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Consensus Statement | Global Health

Guidance for Health Care Leaders During the Recovery Stage of the COVID-19 Pandemic
A Consensus Statement

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Abstract

IMPORTANCE The COVID-19 pandemic is the greatest global test of health leadership of our generation. There is an urgent need to provide guidance for leaders at all levels during the unprecedented preresolution recovery stage.

OBJECTIVE To create an evidence- and expertise-informed framework of leadership imperatives to serve as a resource to guide health and public health leaders during the postemergency stage of the pandemic.

EVIDENCE REVIEW A literature search in PubMed, MEDLINE, and Embase revealed 10 910 articles published between 2000 and 2021 that included the terms *leadership* and variations of *emergency*, *crisis*, *disaster*, *pandemic*, *COVID-19*, or *public health*. Using the Standards for Quality Improvement Reporting Excellence reporting guideline for consensus statement development, this assessment adopted a 6-round modified Delphi approach involving 32 expert coauthors from 17 countries who participated in creating and validating a framework outlining essential leadership imperatives.

FINDINGS The 10 imperatives in the framework are: (1) acknowledge staff and celebrate successes; (2) provide support for staff well-being; (3) develop a clear understanding of the current local and global context, along with informed projections; (4) prepare for future emergencies (personnel, resources, protocols, contingency plans, coalitions, and training); (5) reassess priorities explicitly and regularly and provide purpose, meaning, and direction; (6) maximize team, organizational, and system performance and discuss enhancements; (7) manage the backlog of paused services and consider improvements while avoiding burnout and moral distress; (8) sustain learning, innovations, and collaborations, and imagine future possibilities; (9) provide regular communication and engender trust; and (10) in consultation with public health and fellow leaders, provide safety information and recommendations to government, other organizations, staff, and the community to improve equitable and integrated care and emergency preparedness systemwide.

CONCLUSIONS AND RELEVANCE Leaders who most effectively implement these imperatives are ideally positioned to address urgent needs and inequalities in health systems and to cocreate with their organizations a future that best serves stakeholders and communities.

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Key Points

Question What leadership imperatives are most essential for health leaders following the emergency stages of the COVID-19 pandemic?

Findings In this consensus statement, 32 coauthors from 17 countries with expertise in various aspects of health leadership, health care, public health, and related fields outline 10 imperatives to guide leaders through recovery from the emergency stages of the pandemic. Key leadership capabilities and reflection questions are presented to guide leaders and to structure performance reviews.

Meaning Leaders who most effectively implement this framework are ideally positioned to address urgent needs and inequalities in health systems and to cocreate a culture within their organizations that best serves its people.

+ Supplemental content

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Introduction

The COVID-19 pandemic is the greatest global test of health leadership of our generation.[1,2] Although some lessons of epidemics are available from severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS) experiences, few jurisdictions were prepared to manage this crisis effectively.[3-5] COVID-19 has highlighted worldwide interdependency,[2,4,6] and consequently Dr Tedros Adhanom Ghebreyesus, the director-general of the World Health Organization (WHO), stated, "The greatest threat we face now is not the virus itself, it's the lack of global solidarity and global leadership."[7]

The pandemic has laid bare and exacerbated gaps and wide inequalities in health systems,[5,8,9] including underlying structural, societal, political, and economic problems in an undeniably graphic way.[6] Accordingly, there have been calls for systemic social change and pressure on governments to address these issues and to ensure that the needs of at-risk and priority populations are met.[10]

Even with the widespread distribution of vaccines, the projected timelines for achieving international herd immunity have been lengthening[11] and some experts suggest that there is a critical need to prepare for the endemic potential of persistent and seasonal resurgences of the virus.[12,13] Furthermore, a letter by Dr Tedros and 26 heads of state asserted that "the question is not if, but when" future pandemics will arise,[2] which Dr Mike Ryan, executive director of the WHO Health Emergencies Programme, suggests may be even more lethal.[14]

The unprecedented and high stakes nature of this global phenomenon highlights an urgent need for clear guidance to support leaders at all levels in navigating the course of this crisis and in preparing for those to come.[2,15]

The Context: 4 Stages of a Crisis

The COVID-19 pandemic and other global crises can be understood in a novel model of 4 overlapping progressive stages: 1) escalation, 2) emergency, 3) recovery, and 4) resolution.[16] The escalation stage (stage 1) is predominantly characterized by an increasing realization, often based on limited, erratic, or unsubstantiated information, that an external threat is encroaching, and by the need for rapid preparations. The emergency stage (stage 2) focuses on leadership at the onset of a threat, when it is direct and local. The recovery stage (stage 3) is highly capricious because although it is less acute than the previous phase, there may be widespread staff and community fatigue or burnout, along with a prolonged looming potential threat of reverting to an emergency state at any point in reaction to a resurgence. The resolution stage (stage 4) involves addressing the repercussions of the crisis and subsequently setting priorities, ideally alongside a collective creative discussion of postcrisis opportunities and strategies to achieve a new (and hopefully) better reality.

