

## **Where is the Transformative Change in Healthcare Delivery? Can Disruptive Supply Chain Management Offer the Answer?**

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*Healthcare systems deliver their services in the same way they have done for the past 100 years or more but have not benefitted from transformative or disruptive change. Other industries have progressed much more. Why is that? Where are the opportunities for change? Healthcare supply chain management can offer that opportunity. Healthcare executives and hospital Boards need to pay close attention to this opportunity.*

The healthcare system in the US, as in almost every other country, is the largest industry. It represents over 15% of GDP and employs millions of people. Furthermore, from a societal point of view, we rely on it to assure our health and longevity. Despite its massive importance and our reliance on it, the sustainability of the system today is in jeopardy. Costs are rising faster than the overall inflation rate and revenues are more and more difficult to come by for patients and governments who are increasingly economically challenged.

It is not unusual to find industries financially challenged. Many have had such challenges and have overcome adversity through focus, determination, and transformation. Think of the auto industry in the 90s, the technology industry in 2000, and the regular cyclical turbulence in the energy and resource industries. No doubt, the healthcare industry will survive the challenges it faces today. The question is who will change it and how quickly?

What is disappointing and frustrating in healthcare, given the grave condition that the industry faces, is that, as an industry, it delivers its services in the same way it has done for the past 100 years or more. Other industries have or are undergoing fundamental transformation with tremendously benefits. Healthcare has not. Given the availability of smart apps and new technology, it is surprising and disappointing that healthcare has not benefitted from this. It operates and treats its customers (patients) exactly the same as it did 100 years ago.

Today, as in the past, patients (customers) seeking its services arrive at a hospital, are seen by a triage nurse, sit and await the next stage, are then seen by an admitting nurse, then by a junior physician when the initial diagnosis is obtained. More waiting, then likely some diagnostic tests, more waiting, further consultation by a physician, and then, hopefully, treatment. This fundamental delivery process has not changed in over a century. Without doubt, the diagnostic and procedural equipment and supplies are far more sophisticated today. Physicians and nurses are far better trained than in the past and lean

management tools have resulted in impressive but only incremental improvements. Yet the processes in which they are used and the stakeholders involved have not fundamentally changed in more than a hundred years.

While this basic process of providing healthcare has been followed without any fundamental change for years, there have been some very impressive advancements in research, medical technology for diagnostics, and treatment. Improvements and innovations in diagnostic imaging, cardiac intervention technology, and orthopedic implants have vastly improved the health of patients. Lasers, advanced optics, da Vinci robots, and nuclear chemistry have helped doctors, nurses, and technicians to save lives and extend lifespan. There is no dispute there. But the way in which medicine is delivered has not changed other than through unsustainable cost increases.

Compare this slow pace of change in healthcare to significant, transformative change in other industries. Many of these changes have been disruptive to the industry leading to structural and market facing changes. A great example of this is the book retailing industry, first transformed in the late 90s by Amazon with an easy to use, intuitive, and low cost means to order and obtain books, CDs, and DVDs through an on-line web process. Ten years later it was followed by a second transformation enabling the distribution of books digitally through e-readers. As a consequence of the change to the fundamental retail process (physical stores to virtual stores) and the product itself (the book), numerous steps and middlemen have been removed from the process. This disintermediation of the delivery of books from publisher to consumer has resulted in substantial cost reduction, far faster time to market, and the consumers' access to literally millions of books at the touch of a keyboard.

This type of transformative event has occurred in dozens of industries across the globe. Some of these industries include:

- Hotel industry: introduction of airbnb and VRBO
- Travel Agency industry: introduction of on-line booking engines such as Expedia and Travelocity
- Taxi industry: introduction of Uber and Lyft
- Postal and Courier industries: introduction and widespread adoption of e-mail for document transmission and on-line bill presentment systems
- Banking industry: introduction of on-line banking and ATMs for cash dispensing
- Newspaper classified ad industry: introduction of Craigslist and eBay.
- Automobile industry: introduction of Tesla fully electric cars and the direct sales model eliminating auto dealerships
- Retailing industry: introduction of e-commerce sites for B2C sales of almost any product from fruits and vegetables to home appliances

