



HEALTH CARE 2009

## A Strategy for Health Care Reform — Toward a Value-Based System

Michael E. Porter, Ph.D.

Despite many waves of debate and piecemeal reforms, the U.S. health care system remains largely the same as it was decades ago. We have seen no convincing approach to changing the

unsustainable trajectory of the system, much less to offsetting the rising costs of an aging population and new medical advances.

Today there is a new openness to changing a system that all agree is broken. What we need now is a clear national strategy that sets forth a comprehensive vision for the kind of health care system we want to achieve and a path for getting there. The central focus must be on increasing value for patients — the health outcomes achieved per dollar spent.<sup>1</sup> Good outcomes that are achieved efficiently are the goal, not the false “savings” from cost shifting and restricted services. Indeed, the only way to truly contain costs in health care is to improve outcomes: in a value-based system,

achieving and maintaining good health is inherently less costly than dealing with poor health.

True reform will require both moving toward universal insurance coverage and restructuring the care delivery system. These two components are profoundly interrelated, and both are essential. Achieving universal coverage is crucial not only for fairness but also to enable a high-value delivery system. When many people lack access to primary and preventive care and cross-subsidies among patients create major inefficiencies, high-value care is difficult to achieve. This is a principal reason why countries with universal insurance have lower health care spending than the United States. However, expanded

access without improved value is unsustainable and sure to fail. Even countries with universal coverage are facing rapidly rising costs and serious quality problems; they, too, have a pressing need to restructure delivery.<sup>2-4</sup>

How can we achieve universal coverage in a way that will support, rather than impede, a fundamental reorientation of the delivery system around value for patients? There are several critical steps.

First, we must change the nature of health insurance competition. Insurers, whether private or public, should prosper only if they improve their subscribers' health. Today, health plans compete by selecting healthier subscribers, denying services, negotiating deeper discounts, and shifting more costs to subscribers. This zero-sum approach has given competition — and health insurers — a bad name. Instead, health plans must compete on

value. We must introduce regulations to end coverage and price discrimination based on health risks or existing health problems. In addition, health plans should be required to measure and report their subscribers' health outcomes, starting with a group of important medical conditions. Such reporting will help consumers choose health plans on the basis of value and discourage insurers from skimping on high-value services, such as preventive care. Health insurers that compete this way will drive value in the system far more effectively than government monopolies can.

Second, we must keep employers in the insurance system. Employers have a vested interest in their employees' health. Daily interactions with their workforce enable employers to create value by developing a culture of wellness, enabling effective prevention and screening, and directing employees to high-value providers. Employers can also foster competition and drive broader system improvement in ways that are difficult for government entities to replicate. To motivate employers to stay in the system, we must reduce the extra amount they now pay through higher insurance costs to cover the uninsured and subsidize government programs. We must also create a level playing field for employers that offer coverage by penalizing employers that are free riders.

Third, we need to address the unfair burden on people who have no access to employer-based coverage, who therefore face higher premiums and greater difficulty securing coverage. This means first equalizing the tax deductibility of insurance purchased by individuals and through employers.

Fourth, to make individual insurance affordable, we need large

statewide or multistate insurance pools, like the Massachusetts Health Insurance Connector, to spread risk and enable contracting for coverage and premiums equivalent to or better than those of the largest employer-based plans. Regional pools, instead of a national pool, will result in greater accountability to subscribers and closer interaction with regional provider networks, fostering value-based competition. We also need a reinsurance system that equitably spreads the cost of insuring Americans with very expensive health problems across both regional pools and employers.

Fifth, income-based subsidies will be needed to help lower-income people buy insurance. These subsidies can be partially offset through payments from employers that do not provide coverage but whose employees require public assistance.

Finally, once a value-based insurance market has been established, everyone must be required to purchase health insurance so that younger and healthier people cannot opt out. This will bring substantial new revenues into the system, lowering premiums for everyone and reducing the need for subsidies.

Although most U.S. health care reform efforts have focused on coverage, the far bigger long-term driver of success will come from restructuring the delivery system. That is where most of the value is created and most of the costs are incurred.

The current delivery system is not organized around value for patients, which is why incremental reforms have not lived up to expectations. Our system rewards those who shift costs, bargain away or capture someone else's revenues, and bill for more services, not those who deliver the most value.

The focus is on minimizing the cost of each intervention and limiting services rather than on maximizing value over the entire care cycle. Moreover, without comprehensive outcome measurement, it is hard to know what improves value and what does not.