Advancement through these stages may not be linear given the volatile nature of crises, and overlap is inevitable, especially as resurgences arise and abate. Globally, the threat from COVID-19 is far from over, since although several jurisdictions have withstood initial waves of the pandemic and are now in the recovery stage, others remain in the throes of the storm or may soon return to it before transitioning to recovery.

The Recovery Stage: Stage 3

This report focuses on leadership imperatives during the recovery stage, which requires the greatest spectrum of capabilities at any stage of a crisis and compared with noncrisis situations. The unique leadership challenge during stage 3 is balancing competing priorities, maintaining staff engagement and motivation, and avoiding burnout within a postemergency environment that remains volatile, uncertain, complex, and ambiguous (known in management theory as VUCA).[4,17] The longer each installment of the recovery stage persists and the more frequently one must reevaluate priorities, reschedule, and reorganize logistics as the situation shifts, the more challenging leadership in this context becomes.[18] Stage 3 also offers unprecedented opportunities at all levels to capitalize on

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improvisations, innovations, collaborations, and lessons learned during the emergency stages to improve performance and care and to address the needs of, and inequalities in, communities.[9]

The recovery stage demands a versatility beyond the capacity of any individual leader. In contrast to a directive, top-down approach, which is commonly applied in emergencies, the hallmark of effectiveness in the recovery stage is an enhanced systemwide distribution of leadership, beyond the immediate "org chart." In this context, an evolving, experimental, adaptive, coordinated, and collaborative approach is essential. To succeed, alignment around a shared purpose and common objectives is required, as well as leaders releasing some control and establishing and maintaining high levels of trust among key stakeholders.[5,19-22]

Purpose of the Framework

The purpose of creating an evidence- and expertise-informed leadership framework for the recovery stage of the COVID-19 pandemic was for it to potentially serve as a resource to guide health and public health leaders, including those in positional or informal leadership roles at all levels and in organizations of any size. The framework could also provide a structure for reviews of individual leader, team, and organizational performance, which could be used to increase organizational resilience, capacity, innovation, and emergency preparedness.

Although there is an established body of knowledge that is relevant for the emergency stage, including scholarship on disaster preparedness,[23,24] crisis resource management,[25] and leadership in crises,[26,27] to the best of our knowledge there is no comparable framework in the literature for the recovery stage. The need for credible guidance is urgent, especially if the expert predictions are correct and this pandemic becomes endemic, in which case variations of stage 3 may become the new reality.[12] Furthermore, the extent to which leaders effectively implement the imperatives in the recovery stage is directly linked to success in subsequent iterations of the emergency stage (stage 2), as well as during the resolution stage (stage 4).[4,9,28]

Methods

To create the framework for this report, we assembled a team of 32 coauthors from 17 countries who were selected based on their relevant professional and/or academic expertise[29-32] in various aspects of health leadership, health care, public health, and related fields. These fields and professions included: leadership research, public health, patient advocacy, patient safety, aged and long-term care, mental health, Indigenous health, infectious diseases, epidemiology, nursing, physicians, regulated health professionals, the military, peacekeeping, academic health care centers, community hospitals, primary care, national health leadership organizations, and a national chief health officer.

Rather than by soliciting the feedback of subject matter experts as external contributors through surveys or focus groups, our contention was that including them as coauthors could enhance their involvement and investment in creating the framework. Their diverse range of perspectives and collective consensus validation of the final framework could also potentially augment its quality, reliability, and validity,[29,33,34] thus increasing its potential to resonate with and be most useful to leaders. To achieve this, we followed Standards for Quality Improvement Reporting Excellence (SQUIRE) reporting guideline for consensus statement development and applied the core characteristics of a modified Delphi method.[35,36]

The first author (J.G.) conducted a literature search for peer-reviewed, English-language articles published between 2000 and 2021 using PubMed, MEDLINE, and Embase. The search terms were, *leadership* and *emergenc** or *cris** or *pandemic** or *disaster** or *COVID-19* or *public health*. The initial search yielded 10 910 articles, the titles and abstracts of which were scanned for relevance. Second, the first author drafted an initial set of evidence-based imperatives and the team of coauthors engaged in a structured dialogue on a critical question,[29] which was: leadership imperatives are required during the recovery stage of the COVID-19 pandemic?

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Third, we completed 6 rounds of feedback, revisions, and synthesis before reaching consensus.[35,36] Delphi round 1 was completed by 7 authors (A.A., M.B., M.G., J.G., W.G., E. Loh, P.T.). Rounds 2 and 3 involved the original 7 authors and 6 more (D.K., S.J., A.K., A.L., H.S., V.S.). Round 4 was completed by an additional 28 authors (J.A., R.A., L.B., A.D., R.D., L.E., C.I., E. Leshem, O.L., K.N., O.R., H.S., B.S., Z.W.), and the final 2 rounds were completed by all 32 authors (N.B., J.F., C.L.J., J.S.T.). No coauthors who agreed to participate dropped out. For a complete account of the process, see eAppendix in the Supplement.

