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Responding to Covid-19: Lessons from Management Research

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While there is no off-the-shelf playbook for the current coronavirus pandemic, existing management research points to ways that organizations can navigate tumultuous and uncharted times through innovative strategy and creative tactics. This article outlines five actions that should be taken by health care leaders: put people first, manage operations creatively, attend to teamwork and communication, create outside partnerships, and embrace clear and humble leadership.

In the midst of coronavirus disease 2019 (Covid-19), the world — and the health care sector in particular — face an extreme state of VUCA, the U.S. military's acronym for a *Volatile, Uncertain, Complex, and Ambiguous* situation.[1,2] The health care community faces unprecedented*how-to* challenges, from how to rapidly scale-up disease testing to physically protecting workers with limited resources to creating physical and clinical capacity for care of highly contagious patients, just to name a few. This public health crisis requires health care organizations (HCOs: e.g., hospitals, urgent care centers, community health centers, primary care practices, long-term care facilities, state and local public health departments) and their workers to organize and work in new ways on almost a daily basis to respond to a growing volume of complex patients amidst staff and supply shortages.

Covid-19 and other public health crises present organizational and managerial challenges as much as they present clinical ones. While there is no evidence-based medicine or established playbook for how to manage a pandemic that presents this combination of challenges, existing management research offers insights on priorities and strategies for navigating uncertainty and managing crises to mitigate damage and promote recovery. While such research is not necessarily health care–specific, our experience and analysis indicates at least five actions should be taken by health care leaders: put people first, manage operations creatively, attend to teamwork and communication, create outside partnerships, and embrace clear and humble leadership. We explain the importance

of these actions and present strategies for using them to guide and support those involved in managing Covid-19.

Put People First

Ability to care for patients with the virus or symptoms depends on the well-being of the health care workforce — physical and emotional. HCOs naturally attend to patients' physical health. Especially in crises, similar attention must be devoted to workers' physical and emotional health. Many caregivers have been stricken by or succumbed to the virus[3-5]; they (and their dependents) require help from their HCOs to recover and be productive on the front line. Moreover, they and colleagues without the virus need emotional support.

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Media reports increasingly feature health care workers expressing fears (e.g., potentially infecting loved ones), anxiety, frustration, and discouragement. These negative emotions should be acknowledged, and effort made to nurture positive emotions alongside them, not to substitute but complement, as holding both sets simultaneously is associated with resilience and creativity.[6]

Organizations cultivate positive and balanced emotions through emotional intelligence, compassionate practices such as personal check-ins, resources such as the Cleveland Clinic's Code Lavender support-person teams for workers and other tactics suggested by the World Health Organization. Such compassion is associated with worker satisfaction and teamwork, lower absenteeism and emotional exhaustion, higher patient satisfaction, and lower health care utilization.[7,8] Putting workers' full well-being first creates positive environments for quality care despite circumstances.

Manage Operations Creatively

Covid-19 is a *wicked problem,* a term used to identify problems that are extremely difficult or even impossible to solve because they involve many interdependent, changing, and difficult to define factors.[9,10] The Covid-19 pandemic involves many such factors, with no easy solutions to mitigate excess patient demand and mortality. There are thorny operational problems related to virus testing, interactions, staff and bed allocation, non-Covid-19 care management, and inventory and supply chains.

Addressing wicked problems requires systems thinking that recognizes the importance of unheralded internal operations (e.g., infection control, housekeeping, and materials management), surfacing problems and analyzing processes, creating teams that focus internally and externally to expand knowledge sources for developing ideas, and experimenting rapidly using Plan-Do-Study-Act cycles (PDSAs).[11] Exemplifying what is possible with this thinking, within 2 weeks, Stanford

Health Care scaled up and combined telemedicine triage for Covid-19 patients with drive-through testing.[12] Expanding medical assistant roles, combined with use of triage nurses, it reduced drive-through testing time from 15 minutes to 4 minutes in 2 days.

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Critical for such creativity is organizational support for workers adopting a *learning* rather than *performance* mindset and embracing the habit of *changing on the fly* — i.e., quick implementation of iterative changes to respond to new problems that arise — which may trump planned strategy. A learning mindset explores new ideas and practices, while a performance mindset follows and optimizes established practices. Learning mindsets — cultivated via organizational communications and practices — relieve unproductive performance pressure, freeing workers to offer ideas (e.g., two patients on a ventilator simultaneously versus the established practice of one patient at a time) and to experiment in order to develop effective solutions. Solutions could span from new roles for some workers to new sites of care to new technologies (e.g., digital patient navigation to reduce telephone calls and visits).

Attend to Teamwork and Communication

Covid-19 requires coordinated responses amidst uncertainty by teams that cross multiple functions and roles. Effective teamwork hinges on accurate, frequent, timely, and problem-solving communications bolstered by shared goals, shared knowledge, and mutual respect — requirements collectively called *relational coordination*.[13] Due to Covid-19, many HCOs are shifting worker roles, employing retired clinicians, and using *travel nurses* who relocate to wherever needed in the country to address staff shortages[14]; as a result, many caregivers likely have either not previously worked together or not worked together under VUCA conditions, the circumstances when relational coordination matters most. It is achieved through, for example, shared meetings and protocols, tiered huddles, identification of boundary spanners, and shared conflict resolution strategies. It also requires that people feel safe to ask questions, raise concerns, offer suggestions, and share differences of opinion about strategy — an environment not always found among health care workers. Such an environment fosters quality and safety outcomes and bridges differences effectively, fostering learning and innovation[15] — all goals of Covid-19 response.

