HMPI | HEALTH MANAGEMENT, POLICY & INNOVATION
BAHM BUSINESS SCHOOL ALLIANCE FOR HEALTH MANAGEMENT

A Business-Based Pathway to a Stronger U.S. Healthcare System

Richard M. Levy, Former Chairman and CEO, Varian

Contact:dick.levy17@gmail.com

What is the message? Over the last 50 years, the U.S. healthcare industry has led the world in the development and widespread adoption of modern healthcare technology but ranks behind most other developed nations in healthcare delivery and population health. To maintain existing strengths and address persistent weaknesses, hospitals and health systems would benefit from more widely adopting traditional business competencies and approaches – among them, process improvements, multidisciplinary "incubators," updated organizational structures, and quicker reaction times to market and technology changes.

What is the evidence? The author draws from his 50 years of leadership experience in healthcare across supplier, provider, and academic settings.

Timeline: Submitted: April 4, 2024; accepted after review April 4, 2024.

Cite as: Richard M. Levy. 2024. A Business-Based Pathway to a Stronger U.S. Healthcare System. *Health Management, Policy and Innovation* (www.HMPI.org), Volume 9, Issue 1.

Over the last 50 years, the U.S. healthcare industry has led the world in the development and widespread adoption of modern healthcare technology. At the same time, our healthcare system is behind most other developed nations in the effectiveness and efficiency of healthcare delivery, and in the average health of our population, currently rated below all other countries in the developed world by the World Health Organization and others.

The following analysis describes the strengths and weaknesses of the current system and proposes a pathway to maintaining the strengths and addressing the weaknesses.

The technology we have today would have been inconceivable 50 years ago. We have tools like MRI, CT, and ultrasound which can non-invasively diagnose problems within the body with millimeter precision. We are able to pinpoint and treat cancer with precise radiation oncology. We have minimally invasive and robotically controlled surgery. Our system has developed artificial organs and techniques for organ replacement. We have vaccines and drugs customized to particular genetic traits of individuals.

These tools and many others have helped to increase life expectancy in developed countries by 7 to 10 years, have cured diseases previously thought incurable, and prevented diseases, previously thought non-preventable. They have made it possible to better manage some diseases and improve the quality of life for millions of people.

Partially due to the burgeoning technology industry, healthcare in the United States has become an economic force, representing 18% of gross domestic product and creating meaningful jobs for over 30 million people. This employment is second only to the defense industry.

But there have been unintended consequences related to the above successes.

Healthcare costs have gone up twice the rate of inflation over the last 50 years. Per capita healthcare costs in the United States are twice as high as the average of all other developed countries. Many patients have healthcare debt. Some have declared bankruptcy and lost their homes due to the cost of healthcare, and many others have avoided accessing the system until advancing illness forces them to seek help.

Hospitals have seen costs increase faster than revenues for the last 20 years. To remain solvent, many have had to reduce unprofitable services, which are still needed by their communities. They have had to reduce support for doctors, leading to unprecedented physician burnout and early retirements. The number of doctors required to treat our aging population, already inadequate today, will decline between now and 2030.

To address the financial stresses, over half of U.S. hospitals have joined with other hospitals to

form large consortiums. This has often created an additional layer of bureaucracy and regulatory oversight, sometimes making the system more impersonal for both doctors and patients.

Our aging population exacerbates the financial stresses on the system. Today, 17% of the population is over 65, the highest ever and by 2030, that number is forecasted to increase to 21%. Because people are older, there has been an even larger increase in chronic diseases. Chronic diseases do not need episodic cures as much as they require long-term care, including help with activities of daily living and with social determinants of health. Long- term care is also needed by two other growing segments of the population, the neediest people and those with mental illnesses. A vast majority of our $4.9 trillion healthcare expense treats these three population segments, all of which need more long-term care than is generally available.

We spend less on long-term care as a percentage of total clinical care than any other country in the developed world. Small dollar increases in long-term psycho-social care would reap large reductions in the $4.9 trillion healthcare costs, increase overall population health, and reduce the burden of overwork for clinicians.

These two significant factors – market changes, and cost increases higher than inflation and revenues – are common in businesses, the media, and education systems. The primary tool of business when the markets shift and budgets are tight is a strategy change, which usually requires a change in organization structure and job definitions. In some businesses, organization changes occur every 5 to 10 years to meet the strategic needs. But some healthcare organizations haven't changed traditional organization structures in 50 or even 100 years.

One frequent organizational strategy in business is the creation of small ad hoc multidisciplinary teams. Such teams are often used when there is a need for urgent action, e.g., solving an unexpected problem or testing a new business process, requiring different specialties to work together rather than each department operating independently. Often, the urgency forces teams to go outside the company for competencies or products not readily available inside the company. And usually, the need for quick results forces the team to depend most on process innovation, which is cheaper and faster.

There are ad hoc teams in healthcare, often called "incubators," that have been used effectively in streamlining internal operations. But, unlike in business, they have not been broadly used in

hospitals to improve what's important for customers/patients: cost and convenient access to the right care at the right time. This is possibly due to barriers to change such as extensive rules and regulations, legal risks, formal accreditation standards, unions, government oversight, and payment structures.

The environment for supporting a more patient-focused strategy will improve as we transition from highly regulated hospital care to more flexible outpatient care and home care.