For each round, coauthors provided written feedback on the manuscript, to which the first author responded point-for-point, revised the manuscript accordingly, and then circulated an updated working version to all coauthors for reconsideration.[35,36] This process was supervised by 3 senior coauthors (M.B., M.G., W.G.). All coauthors provided feedback during the final 2 (of 6) rounds of the process and had equal verification of the final version of the manuscript.[29,35,36] Here, we present the consensus framework.

Results

An Evidence- and Expertise-Informed Framework: 10 Imperatives for Health Leaders During the Recovery Stage of a Crisis

After 6 rounds of revisions, our team reached consensus on 10 leadership imperatives for the recovery stage of the COVID-19 crisis, with corresponding capabilities for each and reflection questions for leaders to self-assess their leadership and organizational capacity (**Table**). The imperatives are presented in 6 groups (**Figure**): people focus (1 and 2); environmental scan (present and future focus) (3); learning and preparation (past and future focus) (4); recalibrating, optimizing, organizing (present focus) (5, 6, and 7); envisioning (future focus) (8); and crisis communication (9 and 10).

People Focus

Acknowledge Staff and Celebrate Successes

Following the emergency stage, to increase and maintain morale, there is an essential need to acknowledge and celebrate the dedication, resilience, and achievements of staff.[5,9,37,38] Recognition can reenergize and inspire individuals, teams, organizations, and communities, as well as increasing their performance.[39,40] This is also an opportunity to reinforce through praise the behaviors that are considered vital to improving patient outcomes in the future, including that successful crisis response relies on leadership and contributions, large and small, from everyone in the organization.

Provide Support for Staff Well-being

Burnout and mental health issues have risen during the pandemic, particularly among health professionals, since many have been traumatized by firsthand experiences or by sustained uncertainty, health risk, and exhaustion.[21,41-43] In addition to their professional work, many have also had to care for elderly relatives and/or manage children at home because of daycare and school closures, as boundaries between work and home lives have blurred deleteriously.[18] The longer the pandemic persists, the more the likelihood of identified and latent effects of the crisis on people will manifest.[21,43,44] Leaders must demonstrate emotional intelligence,[42] empathy,[45] care and compassion,[9] and the initiative to engage frontline staff in their work environment.[5,21,46] There, leaders can gauge their stress level, understand their challenges, solicit their feedback based on unit-level data and/or their experiences, and foster their well-being and resilience.[5,47] Visiting the frontlines also enables leaders to see the impact of their decisions at point of care. Engaging with staff in the field requires leaders to be confident that their colleagues can substitute for them effectively and will report anything urgent immediately.

To perform effectively, as well as to recover and to heal, staff need access to psychologically safe spaces where they can voice confusion, express frank concerns, and admit mistakes without fear of

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Table. Leadership Imperatives During the Recovery Stage of a Crisis, Required Capabilities, and Reflection Questions

Imperative	Leadership capabilities	Reflection questions[a]
People focus		
Acknowledge staff and celebrate successes	Celebrate others, acknowledge performance, resilience	• To what extent do you think leaders and staff feel valued and appreciated? • To what extent have you and other organizational leaders identified and celebrated individuals and teams who have performed outstandingly during the pandemic, including those not in positional roles? • To what extent is diversity reflected in those publicly celebrated? Diversity includes but is not limited to gender, ethnicity, people with disabilities, stage of career, professional background, etc. • To what extent have you linked recognition to organizational values and strategic priorities?
Provide support for staff well-being	Empathy, emotional intelligence, support teams, model self-care	• To what extent do you engage with other leaders, frontline, and sidelined staff to gauge their stress, burnout levels, and well-being, as well as to ensure that they feel supported? • To what extent would staff characterize your organization as a psychologically safe environment where they can speak openly, voice confusion, express concerns, propose alternative options, admit mistakes, and request time off, support, or to step down from a formal role? • To what extent are staff aware of internal and external resources to support their well-being, mental and otherwise (eg, mentor programs, buddy systems, help lines, formal counseling)? • To what extent do you model self-care and ensure that you have the energy and stamina to lead through further developments of the pandemic? • To what extent have leaders and staff had the rest they need for their well-being and to ensure that there is organizational capacity, should another major emergency onset in your organization?
Develop a clear understanding of the current local and global context, along with informed projections	Curate information, develop a reliable network, mobilize knowledge, systems thinking, understand the socio-political context; embrace the VUCA context, forecast future risks and possibilities	• To what extent are you regularly up to date in your knowledge of relevant regional and international developments and their potential impact on your organization, community, and system? • To what extent do you have access to a network of reliable experts and mentors whom you can contact for clarification or guidance? • To what extent have you forecasted likely scenarios based on the best information, reliable advice, and current trends and have you made the assumptions of these projections explicit in communicating findings? • To what extent do staff understand the volatility of the current situation, including the potential for mistakes, setbacks, and additional resurgences?
Prepare for emergencies (personnel, resources, protocols, contingency plans, coalitions, and training)	Self-awareness, self-development, develop others, resilience, provide resources, decision-making, communication, adaptability, emergency preparedness, develop coalitions, lead continuous improvement	• To what extent would you rate your organizational resilience as high, in terms of being prepared to anticipate, manage, and recover from future emergencies? • To what extent have you facilitated discussion and collected statistical and anecdotal data on team and organizational operational performance during the pandemic? • To what extent have you shared the results of that data with key stakeholders, as well as proposed improvements? • To what extent have you reflected critically and gathered anonymous feedback on your own performance during the first stages of the pandemic? • To what extent have you encouraged other positional leaders to do the same? • To what extent have you fairly assessed whether any positional leaders need to be further supported or replaced? • To what extent have you discussed why some leaders and teams might have performed significantly better or worse than others? • To what extent might the variation in leader and team performance be attributable to conditions, resources, prior training, or other factors? • How might your answers to the previous 3 questions influence your priorities for selection and development? • To what extent is diversity prioritized in decisions of whom to promote or lead programs or initiatives? • To what extent are personnel, equipment, resources, and supply chains readily available in case of a resurgence? • To what extent are updated emergency protocols, contingency plans, and coalitions with support organizations in place? • To what extent are staff fully trained and confident in their ability to lead the response to, and to effectively manage, another emergency? • To what extent have you encouraged leaders to look beyond silos and your organization for potential coalition opportunities that could improve the quality continuum of care?
Reassess priorities explicitly and regularly and provide purpose, meaning, and direction	Set the strategy, provide direction, inspire others, communication	• To what extent have you facilitated discussion regarding which service priorities should be prioritized, deprioritized, discontinued, or managed offsite? • To what extent are staff clear about current priorities, especially if they have changed or narrowed during the pandemic? • How would you rate the current levels of staff engagement and motivation? • To what extent have you reinforced explicitly the constants—what is not changing (eg, purpose and values)?
Maximize team, organizational, and system performance and discuss enhancements	Communication, lead team performance, motivation, conflict resolution, inspire a shared purpose	• To what extent have you facilitated or encouraged discussion with leaders and staff regarding the balance of in-person vs virtual interactions that would optimize performance in terms of: care provision, work (ie, working from home, flex time, or in-person), teaching, development/training (with Human Resources/Organizational Development)? • To what extent have you used this process to consider how it can enhance work conditions, learning, and development for staff and care provision for patients and families? • To what extent have patients been factored into each of the decisions made above? • To what extent has the input of top performers been factored into the decisions? • To what extent are all staff clear about expectations and satisfied with the balance or provisions?

