

AS NEW DRUGS AND HIGH-TECH ADVANCES CONTINUE TO DRIVE UP THE PRICE OF MEDICAL SERVICES, EXPERTS QUESTION WHETHER WE ARE PUTTING ENOUGH CONSIDERATION INTO HOW WE SPEND.



Are We Getting Our Money's Worth?

Cost, Quality, and Health Care Spending

Savvy consumers pursue value – the best

return for each dollar spent. But when it comes to health care, how savvy are we as a nation? The cost of medical services is soaring – and as a society, we're paying. Yet many experts, including those who study cost and quality at the UCLA School of Public Health, cast doubt on whether we're spending wisely, and getting the most for our money.

After a leveling-off period during the 1990s, health care expenditures are again growing faster than the rest of the U.S. economy. National health spending constituted 15% of U.S. Gross Domestic Product expenditures in 2002, up from 12% in 1990 and 9% in 1980. By 2013, that figure is projected to surpass 18%.

One of the primary reasons for the nation's rising health care tab is the rapid growth of medical technology and pharmaceuticals. "Medical care and drugs can do more good for people now than they did in the past," says Dr. Thomas Rice, professor of health services at the school, "and with the prospect of genetic therapy and other high-tech services, it's likely that cost increases exceeding the growth of the economy will remain with us into the indefinite future." It's not merely the availability of expensive medicine that is responsible for the soaring costs, he notes; it's also a U.S. financing system that covers most of these expensive services – often with minimal prior evaluation of their effectiveness.



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The United States has been unable to adopt a strategy for long-term success when it comes to controlling health costs, says Rice. For a time in the 1990s, so-called heavy-handed managed care – health maintenance organizations with strict limits on which providers could be seen and which services would be covered – appeared to be making an impact in containing costs. But that approach proved unpopular, and the market responded to the backlash. “The reason people aren’t as angry at their HMOs anymore is that these organizations have become less strict,” Rice says. “In addition, there has been a movement in enrollment away from HMOs and toward preferred provider organizations, which have very few restrictions. So the one thing that seemed to be working to control costs is no longer available as a strategy because people disliked it.”

The current trend is toward what is known as consumer-directed health care, with many plans shifting the cost to consumers until a high annual deductible, ranging from \$1,000 to as high as \$3,000, is met. “The rationale is that this will make individuals more sensitive to the prices they’re paying for health care services,” says Dr. Gerald Kominski, professor of health services at the school and associate director of the UCLA Center for Health Policy Research. “The problem is that as individuals it can be difficult for us to assess the true medical benefit of various services, and so this price sensitivity may cause people to forego necessary and highly effective treatments.”

Indeed, Kominski notes, health cost and health quality are often related, raising concerns that efforts to reduce spending will lead to declines in the level of care. He is currently conducting a study for California’s Division of Workers Compensation looking at the quality-of-care impact of recent legislative changes designed to control the system’s costs; the new regulations place restrictions on access to providers and limits on the number of services injured workers can receive for certain injuries. Kominski and colleagues are surveying injured workers and providers to determine whether workers are having significant difficulties accessing medically necessary services and getting referrals to appropriate specialists. “There have been data published indicating that workers comp expenditures in the state have gone down and premiums have been reduced as a result of these legislative changes,” Kominski says. “The question is whether that is at the cost of denying access to medically appropriate care.”

As financially strapped hospitals sought ways to reduce costs in the 1990s, many cut back on their use of registered nurses. This prompted a number of researchers, including Dr. Jack Needleman, to study

the impact of RN staffing on quality of hospital care. Needleman, who began the research while on the faculty at Harvard and has continued it since joining the UCLA School of Public Health faculty in 2003, found compelling evidence that the quality and size of a hospital’s nursing staff makes a difference in patient outcomes and quality of care. In a seminal 2002 article in the *New England Journal of Medicine*, Needleman estimated that patients in hospitals whose nurse staffing ranked them in the top half of hospitals experienced cardiac arrest and shock 9% less often and suffered 9% fewer urinary tract infections, 5% fewer episodes of bleeding in their upper gastrointestinal tract and 6% less hospital-acquired pneumonia than patients in hospitals in the bottom half, along with 4% shorter admissions. More recently, he found that increasing the use of RNs and hours of nursing care per patient could help hospitals to avoid more than 6,700 patient deaths and 4 million days of care each year (see page 24). “Nursing care is central to what the hospital provides,” Needleman says, “but because nurses are everywhere doing everything, their contribution to care is frequently overlooked.”

Measuring the quality of services delivered by health care providers has only recently become a popular phenomenon in the United States. Dr. Robert Brook, professor in the UCLA schools of medicine and public health and director of RAND Health, began conducting pioneering work in the field of quality measurement in the 1960s and established the scientific basis for determining whether various medical and surgical procedures were being used appropriately – contributions recently recognized by the Institute of Medicine, which awarded Brook its prestigious Gustav O. Lienhard Award (see page 32). Thanks to Brook and other health quality researchers who joined in the growing effort, quality has become a more vital interest to policy-makers, providers and patients alike.

