From diagnosis and treatment of diseases to organization of the delivery system and payment for medical services, health care is constantly evolving. My role as a health futurist is to evaluate transformational trends and guide strategic responses to anticipated changes. As such, I have been looking into health care’s crystal ball as my primary professional activity for more than 25 years, and the experience has convinced me that the future is literally unpredictable. No unique outcome will occur at a specific future time, contrary to expectations often conveyed by government reforms. Rather, we are experiencing an ever-expanding realm of possibilities that will generate many different approaches to cure and care in the private and public sectors.

The single word that best describes the future of health care in the United States is diverse. Any “one-size-fits-all” prediction is futile, if not counterproductive, because health care’s problems can and will be solved in many different ways in different markets. Consequently, meaningful inquiries will focus on the many futures that can evolve simultaneously for health care—especially in our fiercely pluralistic country with a tradition of incremental change and substantial regional differences in medical care delivery.

Different types of trends create diverse possibilities for American health care. Some of the most powerful: medical science and technology, and supply and demand. Each of these trend groups operates with considerable independence. However, because their forces do not necessarily operate synergistically, this analysis suggests that disturbing instability in the U.S. economy makes it mandatory that health care’s stakeholders create new business models for the 21st century. Success is most likely to come to organizations that realign priorities in light of these trends.

PATIENT-CENTERED: THE FOCUS
Medical science has been the most powerful force in shaping the allocation of resources to understand and treat illness since the modern era of health care began (generally dated from the mid-1880s when scientific principles were introduced into the daily practice of medicine). Clinical research largely determines the definition of disease and where and how to deliver curative care. Scientific discoveries—like asepsis, imaging and antibiotics—have collectively done more than any other force to determine the evolution of hospitals, caregivers and therapies.

My crystal-ball view suggests that medical science will continue to be the most important determinant of American health care for the foreseeable future. Consequently, health care delivery is most likely to follow the path of medical science, and medical science is starting to move in a very different direction. Indeed, a revolution is underway. Due to remarkable discoveries made by the Human Genome Project during the late 1990s and early 2000s, the clinical paradigm of human health is shifting from “one size fits all” to personalized, predictive medicine based on understanding disease at the molecular level.

Clinicians now recognize remarkable differences in diseases long thought to be identical in all patients with the same signs and symptoms. For example, breast cancer is now under-
stood as a multitude of conditions that, though they look alike on X-ray film or a microscope slide, follow different clinical courses due to different biochemical instructions in the tumor cells. Hence, a drug that cures one breast cancer patient should not be expected to help another patient with a different form of the disease.

This revolution in clinical knowledge is affecting every medical specialty, and it will shift the fundamental paradigm of health care from episodic treatment of acute diseases to ongoing management of chronic conditions. More resources will be reallocated from inpatient to outpatient settings. Patient-centered primary care will rise in importance. Pharmaceutical therapies will replace many surgical interventions, and patients increasingly will be made aware of their essential roles in managing their own health. These shifts will occur slowly, but inevitably. "Patient centered" will evolve from a promising idea to a defining concept for a substantial portion of health care services.

TECHNOLOGY: THE ENABLER

Advances in technology will transfer the seismic shifts in health care’s foundations into daily practice. Indeed, the revolution in medical science was made possible by the amazing growth of computers and telecommunications technologies over the past 20 years. Cracking the genetic and molecular codes of human health could not have occurred without networked computers. Electronic health records and related systems (computerized data entry, information exchanges, etc.) will support optimal, personalized care and translational research for continuous improvements in quality and performance. Digital transformation of daily operations will increasingly differentiate winners and losers in the medical marketplace.

Telemedicine will also emerge as a technological foundation of optimal care over the next five to 10 years. Clinical and financial stability will depend on the extent to which providers and their business partners can replace the hands-on, real-time practice of 20th century health care with asynchronous and integrated digital devices that allow patients and caregivers to interact without being in the same place at the same time. The nation’s top-rated health systems largely will be characterized by cost reductions and quality improvements that can be traced directly to appropriate substitution of personnel and facilities with virtual care networks.