To achieve a value-based delivery system, we need to follow a series of mutually reinforcing steps. First, measurement and dissemination of health outcomes should become mandatory for every provider and every medical condition. Results data not only will drive providers and health plans to improve outcomes and efficiency but also will help patients and health plans choose the best provider teams for their medical circumstances.

Outcomes must be measured over the full cycle of care for a medical condition, not separately for each intervention. Outcomes of care are inherently multidimensional, including not only survival but also the degree of health or recovery achieved, the time needed for recovery, the discomfort of care, and the sustainability of recovery.<sup>5</sup> Outcomes must be adjusted for patients' initial conditions to eliminate bias against patients with complex cases.

We need to measure true health outcomes rather than relying solely on process measures, such as compliance with practice guidelines, which are incomplete and slow to change. We must also stop using one or a few measures as a proxy for a provider's overall quality of care. Performance on a measure such as mortality within 30 days after acute myocardial infarction, for example, says little about a provider's care for patients with cancer. Active involvement of the federal government will be needed to ensure universal, consistent, and fair mea-

surement throughout the country, like that already achieved in areas such as organ transplantation.

Since implementing outcome measurement will take time, an interim step should be to require every provider team to report its experience or the volume of patients treated for each medical condition, along with the procedure or treatment approach used. Experience reporting by providers will help patients and their doctors find the providers with the expertise that meets their needs.

Second, we need to radically reexamine how to organize the delivery of prevention, wellness, screening, and routine health maintenance services. The problem is not only that the system underinvests in these services relative to the value they can create but also that primary care providers are asked to deliver disparate services with limited staff to excessively broad patient populations. As a result, delivery of such care is fragmented and often ineffective and inefficient. We need structures for the delivery of specified prevention and wellness service bundles to defined patient populations with unified reimbursement. Employers with on-site health clinics are achieving extraordinary success in providing such services, highlighting the need for new delivery channels beyond conventional settings.

Third, we need to reorganize care delivery around medical conditions. Our system of uncoordinated, sequential visits to multiple providers, physicians, departments, and specialties works against value. Instead, we need to move to integrated practice units that encompass all the skills and services required over the full cycle of care for each medical condition, including common coexisting conditions and complications. Such

units should include outpatient and inpatient care, testing, education and coaching, and rehabilitation within the same actual or virtual organization. This structure, organized around the patient's needs, will result in care with much higher value and a far better experience for patients. Government policies creating artificial obstacles to integrated, multidisciplinary care (e.g., the Stark laws) should be modified or eliminated. In a value-based system, the abuses that gave rise to such legislation will decline substantially.

Fourth, we need a reimbursement system that aligns everyone's interests around improving value for patients. Reimbursement must move to single bundled payments covering the entire cycle of care for a medical condition, including all providers and services. Bundled payments will shift the focus to restoring and maintaining health, providing a mix of services that optimizes outcomes, and reorganizing care into integrated practice structures. For chronic conditions, bundled payments should cover extended periods of care and include responsibility for evaluating and addressing complications.

Fifth, we must expect and require providers to compete for patients, based on value at the medical-condition level, both within and across state borders. This will allow excellent providers to grow and serve more patients while reducing hyperfragmentation and duplication of services. In order to achieve high value, providers need a sufficient volume of cases of a given medical condition to allow for the development of deep expertise, integrated teams, and tailored facilities. We may need to institute minimum-volume thresholds for complex medical conditions in order to jump-start consolidation and spur geographic

expansion of qualified providers. At the same time, strict antitrust scrutiny must be applied to avoid excessive concentration among a small number of providers or health plans in a region.

Sixth, electronic medical records will enable value improvement, but only if they support integrated care and outcome measurement. Simply automating current delivery practices will be a hugely expensive exercise in futility. Among our highest near-term priorities is to finalize and then continuously update health information technology (HIT) standards that include precise data definitions (for diagnoses and treatments, for example), an architecture for aggregating data for each patient over time and across providers, and protocols for seamless communication among systems.

Finally, consumers must become much more involved in their health and health care. Unless patients comply with care and take responsibility for their health, even the best doctor or team will fail. Simply forcing consumers to pay more for their care is not the answer. New integrated care delivery structures, together with bundled reimbursement for full care cycles, will enable vast improvements in patient engagement, as will the availability of good outcome data.

Comprehensive reform will require simultaneous progress in all these areas because they are mutually reinforcing. For example, outcome measurement not only will improve insurance-market competition but also will drive the restructuring of care delivery. Delivery restructuring will be accelerated by bundled reimbursement. Electronic medical records will facilitate both delivery restructuring and outcome measurement.