“Without measuring quality of care and using those measures in making policy, health care reform will essentially mean doing things cheaper,” Brook says. “If we do not know the impact of organizational change or clinical services on quality and health then it will be very easy just to do less. Making quality an equal partner to cost is essential as we go about reforming the health care delivery system.”

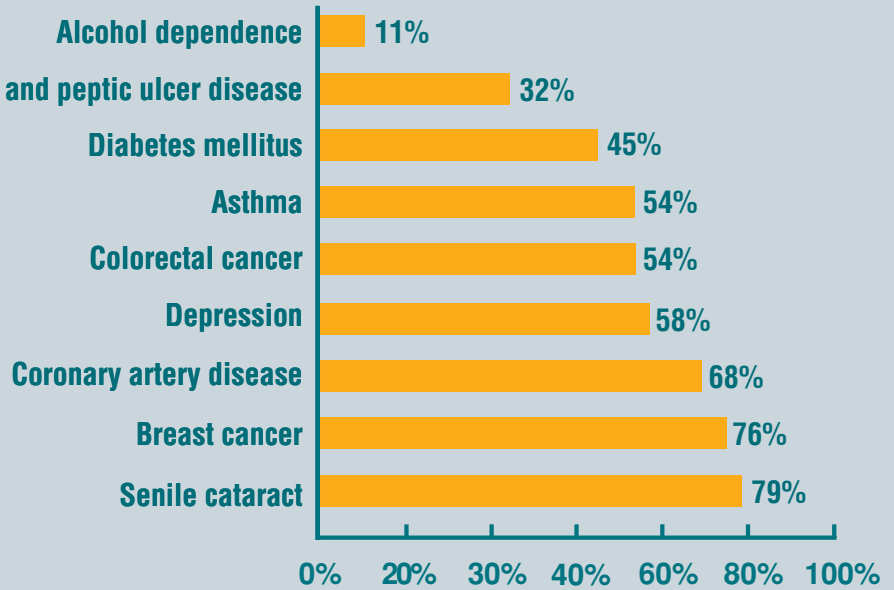
Quality has several dimensions. One component, notes Needleman, is that the patient gets the right care at the right time, delivered effectively. At the same time, he adds, the care should be safe – the patient should not be injured by his encounter with the health care system.



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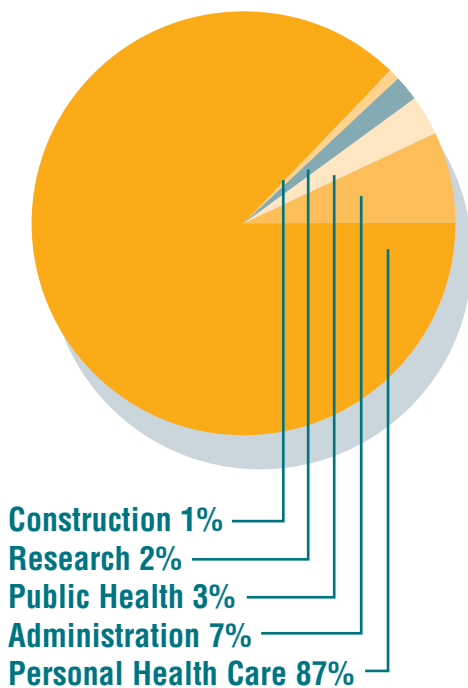
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The Standard of Care Is Received on Average 55% of the Time



Source: McGlynn et al., Quality of Health Care Delivered to Adults in the U.S., *NEJM* 2003.

National Health Expenditures, 2002
\$1.553 Trillion



Source: Levit et al., Health Spending Rebound Continues in 2002, *Health Aff* 2004.

On both measures, there appears to be plenty of room for improvement. Typically, peer groups of clinicians will define the standard of care for particular conditions based on available evidence; one way to gauge the quality of care nationally for patients with that condition is to measure how often that evidence-based standard is achieved. A 2003 RAND study found that only 55% of patients in a random sample of adults received recommended care (see the graph above). Separate studies have found that more than half of patients with diabetes, hypertension, tobacco addiction, hyperlipidemia, congestive heart failure, asthma, depression and chronic atrial fibrillation are managed inadequately.

As for the “do no harm” measure, a widely publicized report by the Institute of Medicine (IOM) of the National Academy of Sciences estimated that between 44,000 and 98,000 U.S. hospital deaths each year could be attributed to medical errors. Nationally, the cost associated with preventable adverse events is estimated at \$17-\$29 billion. Since 1996, the IOM has had an ongoing effort to assess and make recommendations to improve the nation’s quality of care, which it defines as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.” The IOM has summed up the issue as one of “overuse, misuse, and underuse of health care services.” (IOM President Harvey V. Fineberg recently spoke at the school. See page 33.)

