the American Medical Association* 281(7):627-633.

Orkin, F.W. 1993. "Patient Monitoring During Anesthesia as an Exercise in Technology Assessment." In *Monitoring in Anesthesia*, 3rd. ed., L.J.Saidman and N.T. Smith, eds. London, U.K.: Butterworth-Heineman.

President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry 1998. "Quality First. Better Health Care for All Americans." Final Report to the President of the United States. Washington, D.C.

Regier, D.A., WE. Narrow, D.S. Rae, R.W. Maderscheid, B.Z. Locke, and FK. Goodwin 1993. The de facto US Mental and Addictive Disorders Service System. *Archives of General Psychiatry* 50:85-94.

Rivera, L.A., P.V. Lee, K. Olson, B. Harris 1998. "Making Sense of Managed Care Quality Information." National Health Law Program, Inc. Center for Health Care Rights.

Schuster, M.A., E.A. McGlynn, and R.H. Brook 1998. How Good Is the Quality of Health Care in the United States? *Milbank Quarterly* 76(4):517-563.

Soumerai, S.B., T.D. McLaughlin, E. Hertzmark, G. Thibault, and L. Goldman 1997. Adverse Outcomes of Underuse of Beta-Blockers in Elderly Survivors of Acute Myocardial Infarction. *Journal of the American Medical Association* 277:115-21.

Stafford, Randall S., Demet Saglam, Nancyanne Causino, and David Blumenthal 1997. Low Rates of Hormone Replacement in Visits to United States Primary Care Physicians. *American Journal of Obstetrics and Gynecology* 177(2):381-387.

Starfield, B., N.R. Powe, J.R. Weiner, et al. 1994. Costs vs Quality in Different Types of Primary Care Settings. *Journal of the American Medical Association* 272:1903-8.

Tirado, M.D. 1996. "Tools for Monitoring Cultural Competence in Health Care." Final Report to the Office of Planning and Evaluation Health Resources and Services Administration, State of California.

Wells, K., W. Katon, B. Rogers, and P. Camp 1994. Use of Minor Tranquilizers and Antidepressant Medications by Depressed Outpatients: Results from the Medical Outcomes Study. *American Journal of Psychiatry* 151:694-700.

Wells, K.W., G. Norquist, B. Benjamin, W. Rogers, K. Kahn, and R. Brook. 1994. Quality of Antidepressant Medications Prescribed at Discharge to Depressed Elderly Patients in General Medical Hospitals before and after Prospective Payment System. *General Hospital Psychiatry* 16:4-15.

Wennberg, J.E. et al, ed. 1993. *The Quality of Medical Care in the United States: A Report on the Medicare Program; The Dartmouth Atlas of Health Care 1993*. Chicago: AHA Press.

Wilbur, D.C. 1997. False Negatives in Focused Rescreening of Papincolaou Smears: How Frequently Are 'Abnormal' Cells Detected in Retrospective Review of Smears Preceding Cancer or High-Grade Intraepithelial Neoplasia? *Archives of Pathology and Laboratory Medicine* 121(3):273-6.

Wong, J.H., J.M. Findlay, and M.E. Suarez-Almazor 1997. Regional Performance of Carotid Endarterectomy: Appropriateness, Outcomes, and Risk Factors for Complications. *Stroke* 28:891-8.

Organization Reference List

PURCHASERS

California Department of Health
Services Medi-Cal Program
714 P St., Room 650
Sacramento, CA 95814
(916) 653-5297
(916) 657-2732 fax
http://www.medi-cal.ca.gov

California Managed Risk Medical
Insurance Board
1000 G St., Suite 450
Sacramento, CA 95814
(916) 324-4695
(916) 324-4878 fax
http://www.mrmib.ca.gov

California Public Employees Retirement
System (CalPERS)
Lincoln Plaza
400 P St.
Sacramento, CA 95814
(916) 326-3000
(916) 326-2545 fax
http://www.calpers.ca.gov

Federal Employees Health Benefit
Program/Office of Personnel Management
150 Frank Ogawa Plaza
Oakland, CA 94612
(510) 238-3307
(510)238-2976
http://www.opm.gov/insure/98

Pacific Business Group on Health
221 Main St., #1500
San Francisco, CA 94105
(415) 281-8660
(415) 281-0960 fax
http://www.pbgh.org

U.S. Health Care Finance Administration
75 Hawthorne St., 4th Floor
San Francisco, CA 94105
(415) 744-3682
(415) 744-2692 fax
http://www.hcfa.gov

CONSUMER/PATIENT ORGANIZATIONS

Alzheimer's Association of Los Angeles
5900 Wilshire Blvd., Suite 1710
Los Angeles, CA 90036
(213) 938-3379
(213) 938-1036 fax
http://www.alz.org

American Association of Retired Persons
980 9th St., Suite 700
Sacramento, CA 95814-2727
(916) 446-2277
(916) 556-3000 fax
http://www.aarp.org

