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FUNDAMENTALS OF U.S. HEALTH POLICY

Improving the Quality of U.S. Health Care — What Will It Take?

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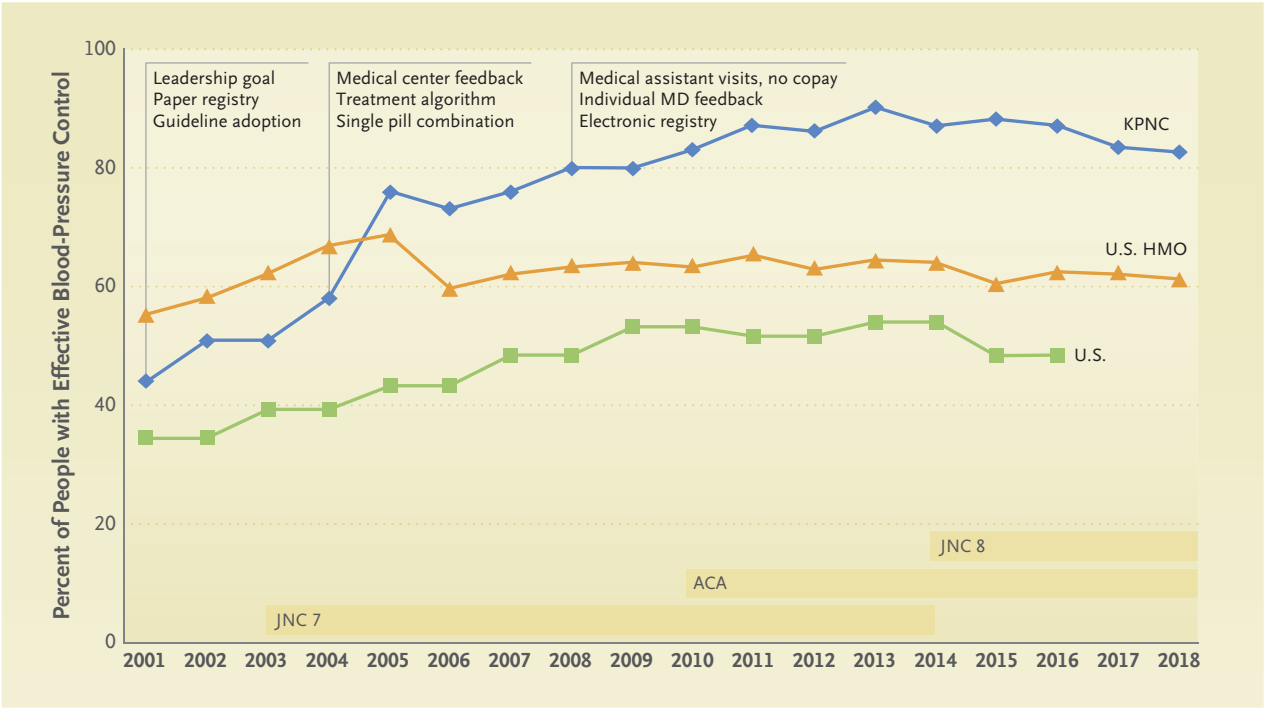
The Covid-19 pandemic has revealed quality deficits in U.S. health care that have been present for decades. In 2003, my colleagues and I reported that on average, U.S. adults received about 55% of recommended care for the leading causes of death and disease.[1] Despite nearly two decades of experimentation with standardized measurement, public reporting, and reward-and-penalty programs, average quality performance remains about the same. In a country like the United States, with its substantial resources and talent, what will it take to improve the quality of care?

High-quality health care increases the likelihood of desired health outcomes and is consistent with current professional knowledge. In the 1960s, Avedis Donabedian proposed an enduring framework for evaluating quality: structure, process, and outcomes.[2]

Outcomes, in the context of quality, are the health-related and experience-oriented results we hope to achieve. It is instructive to consider the example of management of hypertension, a common and treatable chronic condition that is a leading contributor to morbidity and mortality. We seek to improve the quality and quantity of life by reducing the risk of heart attacks and strokes. Nearly half of U.S. adults have hypertension, which in 2017 accounted for 23 deaths per 100,000 population, but among Black Americans, the rates were much higher — 54.1 deaths per 100,000 men and 37.8 per 100,000 women.[3] Blood-pressure control is an intermediate outcome that indicates how effectively hypertension is being managed. The graph illustrates how little has changed over the past two decades in the population management of hypertension. Managed care organizations have done better, on average, and high-performing health systems have demonstrated what is possible. Similar graphs could be drawn for other common chronic conditions.

Processes, in the context of quality, are the ways in which the right health services can be delivered to the right person at the right time every time. As clinicians know, optimizing care processes requires translating the most current available evidence into effective actions that will increase the likelihood of better outcomes and tailoring those actions to the health needs and preferences of individuals. For most chronic conditions, these actions include detection, diagnosis, choosing appropriate treatments, ensuring adherence, assessing treatment effectiveness, and adjusting treatment as necessary.



Blood-Pressure Control at Kaiser Permanente Northern California, 2001–2018.

