What are physician leaders to do in a chaotic system? Be agile in swiftly changing leadership style in response to what is needed and when. Although it might feel uncomfortable for those familiar with distributed leadership, there will be moments during the COVID-19 crisis when one will have to be a “control and command” leader. At those moments, remain honest and admit that you don’t know when you don’t know.

What other skills are needed by physician leaders during the pandemic? Imagine physician leaders as buckets (Figure 1) that hold support resources (right side of bucket) that others can take out as needed (left side of bucket).

**Practice compassionate leadership:** Show empathy, but also take compassionate action, which might include:

- being visible and available
- walking around and/or sending texts or emails to colleagues, acknowledging their difficult work and associated stress
- asking “How can I support you right now?”
- listening
- offering encouragement, expressing appreciation, and asking how people are doing
- ensuring that fellow physicians are able to get the rest they need
- being kind – even though your patience might be challenged, the people you lead are worried and anxious

**Communicate:** Be honest and consistent in your communications. Three decades of research show that honesty is by far the number 1 leadership trait that inspires people to follow you. Provide reliable information on COVID-19 regularly – testing stations, changes in processes, closures and cancellations, clinical screening, diagnosis and management – and how to deal with the associated stress.

**Advocate:** Ensure that physicians have the necessary resources to do their job properly and safely: personal protective equipment, regularly updated policies and protocols, and staff support.

**Provide personal support:** Ensure that physicians have access to resources, such as child care while kids are out of school, grocery shopping, walking pets, so that they can be at work or recover from work.

**Ensure emotional support and counseling:** Organize multiple sources of support for physicians, including access to online mindfulness, yoga, and cognitive behavioural therapy sessions; peer support programs and groups; access to family physicians for self-care; access to psychologists and psychiatrists for assessment, counseling, and medical treatment.

**Lead self:** Monitor your own psychological
reactions and responses to ensure effective self-care; maintain your own physical health by taking appropriate precautions.

**Maintain humour:** Humour facilitates divergent thinking leading to creativity and viable solutions, while a somber mood leads to convergent thinking and blocked vision.

**Keep your sense of purpose:** Maintain your vow to care and to get your team, yourself, and Canada out of this chaotic state and through the pandemic.

If you have time, please also read the following pages which explain the difference between complex systems (such as the health care system with which physicians are familiar) and chaotic systems (in which physicians are not used to working) and the different leadership styles needed. Below, we summarize the literature and provide a simple explanation of the Cynefin framework, which Cynefin is being applied by several Canadian health organizations in the context of COVID-19. It is also part of the PLI course on Social Complexity.

### The Cynefin framework

The COVID-19 crisis has quickly changed all our systems, including health care, the economy, finance, education, and supply chains, from complex to chaotic. Chaotic systems require agility to navigate a wide range of leadership styles from “command and control” to “distributive,” and everything in between. Physicians have been trained as experts, meaning that they are very good at making decisions in the ordered world. The Cynefin framework (Figure 2) describes four systems – simple, complicated, complex, and chaotic – and the leadership styles needed in each case, including the COVID-19 crisis.

In simple systems (lower right quadrant), there is a high degree of evidence-informed certainty about what needs to be done and a high level of agreement among all stakeholders. The cause-and-effect relationship is well known and decisions are made and agreed on based on **best practice**. An example would be the execution of a protocol for a specific condition. In such a simple system, one senses (observes, measures), then categorizes what is observed, and makes the appropriate response.

Complicated issues (upper right quadrant) require groups of experts. For example, when a patient with multiple comorbidities needs cancer surgery, several specialists must do the sensing, each in their own field of expertise, then analyze as a team and respond with one of multiple possible answers, resulting in **good practice**. As physicians, we are comfortable and skilled at working in the ordered world, dealing with one patient at a time.

We are less comfortable in the unordered world (Figure 2, left side), where there is less evidence and agreement on how to do things. Under normal conditions, the health care system is complex (upper left quadrant) and in constant flux because of the many moving elements with many known and unknown interactions. Because there is no clear relationship between cause and effect, we understand why things happen only in retrospect. As a result, there is no best practice, only **emergent practice** that can be tested and adjusted based on ongoing sensing (measuring) and learning. In complex systems, leaders probe first, perhaps by doing a small pilot trial, sense by observing what the emerging patterns might be, and then respond by amplifying or damping the returning signal or launching a different probe. In complex systems, we often have some luxury of waiting while we sense.
In a chaotic system (lower left quadrant), there is little time to act, particularly in a crisis situation, such as that precipitated by COVID-19. Overall randomness makes the relationship between cause and effect unknowable. Because of the lack of patterns and system constraints, a leader must act quickly to (hopefully) “stop the bleeding.” The leader then senses what is happening in the system, where any type of pattern or stability might be present, or where it might be absent. Finally, a response will try to move the system from chaotic to complex. Because of all the randomness and the unknowable, practice is novel.

**Leadership in different systems**

To determine the type of leadership needed for different systems, we need to know the constraints of each. For *simple systems*, the constraints are rigid or fixed. One shall follow the established protocol to resuscitate a preterm infant in the delivery room, for example. Although the orchestrated resuscitation was simulated and practiced beforehand using collaborative and distributed leadership, the actual execution of the resuscitation protocol requires one person to be in command and control.

*Complicated and complex systems* have less rigid constraints, allowing for and actually requiring distributed leadership. This type of leadership maximizes diversity of input in a collaborative fashion, and trust fosters creativity.

Because a *chaotic system* has no constraints, the leader needs to act quickly, with little time for consultation or collaboration in that first step. As a result, a chaotic system requires command and control leadership at the beginning, the only way to try and push the chaotic system into complexity and then sense what patterns might be emerging. In disaster situations, draconian imposition of order is (and must be) accepted by people as the price to pay for survival, even if that price is high.

Unfortunately, the sense of urgency over COVID-19 felt by the public at the beginning of March 2020 was not great enough to allow such action. Creating a feeling of urgency is in itself a fine balance between enticing people to accept civic responsibility and creating panic. That is where transparent, consistent, and frequent information is very important, for example, as demonstrated by British Columbia from the beginning. Initial inconsistencies between provinces worked against creating a sense of urgency. In addition, some provinces continued to lead from a complicated or complex perspective, while some moved to a chaotic leadership style faster.

What does that mean in practice? Immediately after planes hit downtown buildings in New York, Mayor Rudy Giuliani was effective in issuing directives and taking action to re-establish some degree of order. The COVID-19 crisis is a similar attack, except it is not initiated by people, there is a latency period between the attack and deaths, and it is less visible, all of which decrease urgency. Therefore, a command and control style may be needed and should be maintained until some stability or recognizable pattern emerges.

Once the system moves back to the constraints of a complex or complicated system, leaders must quickly adapt to a distributed leadership style or they will lose people’s trust and collaboration. Mayor Giuliani continued to use the command and control style and now fails miserably. His example clarifies the important need for leadership agility, being able to move swiftly from one leadership style to another by recognizing which style is needed and when.

BE KIND
BE WELL AND STAY WELL
DO GOOD
TOGETHER WE CAN BEAT COVID19
Your CSPL

Johny Van Aerde, MD, PhD, FRCPC, is editor-in-chief of the Canadian Journal of Physician Leadership and executive medical director of the Canadian Society of Physician Leaders.

Mamta Gautam, MD, MBA, FRCPC, CPDC, CCPE — a psychiatrist with 25 years of experience treating physicians and physician leaders — is also a coach, author, and president of Peak MD, Ottawa, Ontario.