At Intermountain Healthcare, tiered *team huddles* (more than 2,500 daily) have produced such results. Their 10–15 minute meetings that cascade rapidly throughout all their facilities and offices daily, starting at 8:45 a.m. (with frontline staff and managers, Tier I) and ending at 10:15 a.m. (with the organization's senior leadership team, Tier VI), have fostered open voicing of observations and issues, with information from one tier's huddles moving to the next tier. They have improved communication, coordination, and operations significantly.[16] Last year, Intermountain was able to respond rapidly to a community-wide hepatitis B virus outbreak with increased staffing and medication and separately was able to address issues with equipment availability because of

forthright information communicated via its huddles — relational coordination and psychological safety in practice.[17]

Create Outside Partnerships

No organization can address independently the wicked problems presented by the scope and scale of Covid-19. This pandemic crosses demographic, geographic, and organizational boundaries. Forming and/or strengthening effective outside partnerships is key, whether with peer organizations, supply vendors, customer-patient groups, or nonindustry entities. Relative to other countries, partnerships are formed in the U.S. primarily to gain competitive advantage due to the decentralized nature of the system and fragmented payment models. Management research suggests that collaborative partnering is crucial for organizational and collective ability to address wicked problems.

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Organizations that thrive, especially when facing novel circumstances, leverage inside *and* outside relations, as evidenced by the experience of Hattiesburg Clinic, a 300-plus-provider multispecialty clinic serving more than 500,000 residents in South Mississippi, when confronted with a shortage of Covid-19 test kits. Through analysis of internal skill sets and operations, the clinic president realized that the clinic could make its own test kits, if only it had the ingredients. He reached out to a local hospital (Forrest General Hospital) and then to research labs at the University of Southern Mississippi. A lab had the ingredients and was able to make 200 tubes to assist in testing the same day, using the formulation that the clinic president presented. The president then collaborated with the state health department to obtain approval of the test, which was granted. This partnership has increased the local testing capacity by a multiple of 10 and expanded testing capacity for the other parts of the state. The president observed that "'a local solution sourcing strategy might work in other communities . . . . It is impressive that the University of Mississippi Medical Center, Hattiesburg Clinic, Forrest General Hospital, University of Southern Mississippi, Mississippi State Department of Health and Wesley Medical Center 'can work cooperatively together during this crisis, when just 2 weeks ago some of them may have been competitors.'"[18]

Having outside partners, even those with whom one has had only weak ties in the past, grants access to novel knowledge about innovations and their implementation, more minds for problem-solving, and help for dealing with issues like equipment and personnel shortages. Some HCOs, like Hattiesburg Clinic, are quickly partnering with competitors, public health agencies, private test-development companies, and non–health care manufacturers with production capacity. More are likely to benefit from thinking about current and potential partners broadly, discussing opportunities for collaboration with them, forming or utilizing existing collaboratives or learning networks to generate and trial ideas, and assigning a liaison person to steward the partnership — all

of which aids crisis response. Of course, the threat to such partnerships and their continuity are layoffs and/or illness burdens posed by the contagion.

Embrace Clear and Humble Leadership

Leadership — the process of engaging with others to set and achieve shared goals — is indispensable in organizations, more so in times of crisis.[19] When groups are confronted with VUCA conditions and wicked problems, they look to leaders for direction and assurance. These are conveyed through clear, timely, and transparent messages and actions. The four aforementioned actions convey leaders' sensitivity to workers' welfare and experience, and the actions reveal the leaders' intent to best position the organization for effective response, which are essential if we expect to see workers join the effort willingly. None of these actions can happen effectively unless leaders prioritize these actions, communicate their importance, provide resources to enable them, and model humble leadership. In contrast to the leader as all-knowing expert and hero, the humble leader recognizes every worker as having the capacity to identify and solve problems.[20] There is deference to expertise, wherever it rests.

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Demonstrating this, Microsoft's top leaders expressed concern during a conference call that they lacked the expertise to respond to Covid-19 as it spread in Seattle. Microsoft's president acknowledged "none of us have a PhD in public health." Hearing that, another person on the call who was much lower in the organizational hierarchy but had a PhD in public health spoke up. According to Microsoft's CEO, "she was able to ground us in all of what is the fact and the data."[21] Humble leaders acknowledge their limitations and recognize others' strengths and contributions publicly and privately. They invite others' participation, resulting in greater worker trust in the organization, interest and energy in participative problem-solving, collective ownership of decisions, and innovative solutions that reflect the collective and unique strengths of the workforce.[19,20]

Based on management research, these five actions should reduce the devastation of Covid-19 and lay the foundation for more agile HCOs that can survive in a VUCA world. A VUCA world is increasingly the norm. Widespread outbreaks of infectious diseases and natural disasters are more frequent. Their effects are amplified by unstable political regimes, policy reforms, technological advances, global trade and travel, and interdependent financial markets. Management research indicates that the actions described above help organizations, workers, and patients to better manage the consequences of such upheaval, uncertainty, and change. These actions provide the foundation for the required resilience, creativity, and compassion to emerge. As such, they provide a template for moving forward. Organizations that take these actions are likely to see the beneficial impacts soon. Regardless of where an organization is today, it can begin to implement these actions and experience the benefits for itself, its workers, and its patients.

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