Changes in the percentages of people with hypertension at Kaiser Permanente Northern California whose blood pressure was controlled are shown in comparison with percentages in U.S. commercial health maintenance organizations (HMOs) and U.S. averages. Data for the United States are from the National Health and Nutrition Examination Surveys, 2000–2016. Data for U.S. HMOs and Kaiser Permanente are from the National Committee on Quality Assurance (www.ncqa.org/hedis/measures/controlling-high-blood-pressure/) and were current as of July 17, 2020. The listed interventions that were implemented at Kaiser Permanente are from Jaffe and Young.[4] JNC denotes Joint National Committee on the Prevention, Detection, Evaluation, and Treatment of High Blood Pressure, JNC 7 Seventh Report, JNC 8 Eighth Report, and ACA Affordable Care Act.

Accomplishing these actions with high reliability is difficult without supportive tools, protocols, and teamwork. Herein lies the heart of the challenge of improving quality systematically for everyone in the country.

Structure is the way in which institutions and professionals are organized, resourced, and financed to provide care in the communities they serve. Structure can also include disease registries, point-of-care decision-support tools that enable customized and effective treatment and feedback, staff to provide other services, and aligned financing and delivery-system incentives that support doing the right thing.[4] The structure for health services delivery is the necessary foundation for effective processes and outcomes.

Quality of care is rarely about good health professionals versus bad ones. Professionalism remains a crucial, though insufficient, cornerstone of high-quality care. But in recent decades, policymakers have emphasized three additional levers to drive quality improvement: measurement, incentives, and addressing social factors.

Donabedian argued that measurement was essential to improving quality.[2] Measurement can be used to raise awareness, identify priorities, and assess progress. Developing and implementing quality measures and reporting results have dominated the modern policy environment when it comes to quality, but those efforts have produced little progress relative to the investments to date.

Most measures assess processes of care: what proportion of people receive selected services such as preventive care (e.g., immunizations), early diagnosis (e.g., cancer screening), treatment (e.g., medication, surgery, counseling), and follow-up (e.g., visits after hospital discharge). Ideally, process measures are based on clinical research that has proven which services increase the odds of desired outcomes. Because process measures generally focus on one element of care at a time, they rarely capture the full range of care needed by a given patient. It is increasingly common for peo-

ple to have multiple chronic conditions, and measures are rarely aggregated for patients across all their needs.

Outcomes are less frequently measured, and many present both methodologic and attributional problems for accountability or reward systems. Many health-related outcomes take years to emerge (e.g., diabetes complications), are multifactorial (e.g., premature mortality), or occur too rarely to be measured meaningfully. Measurement is necessary — we cannot improve if we do not know how we are doing — but not sufficient to improve quality.

Policymakers have increasingly turned to financial incentives, such as pay for performance, value-based purchasing, and bundled payments linked to quality measures, in efforts to motivate quality improvement. Research suggests that these programs have been only marginally effective because of program design, the magnitude of the incentives, the extent of the care affected, and the validity of the measures. Research has also found little relationship between methods of financing and quality. This disconnect may be attributable to the fact that incentive programs have not fundamentally changed the way care is financed. Financial incentives alone cannot fix fragmented and reactive systems or create the operating systems required to enable reliable delivery of high-quality care.

Recently the attention of health care leaders has returned to the structure and organization of health services delivery and its operation within the larger social and economic context of the United States. These social factors (or social determinants) — such as housing, food, income, education, and safety — may have a greater effect on health outcomes than the number of hospital beds or doctors per capita or the proportion of institutions and providers that have implemented electronic health records. Social factors have also contributed to disproportionate rates of chronic illness and delays in seeking health care services among Black and Latino Americans and other communities of color, affecting the ability of even the most effective health systems and hospitals to overcome the disadvantages. For example, risk factors such as obesity, physical inactivity, and smoking are significantly influenced by the environments in which people live and work.

An audio interview with Dr. McGlynn is available at NEJM.org

Given the limited progress to date, the path to higher-quality care in the United States requires reconsidering approaches to measurement, financing, and organizational structures and a new emphasis on social needs. We need to redesign for success, spread what works, and stop doing what does not work.

I believe we should start by creating the financial and organizational conditions for changing care delivery from a reactive, fragmented enterprise to one that is coordinated and longitudinal, reflecting the need for systems that can effectively manage chronic disease. We need to modernize measurement systems and use them more effectively. Measuring discrete events, as we have generally done, reinforces fragmentation and may not lead to overall quality improvement. New approaches that use data from electronic health records rather than claims data and that allow for nuances that make clinical sense will require investments, testing, and deployment.[5] They should be designed to encourage and reward the development of systems for personalizing health service delivery, enabling patients to achieve their health goals alone and in partnership with health professionals.

Finally, as the Covid-19 epidemic has demonstrated, we need to explicitly link health care systems with appropriately resourced public health and community-based services. A variety of programs designed to proactively and intentionally make these linkages are under way throughout the country. These approaches must undergo systematic evaluations that will assess whether and under what conditions they work. As we recover from the pandemic and address structural racism and inequities, we have an opportunity to invest in quality in ways that lay a foundation for a healthier America.

Disclosure forms provided by the author are available at NEJM.org.

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