

Continuity—Working Backward From the Patient

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In 1904, William Osler wrote, “The practice of medicine is an art, not a trade; a calling, not a business . . .”¹

Whatever your position on this matter is, consider for a moment that today’s medicine *is* in part a business, and that business leaders might have something to teach us. Jeff Bezos, founder of Amazon.com, famously said, “We start with the customer and we work backward. We learn whatever skills we need to service the customer.”² Steve Jobs³ and other successful business leaders have expressed the same sentiment. Even if you believe medicine should be a calling and not a business, it would not be too far a leap to replace Bezos’ word “customer” with “patient.” *We start with the patient and we work backward. We learn whatever skills we need to service the patient.*

In this issue of the *Journal of Graduate Medical Education*, Bjorklund et al⁴ suggest that graduate medical education has not yet made this leap. These authors looked at trainee continuity of care following an emergency department (ED) consultation, and found that continuity was low across all specialties and levels of training. Only 4.1% of patients who were seen in the ED followed up within 6 months with the same physician who consulted on them, with the “best” performing practices reaching just 21%. These findings place credence in something we feel on a daily basis—that care provided in academic medical centers is fractured and discontinuous.

If we started with the patient, and worked backward, we likely would not develop a system in which continuity of care was the rare exception. The literature is not definitive, but studies suggest that increased continuity of care is associated with improved patient satisfaction,^{5–8} increased trainee humanism and satisfaction,^{9–12} and enhanced patient outcomes.^{13–16} Decreasing continuity is often associated with the opposite findings.^{17–19} And yet, as pointed out by Bjorklund and others,^{4,20} teaching institutions seem to be choosing the latter approach.

There are likely many reasons for this, but chief among them is the implementation of duty hour limits

for trainees in 2003 and 2011. Duty hour restrictions were intended to improve working conditions for residents and improve care for patients. However, recent reports suggest that we have at best achieved a mixed picture for quality of life for residents^{20–24} and no demonstrable improvement in patient outcomes.^{20,23,25,26} The takeaway has been an almost universal acknowledgement that continuity has gotten worse.^{27–30}

This does not mean that things were necessarily better in the past. Faculty and trainees did not question processes back then; we just assumed we were right. So in a way, duty hour limits and associated scheduling changes have created a feeling that valuable parts of our past education have gone missing, and this is pushing us to explore the balancing measures of the current process.

Duty hour limits and scheduling changes were implemented not because we knew what was best, but because we feared regulation from outside sources.³¹ Training programs were left to improvise with a flimsy evidence base and a strict set of guidelines. Many lacked the resources to be deliberate in their choices, leaving them to settle for systems of care that were easy or expedient to create. As a result, many trainee scheduling systems became physician centered, not patient centered.

After more than a decade under the new standards, we still lack a solid evidence base on how best to proceed. Studies like the one conducted by Bjorklund and colleagues⁴ point out the problems, but what to do next? Business leaders who work backward from the customer would take a simple approach. First, they would define the customer experience, describing in precise detail how the customer interfaces with their product or service. In the case of the study by Bjorklund et al,⁴ 96% of the time after the customer/patient goes to the ED, he or she sees a different physician in the follow-up. This is an interesting (though not unexpected) finding, but the more important aspect of the study is that it looks at a system of care through the eyes of the patient. Second, successful business leaders relentlessly pursue what works better. As Jeff Bezos said, “. . . we are inventors . . . we like to go down unexplored alleys and see what’s at the end. Sometimes they’re dead-ends. Sometimes they open

up into broad avenues and we find something really exciting.”²

Academic medical centers need to define the patient experience and become inventors. Programs need to take stock of their current systems of care, determine how their patients interact with it, and develop solutions to improve deficiencies. This could take the form of small tests of change typical of quality improvement projects, or research studies like that by Bjorklund et al.⁴ Programs need to be given the training, resources, and leeway to determine what might be better. Vanguard examples in graduate medical education include the Educational Innovations Project in internal medicine^{32–34} and the American Board of Pediatrics–sponsored Initiative for Innovations in Pediatric Education.³⁵

Recently, 2 large-scale multicenter studies have been launched, the Comparative Effectiveness of Models Optimizing Patient Safety and Resident Education³⁶ and the Flexibility in Duty Hour Requirements for Surgical Trainees trial.³⁷ Ideally, studies such as these should have been done before duty hour changes were enacted, and practice would have been changed only after we knew the evidence. As it is, we need these trials now, and we need to ask many questions. Who are the customers we serve in academic medical centers (patients, trainees, attending physicians, allied health practitioners, insurers)? How do we combine these individuals’ and entities’ disparate experiences into a maximally effective whole? What degree of continuity between patient, trainee, and team is best and in what context? What degree of flexibility do programs need to be successful innovators?

Shortly after the quote about medicine being a calling and not a business, Osler wrote, “Often the best part of your work will have nothing to do with potions and powders, but with the exercise of an influence of the strong upon the weak.”¹ He may have been imagining “the strong” to be the physician, and “the weak” to be a patient in need. Looking at the way we have structured academic medical centers today, the metaphor still fits. But what if we imagined the opposite to be true? That the influence of the strong upon the weak is that of the patient on the medical center? Perhaps then 96% of patients would see the same physician in follow-up after an ED visit. Or perhaps it would be an entirely different reality. Either way, we need to work backward and find out.

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