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What 21st Century Health Care Should Learn from 20th Century Business

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Health care today has a complexity problem. Progress has produced major medical advances, but health care's traditional organizational structure is buckling. Knowledge has increased the number of therapeutic options for most conditions — but also the number of people involved in delivering care. The result: Clinicians have trouble collaborating. Patients have trouble navigating the system. And leaders have trouble leading.

Analogous challenges confronted American business during the 20th century. Many companies had become larger and more diverse, designing, producing, and selling disparate products through shared functional departments. Yet leading companies, like General Electric (GE), Dupont, and General Foods did not succumb to exploding complexity; instead, they changed the way they organized. They shifted from organizing around individual functions (e.g., marketing and production) to organizing around products and the customer needs they aimed to meet. This new structure enabled companies to compete, product by product, to improve product quality and efficiency and speed up innovation, while continuing to diversify and grow.

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In many ways, health care today is where business was in the early and mid-20th century — i.e., it is becoming increasingly clear that today's organizational model is a major obstacle to meeting customers' needs and supporting innovation. Service delivery is organized around what clinicians do (e.g., surgery, primary care, physical therapy) and where they do it (e.g., hospitals or outpatient settings). Results are defined by how often particular discrete services are delivered, not in terms of how well patients' overall needs are met.

However, poor coordination, inefficiency, and ineffectiveness are making organizational change essential. Financial pressures are making the current model unsustainable, but the real driver of the need to reorganize care is not cost alone — it is value for patients. And improving value requires providers to shift their focus from services they perform to results for patients.

Even though the fee-for-service system still props up the traditional structure, providers are moving toward patient- and condition-centric approaches to care delivery. Reorganizing around the needs of groups of patients with particular needs, in the same way businesses reorganized around particular customers' needs, is the future of health care.

Reorganizing For Complexity

The parallels between the history of business and the evolution of health care reflect changing technology and the resulting organizational complexity. In the late 1800s, inventors like Thomas Edison and Alexander Graham Bell produced striking basic innovations with electricity and communications, which were complemented by the work of countless engineers who radically changed the nature and efficiency of work. They created new product capabilities, machines that enabled production of goods

efficiently and at large scale, and transportation logistics that supported large-scale plants located far from where customers lived.

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Until the early 20th century, most businesses were relatively small and produced a single product, and were organized around business functions — e.g., product development, manufacturing, marketing, sales, and after-sales services, such as repairs. Over time, however, companies like GE, Dupont, and General Foods diversified into multiproduct, multi-market, multi-geography companies, serving disparate needs of differing set of customers.

This new complexity created challenges for organizations structured around functions. Functional departments had to master many different requirements, and the need for coordination among many departments exploded and became a major barrier to performance. At the end of the 1960s, for example, GE had 175 separate "profit centers" — parts of larger businesses in which shared costs were rampant. The difficulty of improving performance and even measuring success became insurmountable.

The solution at GE was to form 40 Strategic Business Units (SBUs) in 1970, each of which met three simple criteria:

1. It should be a complete business, including all needed functions.
2. Its external competition should be identifiable.
3. Its general manager should be responsible for developing an overall strategic plan for the business, balancing short- and long-range performance objectives.

The breakthrough concept underlying this shift was to organize around producing value for sets of customers with needs for distinct products. GE had in fact been

moving toward this idea as it developed more and more profit centers, but realized that these centers were hamstrung by not being self-sufficient. The change was that the SBU contained ***all*** the functions needed to design the product, produce it, and deliver and support it. These functions included research and development, procurement, manufacturing, order processing, delivery, and after-sales service. The activities involved in competing in a particular business and designing an integrated strategy were made more rigorous through the concept of the value chain, which was introduced in the 1980s.

A search of the ProQuest database of annual reports of more than 800 major U.S. companies for the term "strategic business unit" reflects the spread of this concept in companies that were highly diversified and in a variety of industries. SBUs were first mentioned in the GE annual report in 1972, followed by General Foods in 1973, and International Paper in 1974, growing from 16 company mentions in the 1970s to 43 in the 1980s, 118 in the 1990s, and 158 in the 2000s.

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What drove these companies to the SBU structure was the impracticality of having a manufacturing department trying to manufacture 25 different products involving different manufacturing methods, or a sales department trying to sell 25 different products to different customers with widely disparate needs. SBUs also highlighted another important concept — that the essence of a true strategy is holistic. An effective strategy must integrate ***all*** functions around delivering the needs of a particular product to a defined set of customers in order to maximize overall value. A series of discrete and independent functions or services involved in meeting a customer

need does not result in a strategy, but is instead a recipe for poor quality and coordination.

Related to this is another important insight about strategy and value creation — and a humbling one for experts in individual functions. Individual business functions or activities (e.g., product development, marketing, logistics to reach the customer) do not exist in a vacuum, but can only be optimized in the context of the overall strategy. There is no such thing as good marketing, or good manufacturing. There is only good marketing or good manufacturing for a particular product meeting a particular need for a particular group of customers.

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When businesses are small or competing in a single market, they don't need to integrate activities into SBUs. They *are* SBUs. The need for organizational change emerges only when the diversity of the enterprise grows. When companies try to serve heterogeneous needs of customers, a functional structure becomes dysfunctional. SBUs proved far more focused and effective.