(continued)

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Table. Leadership Imperatives During the Recovery Stage of a Crisis, Required Capabilities, and Reflection Questions (continued)

Imperative	Leadership capabilities	Reflection questions[a]
Manage the backlog of paused services and consider improvements, while avoiding burnout and moral distress	Management, prioritization, empathy	• To what extent does your organization have a clear, robust, and coordinated plan for reintegrating important services that were paused during the emergency stage(s)? • To what extent have you and key stakeholders considered process and service improvements, including if any services should be discontinued or could be supported or replaced by allied organizations, during the planning process? • To what extent have you involved outcome researchers to guide and safeguard Evidence-Based Medicine priorities? • To what extent have you considered the moral and psychological implications for staff, patients, and families of the scheduling prioritization? • To what extent have you considered the stamina and risk of burnout of staff in the short-, medium-, and long-run when making these decisions?
Sustain learning, innovations, and collaborations, and imagine future possibilities	Inspire others, encourage and support innovation, lead change, inspire a shared vision	• To what extent have you actively facilitated discussions with key stakeholders about lessons learned and positive improvements or innovations that have been implemented in your organization since the pandemic began, as well as how they can be sustained? • To what extent have you actively facilitated discussions with key stakeholders regarding new potential improvements and innovations, as well as how they could be implemented? • To what extent do you think staff have considered the possibility that there will be no return to prepandemic conditions and are prepared to accept new realities? • How can you best help to sensitively prepare people to accept a new, unfamiliar reality? • To what extent has your communication emphasized the benefits of recent and potential improvements? • To what extent are staff and leaders in your organization encouraged to improvise within limits without seeking permission knowing that they will be supported? • To what extent have you initiated the process of institutionalizing adaptability, collaboration across silos, strategic foresight, innovation, and the continuous reappraisal of optimal work conditions and embedding them in the organizational culture?
Provide regular communication and engender trust	Communication, create a culture of trust, trustworthiness	• To what extent do you think staff would rate the formal communication during the current pandemic as clear, consistent, and trustworthy? • To what extent is your organization's communication tailored to most effectively resonate with different audiences? • To what extent do you think staff would rate leaders' listening as consistent and effective, and openness to feedback and suggestions as high? • To what extent would you rate the level of trust that staff have in leaders in your organization as high? • To what extent would you rate the level of trust that leaders have in staff in your organization as high? • What can you do/can be done to increase levels of trust in your organization?
Advise government with public health and fellow leaders on requirements, exchange information with other organizations, and inform staff and the community to improve equitable and integrated care and emergency preparedness systemwide	Understand the sociopolitical context, mobilize knowledge, communication, public relations, develop coalitions, trustworthiness	• To what extent are you and/or experts in your organization involved in sharing learning and information with: government, allied organizations, leaders in other relevant sectors (eg, education), staff, key stakeholders, patients and families, and the community? • What can you do/be done to improve information sharing among these various groups?
Overall		
• To what extent do you think your organization is prepared to thrive in the current pandemic world; as things are now, as they advance, and if there is a resurgence? • To what extent do you think other leaders (executives, senior, mid-level, and front-line) and staff would agree with your ratings above?		