Technology substitution also will be essential for overcoming the shortage of qualified health professionals and for reducing expenditures on physical plants. Electronic information systems and simulation training will be the only ways for most organizations to improve the productivity of existing personnel. Future costs of medical office buildings will decline for organizations that learn how to support good patient-caregiver interactions outside the expensive confines of bricks and mortar. Technology adoption by health care enterprises will vary considerably across the country, reflecting the diversity in my forecast. Organizations that do not adopt appropriate technologies to solve their operational problems will be lucky to stay in business.

EFFICIENCY: THE KEY

The production and distribution of medical services in the United States are accidents of history, not products of rational planning. I do not know anyone who thinks we would intentionally recreate today’s American health system if we were able to redesign it from scratch. It is a Rube Goldberg contraption, with components that do not fit together well (literally and figuratively). The past two years of intense debate over health reform have enhanced awareness of deeply embedded inefficiencies on the supply side of the marketplace. Politicians vehemently disagreed on how to reform the system, but all agreed that the status quo is unsustainable.

Although my crystal ball shows lots of dark clouds on the supply side, I also see silver linings. A small, but growing, number of health systems are responding constructively to the need for change. Their successful implementation of better business models gives me the confidence to forecast long-range survival and growth for quite a few providers.

Again, the favorable trend exhibits diversity. Integration is a common denominator of the progressive provider organizations, but their business models vary significantly in detail (e.g., medical staff relationships, ownership, management
structure, relationship with reimbursement). Their creative vision and commitment to dramatic change are clearly emerging as the supply-side differentiators in my long-range view.

Conversely, my outlook is bleak for most health care organizations that are trying to preserve old ways of doing business.

The biggest change in my crystal ball over the past few years is in the picture of demand for health care. Until recently, suppliers have not needed to operate efficiently or effectively because purchasers could always be counted on to pay more. Suppliers' market power and growth of the American economy allowed the medical sector to rise from 4.5 percent of gross domestic product in 1965 (when Medicare and Medicaid were enacted) to 17 percent of GDP today.

This economic growth has stalled for the time being and is unlikely to return to previous levels any time soon. The organizations and individuals that pay for medical services are unlikely to have more money to spend — on health care or anything else. The reforms of 2010 may give the impression that medical spending will stay strong as more Americans become insured. In my view, however, maintaining current spending on health care (i.e., 17 percent of GDP) is the best-case scenario for the next few years — and some would argue even that is overly optimistic.

At the same time, fiscal responsibility for medical services is shifting from third parties to consumers as employers continue to raise employees’ share of premiums, increase deductibles and co-insurance rates and reduce or even eliminate coverage for dependents. I see nothing to stop this trend — and I see nothing to suggest that consumers will have disposable resources (income or savings) to assume a greater share of their total health care bills. Further, purchasers (employers and governments) and payers are becoming very serious about expecting services of acceptable quality in exchange for their third-party reimbursement.

In conclusion, organizations on either side of the medical marketplace are starting to face a real budget constraint for the first time. I forecast a 70 percent chance of no long-term income growth for the medical sector of the American economy. (The residual in my forecast is a 20 percent chance of growth and a 10 percent chance of totally unexpected outcomes.) Individual organizations can grow by taking business away from competitors in a zero-sum game, but the halcyon era of a growing medical economy — the tide that lifted all ships — is most likely history.

Cost shifting has also reached its limits. Businesses in health care must finally learn how to survive and grow with the resources at hand. Ironically, there’s no downside risk in acting in accord with my forecast, even if it is wrong. Efficiency and effectiveness are keys to success under any circumstances.

ACOs: THE SILVER LINING

The Patient Protection and Affordable Care Act includes laudable provisions to create a relatively small number of accountable care organizations (ACOs) to evaluate cost-effectiveness of different medical services and to expand the supply of health professionals with a clear focus on primary care. However, none of these supply-side programs can have any meaningful impact on the delivery of care until late in this decade. In the short term, the economic crisis will hit the medical marketplace hard in 2011.

What are providers and their business partners to do under these foreboding circumstances? The obvious solution is to learn how to produce affordable services of quality acceptable to consumers, a challenge that requires changing almost everything about America’s 20th century medical marketplace. The systems on which the ACO initiative is modeled prove that success is possible even outside conditions defined by the Affordable Care Act. After all, these exemplary organizations, working creatively with other stakeholders, reshaped themselves before the latest health reform laws were passed, converging the best options from the realm of scientific and technological possibilities and providing the silver linings I see in my otherwise stormy crystal ball.

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