American Cancer Society
1710 Webster St.
Oakland, CA 94612
(510) 893-7900
(510) 874-7161 fax
http://www.cancer.org

American Diabetes Association
6300 Wilshire Blvd., Suite 100
Los Angeles, CA 90048
(800) 828-8293
(323) 966-2790 fax
http://www.diabetes.org

American Heart Association
1055 Wilshire Blvd., Suite 900
Los Angeles, CA 90017
(213) 580-1408
(213) 580-1467 fax
http://www.heartsource.org/offices/la.html

American Lung Association
921 11th St., Suite 700
Sacramento, CA 95814
(916) 442-4446
(916) 442-8585 fax
http://www.lungusa.org

Arthritis Foundation, Northeastern CA Office
3040 Explorer Dr., Suite 1
Sacramento, CA 95827-2729
(916) 368-5599
(916) 368-5596 fax
http://www.arthritis.org

California Advocates for Nursing
Home Reform
1610 Bush St.
San Francisco, CA 94109
(415) 474-5171
(415) 474-2904 fax
http://www.canhr.org

California Black Health Network
7840 Mission Center Ct.
San Diego, CA 92108-1320
(619) 295-5413
(619) 295-5749 fax

California Black Women's Health Project
1061 East 54th St.
Los Angeles, CA 90011
(323) 231-5303
(323) 231-2086 fax

California Health Advocates
The California Health Insurance Counseling
and Advocacy Program (HICAP) Association
1971 E. 4th St., Suite 200
Santa Ana, CA 92705
(530) 877-6794
(530) 877-6790 fax

California Health Decisions
505 South Main St., Suite 400
Orange, CA 92868
(714) 647-3600
(714) 647-3610 fax

California Pan Ethnic Health Network
654 - 13th St.
Oakland, CA 94612
(510) 832-1160
(510) 832-1175 fax
http://www.cpehn.org

California Partnership for Children
1121 L St., #304
Sacramento, CA 95814
(916) 443-1149
(916) 443-1351 fax

Center for Health Care Rights
520 Lafayette Park Place, #214
Los Angeles, CA 90057
(213) 383-4519
(213) 383-4598 fax
http://www.hrh.org

Center on Disability & Health
1522 K St., N.W., Suite 800
Washington, DC 20005
(202) 842-4408
(202) 842-2402 fax

Children Now
1212 Broadway, Fifth Floor
Oakland, CA 94612
(510) 763-2444
(510) 763-1974 fax
http://www.childrennow.org

The Children's Partnership
1351 3rd St. Promenade, Suite 206
Santa Monica, CA 90401
(310) 260-1220
(310) 260-1921 fax
http://www.childrenspartnership.org

Community Health Council
3741 Stocker, Suite 208
Los Angeles, CA 90008
(323) 295-9372
(323) 295-9467 fax

Consumers Union
1535 Mission St.
San Francisco, CA 94103
(415) 431-6747
(415) 431-0906 fax
http://www.consumer.org

Families USA
1334 G St., NW
Washington, DC 20005
(202) 628-3030
(202) 347-2417 fax
http://www.familiesusa.org

Health Access
942 Market St., Suite 402
San Francisco, CA 94102
(415) 395-7959
(415) 395-7956 fax

Health Rights Hotline
519 Twelfth St.
Sacramento, CA 95814
(916) 551-2181
(916) 551-2158 fax
http://www.hrh.org

Latino Coalition for a Healthy California
1535 Mission St.
San Francisco, CA 94103
(415) 431-7430
(415) 431-1048 fax
http://www.lchc.org

National Alliance for the Mentally Ill
1111 Howe Ave.
Sacramento, CA 95825-8541
(916) 567-0163
(916) 567-1757 fax
http://www.nami.org

National Health Law Program
2639 South La Cienega Blvd.
Los Angeles, CA 90034
(310) 204-6010
(310) 204-0891 fax
http://www.healthlaw.org

National Multiple Sclerosis Society
2440 S. Sepulveda Blvd., Suite 115
Los Angeles, CA 90064
(310) 479-4456
(310) 479-4436 fax
http://www.nmss.org

San Francisco AIDS Foundation
955 Market St.
P.O. Box 426182
San Francisco, CA 94103
(415) 487-3099
(415) 487-3089 fax
http://www.sfaf.org

21st Century Consumer
165 Mountain Canyon Place
Alamo, CA 94507
(925) 820-1268
(925) 820-9204 fax

Western Center on Law & Poverty
2424 K St., First Floor
Sacramento, CA 9581-65002
(916) 442-7966
(916) 442-7966 fax

W.I.N. Against Breast Cancer
19325 East Navilla Place
Covina, CA 91723-3244
(626) 332-2255
(626) 332-2585 fax

GOVERNMENT REGULATORS

California Department of Corporations
980 - 9th St., 5th Floor
Sacramento, CA 95814
(916) 323-0180
(916) 327-6352 fax
http://www.corp.ca.gov

