Editorial Column

Foreword to: Keeping our Promises: Research, Practice, and Policy Issues in Health Care Reliability. A Special Issue of Health Services Research*

When Paul O'Neill became CEO of Alcoa, he declared a bold new aim: Alcoa would become the world's safest place to work. A few days later, a young Alcoa employee was killed in an industrial accident in Arizona. O'Neill immediately brought the entire Alcoa executive team together to learn as much as possible about the accident, and to take responsibility for implementing what had been learned from Arizona, in every plant throughout the world. As he began this process, he looked at his senior executives and said "We're the leaders. Leaders are responsible for everything in an organization—especially what goes wrong. We killed him."

At the time, Alcoa was a company in which a worker could expect to lose a day of work from serious injury every 150 days. Within 10 years of O'Neill's declaration, Alcoa was several orders of magnitude safer. Despite what appeared to be inherently dangerous work, involving complex processes, huge equipment and hot metals, Alcoa became the second safest major industrial company in the world. The combination of steadfast leadership, and a thoughtful, sophisticated approach to shaping systems, structures, and patterns of behavior around safety, transformed Alcoa.

Health care leaders face a similar challenge to O'Neill's. When patients entrust themselves to our care, we make two implicit, but important, professional promises. We promise to do everything possible to help them, and while we're going about that task, we promise not to hurt them. But things go wrong in healthcare every day—for our patients, and for our staff. We tend to

*Acknowledgment and Disclaimer for the Special Issue: Funding for this project was provided under contract number HHSP233200400546P by the Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services. The authors of these articles are responsible for their content. Statements should not be construed as endorsement by the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services.

notice the more visible, “sentinel” events such as deaths or serious harm due to medication errors and wrong-site surgery. These types of “things that go wrong” are generally labeled “patient safety issues,” and arise from a much deeper pool of little things that go wrong but which either don’t cause harm, or are mitigated before they can cause harm. The net effect of these errors and mishaps is that a large number of hospitalized patients—perhaps up to a hundred thousand or more—die needlessly each year (Committee on Quality of Health Care in America 2000). As a system, we aren’t doing a very good job of keeping our promise not to hurt those who come to us for care.

But errors and mishaps that lead to harm—safety problems—aren’t the only things that go wrong in health care. In our hospitals, offices, and clinics, the US health care system delivers the evidence-based care that should be delivered only about 55 percent of the time, whether for acute, chronic, or preventive services (McGlynn et al. 2003). In other words, we regularly fail to perform services that could have helped the patient. These types of mistakes aren’t usually thought of as safety issues, but instead, are part of the broader arena of “quality of care.” So, in addition to failing to keep our promise not to hurt patients, we also fail to keep our promise to help them, using all the knowledge we have.

These two types of defects—errors and mishaps that harm patients, and failure to deliver services that could help patients—pose major challenges to health system leaders. If leaders are responsible, as O’Neill states, “. . . for everything, especially for what goes wrong,” we urgently need to reduce both of these types of defects. And in order to reduce the likelihood of these defects, we need to learn a great deal more about how to build health care organizations that are reliable, and we must apply what we learn.

A convenient definition of reliability is “defect-free operations over time.” It is our editorial aim that the papers on reliability gathered together in this issue will advance the state of practice, stimulate policy debate, and raise questions that need to be addressed by the health services research community, in order to reduce patients’ likelihood of being hurt by unreliable safety systems, and to improve the likelihood of being helped by reliable systems of evidence-based care.

The papers in this issue fall into three broad categories. The first three papers address several important research and policy issues in reliability, and are particularly focused on how principles of reliability can address the problem of not harming our patients. Dixon and Shofer outline the findings of a study of leading-edge organizations’ efforts to create “high reliability organizations,” and provide an excellent customer survey of the areas in which

practitioners need knowledge and guidance. Rivard, Rosen, and Carroll examine the value of measures—"patient safety indicators"—as aids to organizations in understanding their safety issues, and guiding leaders' efforts to reduce safety defects. Tamuz and Harrison address a deep research debate regarding the applicability of two theories of safety—natural accidents theory, and high reliability organization theory—and provoke deeper policy and research questions about the applicability of these theories to health care.

The second set of papers clusters around a particularly important factor in an organization's reliability—the patterns of behavior that constitute the organization's culture. One such pattern is "organizational silence" in response to safety defects, and Henriksen and Dayton advance our understanding of this toxic cultural attribute, along with what might be done to address it. Battles et al. provide a helpful review of "sensemaking," and its importance to creation of highly reliable organizations. Pronovost et al. describe a comprehensive approach to changing the "microculture" at the level of each operating unit, as a powerful technique for improving reliability—both as a safety attribute, and as an "evidence-based medicine delivered" attribute.

The third set of two papers is focused on translation of reliability theory to practice. Resar describes a sensible approach to the important problem of improving the reliability of "non-catastrophic processes." This approach, developed with his colleagues at the Institute for Healthcare Improvement, might be particularly helpful to hospitals that are struggling to break through to higher levels of reliability in delivery of evidence-based medicine as reflected in publicly reported "core measure scores" for common problems such as acute myocardial infarction and congestive heart failure. Finally, Frankel, Leonard, and Denham outline a practical framework that provides a useful guide for planning and structuring the work of senior executive leaders who aim to create safer, more reliable health care systems.

These three clusters of papers do not begin to cover the field of reliability. But they do provoke some interesting research questions, stimulate debate about competing theories, provide a glimpse of the issues facing practitioners, and encourage ongoing dialogue among leaders in the fields of health services research, policy, and practice. We need to answer those research questions, and translate what we learn into practice, if the health system for which we are responsible is to improve its performance.

Ultimately, achieving a high-performance health care system overall requires coordinated leadership by health system leaders and policy makers. The paper by Anne Gauthier and colleagues clarifies the intersection between reliability at the level of an organization and macro policy levers that can

promote and reward consistent high performance throughout the health care system.

As health system leaders, we have made promises to our patients to help them, and not to hurt them. We need to learn how to become reliable—to keep our promises.

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