Abbreviation: VUCA, volatile, uncertain, complex, and ambiguous.

[a] Assessment of the reflection questions can use a 5-point scale, such as: (1) not at all/never; (2) a little/seldom; (3) somewhat/half the time; (4) fairly/often; (5) completely/always; (6) unsure.

undue negative repercussions.[9,18,21,48,49] Being mindful of the frustration, guilt, and anxiety experienced by those whose work, research, or learning/training have been inevitably interrupted by the crisis is also indispensable.[5] Where appropriate, leaders should identify and address the nonwork concerns of staff (eg, family or financial worries) that can adversely affect their performance.[50] It is essential for leaders to recognize the importance of traditional forms of healing—humor and laughter—and to realize that, as Empson and Howard-Grenville state, "Emerging from a profoundly disruptive experience takes time."[18]

Changing directions too frequently, unnecessarily, or without a clearly communicated strategy can also contribute to staff fatigue and burnout.[9] Staff need essential breaks to rest and recuperate and to sustain organizational capacity, as well as formal burnout prevention strategies based on their input regarding which components will be most meaningful.[9,43] It is essential to communicate the volatility of the situation to staff while instilling confidence that they are in it for the long haul and will be ready and supported to overcome adversity, even when leaders themselves are experiencing uncertainty.[5,49] Leaders must also promote and model self-care themselves.[37] This includes taking

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time to reflect on and appropriately communicate their own struggles, whether to colleagues or to a trusted confidant, and considering sharing the workload more widely.[9,21] Those experiencing burnout or who are feeling overwhelmed should be afforded rest, receive support, or be allowed to transition to other roles with grateful acknowledgment of their contributions.[43] Outstanding performers should be prioritized for promotion and succession planning that is rooted in equity, diversity, and inclusivity that reflects the local communities being served.