California Department of Managed Care/Office of the Patient Advocate
3700 Wilshire Blvd.,
Los Angeles, CA 90010-3002
(800) 400-0815
http://www.dmc.ca.gov

California Office of Statewide Health Planning & Development
1600 - 9th St., Room 420
Sacramento, CA 95814
(916) 323-8399
(916) 324-9242 fax
http://www.oshpd.ca.gov

ACCREDITORS/MEASURERS

Accreditation Association for Ambulatory Health Care, Inc.
3201 Old Glenview Rd., Suite 300
Wilmette, IL 60091
(847) 676-9610
(847) 853-9028 fax
http://www.aaahc.org

American Accreditation HealthCare Commission
1275 K St., NW, #1100
Washington, DC 20005
(202) 216-9010
(202) 216-9006 fax
http://www.urac.org

American Association for Accreditation of Ambulatory Surgery Facilities
1202 Allanson Rd.
Mundelein, IL 60060
(847) 949-6058
(847) 566-4580 fax
http://www.surgeon.org/contacts/listings/aaaasf.html

California Cooperative Healthcare Reporting Initiative
221 Main St., Suite 1500
San Francisco, CA 94105
(415) 281-8660
(415) 281-0960 fax
http://www.healthscope.org

California Institute on Health Systems Performance
1201 K St., Suite 800
Sacramento, CA 95814
(916) 552-7642
(916) 552-7585 fax
http://www.cihsp.org

California Medical Review, Inc.
1 Sansome Street, Suite 600
San Francisco, CA 94143
(415) 677-2000
(415) 677-2115 fax
http://www.cmri-ca.org

Dartmouth Atlas of Health Care
Center for the Evaluative Clinical Sciences
Dartmouth Medical School
Hinman Box 7252, MML Building
Hanover, NH 03755-3871
(603) 650-1782
(603) 650-1900 fax
http://www.dartmouth.edu/~atlas

Foundation for Accountability
520 SW Sixth Ave., Suite 700
Portland, OR 97204
(503) 223-2228
(503) 223-4336 fax
http://www.facct.org

Institute of Medicine
Code # F03122
2102 Constitution Ave., NW
Washington, DC 20007
(202) 334-2310
(202) 334-3862 fax
http://www.iom.edu

Institute for Medical Quality
221 Main Street, Suite 210
San Francisco, CA 94105
(415) 882-5151
(415) 882-5149 fax
http://www.imq.org

Joint Commission on Accreditation of
Hospital Organizations
One Renaissance Blvd.
Oakbrook Terrace, IL 60181
(630) 792-5000
(630) 792-5005 fax
http://www.jcaho.org

National Committee on Quality Assurance
2000 L St., NW, Suite 500
Washington, DC 20036
(202) 955-5180
(202) 955-3599 fax
http://www.ncqa.org

U.S. Agency for Healthcare
Research and Quality
2101 East Jefferson St., Suite 502
Rockville, MD 20852
(301) 594-1783
(301) 594-2155 fax
http://www.ahcpr.gov

PROFESSIONAL ORGANIZATIONS

American Medical Group Association
1422 Duke St.
Alexandria, VA 22314
(703) 838-0033
(703) 548-1890 fax
http://www. amga.org

California Academy of Family Physicians
114 Sansome St., Suite 1305
San Francisco, CA 94104
(415) 394-9121
(415) 394-9119 fax
http://www.FamilyDocs.org

California Association of Health Facilities
2201 K St.
Sacramento, CA 95816
(916) 441-6400
(916) 441-6441 fax
http://www.cahf.org

California Association of Health Plans
1201 K St., Suite 750
Sacramento, CA 95814
(916) 552-2910
(916) 443-1037 fax
http://www.calhealthplans.com

California Association of Homes & Services
for the Aged
731 Green Haven Dr., Suite 175
Sacramento, CA 95831
(916) 392-5111
(916) 428-4250 fax
http://www.aging.org

California Association of Marriage and
Family Therapists
7901 Raytheon Rd.
San Diego, CA 92111
(858) 292-2638
(858) 292-2666 fax
http://www.camft.org

California Healthcare Association
1201 K St., Suite 800
PO Box 1100
Sacramento, CA 95814
(916) 552-7511
(916) 552-7596 fax
http://www.calhealth.org

California Medical Association
1201 K St., Suite 1050
Sacramento, CA 95814
(916) 444-5532
(916) 444-5689 fax
http://www.calmed.org

National IPA Coalition
1999 Harrison St., Suite 2750
Oakland, CA 94612
(510) 267-1999
(510) 267-8989 fax
http://www.nipac.org

CALIFORNIA
HEALTHCARE
FOUNDATION

CALIFORNIA HEALTHCARE FOUNDATION
THE QUALITY INITIATIVE

476 Ninth Street
Oakland, CA 94607

Tel: (510) 238-1040
Fax: (510) 238-1044
e-mail: quality@chcf.org
www.chcf.org