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 policymakers 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 Engleberg 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-

er, the generic term "provider" suggests that doctors and nurses and all other medical professionals are interchangeable. "Provider" also signals that care is fundamentally a prepackaged commodity on a shelf that is "provided" to the "consumer," rather than something personalized and dynamic, crafted by skilled professionals and tailored to the individual patient.

Business is geared toward the bottom line: making money. A customer or consumer is guided by "caveat emptor" — "let the buyer beware" — an adversarial injunction and hardly a sentiment that fosters the atmosphere of trust so central to the relationship between doctor or nurse and patient. Reducing medicine to economics makes a mockery of the bond between the healer and the sick. For centuries, doctors who were mercenary were publicly and appropriately castigated, the subjects of caustic characterization in plays by Moliere and stories by Turgenev. Such doctors betrayed their calling. Should we now be celebrating the doctor whose practice, like a successful business, maximizes profits from "customers"?

Beyond introducing new words, the movement toward industrializing and standardizing all of medicine (rather than just safety and emergency protocols) has caused certain terms that were critical to our medical education to all but disappear. "Clinical judgment," for instance, is a phrase that has fallen into disgrace, replaced by "evidence-based practice," the practice of medicine based on scientific data. But evidence is not new; throughout our medical education beginning more than three decades ago, we regularly examined the scientific evidence for our clinical practices. On rounds or in clinical conferences, doctors debated the design and results of numerous research studies. But the exercise of clinical judgment, which permitted assessment of those data and the application of study results to an individual patient, was seen as the acme of professional practice. Now some prominent health policy planners and even physicians contend that clinical care should essentially be a matter of following operating manuals containing preset guidelines, like factory blueprints, written by experts.[2] These guidelines for care are touted as strictly scientific and objective. In contrast, clinical judgment is cast as subjective, unreliable, and unscientific. But there is a fundamental fallacy in this conception. Whereas data per se may be objective, their application to clinical care by the experts who formulate guidelines is not. This truth, that evidence-based practice codified in clinical guidelines has an inescapable subjective core, is highlighted by the fact that working with the same scientific data, different groups of experts write different guidelines for conditions as common as hypertension and elevated cholesterol levels[3] or for the use of screening tests for prostate and breast cancers.[4] The specified cutoffs for treatment or no treatment, testing or no testing, the weighing of risk versus benefit — all necessarily reflect the values and preferences of the experts who write the recommendations. And these values and preferences are subjective, not scientific.[5]

What impact will this new vocabulary have on the next generation of doctors and nurses? Recasting their roles as those of providers who merely implement prefabricated practices diminishes their professionalism. Reconfiguring medicine in economic and industrial terms is unlikely to attract creative and independent thinkers with not only expertise in science and biology but also an authentic focus on humanism and caring.

When we ourselves are ill, we want someone to care about us as people, not as paying customers, and to individualize our treatment according to our values. Despite the lip service paid to "patient-centered care" by the forces promulgating the new language of medicine, their discourse shifts the focus from the good of the individual to the exigencies of the system and its costs. Marketplace and industrial terms may be useful to economists, but this vocabulary should not redefine our profession. "Customer," "consumer," and "provider" are words that do not belong in teaching rounds and the clinic. We believe doctors, nurses, and others engaged in care should eschew the use of such terms that demean patient and professional alike and dangerously neglect the essence of medicine.

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

From Beth Israel Deaconess Medical Center and Harvard Medical School — both in Boston.

1. Krugman P. Patients are not consumers. New York Times. April 22, 2011:A23.
2. Swensen SJ, Meyer GS, Nelson EC, et al. Cottage industry to postindustrial care — the revolution in health care delivery. N Engl J Med 2010;362(5):e12.
3. Broedl UC, Geiss H-C, Parhofer KG. Comparison of current guidelines for primary prevention of coronary heart disease: risk assessment and lipid-lowering therapy. J Gen Intern Med 2003;18:190-5.
4. Barry MJ. Screening for prostate cancer — the controversy that refuses to die. N Engl J Med 2009;360:1351-4.
5. Groopman J, Hartzband P. Your medical mind. New York: Penguin, 2011.

Copyright © 2011 Massachusetts Medical Society.