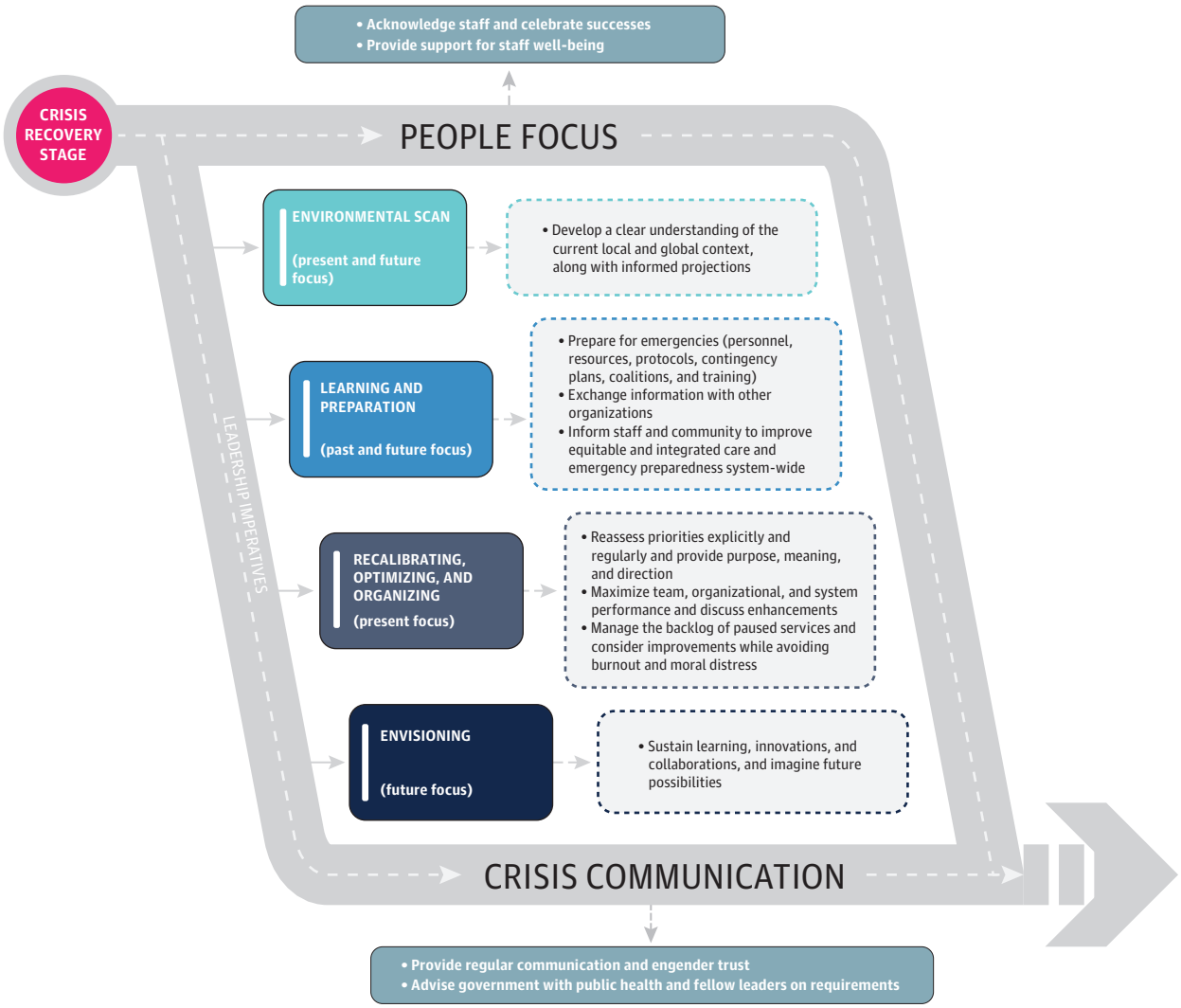
Environmental Scan

Develop a Clear Understanding of the Current Local and Global Context, Along With Informed Projections

Understanding the current local and global context of this crisis includes appreciating its VUCA nature, with a resultant humility and acceptance that no one has all the answers.[21,37,51] Leadership in complex and chaotic situations involves experimenting based on imperfect and conflicting information, including from experts, and preparing people to expect setbacks, failures, and adaptations in response to real-time results.[8,49,52]

To keep updated, leaders must identify reliable sources of information and key experts to help guide decisions and policy making.[5,6,53,54] This pandemic has highlighted explicitly the crucial role

Figure. Health Leadership Imperatives During the Recovery Stage of a Crisis



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that experts should play, as well as the consequences when they are ignored.[8] When facing "wicked problems"—a term used in planning theory to describe complex, interrelated sets of issues for which there are no clear solutions[83]—rather than show an overreliance on clear answers from individual experts, the role of the leader is to ask the right questions of diverse colleagues with relevant expertise, challenge assumptions, encourage debate and innovative approaches, and draw from their collective intelligence to determine priorities and next steps.[54]

Leaders must also analyze the pandemic using systems thinking to recognize the interconnectivity of events and potential ripple effects of how developments in other jurisdictions might ultimately impact their organizations and communities, which Heifetz has described as taking a strategic viewpoint "from the balcony."[46] This also involves understanding which changes in the landscape are likely to be temporary and pandemic- or stage-specific vs those that may be permanent.[9,21]

This process involves monitoring surveillance and case reporting data about how the virus spreads and affects citizens, directly and indirectly. It is important to focus too on which populations are being disproportionately affected and to incorporate timely mitigation strategies to counter impacts. Conducting regular risk assessments and modeling scenarios to project the consequences of possible future events and responses, including the benefits and the costs of each, is vital to situational awareness and to organizational and system resilience by anticipating and preparing for future possibilities.[9,51,55,56] Similarly, strategic foresight exercises, which involve imagining future scenarios, clarifying assumptions, and developing response strategies, enhance the ability to sense, shape, and adapt to future events, as well as to make progressively better and more timely decisions in the present.[9,28] The ongoing results of these processes should drive action and resourcing.[49]

Learning and Preparation

Prepare for Future Emergencies (Personnel, Resources, Protocols, Contingency Plans, Coalitions, and Training)

Actively preparing for future emergencies in the recovery stage is vital[2,5,12] and it begins with introspective analyses and debriefs of individual, departmental, organizational, and interorganizational performance during the earlier stages of the pandemic.[9,21,49,57] The lessons learned should derive from systematically assessing: what worked well; what strengths can be leveraged; and what did not work well, why, and what is needed to augment infrastructure and to manifest organizational values. The framework presented in this article can be used to structure this process, which should be informed by operational and clinical outcome data and by multisource anonymous feedback from key stakeholders, including frontline staff, external stakeholders, patients, families, and others who have been highly critical and/or disproportionately impacted by the crisis. This process should involve considering in what ways emergency operational protocols, structures, policies, and contingency plans should be improved and updated based on stakeholder input,[5] as well as leadership best practices.[49] Leaders should commit to actioning and resourcing these suggestions because implementing lessons from past pandemic experiences has been shown to improve the effectiveness of subsequent emergency response and current operations.[5,9,58] It is also important to identify teams and individuals who have performed admirably[9] and those who should be supported with further training or reallocated. It is also valuable to discern collaboratively whether certain capabilities, conditions, or prior training contributed significantly to differences in performance, since this can help identify how to select the best leaders and prepare them to perform under pressure.

