Leadership & Professional Development: Searching for Ideas Close to Home

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As hospitalists, many of us see things in our daily practice that help inform our efforts to improve quality of care, organizational efficiency, and medical education, and to reduce physician burnout. But many of those efforts, while well intended, lack rigorous empirical evaluation.

Indeed, it is the complexity of hospital care that leads scholars across many disciplines—including economics, epidemiology, and sociology—to look to hospital medicine as a place where "natural experimentation" can inform us about what works and doesn't work in medical care. As a hospitalist and economist, I find that the very best of my ideas come from what I see in the hospital. And for many hospital-based clinicians and physician leaders, translating everyday insights into rigorous scientific explorations is not only feasible but is a natural extension of the curiosity that drives good clinical work. It is also a way to drive quality improvement.

Consider, for example, a question that hospitalists face every day: when to discharge a patient from the hospital. Hospital leaders and frontline clinicians are increasingly under pressure to discharge patients earlier and earlier, with some concerned that earlier discharge poses safety risks. Short of randomizing patients to earlier discharge and studying the effects on outcomes, how can a data-driven hospital leader identify which patients can be safely discharged earlier and how much earlier?

A simple observation of a practicing hospitalist could be a clue to elegantly and rigorously answering this question. It turns out that some patients happen to be hospitalized days before their birthday and it wouldn't be absurd to think that a physician treating such a patient might be more likely to discharge that patient home on or before their birthday so they can celebrate it at home. The same might be true for patients who are in the hospital before an impending storm. Patient-level data could be used to assess whether length of stay is shorter for patients who are admitted to the hospital a few days before their birthday (or just before a storm), compared with otherwise similar patients admitted to the hospital several weeks earlier, and whether outcomes are any different, on average, or in specific subpopulations. For hospital leaders, this could not only be convincing "quasi-experimental" evidence that length of stay can be safely reduced, but it could also contribute to the scholarly literature.

How can hospitalists generate ideas like these, rigorously evaluate them, and translate them into practice? It turns out that examples such as these abound for the practicing hospitalist, yet few draw the link between these everyday phenomena and the larger question of how length of stay affects patient outcomes. To start, a systematic approach to generating ideas is important: "idea rounds"—a dedicated group discussion in which physicians and other providers brainstorm ideas for quality improvement—can leverage the wisdom of frontline clinicians. But, clever insights aren't enough. Data and statistical expertise are needed, but with the growing use of electronic health record data and administrative data from large insurers, lack of data is less of a challenge. The larger challenge is data expertise. Data-driven hospital leaders should invest in personnel with statistical expertise to not only complement the scholarly endeavors of hospital medicine faculty, but also to conduct larger, more rigorous quality improvement studies. Particularly as hospitals are increasingly being measured and reimbursed on the basis of data-oriented quality-of-care metrics, it makes sense for hospital leaders to analogously invest in data infrastructure and the analytic capability to analyze that data. The innovation of this approach lies in the simple insight that the everyday activities of hospitalists can be used to answer interesting questions about what works, what doesn't, and potentially why in healthcare.

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