

Aligning Educational and Hospital Quality Improvement Goals Through the Use of “Shark Tank” Pitches

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In this issue of the *Journal of Graduate Medical Education*, Durstenfeld and colleagues describe a novel 2-week quality improvement (QI) curriculum for internal medicine residents that culminates in a “Shark Tank” presentation to hospital leaders.¹ The authors describe both didactic sessions and a pitch session. Didactic sessions included 7 basic QI topics interspersed throughout 2 weeks of ambulatory clinics. In between these sessions and clinic, teams of residents had up to 25 hours to develop a QI project. The pitch session was held on the last afternoon over a 2-hour period. Groups of 4 to 5 residents presented 10 projects to a room of senior hospital leaders, including a chief medical officer, chief quality officer, and the chief of medicine. Over the 2-year curriculum, 2 to 3 projects each year were selected for extra support for implementation and 2 others were implemented without extra support.

Interestingly, the curriculum appears to increase resident engagement in QI without involving residents in the completion of QI projects. The authors surveyed residents’ knowledge, skills, and comfort in QI tasks before, immediately after, and 1 year after the curriculum. There were sustained results for most participants after 1 year despite only one-third of the residents seeing a QI project through to completion. After the curriculum, residents increasingly saw QI as part of their scholarly activities. This view of the role of the physician has been a difficult hurdle to overcome, for both residents and faculty at academic medical centers.² The authors describe an increase in resident participation in other QI projects beyond required rotations and an increase in resident interest in careers focused on improving quality, safety, or value. Since completion of QI projects presents a formidable task for many residency programs, this type of “Shark Tank” activity could be beneficial if replicated.

The most novel aspect of this curriculum is the bridge between QI educational efforts and QI hospital systems efforts. The importance of building this

bridge between QI education and clinical care was described by Wong et al³ who concluded that connecting training programs and clinical environments, along with aligning educational and health system priorities, was the only way to accomplish the ultimate goal of achieving improved outcomes for patients. This bridge has continued to be a challenge for many training programs and hospitals, which often work in parallel to teach trainees and improve care. Many institutions have begun to create bridging leadership roles to close the educational versus clinical care gap while addressing the Accreditation Council for Graduate Medical Education’s Clinical Learning Environment Review Program requirements.⁴ Other institutions have co-created QI curricula, with educational and hospital leadership, for residents across different specialties to improve QI knowledge and event reporting.⁵ While the authors note few other programs have published this type of bridging innovation, the Penn Medicine Center for Health Care Innovation uses a similar “Shark Tank” format for a capstone project requirement for their interdisciplinary Healthcare Leadership in Quality Track.⁶ The bridge that Durstenfeld and colleagues describe has unique elements of educational innovation and the use of popular culture to motivate residents to learn QI techniques and presentation skills.

In this study there was also an overwhelming interest among hospital leadership such that the authors had more “sharks” than they could accommodate. Although the authors mention that this institutional support might not be present in other programs or institutions, we suspect that the engagement of hospital leadership in resident QI projects would not be a challenge. Recruiting leaders to mentor and positively engage with learners, especially around QI projects aligned with the hospital’s mission, may be attractive to leaders who often spend significant time responding to complaints, dealing with crises, budgets, and metrics. Additionally, the time commitment for leaders was minimal (2 hours). This opportunity for leaders to challenge, mentor, and

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inspire trainees might reduce leader burnout, link leaders to frontline clinicians, and re-inspire confidence in the next generation of trainees.

Hopefully, curricula like “Shark Tank” are the first step in larger efforts for systems and learners to join together for meaningful improvement in a fun and interactive way. However, more efforts are needed to measure patient-centered outcomes from trainee QI projects. The authors’ QI curriculum meets the goal of educating trainees about QI topics, but ideally more of these projects could be seen through to completion. It is slightly concerning that in the second year of the curriculum, more projects were presented but fewer obtained extra support for implementation. Supporting implementation is key as busy trainees try to make a significant impact on large, often bureaucratic, institutions that do not change as quickly as trainees expect. This support would also assure a QI curriculum is not seen as a theoretical experience that never leads to institutional change.

The authors note that they piloted an expansion of the curriculum at an affiliated community hospital with promising initial results. In highlighting the 5 key elements that were necessary to successfully implement the curriculum—putting residents in charge, providing mentorship, encouraging vertical alignment, supporting data-driven decisions, and providing tools for success—the authors neglected to include an essential component of successful QI project implementation: the interprofessional element.⁷ Perhaps including interprofessional learners, encouraging interprofessional “Shark Tank” pitches, or incorporating a chief nursing officer as a shark could prevent the mindset that physicians working alone can fix a system in which they do not see every perspective.

Durstenfeld et al used didactic QI sessions and a “Shark Tank” pitch to engage residents in learning QI and value-based medicine tools. They showed that the pitch was enough to engage and sustain resident involvement in QI education. Most importantly, they were able to build a bridge between hospital leaders and trainees to motivate, inspire, and support the best QI project ideas. We look forward to seeing how this curriculum could start a “Sharknado” in the QI education movement and be used by other residency programs to advance QI education innovation.

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