But even without this transition, the incubators can demonstrate that process innovations for better healthcare at lower cost have fast financial payback for patients, hospitals, insurance companies, and the economy.

A second strategic lever of businesses is restructuring. Businesses, skillful at market segmentation, regularly spin out entities, acquire entities, and combine different specialties to address specific customer needs. Healthcare delivery systems have partially adopted this approach with integrated cancer centers and other centers of excellence for specific diseases. But many of the barriers to change in hospitals described above, do not exist in business. Because of these barriers, centers of excellence must often be bolted onto existing job definitions of specialty-based organization structures which are not optimally designed for a disease-based strategy. A possible solution to this problem is the matrix organization structure.

On one axis of a matrix structure are the specialties, e.g., manufacturing, engineering, marketing, finance, etc. On the other axis is project management. The specialty axis emphasizes quality, best practices, and regulatory compliance. The project management axis emphasizes time to market, cost, efficiency, customer convenience, and market share. Healthcare is mostly structured around the specialty axis. That axis is blessed with the finest doctors and best technology in the world. But the system often has a weekly lead, or non-existent project management (aka case management or navigation) axis, which is equally or even more important to patients. Without this axis, a routine cancer biopsy of a prostate or breast can require as many as eight patient visits to several healthcare sites and result in eight separate bills. Good project management and simple software could reduce the cost and inconvenience for both the patient and the provider.

Either a matrix structure or a freestanding center of excellence would enable healthcare

systems to better measure and manage operational parameters like quality, use of best practices, and budgets, as well as patient-facing parameters such timeliness, convenience, and long-term costs. This is especially critical for chronic illnesses like heart disease, cancer, diabetes, Alzheimer's, lung disease, kidney disease, strokes, and autoimmune diseases.

Another tool used frequently in business, but less in healthcare, is large scale process improvement. Businesses engage in time and motion studies and process mapping to improve efficiency and effectiveness for internal operations and for dealing with customers. In large multi-specialty healthcare organizations, process engineering is difficult if the patient needs help from multiple clinical or non-clinical specialties. Cancer is a good example. Patients diagnosed with cancer may need to make appointments with five or more clinical specialists (and back that up with second opinions) and interact with multiple nurses, receptionists, schedulers, technicians, imaging labs, financial advisors, primary care doctors, insurance companies, and psycho-social experts. The time between the diagnosis and the beginning of treatment in some dedicated cancer centers is as short as five days. In other general purpose hospitals, it can be as long as six months.

The long waiting time can be cruel. It can affect the peace of mind of the patient and family, as well as the choice of treatment, the outcome of the treatment, and the cost. Many institutions are not organized to measure or manage the journey of the patient through difficult cancer treatment. Many also do not track the patient through the survivorship period, which might require a whole different set of interactions to deal with pain management, cosmetic surgery, skin problems, PT and OT, hair loss, incontinence, and other physical and psychological effects of the cancer and the treatment. Similarly to project management in business, healthcare systems are beginning to use navigators or case managers to help patients deal with the many interactions.

Another area where healthcare could learn from business is speed of change. In healthcare, the average time for a new process, or a new technology to become routine, can be as long as 17 years. An important tool that businesses use to react more quickly is acquisitions, partnerships, and hiring people with new competencies. The healthcare system has found it difficult to introduce new competencies through acquisitions and partnerships and has been slow to create new departments with new expertise. This is especially true for long-term care, so important to our aging population, and patient convenience, so important to working people and parents.

Partially as a result, the traditional healthcare system is getting competition from organizations with different competencies, e.g., retail pharmacies, customer-facing companies like Amazon and Microsoft, free-standing outpatient clinics, and medical tourism, all of which offer lower cost and more convenience.

Business skills and experience in organization changes, process improvement, and adding competencies, are all available to and being used in healthcare, but they need to be spread more widely. Board members can play a major role in making this happen. Many Board members of healthcare organizations come from industries in which organizational changes are part of normal business operations. They and their families are patients of the system. They can and must provide more guidance on organizational change and how it affects the patient/customer experience. They can build this guidance into by-laws, management performance evaluation, and incentive plans.

Board members can establish bylaws which describe the skills and experience needed on the board and establish the tenure of members and committee chairs to assure continuity and cohesion. They can set yearly management goals for changes in organizational structure, adding new competencies, and tracking costs and outcomes for managing specific diseases. They can develop incentive plans to reward success. They can oversee acquisitions and partnerships bringing new competencies. They can support philanthropic efforts to enhance all of the above changes, both personally and in the community.

All the skills and the will to do better exist with management and the Board.

The changes are not happening fast enough to offset the explosions in cost, the rapidly aging population, and the shortage of doctors and nurses. Our country cannot afford to wait 17 years for these changes. Although there is always risk with any change, the risk of not changing is greater for the healthcare system. These changes must be more aggressively pursued. Only then will we have what every institution needs to survive in today’s supercharged world—better care at lower cost.

The new skills can be introduced as incubators and, when proven successful, can be spread throughout the system. Incubators can be initiated by empowered doctors and nurses who know best what patients need. These changes in the delivery process don’t require government

intervention or radically different health insurance policies. But, to have a significant impact, they do require more funding from investors, philanthropists, and granting agencies.

Using traditional business skills will enhance, not detract from the incredible strengths of our healthcare system. They are the fastest, least expensive way to reduce cost and improve the health of our population.