Part of the problem is that U.S. health care is structured to meet the needs of acute care patients, but is not well suited for chronic care. “The system is set up to diagnose and treat problems as they arise and then send patients home,” says Dr. Emmett Keeler, adjunct professor in the school and a researcher at RAND. “But because we’re now living longer and people aren’t dying as much from infectious diseases, we have more chronic illnesses in which patients have to be able to take care of themselves for the rest of their lives or they won’t function well. The system is not well suited for those kinds of needs.”

With RAND and UC Berkeley colleagues, Keeler recently completed an analysis of a chronic care model developed by Dr. Ed Wagner, national director of Improving Chronic Illness Care, a Robert Wood Johnson Foundation program.

In evaluating the quality of care for patients at more than 40 organizations that volunteered to implement the model for patients with specific chronic conditions, Keeler found that these organizations were more successful than others in helping their patients learn to take care of themselves.

“All of these methods for taking better care of people with chronic illnesses were developed by HMOs, and the reason is that HMOs benefit financially by keeping patients out of the hospital,” Keeler observes. “But in a fee-for-service environment, there is no incentive to do that.”

In some cases, a business argument can be made for investing in quality. In Needleman’s research on nurse staffing, he concluded that for hospitals with higher proportions of registered nurses rather than the less-skilled licensed vocational nurses, the increased labor costs were offset by savings resulting from patients’ shorter lengths of stay and reduced risk of complications. Needleman believes these and other findings that support the business case for quality investment when it comes to R.N. staffing are conservative. For example, his group didn’t take into account the cost associated with nursing turnover in hospitals, which has been relatively high. Other research suggests that investing in improved working conditions for nurses – by having a higher proportion of nurses to patients, for example – would result in lower turnover, and more cost savings.

On the question of whether investing in quality saves money, the answer often depends on whose money is being considered. Hospitals that are reimbursed at a certain rate for each admission receive benefits from making quality improvements that reduce patients’ length of stay. For hospitals that are paid on a per diem basis, it’s the payer, not the hospital, that benefits from quality care resulting in patients being discharged earlier. In cases where the system saves, explains Needleman, a business case can be made for quality investments on the basis that money can be moved between payers and providers so that it makes financial sense.

Of course, not all quality-investment decisions can be made solely on the basis of whether they save someone money. “The cheapest way to treat heart attack patients is to let them lie on the ground until they either die or get up,” notes Needleman. “But we as a society feel that spending to effectively treat that patient is good value. So the issue isn’t always whether we’re saving money; it can also be whether we’re getting value for the money we’re spending.”

Dr. Kenneth Wells (M.P.H. ’80), a psychiatrist on the faculty at UCLA’s schools of medicine and public health, has focused on the cost-effectiveness

of programs to improve quality of care in mental health. Psychiatric disorders such as depression exact a huge toll, Wells explains, not so much in the cost of treating them as in the social cost to the people who have them.

As director of the UCLA Health Services Research Center, Wells has been examining the impact of investing in better treatment of depression by primary care providers, measured in patients’ improved functioning over the long term. In one study, depressed individuals, particularly Latinos and African Americans, who were part of 6-12 month interventions to improve the quality of their mental health care were found to be faring better five years later than those who weren’t. “We think they had learned how to manage their lives differently,” Wells explains. He found that investing in better depression care improves patients’ employment status – they are more likely to stay in a job or to find a job if they need one – and that underserved minority populations stand to gain the most. “These populations tend to have had much less prior exposure to mental health treatment, which makes them especially inclined to benefit in the long run from an investment in better care up front,” Wells says.

Only about one-fourth of the nation’s depressed people receive care for their depression within the same year. “To increase that treatment penetration would cost health care dollars,” says Wells, “but there is a great return in terms of both the improved quality of life and the economic payoff resulting from their higher functioning. These are substantial social and individual benefits that we get in return from investing in their care that haven’t been captured.”

In a separate study through Wells’ center, Dr. Susan Ettner, professor in the schools of medicine and public health, is developing an intervention to test the impact of financial and non-financial incentives for providers of a managed behavioral health organization to improve the quality of its depression care. “There is a hypothesis, based on the research literature, that if you improve the quality of mental health care, it’s not as expensive as it may seem because it results in medical cost savings over the long term,” says Ettner, who is working with fellow economists at RAND and colleagues at United Behavioral Health on the pilot study.

In previous research, Ettner found that money spent on early substance abuse treatment results in long-term financial benefits from lower crime and increased employment among former substance abusers. “If early investments can prevent higher costs down the road by lowering the risk of hospitalizations, emergency room visits or even accidents among people with depression, substance abuse



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and other treatable mental health problems, you’re recouping some of these costs,” Ettner explains.

