The rapid onset and intensity of this pandemic has left society, and health care systems in particular, reeling from the effects and wondering how they could be so unprepared. While it feels unprecedented in many ways, the Covid-19 pandemic itself is not the primary cause of the current chaos in health care. Pandemics have occurred before and will certainly occur again; the new variable during this one is the deeply interconnected world in which we live in today. Network phenomena are the new reality, and they are only going to become increasingly prevalent. Changing old ways of communicating and making decisions, considering ways to reduce employee burnout and encourage professional development, and most critically, prioritizing leadership throughout an organization, will enable health care organizations to transform and emerge from this pandemic stronger than when they entered it.

Introduction

The Covid-19 pandemic has caused huge disruption to our medical, social, and economic systems and highlighted the need to reinvent our health care systems to meet 21st century realities. But the key factor in this disruption is not the disease itself. In many ways, this pandemic parallels the devastating 1918 H1N1 influenza (Spanish Flu) pandemic, with multiple waves of impact, millions of infections and deaths worldwide, and broad disruption to societal and economic structure.

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What’s new with Covid-19 is the deeply interconnected world we live in today, where problems radiate through distributed networks so quickly that traditional organizational processes can no longer keep pace.1 This crisis could have been a systematic cyberattack, an assault on our electric grid, or geopolitical forces impacting an organization, but in this case, it is a pandemic. Network phenomena, not disease pandemics, are the new reality – and there surely will be more to come. Covid-19 is a symptom of an interconnected and interdependent world, with the health care system and associated supply chains bearing acute pain from its indiscriminate spread.

Our current health care systems are not well-structured to address these problems. Transforming them will require a combination of short- and long-term solutions built on system-level resilience and leader effectiveness. Prioritizing engaged leadership, and emphasizing a more team-oriented approach to care delivery and collaboration across institutions, will improve systems in the short-term, and ultimately, set conditions for long-term change. This article describes several strategies to support that transformation.

In a rather humbling fashion, health care has already begun to contend with the fact that the “old way” of doing things is gone. Legacy models from the 19th and 20th century, characterized by firmly structured hierarchies and siloes of information, have proven too rigid in the face of 21st century change and demands, especially around technology innovation. Covid-19 has laid bare these tensions between past and present. Leaders are being asked to make faster decisions, with more information, and less clarity. These accelerated decision cycles are necessitating a shift in how health care systems and organizations process and share information. As this occurs, the industry must wrestle with not only what this means for health care delivery, but more importantly, what this means for successful leadership.

**Fusion Cells Offer Useful Tool**

The future of medicine will require a fundamentally different style of leadership, rooted in a willingness to decentralize authority, empower a broader network, and build processes that augment a leader’s capacity for decision making and for understanding the needs of the organization and its staff and patients.

Many systemic changes will be tested, debated, and improved in the coming years. For now, one practical tool every health care organization and leader can immediately leverage is that of a fusion cell.2,3 Originally designed by the U.S. military to build a network response to terrorism, fusion cells connect organizations to enhance information flow. Rather than put more pressure on a leader to make decisions faster, these cells are meant to distribute context, thinking, and analysis across a competent network of people in a real-time learning system.

Practically speaking, here are five simple steps to establish an effective fusion cell now:

- Identify a software platform that will allow everyone in your hospital system to conveniently connect, with minimal technological barriers to entry.
• Designate a regular meeting schedule and ensure this is treated as the most important gathering of the week.

• Invite a variety of internal and external partners and open the meeting to anyone who wants to attend. This simple action broadens creativity and buy-in.

• Establish a tight agenda to address the major areas that require decision, rapid evolution, and innovation.

• Empower those closest to front lines to share insights to keep learning fresh and relevant.

A fusion cell can take many forms and evolve in different ways. These characteristics simply provide a foundation for an effective information-sharing and decision-making body to transform health care leadership.

Protecting People and Cultivating Teams

The Covid-19 crisis has shown that, as medicine moves forward with advancements in science and technology, people remain the most critical element of health care. Adopting a fusion cell approach must involve change at the individual, team, and institutional level.

"The Covid-19 crisis has shown that, as medicine moves forward with advancements in science and technology, people remain the most critical element of health care."

Individually speaking, burnout throughout the industry is prevalent. A study co-authored by Tait Shanafelt found that 38% of physicians exhibited burnout, compared to 28% of the population. Covid-19 presents an environment of high demand and low control that correlates with burnout and may present significant challenges in coming months. Duke University psychologist J. Bryan Sexton has suggested that burnout is the impaired ability to experience positive emotions. Creating a sense of mission around which people can rally, then, offers a source of resilience, even in the face of relentless crises. Resilient people, he notes, tend to exhibit strong values, pragmatism, and the ability to innovate and creatively solve problems.