Following this review, the next step is ensuring that the required human, technological, and material resources are in place, which includes a reliable supply chain that is responsive to the urgency of the crisis.[49] This may involve sourcing creatively when supply is thin; however, operating without the requisite resources causes tremendous anxiety among staff and can jeopardize their safety and effectiveness.[5,21,43,59]

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Complex, high pressure situations often foster the formation of new coalitions as diverse groups unite for a shared goal to produce an adaptive response.[21,60] These symbiotic coalitions across silos and with partner organizations should be sustained to provide a higher quality continuum of care and to increase system capacity.[53]

Training of staff should focus on the process of clarifying roles and accountabilities, coherent decision-making in complex situations, productive resource allocation, crisis communication skills, and adaptability to tailor responses to fluctuating circumstances, imperfect information, and to the diverse needs and roles of staff.[37] Evidence shows that leadership development interventions can contribute effectively to successfully improved outcomes at the individual, organizational, and benefit-to-patients levels.[61,62] Leaders need to be able to trust their staff to execute under pressure and to improvise with ad hoc problem solving and creative workarounds[5]; staff should be reassured that they will be supported in their decisions[53] and that successful practices can lead to new procedural norms.[9]

Properly debriefing pandemic performance and outcomes, particularly during the recovery stage, is a developmental and investment opportunity that should not be missed, particularly in terms of individual and system adaptability, resilience, emergency preparedness, and future viability.[5,55,56,63]

Recalibrating, Optimizing, and Organizing

Reassess Priorities Explicitly and Regularly and Provide Purpose, Meaning, and Direction

It is vital to renew priorities and to provide direction regularly as the situation evolves,[64] especially given the tendency for crises to derail organizational strategic plans.[37] The recovery stage creates unparalleled opportunities to check underlying assumptions and to reassess with key stakeholders what matters most to the organization, including what should be prioritized and which services should be discharged, parked, or managed elsewhere.[9,18] The iterative cycle of regularly assessing priorities should consider how to address the needs of population groups that have been overlooked or underserved[5] and how to balance the potential benefits of proposed improvements and the anticipated toll of change fatigue on people's energy levels and stamina. Frequent communication can help reduce confusion.[37,53]

Especially as uncertainty heightens, leaders must inspire people with meaning and purpose[37] by explicitly communicating the constants—what is *not* changing, despite the volatility—such as the commitments to core values and priorities, to keeping the best interests of people at the forefront of decision-making, and to overcoming adversity.[5,40,65] This is vital to avoid succumbing to what has been called the "waiting it out" (until final resolution) syndrome.[16] This syndrome is characterized by a prolonged limbo-like state of existence—merely plodding along with listlessness and depleted joy, passion, productivity, and ambition—which is marked solely by the passage of time. Distinctly separating the defining constants from the transposable (ie, structures, programs, processes, procedures) is a key leadership imperative and challenge, especially when the latter have become entrenched so deeply in the culture that they are treated as constants and impede optimization and innovation.[66] Crises present a unique opportunity to illuminate this distinction.

Lastly, it is essential to avoid focusing exclusively on managing short-term priorities. Being ambidextrous, that is, simultaneously considering future possibilities ("exploring") and present obligations and opportunities ("exploiting"), is crucial for future-proofing, increasing organizational and system adaptability, and improving timely decision-making.[19,67-69]

Maximize Team, Organizational, and System Performance and Discuss Enhancements

Within each evolving context of the crisis, leaders need to critically reexamine conditions for top team, organizational, and system performance in collaboration with staff.[9] This reexamination includes interorganizational collaboration, management structures, staffing, scheduling, costing, and achieving the optimal balance between in-person vs flex time for virtual care, work, education, and training. This process is an opportunity to break free from the default of "the way we've always done

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it" and should be based on the experiences, outcomes, and lessons of planned and improvised adaptations in earlier stages of the crisis.[5,9,18] Without sacrificing organizational or system alignment and coordination, as much as possible, these decisions should be entrusted to leaders who are closest to the work and informed by the input of top performers and teams. This can include enabling high-performing teams to maintain some of the autonomy granted to them during the emergency stage. It is also important to agree on indicators of success for the proposed enhancements. The goal of discussing optimal approaches is to enhance effective and efficient care provision,[70] staff engagement, and organizational and system capacity and resilience, as well as motivating and unifying people under a shared purpose.[53]

Manage the Backlog of Paused Services and Consider Improvements While Avoiding Burnout and Moral Distress

Managing the reintegration of services that were paused or that people avoided because of fear during the emergency stage, including surgeries, procedures, and diagnostic testing and screening, should be done in a strategic manner, rather than simply resuming previous operations. Reintegration decisions should be aligned with the evidence provided by outcomes research[71] and contingent on organizational capacity and public health directives.[72] Staff resilience, burnout, and the guilt and moral distress caused by the impact of service delays on patients and families should also be top considerations.[43] Public trust in the health system may need to be regained through an effective communications strategy. Despite the logistical challenges, reintegration discussions present opportunities for optimization through process and service improvements, such as greater access to consultations with specialists and improved triaging in a "choosing wisely" approach,[73] as well as for considering which services should be deprioritized, discontinued, or could be managed by collegiate organizations.

