

Rethinking Health Care Labor

Robert Kocher, M.D., and Nikhil R. Sahni, B.S.

Of the \$2.6 trillion spent in 2010 on health care in the United States, 56% consisted of wages for health care workers. Labor is by far the largest category of expense: health care, as it is designed and delivered today, is very labor-intensive. The 16.4 million U.S. health care employees represented 11.8% of the total employed labor force in 2010. Yet unlike virtually all other sectors of the U.S. economy, health care has experienced no gains over the past 20 years in labor productivity, defined as output per worker (in health care, the “output” is the volume of activity — including all encounters, tests, treatments, and surgeries — per unit of cost). Although it is possible that some gains in quality have been achieved that are not reflected in productivity gains, it’s striking that health care is not experiencing anything near the gains achieved in other sectors. At the same time, health care labor is becoming more expensive more quickly than other types of labor. Even through the recession, when wages fell in other sectors, health care wages grew at a compounded annual rate of 3.4% from 2005 to 2010.

Complicating this picture is the expansion of health insurance coverage to 34 million additional people over the next 10 years under the Affordable Care Act (ACA).¹ This increase in the population of insured Americans will expand demand and the need for labor — potentially to the point where labor becomes scarce and therefore even more expensive. If we add these new beneficiaries to the health system and

expand the workforce proportionally while retaining today’s labor structure, total health care costs will increase by \$112 billion, or 13%. Therefore, to be successful, any effort to slow the rate of growth of health care spending will require a change to the labor structure.

Standing in the way, however, is the inherent conflict between the federal goals of slowing that rate of cost growth and creating jobs in the health care system. President Barack Obama recently announced that health care is a major area of job creation, and we’ve seen 12% job growth in health care over the past 5 years. A recent report by the McKinsey Global Institute notes that for the United States to return to full employment, as many as 22.5 million jobs would need to be created, with 5.2 million, or 23%, in the health care sector.² Over the past decade, health care has been one of the primary drivers of job growth in the United States. Unfortunately, these jobs have been added in part because the health system has not improved its productivity at the same rates as other sectors.

Increasing labor productivity has been the key feature distinguishing the U.S. economy from other developed economies. Over the past 20 years, our real gross domestic product (GDP) grew 2.5% annually, with total employment contributing 0.7% and labor productivity the remaining 1.8%. In comparison, the real “value added” of the health care sector, measured as the contribution of the industry’s labor and capital to its gross output and to overall gross GDP, grew

at 2.3%, with total health care employment contributing 2.9% while labor productivity actually *decreased* by 0.6% annually. In contrast, other industries experienced substantial growth in labor productivity (see graph). Aside from health care, only education and defense showed no aggregate gains in productivity. Although it’s possible that there were unmeasured gains in quality deriving from technological improvement, as in the case of eye surgery, it is highly unlikely that after such effects were accounted for, labor productivity in health care would approach that of other sectors. Until the productivity adjustments to Medicare were added as a result of the ACA — an effort to recapture overpayments for one-time expenses on buildings or capital equipment that have been inappropriately included in annual inflation adjustments — only weak incentives existed to drive labor productivity. As a result, most efforts to tackle labor productivity have focused on eking out small improvements in approaches to nurse staffing and reducing average hospital lengths of stay by a few hours.

Improving the labor structure in health care can be achieved in three ways: reducing the number of workers, lowering wages, or increasing productivity. The first option is a crude approach generally reserved for recessions, though employment in the health care sector continued to increase during the most recent recession. Wages can be lowered by either reducing current wages or replacing current workers with lower-cost (less



Real Sector Growth (Compound Annual Growth Rate), Broken into Labor Productivity Growth and Employment Growth in Various Sectors of the U.S. Economy, 1990–2010.

Real sector growth is defined as the value added by the industry to the gross domestic product. Data are from the Bureau of Labor Statistics and the Bureau of Economic Analysis.

skilled or more narrowly skilled) workers who can produce the same output. The field of law has gone through such a transition, with the number of jobs for paralegals and legal assistants growing 2.5 times as quickly as that for attorneys in the 2000s.²

Yet it is the final, and realistically most viable, option that provides the greatest return. If the health care sector is to achieve even the average improvement in labor productivity seen in the overall U.S. economy, we will need to redesign the care delivery model much more fundamentally to use a different quantity and mix of workers engaging in a much higher value set of activities. (Although some activities, such as feeding patients and tending to their hygiene, may be impossible to accelerate, productivity is improved when these activities are performed by lower-cost but capable labor. Approaches that encourage delegation of tasks from physicians and nurses to other workers — for instance, transferring postsurgical care from surgeons to physician assistants — provide opportuni-

ties for additional savings and increased productivity.) This solution implies eliminating myriad time-wasting, low-value activities; increasing our use of technology, data, evidence, and teams; increasing standardization to avoid rework; and relying on evidence-based personalized care to avert complications.

