Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

The Secret of Serotinous Leadership: *The Pandemic Crisis Changed Care Models, But Only After Leaders Changed Their Minds About Them*

Tim Moran, BS

The COVID-19 pandemic punctured the status quo, triggering a reassessment of mindsets, biases and assumptions that had impeded widespread adoption of virtual care models and advanced nursing practice roles within them. Now, as we move to a post-pandemic environment, we enter a new phase, one in which continued progress on these fronts is not assured. Formalizing these breakthroughs as new standards of care - and securing nurses' expanded practice roles - rests on the ability of nurse leaders to address a phenomenon called "cultural lag" and imaginatively shape the transformation on which continued progress depends.

As we move into the fall of 2021, I've reflected on how the COVID-19 pandemic of 2020 punctured the status quo. The urgency required to react to the crisis disrupted many of the mindsets, biases, and assumptions that had governed many delivery models in the U.S. health care system. Chief nurse executives and others broke barriers in telehealth, developed new virtual care models, and expanded advanced nursing practice at an unprecedented rate. Now as we move to a post-pandemic environment, we enter a new phase, one in which

continued progress is not assured. It rests to a significant degree in the hands of nurse leaders who are called to exercise innovative leadership skills to formalize a new order and the path to it.

COVID-19 caused a massive acceleration in the use of telehealth. According to McKinsey and Company,¹ even early in the pandemic, consumer adoption skyrocketed, from 11% of US consumers using telehealth in 2019 to 46% of consumers using telehealth to replace canceled health care visits. Providers rapidly scaled offerings and saw 50 to 175 times the number of patients via telehealth than they did before. Part of this can be traced to policy changes during the COVID-19 pandemic that reduced barriers to telehealth access and promoted the use of telehealth as a way to deliver acute, chronic, primary, and specialty care.² Credit is also due to the ingenuity of nurse leaders and others who imagined new telehealth applications that augmented general nursing capabilities with scarce advanced practice nursing care.

What is overlooked, or perhaps taken for granted, in the powerful response to the COVID-19 crisis was the rapid change in mindset that enabled an adoption rate for virtual care models that far outstripped adoption in previous years. The triggers of disruption were atypical and unanticipated. Virtual care and licensure barriers were overcome. Rules to expand nurse responsibilities were rewritten in response to the imperative to reduce provider and patient exposure to the

KEY POINTS

- The COVID-19 crisis triggered a reassessment of mindsets, biases, and assumptions that had governed health care delivery models in normal times.
- Barriers, regulations and policies that had once impeded widespread adoption of new care models were reimaged, opening the way to expanded advanced nursing practice.
- Now, to lead others in shaping the new mindsets and behaviors on which continued progress depends, nurse leaders must act from their own personal transformation in response to crisis - and they can do this by tapping skills in "serotinous leadership".

virus, manage limited supplies of personal protective equipment and distribute scarce critical care and advanced practice capabilities. All of these efforts led to the overthrow of the zeitgeist that had ruled systems of care. Chief nurse executives, policymakers, and others did what most of us often struggle to do in times of normalcy. They let go of prevailing biases and assumptions in the current order of things to see differently and reassess mindsets and biases that no longer fit emerging needs. Then they responded boldly with new ways of thinking. In short, the pandemic crisis changed care models, but only after leaders changed their mindsets and biases about them.

According to Patricia Davidson, dean of the Johns Hopkins School of Nursing, the potential for telehealth expansion has been clear for many years. Still, it took a pandemic to break resistance to it. She also recognizes that provider roles in an increasingly virtual care system are still being debated, and nurse leaders will have to act to secure their position in this future. She says this: “The uptake of telehealth has been a silver lining potentially moving us forward decades over a few short months. I can say with confidence that right now, the world is watching us. We as nurses must grab hold of this opportunity to advocate for our profession and the protection of the populations we serve.”³

FORMALIZING THE EXPANSION OF THE ROLES OF NURSES IN FORMAL PRACTICE MODELS

Many experts describe the policy, licensure, and operational levers that must be pushed to secure the advancements made in new, virtually enabled care models. What is missing are references to the human and cultural factors that must be reordered to formalize gains made in these times of significant change and upheaval. The critical question is, what must nurse executives, advanced practice leaders and others do to address often unseen but present mindsets, biases, and assumptions that often stand in the way of formalized progress? This phenomenon, in which mindsets trail behind and limit the spread and full usefulness of technological and other breakthroughs, has a name. It’s called cultural lag.

William F. Ogburn coined the term cultural lag in his 1922 book, *On Social Change With Respect to Culture and Original Nature*. It describes what happens in a social system when the ideals that regulate life do not keep pace with other changes, which are often—but not always—technological. Advances in technology and other areas of society effectively render old ideals and social norms obsolete.⁴ Why is cultural lag a problem? Because it typically leads to social turbulence, confusion, and conflict in the time it takes to catch up—to develop new ethics, social norms, roles, and decision rights that make sense in new circumstances.