And the list goes on. But noticeably absent from this list is anything to do with the healthcare industry. Our largest industry has not benefitted from such transformative change nor, more importantly, have the patients. Where is the disruptive change? Where are the Apple apps for healthcare? How can we leverage Google search to improve patient care? Where is the Google Glass application in the operating rooms? How can we use social media to build communities of interest for operating units within hospitals? Among the one million apps available for the Apple smartphone, very few are focused on the healthcare industry. Yes, there is early stage work with wearable technology and a plethora of offerings for electronic medical records (EMR). But we are still years away from a substantial rollout of wearable technology and the industry has not established standards for EMRs resulting in numerous systems that do not interface with each other.

Now notwithstanding this inertia, we cannot ignore that through improvements in medical technology, life expectancy has materially increased and the amount of pain and suffering has greatly diminished. But all of this progress has come at the very high expense of the system. Some experts close to the healthcare industry question its long term sustainability. Efficiencies through disintermediation and other fundamental process changes have not occurred. But significant change must occur.

In healthcare, the second highest cost element after labor is the cost of supplies and drugs. This is managed through the supply chain management function. Today, this cost element accounts for approximately 25% of a hospital's total cost. While most hospitals have joined buying groups (GPOs) to extract leverage through economies of scale, the historic multi-tiered distribution system compounds margin upon margin for manufacturers, packagers, wholesalers, distributors, and sales staff. The cost of medical supplies, equipment, and drugs continue to rise at levels exceeding annual inflation rates. This is a system in need of change and ripe for transformation to extricate intermediaries from the process. The customers of the healthcare system (the patients) are crying for change. But where is the transformation? What is preventing it? Why is there such inertia restricting change?

Salim Ismail in his recent book, *Exponential Organizations*, recognizes highly successful organizations that have disrupted their markets and are growing at rates orders of magnitude faster than traditional companies. He references Google, Apple, Amazon, Uber, and airbnb where the innovation in product offerings and the organization culture drive and embrace radical ideas and change. These companies seem to have a common DNA for driving change. Interestingly, none of the companies mentioned in the book are healthcare related.

Part of the problem is that the system and the commercial relationships in healthcare are so large and so complex that they defy organized change. Supply chain management is one area where disruptive change can occur. Insightful supply chain experts can look at the total system and begin to recommend transformation. Innovative entrepreneurs can introduce powerful solutions that simplify the process, add quality, and take cost out of the system. Clinician, administrators, and suppliers can collaborate to jointly solve problems facing the systems' supply chains. There are vastly better ways of managing the healthcare system and its supply chain. In some hospital systems and in some jurisdictions, great progress is being made. But the vast majority of hospitals have significant gaps in their supply chain management practices.

For the past 10 years Gene Schneller and Jim Eckler have focused their efforts on healthcare supply chain strategies and organization effectiveness. Gene has approached it from an academic and research perspective. Jim has served as a senior executive in several supply chain businesses. Our view is that this overlooked and undercapitalized part of the healthcare system is a valuable source of quality and performance improvement. Leveraging strategies and tools that have helped other industries transform can drive more than incremental improvements in healthcare. Some early progress is evident but much more can be done. Nevertheless, we are confident that with a commitment to transformative change, fundamental changes – in fact disruptive changes – to healthcare supply chain management processes can be designed and implemented. It is this opportunity that can begin the transformative change in healthcare delivery system.

Strong leadership from Boards and CEOs is needed. Driving transformative change in supply chain management requires support from a broad group of stakeholders: physicians, nurses, technicians, administrators, financial gatekeepers, and Board Trustees. And most of all, it takes vision and courage to make the massive transformational changes that are needed.

Open-minded, knowledgeable people need to address this and close the gaps. Incumbent managers need to consider alternatives and accept that fundamental change is needed and should be introduced. It has worked in many other industries. It is time to apply this to the healthcare industry. Healthcare system executives and trustees need to lead and endorse the drive for this change.

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