Dr. Robert Kaplan, professor and chair of health services at the school, is also interested in value – specifically, how to maximize the health care expenditure dollar in relation to the potential benefit. “If you assume that there is a fixed amount of money, we want to be able to use that money to provide the most health for the most people,” he says. “That means looking at quality not only in the sense of whether something is the best treatment, but also whether spending on that treatment is using our resources in the best way. If we allocate resources to very expensive treatments, for example, we might give up the opportunity to spend on other treatments that would better serve the population.”

As a way of conducting cost/utility analyses of disparate health services, Kaplan has developed a research instrument that measures what he calls quality-adjusted life years. The approach, considered radical when Kaplan first began the work in the 1970s, has become part of the vocabulary of health policy. “A lot of health services don’t produce an extension of life expectancy but have a big impact on quality of life and functioning,” Kaplan notes. His indices combine life expectancy with quality of life: For example, if a person with a life expectancy of 75 years develops an illness at age 50 that reduces by half the quality of life for his remaining 25 years, that illness is considered to have cost 12.5 quality-adjusted life years, and an intervention that could have prevented it or returned the individual to full function might produce or save the equivalent of 12.5 life years. Using that approach, researchers analyzing a major clinical trial on the prevention of type 2 dia-

betes complications for people at risk found that lifestyle interventions, though appearing to be more costly than medicines, were actually less expensive per quality-adjusted life year than drugs because of the extra benefit they produced.

The premise behind Kaplan’s approach – that hard choices need to be made in considering how to spend finite health care dollars – seems to be one that many in this country have yet to accept.

“One of the reasons we have so many uninsured people is that health care has become so expensive,” says Keeler. “If we could figure out ways of delivering care more efficiently, we could bring down the cost. But part of the problem is that we have a culture in which people expect that they are entitled to whatever services are available, even if those services aren’t going to work very well, and that’s driving up the cost. For a lot less money, we might be able to get 98% of what we’re getting right now, and that would be a better deal for the society as a whole.”

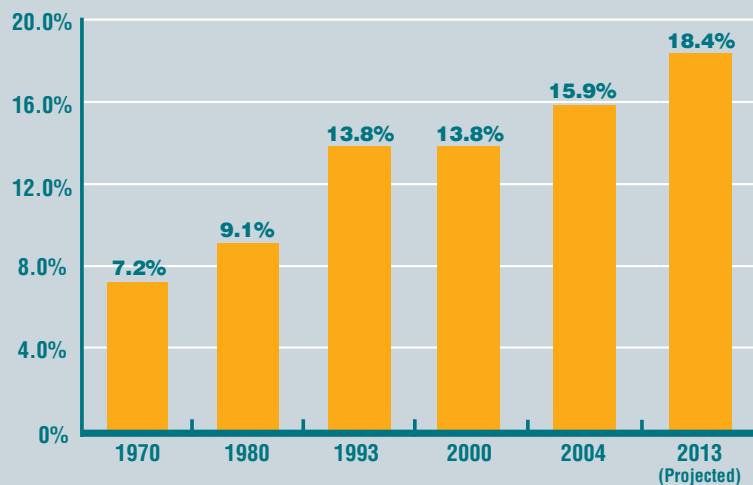
Most analysts agree that there is a great deal of inefficiency in the U.S. health care system, adds Kominski. “There are clearly large administrative costs that are the result of the multiplicity of payers and payment rules in place,” he notes, “as well as a general lack of coordination of care across different settings and providers.” In a market in which most services are purchased using someone else’s money, he adds, it’s not surprising that the demand tends to be high for the “latest and greatest” – and most expensive – technological services. “It’s not that these new technologies aren’t effective,” Kominski says. “But we don’t always know, prior to their introduction, whether the additional benefit is being achieved at a reasonable cost per unit of outcome. Those studies are often not done until well after a product has been developed and adopted broadly in medical practice.”

The last decade has seen the emergence of quality measurement as a fundamental area of concern in health care policy and delivery, Kominski notes. As a result, much research is now under way to measure and make information about quality available to patients and the purchasers of services.

Kaplan foresees a dramatic increase in efforts to better define which health services are producing the most value for the money spent. The bottom line, he asserts, is that the nation needs to be more thoughtful in the way it spends its health care dollars.

“People need to recognize that there are too many options and it’s too expensive,” he says. “If we took away all the limits and told doctors to do whatever they want, we would probably destroy the economy, without clear evidence that the greater expenditures would result in a healthier population.”

National Health Spending as a Share of Gross Domestic Product, Selected Years, 1970-2013



Source: Center for Medicaid and Medicare Services, Office of the Actuary.