


Partnering With Patients in a Quality Improvement Curriculum for Internal Medicine Residents

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Abstract

Patient experience is a core component of the Institute for Healthcare Improvement Triple Aim for health care improvement. Although resident physicians must meet quality improvement (QI) competencies prior to graduation, QI training during residency may not adequately prepare residents to improve patient and family experience. We describe an active learning QI curriculum engaging 3 Patient and Family Advisors as partners alongside 15 resident physicians. This partnership proved to be a meaningful experience for both groups, with the development of mutual respect and insight into the contributions that patients and families bring to solving problems in health care quality.

Keywords

patient family advisor, curriculum, quality improvement, resident education

Introduction

Patient experience includes the domains of health care quality and satisfaction (1). Systems focused on improving the patient experience and prioritizing patient- and family-centered care (PFCC) have been shown to lead to better health outcomes (2,3). One way hospitals and health care organizations have improved PFCC is through the development of patient and family advisor (PFA) programs (4). Patient and family advisors are patients or family members of patients who are committed to partnering with clinicians and institutional leadership to improve the delivery of care by providing the patient and family perspective in organizational design, governance, and policy-making (2,5). Organizations have called for PFAs to be integrated throughout the health care continuum (4); however, less than half of US hospitals have formal PFA programs (6).

As PFAs become more widely integrated into the health care system, it is important to ensure that physicians in training develop an understanding of the patient experience and are equipped to advance PFCC in their careers. Although the Accreditation Council for Graduate Medical Education (ACGME) identifies quality improvement (QI) competencies for resident physicians (7), QI training during residency

may not be adequately preparing residents to improve patient experience (8), a core component of the Institute for Healthcare Improvement (IHI) Triple Aim (9). We sought to integrate the patient and family perspective into the QI and patient safety (PS) curriculum for internal medicine (IM) residents by partnering with PFAs at our institution.

Methods

As part of a longitudinal 3-year QI, PS and high-value care curriculum, we provided a 10-session active learning QI curriculum to second-year IM residents (10). The curriculum was originally developed by an interprofessional group of physician, pharmacist, and QI faculty in the University of Vermont Department of Medicine Quality Program and first delivered in 2017. In 2018, we specifically shifted the focus

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of curriculum-related QI projects to address challenges that patients experience. In 2019, we invited PFAs to participate in the curriculum as active team members and colearners, working collaboratively with the residents throughout all aspects of the curriculum. The advisors who participated in this curriculum belonged to the established volunteer PFA program at our academic medical center. None of the PFAs had prior experience participating in resident curricula.

The QI curriculum applied the IHI Model for Improvement in QI initiatives selected by the participating residents and PFAs and focused on improving the patient experience (11). The goals of the QI curriculum were to:

1. Identify an opportunity for a focused QI project related to patient experience,
2. Design and implement changes,
3. Collect data and analyze the results,
4. Prepare and present a poster for our institution's Department of Medicine Quality Showcase.

The curriculum was delivered in 10, 45-minute sessions over a 6-month period beginning in September 2019, with 2 to 3 weeks between sessions. Each session consisted of brief didactics followed by facilitated discussions among residents and PFAs. The PFAs participated in the curriculum as members of the QI team and fellow learners, with the same expectations and responsibilities as residents. Patient and family advisors were equal contributors to the brainstorming, design, implementation, analysis, and scholarship associated with their respective projects. Throughout the curriculum, the teams used QI tools, including affinity diagrams, process maps, SMART goals, 5 Why analyses, and Plan-Do-Study-Act cycles. Patient experience was intentionally chosen as a project theme with the goal of encouraging natural collaboration between the residents and PFAs, as each group would have a vested interest in the topic and unique perspectives to contribute.

Upon completion of the curriculum, the facilitators held a focus group session with the PFAs to obtain direct feedback for QI purposes. Residents also participated in a similar structured debriefing session addressing all aspects of the curriculum, which included the experience of working alongside PFAs. The authors reviewed focus group transcripts to identify enablers and barriers to curricular success.

Results

Fifteen second-year IM residents and 4 PFAs participated in the curriculum in 2019, comprising 2 heterogeneous teams that each designed and implemented its own QI project. One PFA withdrew participation after 4 sessions, reporting that she did not feel she was making substantial contributions to the curriculum.

Both groups identified an opportunity related to communication during transitions of care, with one group focusing on verbal handoffs between inpatient physicians and primary

care providers and the other on written communication in the discharge summary. Two PFAs and 10 residents participated in their respective debriefing sessions.

