Population Health and the Disruptive Business Models Necessary to Support It

BY JON BURROUGHS, M.D., M.B.A., FACHE, FACPE, THE BURROUGHS HEALTHCARE CONSULTING NETWORK, INC., AND DAVID NASH, M.D., M.B.A., JEFFERSON SCHOOL OF POPULATION HEALTH

The United States healthcare system has been a great success and a great failure. It provides some of the finest critical, surgical, and interventional care in the world.

Unfortunately, these services make up approximately 0.1 percent of our healthcare needs and so large areas of care including pre- and post-acute, preventive, palliative, and public health services go largely under- or non-funded. This is due to a politicized fee-for-service reimbursement system created to support the needs of suppliers. These supplier entities fund Congress to ensure that their services are richly reimbursed through Congress's oversight of the Medicare Payment Advisory Commission (MedPAC) and thus result in an excellent return on investment as opposed to return on health or quality adjusted life years (QALYs). The overall result is mediocre national lifetime health metrics including 37th in overall health, 39th in infant mortality, and 36th in life expectancy.[1]

One challenge is that a small number of individuals make up a disproportionate share of our healthcare costs and our traditional healthcare system is unable to address them. These "significant few" include the top 1 percent of individuals who make up 23 percent of our healthcare costs and include those undergoing critical care services, particularly at the end of life. As a nation, we have been slow to embrace palliative care services that offer a focus on total health and well-being towards the end of life as opposed to small incremental weeks of survival on a ventilator with advanced monitoring devices that preclude an individual's ability to speak or to make autonomous decisions. The other "significant few" is the top 5 percent of individuals who make up 49 percent of our healthcare costs and these are those individuals who live with multiple chronic diseases (e.g., congestive heart failure, diabetes, hypertension, etc.) and for whom our current healthcare system offers difficult-to-access episodic treatment that is not always timely or efficacious.

1 World Health Organization (see www.who.int/en/).

The two traditional business models for healthcare delivery in the United States are the stand-alone hospital (whether community-based or academic) and the independent physician's office. Determination of a diagnosis was traditionally obtained by going to the correct specialties (often self-referred) that perform the necessary evaluation to arrive at a correct diagnosis, prognosis, and treatment plan. For example, if someone had breast cancer, this may require a visit to an OB-GYN (often serving as a primary care provider), radiologist (mammography), general or breast surgeon (lumpectomy/sentinel node biopsy), pathologist (frozen section interpretation), oncologist (chemotherapy), radiation oncologist (radiation), case manager (overall coordination), and family physician or general internist (primary care). The process may take up to three months with multiple independent business units, none of whom necessarily communicate with each other either through an integrated healthcare delivery network or health information exchange. Whatever occurs in the hospital setting is often overseen by independent providers practicing according to their individual preferences (hence preference cards in the operating room) and who achieve a wide variation of outcomes and costs.

Disruptive Business Models

In *The Innovator's Prescription: A Disruptive Solution for Health Care*, the authors popularized three different business models that address the issues mentioned above:[2]

1. Integrated Solution Shops for Undiagnosed Entities

When an individual presents with an undiagnosed entity such as breast cancer, instead of seeing independent physicians in their individual offices, they present to a team of aligned practitioners functioning in a clinically integrated network that provide a seamless process to go through a coordinated diagnostic effort in a time- and cost-sensitive basis. Instead of being paid through the traditional fee-for-service method, the team either receives a bundled or capitated payment based upon the effectiveness of their process. This may result in the diagnosis of breast cancer with a prognosis and evidence-based treatment plan within hours (as opposed to weeks) at significant cost savings and greater reliability.

2. Value Added Processes (VAPs) for Diagnosed Entities

Once a diagnosis is made, the patient may require acute treatment (e.g., surgery, radiation, chemotherapy). Traditionally, this is done by independent practitioners practicing autonomously according to their

2 Clayton M. Christensen, Jerome H. Grossman M.D., and Jason Hwang M.D., *The Innovator's Prescription: A Disruptive Solution for Health Care*, New York: McGraw-Hill, 2009.