A large obstacle to such a wholesale redesign is the complexity of the federal and state reimbursement rules and requirements for scope of practice, licensure, and staffing ratios. One example of the current inflexibility is the requirement that all imaging centers have a physician on hand at all times if intravenous contrast may be administered, owing to the 0.1% probability that a patient will have a severe, life-threatening allergic reaction.^{3,4} Surely, other health care professionals could be trained to respond effectively to such an allergic reaction, which would liberate these physicians to fill higher-productivity roles. In addition, though providers are integrating new technology into their systems, they have no incentive in fee-for-

service reimbursement for improving productivity by converting inpatient encounters to virtual visits, incorporating remote monitoring, or managing treatments with lower-cost care coordinators. Though a Current Procedural Terminology code was created to permit billing for e-visits, it requires the patient to initiate the online visit. Hence, communication between physicians and patients — such as an e-mail follow-up after an office visit — does not meet the criteria, a limitation that hinders the uptake of technology.

Every other major sector of the economy has managed to simultaneously improve quality and consumer satisfaction and reduce costs, which suggests that the same should be achievable in the health care sector once the incentives are strong enough. Moreover, in industries in which productivity is improved, workers' wages grow, as they capture some of the value created by additional productivity.

It is critical that policymakers and health plans focus on revamping their reimbursement approaches to create stronger in-

centives to increase labor productivity. The combination of a risk-based payment model tied to outcome goals, on the one hand, and coding rules that are appropriate regardless of how providers achieve their clinical goals, on the other, could inspire the implementation of innovative, technology-based, analytically informed approaches that increase productivity. Alternatives that are not oriented toward substantial improvements in labor productivity will inevitably lead to a future in which health care salaries come under extreme pressure, as payers and policymak-

ers resort to traditional levers of market-basket cuts and utilization controls. Therefore, as the system embarks on initiatives such as accountable care organizations, patient-centered medical homes, and bundled payments, it is imperative to work to optimize both patient outcomes and labor productivity.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

From the Engelberg Center for Health Care Reform, Brookings Institution, Washington, DC (R.K.); Harvard Business School, Boston (N.R.S.); and the John F. Kennedy School of Government, Harvard University, Cambridge, MA (N.R.S.).

1. Congressional Budget Office. CBO's March estimate of the effects of the insurance coverage provisions contained in the Patient Protection and Affordable Care Act (Public Law 111-148) and the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152). March 2011. (<http://www.cbo.gov/budget/factsheets/2011b/HealthInsuranceProvisions.pdf>)

2. McKinsey Global Institute. An economy that works: job creation and America's future. June 2011. (http://www.mckinsey.com/mgi/publications/us_jobs/pdfs/MGI_us_jobs_full_report.pdf)

3. American College of Radiology. ACR practice guideline for the use of intravascular contrast media. 2007. (http://www.acr.org/SecondaryMainMenuCategories/quality_safety/RadSafety/OtherSafetyTopics/intravascular-contrast.aspx)

4. More D. Iodine contrast allergy. About.com. February 6, 2009. (<http://allergies.about.com/od/medicationallergies/a/rcmallergy.htm>.)

Copyright © 2011 Massachusetts Medical Society.

The New Language of Medicine

Pamela Hartzband, M.D., and Jerome Groopman, M.D.

During our first year of medical school, we spent countless hours learning new words, memorizing vocabulary as if we were studying a foreign language. We discovered that some words that sounded foreign actually represented the familiar: rubeola was measles, pruritus meant itching. Now, we find ourselves learning a new language of medicine filled with words that seem familiar yet feel foreign. Patients are no longer patients, but rather “customers” or “consumers.”¹ Doctors and nurses have been transmuted into “providers.” These descriptors have been widely adopted in the media, medical journals, and even on clinical rounds. Yet the terms are not synonymous. The word “patient” comes from *patiens*, meaning suffering or bearing an affliction. Doctor is derived from *docere*, meaning to teach, and nurse from *nutrire*, to nurture. These terms have been used for more than three centuries.

What precipitated the increasing usage of this new vocabulary

in medicine? We are in the midst of an economic crisis, and efforts to reform the health care system have centered on controlling spiraling costs. To that end, many economists and policy planners have proposed that patient care should be industrialized and standardized.² Hospitals and clinics should run like modern factories, and archaic terms such as doctor, nurse, and patient must therefore be replaced with terminology that fits this new order.

The words we use to explain our roles are powerful. They set expectations and shape behavior. This change in the language of medicine has important and deleterious consequences. The relationships between doctors, nurses, or any other medical professionals and the patients they care for are now cast primarily in terms of a commercial transaction. The consumer or customer is the buyer, and the provider is the vendor or seller. To be sure, there is a financial aspect to clinical care. But that is only a small part of a much

larger whole, and to people who are sick, it's the least important part. The words “consumer” and “provider” are reductionist; they ignore the essential psychological, spiritual, and humanistic dimensions of the relationship — the aspects that traditionally made medicine a “calling,” in which altruism overshadowed personal gain. Furthermore, the term “provider” is deliberately and strikingly generic, designating no specific role or type or level of expertise. Each medical professional — doctor, nurse, physical therapist, social worker, and more — has specialized training and skills that are not recognized by the all-purpose term “provider,” which carries no resonance of professionalism. There is no hint of the role of doctor as teacher with special knowledge to help the patient understand the reasons for his or her malady and the possible ways of remedying it, no honoring of the work of the nurse as a nurturer with unique expertise whose close care is essential to healing. Rath-