EXAMPLES OF CULTURAL LAG

The health care landscape is dotted with scenarios in which technical breakthroughs and lagging mindsets produced turbulence and conflict. For example:

When new radiologic technologies became popularized in the 1980s, disputes arose between interventional radiologists and other physician groups about which medical professionals should do certain procedures. Interventional radiologists saw themselves as among the first minimally invasive specialists; they used their expertise in angioplasty and catheter-delivered stents to treat peripheral arterial disease. Cardio and vascular surgeons soon increased their use of interventional techniques, which set the stage for fierce, years-long territorial disputes.⁵

The first nurse training program for nurse practitioners was developed at the University of Colorado by Dr. Loretta Ford and Dr. Henry Silver, in 1965. The path to more inclusive roles in the broader practice of health care has not been without conflict. Today, nurse practitioners and other nurse specialties continue to confront a lag in mindsets and biases that hinder recognition and full adoption of emerging capabilities in nursing practice.

WHAT IT MEANS FOR CHIEF NURSING EXECUTIVES TODAY

Kathleen Sanford, chief nursing executive (CNE) of CommonSpirit Health, believes that as balancers of stakeholder needs, and as supporters of multidisciplinary team care, nurses and chief nursing executives are uniquely positioned in their organizations. “Nurse leaders have a uniquely synchronized view of all issues during a crisis. As clinical executives who have experienced leadership of hospital operations around the clock, we have been required to maintain updated knowledge in the operational side of the organization, the business side of health care and current clinical best practice,” she said.⁶

I agree with Sanford. Nurse executives are uniquely positioned in their organizations and *trusted* by the wide range of stakeholders whose engagement is necessary to formalize change. This makes nurse executives powerful organizational sense-makers and more qualified than most to address the culture gap between the breakthroughs the pandemic catalyzed and the new mindsets and behaviors needed to formalize them as future practices.

In two articles published last year, I described an approach to leadership that could help nurse leaders address the cultural gap they face. It is called “serotinous leadership,” and it is derived from an unusual ecological process called serotiny, whereby certain plants reproduce in response to a specific environmental trigger.^{7,8}

SEROTINY... WHEN FIRE IS BOTH CRISIS AND CATALYST FOR RENEWAL

In the summer of 1988, the largest forest fire in the history of Yellowstone National Park broke out in a series of small fires. Most burned themselves out, just as forestry specialists predicted, based on studies of fire behavior in previous years. But that summer, the driest in the history of the park, something unexpected happened; predictable July rains did not come, and the Yellowstone fires grew and burned unabated. By the end of the summer, more than a million acres, over a thousand square miles, had been consumed. Yet, through the serotinous capability evolved in the lodgepole pine, the destructive process of fire also served as the catalyst for Yellowstone's renewal; because the seeds of the lodgepole pine are held fast for many years in cones hardened by resin, until fire burns the trees. As fire melts the resin, the lodgepole seeds are released and dispersed through wind and gravity. Even as fire laid waste to Yellowstone National Park, serotiny had broken open the lodgepole's cones and with them, the forest's future.

I believe the imagination is often sparked in the space between knowing and not knowing; in the disorientation of liminal space into which disruption and crisis cast us. I also believe that the transformation leaders seek in their organizations often hinges on awareness of their personal experience of disruption, disorientation and crisis, and their ability to tap this and use it to imaginatively engage others in the transformation of their organizations and the communities they serve. Leading from personal experience is how trust, the foundational element in successful teams and organizations, is built. For serotinous leaders, crisis acts as a crucible of formation and evolution, dispersing seeds of renewal that they use to help individuals, teams, and organizations move ahead, not in a return to what was, but resiliently forward.

You may know a serotinous leader. You recognize them by their grit, to be sure, but that toughness is balanced with humility born from their own inner, personal transformation. They tell stories about their serotinous experience: the way a fire of crisis burned away assumptions and biases that no longer fit changing circumstances. They create the atmosphere where even between knowing and not knowing, imagination can work. They invite colleagues to listen, see differently, and synthesize information, points-of-view, and unspoken subtext that are critical to sense-making and managing ambiguity and the cultural gap. They are quick to express gratitude for the opportunity to find renewal. And through their own vulnerability, they build trust and connection as a foundation for the meaningful and fruitful relationships upon which all good organizations—and a renewed future—are built.

Another way to think about serotinous leadership is through Richard Rohr's principle of "the three boxes."⁹ It's a simple but powerful reference to the difficulty and necessity of embracing change as the way to renewal. As Rohr describes it we move through life in cycles, from order, which eventually disintegrates into disorder, which seeds a new form of reorder. Rohr, who describes spiritual transformation through this principle, wrote what I believe is applicable to all of us who are engaged in leadership and transformative change: "The temptation is to become overly invested in what we know, the current order, what's comfortable. Certain as the dawn comes imperfection, failure and inadequacy of that order. Then comes disorder and the necessity to reframe and see things differently." Rohr goes on, "Whenever we're led out of normalcy into open space, it's going to feel like suffering, because it is letting go of what we're used to."

THE CHIEF NURSE EXECUTIVE AS A SEROTINOUS LEADER

How do CNEs and other nurse leaders address the turbulence, confusion, and conflict that we are likely to experience as health care culture lags behind the innovations in care that were pushed ahead by the pandemic crisis? To address the cultural gap, they will have to think in new ways and call others to set aside old mindsets and biases in new approaches to shared sense-making. They will have to speak from what author Walter Brueggemann¹⁰ calls the prophetic imagination.

