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## **Healthcare Safety Needs Radical Collaboration**

Data-driven stakeholder cooperation can help produce proactive solutions.

The state of patient and workforce safety is concerning. COVID-19, though declining, remains with us and has created financial turmoil for health systems, supply disruptions and formidable challenges to workforce morale. National patient safety reports show that while we have made progress in certain areas, there have also been significant setbacks. We still face major headwinds to the overall improvement of safety across our healthcare systems.

Though these findings appear bleak, there is still cause to celebrate the work of the patient safety movement. Safety is now a near-universal focal point for every board and leadership team in U.S. healthcare. Teams are dedicated to improving safety, and new diagnostics and treatments are regularly and reliably evaluated for it. We now have a common language for this work, one that is taught in medical and nursing schools across the country. Many patient outcomes have improved, from infection rates to medication adverse events to remarkable achievements in managing the pandemic. Some errors that were once common are now rare or never events.

These wins come against a back-drop of ever-increasing clinical

complexity, more powerful (and more potentially harmful) treatments, growing interest in the capabilities of AI in healthcare, and an aging population that experiences more medical errors and harms than ever before. The battle for a safer healthcare system in America is winnable, though we are wise to increase our sensitivity to harm and error even as we work with everriskier tools and more complex clinical contexts

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New treatments and diagnostics, novel and more numerous applications of AI, and increasing co-production of healthcare with patients and families carry unimaginable health possibilities for our families and communities. But they also carry new safety risks that we must anticipate, predict, diagnose, mitigate and solve.

We need to move quickly toward a much more proactive and prospective approach to improving safety. Though this future-looking approach can take many forms, there is already evidence and precedent from other industries of what healthcare systems may require to move toward breakthrough performance in safety and quality.

For example, by the mid-1990s commercial aviation had become much safer. Catastrophic aircraft losses became relatively rare events, yet occasional disasters still occurred, and the overall rate of improvements in aviation safety plateaued. At that time, regulators and industry experts set aside their competitive interests to collaborate on safety improvement, recognizing that any aviation disaster would be devastating for the whole industry. Inspired leaders established the Commercial Aviation Safety Team, or CAST, an organization dedicated to improving aviation safety worldwide and, importantly, worked to link government agencies, aircraft manufacturers, airlines, pilot unions and other industry stakeholders. CAST operated from a datadriven approach, using aviation incident and accident data analysis to identify common safety risks and develop targeted solutions that needed multiple stakeholders to implement.

When CAST began, many in the aviation industry believed we had reached the apex of aviation safety. What happened next is remarkable: a further 83% decline in fatality risk in commercial aviation. Flying today is far safer than it was in the 1990s, even as many more of us have taken to the skies. CAST achieved this incredible feat by unifying data systems, fostering real collaboration and promoting a proactive approach to safety.

Establishing a similar entity could help healthcare break through the current plateau in safety. We could call it the Health Care Safety
Team—a voluntary, data-driven stakeholder collaboration that seeks proactive solutions to patient and workforce safety challenges.
Fortunately, federal partners and advisers in the U.S., including the President's Council of Advisors on Science and Technology, are coming to similar conclusions about the need for a national-level focus on patient safety.

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So, what might a Health Care Safety Team look like? It could share many similar elements to those in CAST, but one distinguishing characteristic is the crucial engagement of patients and families. An effective Health Care Safety Team centers patients and their families—who remain underused resources—in the work; they are the primary and most crucial detectors of risk and potential deterioration and essential participants in the co-production of clinical improvements and outcomes.

The Commercial Aviation Safety Team broke new ground by moving from competition to collaboration and by building and leveraging new relationships across stakeholder groups. A Health Care Safety Team could go even further and rely on a "radical collaboration." Such collaboration starts with centering patients and their families, but it also requires engaging every part of the health system and using emerging technologies—especially AI—to both support and augment the efforts of stakeholders. It is becoming increasingly possible for novel AI-driven algorithms to help identify signs of clinical deterioration, adverse drug events, risk for falls and pressure injuries, and to improve disease management for whole populations. A critical step in the next few years will be to ensure that new knowledge generated by those algorithms can be matched by delivery system improvements to help clinicians act on these insights to protect the health of our patients.

One of the best ways to use this new knowledge to design and implement real improvements in care delivery is to create and nurture large-scale learning networks. These networks typically connect clinicians, researchers, patients and families in a single network to ensure that what we study is what matters to patients, and what we discover gets rapidly implemented in clinics and hospitals. It's the same principle of collaboration that would drive the Health Care Safety Teameach stakeholder group already has a critical role to play in ensuring safety, but continuing to work separately will achieve the safety results we have always gotten, and that's not good enough.

Another goal of the Health Care Safety Team could be to enable clinical systems to use real-time, proactive data to create greater situational awareness and to anticipate and mitigate risks. Data from individual clinical settings, the condition-specific learning networks, and the larger network of the Safety Team could all be combined so AI-driven algorithms could instantly detect patterns and signals.

Lastly, undergirding this new kind of radical collaboration is the restorative, just culture necessary for lasting safety improvements. The progress made to date by the patient safety movement has revealed the key cultural elements needed to both prevent adverse events and effectively learn from them: true accountability without blame or shame, emphasizing curiosity over judgment, and effective communication and resolution programs. Together, these elements allow patients, families and clinicians to learn from adverse events and to heal.

Aviation industry leaders that formed CAST in the 1990s understood that despite significant improvements in safety, better was not enough. CAST was created to pursue perfection, to set a goal of making commercial aviation completely safe. We require the same for safety in healthcare. Perfection in healthcare may be out of reach, but as legendary Green Bay Packers coach Vince Lombardi said, "We will chase perfection, and we will chase it relentlessly, knowing all the while we can never attain it. But along the way, we shall catch excellence."

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