SBUs For Health Care Delivery

The analogies between 20th century business and 21st century health care are clear. When medical science was less advanced, health care functioned just fine with a lot of small-scale enterprises (physician practices) in disparate sites. The hospital acted as an "overhead pool" where physicians performed certain activities that were not possible within their practices (e.g., surgery, inpatient care). Providers were organized around clinicians' functions (e.g., specialty) and discrete services (e.g., imaging). This was natural, because it was how physicians were trained and conducted clinical research, and how they used specialized staff skills.

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This model was reinforced by fee-for-service reimbursement, which paid function by function, service by service, limiting the strengths of relationships and coordination among clinicians. Another factor slowing reorganization in health care around the needs of its customers (patients) was the high value placed on physician autonomy.

Health care got by with the traditional organizational model as long as things were relatively simple and a physician could master all that was known about treating the diseases in which the specialty was involved. When there were few drugs and not much that could be done for patients with cancer, for example, it didn't matter much which cardiologist was consulted for cancer patients who developed heart failure.

However, as medical progress continues to accelerate, the failures of the traditional structure have become conspicuous. The number of physicians/10,000 population has approximately doubled since 1975, so the number of clinicians who must collaborate in delivering state-of-the-science care for patients of any complexity has risen substantially. Each clinician must absorb far more specialized knowledge about each medical condition in which his or her specialty could be involved. With complex procedures and interventions, practice and experience is needed for good execution, as the medical literature overwhelmingly verifies. Lack of expertise around particular conditions, then, has led to rising penalties in terms of outcomes and efficiency, as reflected in the strong evidence that volume in a particular condition matters for almost every function). And poor coordination across the care cycle has become a major stumbling block that creates inefficiency, chaos for both clinicians and patients, and subpar outcomes.

Today, the health care marketplace increasingly wants to pay for the real product (i.e., overall outcomes), not the

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pieces (i.e., services). Efforts to slow this transition persist, but such organizations and clinicians are losing ground to clinical teams that embrace it. To get good outcomes as a cancer patient, patients need care by oncologists who are expert in the care of the cancer involved and how to personalize it. And their patients need to be seen by cardiologists who work constantly with cancer patients and intimately understand their medications' effects on cardiovascular function. Patients need cardiologists who are not isolated actors, but members of the cancer care team, which includes the other clinicians with a role in the overall care process.

The history of SBUs shows that which types of expertise are involved and how personnel are organized in meeting a common need, really does matter. This is why the term Integrated Practice Unit (IPU) was introduced a decade ago in the book *Redefining Health Care*. The term IPU was chosen to be analogous to the term SBU, and to highlight that whenever an organization is doing something complicated, it should organize around the overall customer needs being met.

IPUs *are* health care's SBUs. They are multidisciplinary teams organized around meeting the needs of groups of patients with a shared clinical condition. These teams can often function best when they are co-located and part of the same provider entity, but they can also be hub and spoke structures, which deliver specific services at different sites, and virtual teams in which some members are not part of the same organization. However, everyone in IPUs must see themselves as part of a team, and have a clear goal — improving the value of care for the group of patients they are serving.

IPUs emerged first in provider organizations that were primarily addressing one condition, such as the Joslin Diabetes Center, or in organizations like the Cleveland Clinic where there was enough volume in some conditions (e.g., cardiac surgery) so that co-location and teams emerged organically to improve quality and efficiency. In such organizations and clinical conditions, surgical and nonsurgical clinicians

involved in delivering care were co-located and surrounded with all the necessary supporting services. Once IPUs began to form, the next logical steps included measuring overall outcomes, not just processes and specialty outcomes, and using the data to build accountability in the team as a whole to improve outcomes and efficiency.

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The Cleveland Clinic has since extended this model to over 100 conditions, and is on a path to apply it to all its complex care. IPUs within the Cleveland Clinic track and work to improve outcomes that are not relevant to the overall population, but just for the patients upon whom they are focused — e.g., cancer IPUs try to reduce the time between diagnosis and formulation of a plan for patients. This kind of focused improvement activity can only be effective through the efforts of multidisciplinary teams organized around segments of patients with similar conditions.

IPUs enable progress beyond the "Exceptionalism" view of patient care that has dominated the culture of medicine and health care in the past. Traditionally, physicians have sought heterogeneity among patients, and resisted any organizational changes that reduced their flexibility and autonomy in meeting disparate patients' needs. The physician was often seen as the only figure who could deal with the variability in patient circumstances.

That variability in patients will always persist, but what has disappeared is the ability of any individual physician to deliver excellent care on his/her own. In today's sophisticated medicine, the patient needs a team. The ability to personalize care lies in the ability of experienced groups of clinicians working together in treating patients with similar conditions to understand how to deal with individual differences. An IPU team is far better equipped to deal with exceptional cases and deliver personalized

care than the traditional model — just as SBUs were better able to respond to their customer needs for their product than traditional functional structures. Health care needs real teams and real IPUs that are dedicated to meeting the needs of particular groups of patients, with the same focus that SBUs allow in meeting the needs of their customers for their product.

Classical organizational theory asserts that growth creates complexity in coordination and meeting particular needs — a fact of life for every clinician at the front lines of care. Providers who recognize the historical forces at work that are restraining the traditional model of health care delivery can learn from how business changed its structure in the 20th century.

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