As you read Brueggemann's description of the characteristics that distinguished the prophets of history, imagine CNEs and other nurse leaders acting imaginatively from the uniquely synthesized positions they have in their organizations today. Brueggemann¹⁰ writes, "The prophets were poets and storytellers, who gave voice to a new way of seeing. They imagined their contemporary world differently. They were moved, as is every good poet, to think outside the box and describe the world differently according to their insight." Coming alongside the idea of the serotinous leader, Brueggemann says that in our ever-present need to adapt to changing circumstances, "The task is reframing, so that we can re-experience the social realities that are right in front of us, from a different angle."¹¹

THE ROLE OF CREATIVITY IN LEADERSHIP

How do nurse executives enhance skills to address the cultural gap? How do they become serotinous leaders in touch with their prophetic imagination when our culture, and in many instances, our work cultures, don't give us tools for this transformation? After many years as a corporate health care strategist, today I come alongside executives, teams, and others to help them:

- Tap creativity to identify cultural lag and reshape mindsets and biases that no longer fit changing circumstances.
- Recognize renewal and resilience as inherent characteristics of serotinous experiences and employ them in guiding others in the cycle of order to disorder to a new order.
- Create work environments and a culture that values the prophetic voice in organizational transformation.
- Develop skills to advance individual, team and organizational sense-making, resilience and renewal.

CONCLUSION

Crisis can be an extraordinary crucible of formation and evolution, dispersing seeds of renewal to help individuals, teams and organizations move ahead - not in a return to what was, but forward, in the cycle of order to disorder to reorder. In the case of the lodgepole pine, the renewing properties of serotiny are triggered by an inevitable outside event, a fire beyond its control. For nurse leaders at the threshold of transformation in nurse practice in a post-pandemic environment, it will not be so simple. Confronting lagging mindsets and biases that could impede the formalization of new delivery models – and expanded nurse roles within them – will demand a form of serotinous renewal that must be sparked and tended by chief nurse executives and others who are called to become serotinous leaders; fully equipped to manage these times as both crisis and catalyst for change.

REFERENCES

1. Bestsennyy O, Gilbert G, Harris A, Ros J. Telehealth: A Quarter-Trillion-Dollar Post-COVID-19 Reality? McKinsey and Company Healthcare Systems and Services; May 29, 2020. Available at: <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality>. Accessed December 1, 2020.
2. Ogburn WF, ed. *On Social Change With Respect to Culture and Original Nature*. New York, NY: B.W. Huebsch Inc; 1922.
3. Pearce K. COVID-19 Ushers in Decades of Change for Nursing Profession. Johns Hopkins University Hub; October 19, 2020. Available at: <https://hub.jhu.edu/2020/10/19/nursing-changes-covid-19/>. Accessed December 1, 2020.
4. Crossman A. Effects of Cultural Lag. ThoughtCo; July 25, 2019. Available at: <https://www.thoughtco.com/cultural-lag-3026167>. Accessed December 1, 2020.
5. Cantlupe J. Halt Interventional Radiology Turf Wars. HealthLeaders; August 2012. Available at: <https://www.healthleadersmedia.com/strategy/halt-interventional-radiology-turf-wars>. Accessed December 1, 2020.
6. Sanford K. Nurses in Executive Practice: A Specialty for Today and Tomorrow. Health Progress; Fall, 2020. Available at: <https://www.chausa.org/publications/health-progress/article/nurses/nurses-in-executive-practice-a-specialty-for-today-and-tomorrow>. Accessed December 1, 2020.
7. Moran T. Some Leaders Break in Crisis...Others Are Broken Open. LinkedIn; April 2020. Available at: <https://www.linkedin.com/pulse/some-leaders-break-crisis-others-broken-open-flourish-tim-moran/?articleId=6656186634725310466>. Accessed December 1, 2020.
8. Moran T. A Path to Renewal in Work and Leadership. Health Progress; Fall 2020. Available at: <https://www.chausa.org/publications/health-progress/article/nurses/a-path-to-renewal-in-work-and-leadership>. Accessed December 1, 2020.
9. Rohr R. The Three Boxes. Center for Action and Contemplation; December 2016. Available at: <https://cac.org/the-three-boxes-2016-12-06/>. Accessed December 1, 2020.
10. Brueggemann W. *The Prophetic Imagination*. Philadelphia, PA: Fortress Press; 1978.
11. Tippet K. On Being With Krista Tippet [podcast]. December 2011. Available at: <https://onbeing.org/libraries/public-theology-reimagined/>. Accessed December 1, 2020.

Tim Moran, BS, is the former system vice president for strategy and alignment at Catholic Health Initiatives. He is president of Creativity in Leadership, LLC. He can be reached at tmsmoran1@gmail.com.

1541-4612/2021/\$ See front matter
Copyright 2021 by Elsevier Inc.
All rights reserved.

<https://doi.org/10.1016/j.mnl.2021.06.003>