Health care has acknowledged burnout but has been slow to address its system-related causes, including bureaucracy and inadequately developed electronic health records. To move forward, health care organizations must actively adopt and/or improve leadership assessments, coaching, and professional development programs that build resilience, foster innovation, and allow leaders to share best practices and learn from each other.

Shifting to the team level, high-performing teams typically exhibit common aspirational goals, alignment on team values, and strong accountability. Teamwork is effectively done by several associates, “with each doing a part but all subordinating personal prominence to the efficiency of
the whole.” Medicine and surgery have deeply ingrained individualism, marked by a journey of standardized testing, personal performance, and demanding routines and practices. However, transcending self and focusing on teammates, the team, and a common purpose, as witnessed with high-level team sports and military special operations, can enable health care organizations to break traditional hierarchical tendencies.

To build and sustain effective teams in a decentralized environment, leaders must keep the composition of teams fluid to reflect the mission and project at hand. This allows continuous learning and innovation, as tasks shift to match resource demands. Take for example, how the development of electronic intensive care units, various telehealth and digital health solutions, and overall Covid-19 response efforts have involved a constant reevaluation of population needs and resources.


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To push decision making deeper into the organization and closer to the front lines of care delivery, systematic changes must be made."

Lastly, looking at the **institutional** level, we know that health care’s hierarchical culture and bureaucracy are designed for both simple and complicated endeavors. To push decision making deeper into the organization and closer to the front lines of care delivery, systematic changes must be made. Leadership must take steps to promote sustainable individual and team-level leadership skills as health care continues to dramatically change. There aren’t prescriptive ways for this to take place, but a combination of formal and informal actions – such as professional development programs and a fluid organizational mission statement that can be adjusted based on emerging challenges – offer a higher chance of lasting success.

**Legacy Versus Learning Leaders**

In our current environment, effective leadership is more crucial than ever before. The pandemic is forcing clarity around the difference between “legacy leaders” and “learning leaders.” Legacy leaders are marked by linear thinking and working within the existing system, be it education, health care, or the military. Learning leaders, on the other hand, are constantly seeking to expand, learn and grow from failures, and look anywhere and everywhere for good ideas. Leveraging partnerships and collaboration is crucial to making this a success. How can we be more connected to those with our common mission? How can we decentralize efforts to improve outcomes across the system? Learning leaders understand that exponential change requires the sharing of information and decision making. They are humble and hungry to learn from their teams.

Some practical strategies exist to help support this learning leader approach:

- **Pre-mortems and after-action reviews**: Hold team meetings that both preemptively identify risks and review projects after their completion. Weighing the likelihood of potential risks make pre-mortems particularly valuable when navigating new territory. After-action reviews
identify lessons learned, best practices, and most importantly, how to mitigate any risks moving forward.\textsuperscript{11,12} This can provide value in both health care delivery and management practice.

- **Empowerment**: Empower staff by providing them with the authority and context to make decisions and drive initiatives. Additionally, create a learning environment and provide training to ensure that they can make best use of this empowerment.

- **Communication**: Fully rethink how meetings are structured, and how communication flows, within the organization. Large information-sharing meetings that cross departments and functions are one way to achieve this positive disruption. Forums where senior leaders discuss the industry, company, and social trends in ways that enable all teams to understand their roles are similarly powerful. These strategies hinge on reevaluating access to information so that broader groups within the organization have sufficient decision-making context.

- **Leadership development training**: Make time for, and invest in, leadership development across multiple levels of the organization. Every workplace has diamonds in the rough: talented, motivated, and ambitious individuals who lack the exposure or experience to be as effective as they could be. Providing leadership training can often yield significant returns in innovation and success throughout the institution and system.

Transformation in health care shouldn’t be done in fear of the next pandemic. It should be done with longevity, sustainability, and improved patient outcomes and access in mind. However, the lessons and opportunities presented by Covid-19 highlight key areas of change that will not only enable a new, more collaborative, model of health care to emerge, but better position our system to withstand similar pressures in the future. The biological nature of this virus is not the only complex aspect of the pandemic. The networks of our world are more connected, and at the same time more distributed, than ever before. Reimagining health care in a way that prepares our systems for the ongoing challenges of operating in a networked environment will be vital for success.

Medicine, and promoting the health of society, is arguably the ultimate team endeavor. Shifting to this information-sharing mindset of the fusion cell is crucial if we are going to take full take advantage of the world’s brightest and most committed minds. Supporting leaders in their work to drive systemic changes in the industry and to put people first will help ensure that health care emerges even stronger after the Covid-19 pandemic has waned.

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