Envisioning

Sustain Learning, Innovations, and Collaborations, and Imagine Future Possibilities

Looking forward, it is vital during the recovery stage to discuss how to capitalize on and commit to sustaining lessons learned, successful innovations, collaborations, and coalitions. The urgency of crises can ignite unparalleled innovation,[5,9,28] which can circumvent traditional individual and organizational barriers to change. These barriers include entrenched resistance to change, rigid adherence to traditional mental and operational models, routines, and processes, excessive bureaucracy, and skepticism regarding the plausibility of introducing ideas from outside sources or organizations.[5,74,75] Leaders should leverage the creative momentum and successes from the previous stages and secure space to reimagine possible improvements and future opportunities, rather than delaying this process until the pandemic is over.[5,16,22,53] It is crucial to ensure that people understand that there is no returning to the former status quo or to "business as [previously] usual."[9,11] Instead, discussions should begin from a premise of abiding uncertainty and with a focus on thriving in an evolving context while imagining, inventing, and communicating the benefits of various better futures in the endemic world.[8,9,28]

The concept of *learning organizations* provides a helpful model for a culture that can facilitate the requisite system improvements for ongoing resilience and sustainability. In this environment, people at all levels are enabled, within appropriate boundaries, to propose new ideas and to innovate spontaneously without seeking permission, while remaining coordinated and aligned with strategy.[76] This approach combines centralized purpose and trust with judiciously decentralized power.[20] Strategic foresight, adaptability, innovation, collaboration (across silos, organizations, communities, and disciplines), and the continuous reappraisal of optimal work conditions should become institutionalized and embedded in the organizational culture.[18,22,28] This kind of culture increases organizational capacity and future viability,[67] enhances team and organizational effectiveness complementarily in the present,[28] and contributes to functioning as a complex adaptive system that evolves with the changing environment.[77] Although this should ideally be embedded systemwide, it can be implemented at the team and unit level in alignment with overall strategy.[78]

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Crisis Communication

Provide Regular Communication and Engender Trust

Underpinning all the imperatives is the essential need for leaders to provide and engage in regular, clear, and unambiguous communication with their staff and stakeholders in a way that engenders trust and confidence.[5,8,21,79] Cultivating a culture of trust requires instilling certainty that leaders are making decisions based on the best available evidence and always putting the health and wellness of their people and communities at the forefront.[65] This also involves anchoring messaging in realism, being transparent when there is little evidence, and clarifying the process and criteria by which decisions are being made and their corresponding timelines.[5,49,65] It is also important to selectively and consistently debunk false information,[6,58] including messaging broadcast on social media, which is part of the "infodemic."[5,8,80]

Building trust may mean sharing detailed and even sensitive or controversial information with the community. It is also critical for leaders to create environments where constructive challenges are welcome, to acknowledge their own mistakes, to be explicit about what might have gone wrong, why, and what they have learned in the process.[5,9] Finally, it is important to highlight achievements[9] and to inspire confidence and hope that the commitment of the people, organization, and community to thriving in and emerging from the crisis will ultimately be successful.[49]

In Consultation With Public Health and Fellow Leaders, Provide Safety Information and Recommendations to Government, Other Organizations, Staff, and the Community to Improve Equitable and Integrated Care and Emergency Preparedness Systemwide

Health leaders have a unique opportunity and responsibility to influence long-term structural changes that are required for health care systems to address the needs of all people, including social determinants of health.[6,8] Historically, international crises have ignited what Narayan et al[8] have described as "a tipping point for proactive [altruistic] collective action." Regional and international cooperation is paramount to effectively preventing disease movement, bolstering global leadership, and effectively addressing priority needs.[2,4,5,8,58] Health and public health leaders should collate their expertise and experiential learning to advise government, in consultation with social and behavioral scientists and leaders from professional societies, other sectors, and community organizations on what is needed to address immediate and anticipated needs, as well as to strengthen future coordinated emergency response capacity.[5,8,58,81] This also involves highlighting gaps, priority areas, and required resources, and making policy recommendations that are informed by input from the community.[82] Frontline leaders have an equal responsibility to make recommendations for improvements to senior leaders in their own organizations based on their experience and requirements.

Health and public health leaders have an additional role of informing and engaging staff and the community as part of a formal, coordinated, nonpartisan public health strategy.[4,5] Serving as safety standard bearers is additionally important in jurisdictions where messaging from government officials, experts, and health leaders is not aligned.[1]

Limitations

This framework has several limitations. It is focused on an unprecedented phenomenon, the nature of which is evolving constantly. We also acknowledge that despite the diverse nature of our team of authors in terms of expertise and geographical location, it would be beneficial to validate our framework in other contexts globally. Third, we have deviated from the traditional Delphi method of including the input of international subject matter experts on the topic as respondents by elevating them to the role of coauthors, which has implications on the process and outcomes. Our view is that coauthorship enhances the level of responsibility that subject matter experts assume for the final framework, which augments its quality and credibility.

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Conclusions

To our knowledge, the literature has neglected the crucial recovery stage of crisis response. The framework of 10 imperatives that we present provides support for health and public health leaders as they navigate the interweaving challenges and opportunities during the most dynamic phase of the daunting leadership test that is COVID-19.

The organizations, communities, jurisdictions, and nations whose leaders most effectively distribute leadership and implement the imperatives are ideally positioned to address urgent needs and inequalities in health systems and to thrive with purpose, meaning, and the cocreation of a future that best serves its people. This cocreation must start now. Institutionalizing the imperatives and embedding them in organizational and systemwide culture and policies will ensure that the adaptability, capacity, and innovation needed for formidable responsiveness, resilience, and better health care equity are sustained long after this pandemic is over.

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