Key Board Takeaways

Climbing healthcare costs for employers and their employees as well as climbing out-of-pocket expenses creates a business environment ripe for disruptive entrants that can provide convenient, accessible healthcare at a fraction of the price. The traditional stand-alone hospital and physician office will be replaced by integrated solution shops, value added processes, and facilitated networks that will focus on the specific clinical needs of risk-stratified subpopulations and permanently change the fundamental healthcare business model. A few things to consider include:

- The board, management, and physician staff will need to prepare for a new healthcare business model that is market rather than sales driven and treats the patient as a consumer with discretionary choices and payers as discretionary spenders through private exchanges and narrow networks.
- A plan should be created to transition from discounted fee-for-service to risk-based capitation so that the healthcare mission can also transition from treating sickness to optimizing health.

personal biases and preferences. A more effective model is for practitioners to come together in advance, decide upon a consensual approach based upon the latest information and research that includes a single vendor for each key supply component and reflects an approach that is shared by everyone within the care team. Thus, it no longer matters who performs the required test or procedure because it is done the same way every time with the same predictable outcomes and costs. An example of this model is the Shouldice Hernia Centre in Thornhill, Ontario, that performs 7,500 herniorrhaphies without general anesthesia and achieves some of the finest outcomes in the world at less than half the cost of a hernia repair in the U.S. Reimbursement for this approach is again a bundled or capitated payment to the team based upon an optimum cost-effective outcome.

3. Facilitated Networks for Chronic Diseases

Individuals with chronic diseases are poorly handled in the U.S. because our current reimbursement system neither rewards providers who prevent unnecessary procedures, studies, and admissions nor incentivizes patients to become empowered to better manage their own care. Ask any individual who deals with a chronic disease and they will tell you that they make the vast majority of day-to-day decisions that result in a poor, marginal, or optimum outcome. Where they turn for information and guidance is not the medical system but others who confront the same condition and are willing to share their hard-earned insight and expertise. Thus, facilitated networks have emerged (e.g., www.patientslikeme.com) that provide 24/7 cloud-based social networks to confide in and confer with as the need arises. This can be augmented with e-health, home health with wireless monitoring technology, and nurse navigators (overseen by medical directors), as well as a wealth of online clinical analytics to support real-time patient/practitioner interaction. The reimbursement methodology for this approach would be a per member per month (PMPM) membership fee to a facilitated network that provides optimum support.

Segmented Populations

With these types of business models, populations will be segmented to provide care that is appropriate for each group as follows:

- **Healthy individuals:** Online e-health solutions/opportunities on an *ad hoc* basis with personalized portals to manage one's own health based upon individualized genomic, proteomic, and microbiomic profiles
- **Healthy individuals with minor acute conditions:** 24/7 retail clinics staffed by M.D./D.O.s or APNs (predicted to be over 50,000 by 2020)
- **Individuals with chronic medical conditions:** Patient-centered medical homes supported by facilitated networks and wireless home health monitoring systems
- **Individuals with potentially complex undiagnosed conditions:** Integrated solution shops with multi-disciplinary teams and proven processes to derive a timely and cost-effective diagnosis, prognosis, and treatment plan
- **Individuals with significant life-threatening acute conditions:** Evidence-based value added processes (e.g., the Cleveland Clinic for cardiology issues) headed by multi-disciplinary "best in class" teams and a state-of-the-art process to follow based upon the latest information and research
- **Terminally ill individuals:** Outpatient and home-based palliative care with comprehensive support services for patients and their families

The goal to provide optimum care to populations must be accomplished in a segmented way with new delivery structures and processes and a reimbursement system that provides appropriate incentives to achieve desired cost-effective outcomes. The traditional fee-for-service stand-alone physician office and hospital model will be replaced by integrated organizations that can provide a full array of programs and services based upon the unique needs of each salient population supported by a reimbursement methodology that will incentivize the same. It is essential that the board, management, and physician staff collaborate on a short- and long-term strategic plan that will enable their organization to transition from discounted fee-for-service to dynamic risk-based capitated agreements with all payers to focus on supporting the health of defined subpopulations rather than providing care to the "sick" and "injured" in a reactive and unit-based way. The good news is that the health industry is larger ($5 trillion) than the sickness industry ($2.8 trillion) and will create a more sustainable clinical and business model that will benefit healthcare organizations and their communities alike.

The Governance Institute thanks Jon Burroughs, M.D., M.B.A., FACHE, FACPE, President and CEO, The Burroughs Healthcare Consulting Network, Inc., and David Nash, M.D., M.B.A., Founding Dean, Jefferson School of Population Health, for contributing this article. *They can be reached at jburroughs@burroughshealthcare.com and David.Nash@jefferson.edu.*