Moving ahead now on all these fronts is also important in order to align every stakeholder's interest with value, or reform will once again fail. However, a health care strategy, like any good strategy, involves a sequence of steps over time rather than an attempt to change everything at once. Road maps will be needed for rolling out changes in each area while giving the actors time to adjust.

Some new organizations (or combinations of existing ones) will be needed: a new independent body to oversee outcome measurement and reporting, a single entity to review and set HIT standards, and possibly a third body to establish rules for bundled re-

imbursement. Medicare may be able to take the lead in some areas; for example, Medicare could require experience reporting by providers or combine Parts A and B into one payment.

The big question is whether we can move beyond a reactive and piecemeal approach to a true national health care strategy centered on value. This undertaking is complex, but the only real solution is to align everyone in the system around a common goal: doing what's right for patients.

Dr. Porter reports receiving lecture fees from the American Surgical Association, the American Medical Group Association, the World Health Care Congress, Hoag Hospital, and the Children's Hospital of Philadelphia, receiving director's fees from Thermo Fisher Scientific, and having an

equity interest in Thermo Fisher Scientific, Genzyme, Zoll Medical, Merck, and Pfizer. No other potential conflict of interest relevant to this article was reported.

This article (10.1056/NEJMp0904131) was published on June 3, 2009, at NEJM.org.

From Harvard Business School, Boston.

1. Porter ME, Teisberg EO. Redefining health care: creating value-based competition on results. Boston: Harvard Business School Press, 2006.
2. Teperi J, Porter ME, Vuorenkoski L, Baron JF. The Finnish health care system: a value-based perspective. Helsinki: Sitra, March 2009.
3. Porter ME, Yasin ZM, Baron JF. Global health partner: obesity care. Boston: Harvard Business School Publishing, 2009.
4. Porter ME, Guth C, Dannemiller E. The West German Headache Center: integrated migraine care. Boston: Harvard Business School Publishing, 2007.
5. Porter ME. Value-based health care delivery. *Ann Surg* 2008;248:503-9.

Copyright © 2009 Massachusetts Medical Society.

## Managing and Reducing Uncertainty in an Emerging Influenza Pandemic

Marc Lipsitch, D.Phil., Steven Riley, D.Phil., Simon Cauchemez, Ph.D., Azra C. Ghani, Ph.D., and Neil M. Ferguson, D.Phil.

The early phases of an epidemic present decision makers with predictable challenges<sup>1</sup> that have been evident as the current novel influenza A (H1N1) virus has spread. The scale of the problem is uncertain when a disease first appears but may increase rapidly. Early action is required, but decisions about action must be made when the threat is only modest — and consequently, they involve a trade-off between the comparatively small, but nearly certain, harm that an intervention may cause (such as rare adverse events from large-scale vaccination or economic and social costs from school dismissals) and the uncertain probability of much greater harm from a widespread outbreak. This combination of urgency, uncertainty, and the costs of interventions makes the

effort to control infectious diseases especially difficult.

Plans for addressing influenza pandemics define a graded series of responses to emerging pandemic viruses, ranging from very limited interventions to stringent measures such as closing schools and other public venues, encouraging people to work at home, and using antiviral drugs for treatment and prophylaxis. Such grading of responses is based on the pandemic's severity; for example, the United States' Pandemic Severity Index is calibrated to the case fatality ratio ([www.pandemicflu.gov/plan/community/community\\_mitigation.pdf](http://www.pandemicflu.gov/plan/community/community_mitigation.pdf)). Mild responses are prescribed for a strain resembling seasonal influenza, which kills perhaps 0.1% of those infected, with higher rates in the very young and elderly, whereas stringent measures are

envisioned for a very severe pandemic with a case fatality ratio of 2% or more and deaths concentrated in the middle age groups.

This approach makes sense in theory, but in practice, decisions have had to be made before definitive information was available on the severity, transmissibility, or natural history of the new H1N1 virus. The United States, for example, passed the 1000-case mark on May 4, and the second death was reported on May 5. Crudely speaking, the case fatality ratio thus appeared to be 0.2%, near the upper end of the range for seasonal influenza, and superficially, this statistically uncertain estimate seems remarkably accurate given the data available on May 27, by which point there were 11 deaths and 7927 confirmed cases (a case fatality ratio of 0.14%).

However, two principal sour-