Through direct observation during the curricular sessions, reflection and our focus-group sessions with PFAs and residents, we identified successes and opportunities for improvement in future iterations of this curriculum, as well as enablers and barriers to implementation that may benefit others exploring similar educational innovations. These "Pearls and Pitfalls" are outlined in Table 1. Patient and family advisor participation in the curriculum promoted residents' understanding of the patient experience by creating an interprofessional environment where residents and PFAs worked as fellow learners and teammates on real-world QI projects focused on patient experience. The presence of PFAs did not seem to impede the discussion nor restrict residents from expressing their thoughts. Residents obtained a first-hand appreciation of the perspectives PFAs bring to solving problems in health care quality. Patient and family advisor experiences with consulting, team building, and process improvement outside of health care supported brainstorming and designing QI interventions. Similarly, PFAs emphasized a strong sense of satisfaction from engaging in learning alongside resident physicians. Three of the original 4 PFAs reported their desire to participate in the next iteration of the curriculum.

Discussion

Our experience demonstrates that integrating PFAs as learning partners in a QI curriculum for residents is feasible and provides a meaningful experience for both residents and PFAs.

Exposure to the patient and family perspective is important for physicians in training. We believe partnering with PFAs in curricula is an opportunity to actively engage residents in the patient experience while also gaining first-hand appreciation for the insights that patients and families bring to solving problems, in accordance with the framework proposed by the Institute for PFCC for including PFA in QI teams (12). The aforementioned themes of recognizing the patient and/or family perspective and opportunities that PFA collaboration can bring to solving QI problems that have been recently described in a qualitative analysis of an effort to include PFAs as co-leaders in pediatric QI initiatives (13), and others have described successful incorporation of PFAs into the design and implementation multidisciplinary QI initiatives (14). However, to our knowledge, this is the first description integrating PFAs as teammates and learners alongside resident physicians in a QI curriculum seeking to address real-world patient experience problems. Although this curriculum was designed for IM residents, it is generalizable and could be adapted to other health professions training.

Our academic medical center has an established PFA volunteer program, and there were few barriers to finding PFAs trained in understanding basic prerequisites, such as protecting personal health information. Institutions without

Table 1. Integration of Patient and Family Advisors into a QI Curriculum for Residents—Pearls and Pitfalls From Our Experience.^a

Aim	Pearls	Pitfalls	Quotes Selected from PFA focus group session
Integrate the patient perspective	<p>Partnering with PFA allows trainees to interact with patients as peers and appreciate their skills and perspectives.</p> <p>Selection of a project within the domain of patient experience is helpful in providing direction to teams and leveraging the experiences and insights of PFA.</p>	<p>“Patient experience” is a potentially vague term, and deliberate guidance from faculty may help ensure teams select QI projects that directly involve patient interaction to maximize contributions of PFA. Consider providing a menu of possible projects.</p>	<p>“I think a big value was just the exposure to the residents to have [PFA] there. I think that [PFA] had a lot more to say that was more germane, more logical. I think that the exposure to know that there are patient[s] and family who are not just in the bed. You’re not just taking care of them . . . you need to work alongside of them.”</p>
Create a meaningful experience for all learners (PFA and residents)	<p>PFA can contribute meaningfully. They helped to shape the direction of conversation and the focus of the quality project. Small observations, a few words, or an experience shared by PFA could reframe the discussion instantly.</p> <p>PFA enjoyed being part of the process. Getting to know the next generation of doctors was rewarding for them.</p>	<p>PFA and residents have many external factors competing for their attention. It is critical to develop an experience that fosters creativity and genuine interest. Learners can be engaged through an understanding of the broader clinical implications of their projects, particularly early on during development.</p> <p>It may be difficult for PFA to understand their influence and feel like they are helping. Let PFA know they are valuable contributors, and how.</p>	<p>“I felt like I contributed as much as I could, but that I [also] got a lot back in return. It was worth my time to do it because I have been on committees . . . [where] they just need to say they . . . had a [PFA] involved.”</p>
Develop a successful interprofessional team	<p>Ensure PFA and residents are adequately prepared for this new interdisciplinary team through clear expectations, communication of concrete goals of the curriculum, and dedicated time to build respect, trust, and empathy.</p>	<p>Avoid rushing into the curriculum without first prioritizing time to build relationships within the teams by allowing PFA and residents to get to know one another as people and professionals. Highlight and leverage the diverse skills that PFA bring to the team, such as experiences in process improvement and problem-solving. Faculty facilitators can help engage PFA during group discussions.</p>	<p>“I think it could be as simple as, ‘Why did you want to be a doctor?’ ‘Why not orthopedics, why not psychiatry, why this?’ and in return, ‘Why did you want to be a patient advisor?’ ‘What’s your motivation?’ If you understand someone’s motivation you begin to understand who they are.”</p> <p>“[PFA] comes from a phenomenal background in nursing and QI. I come from a background of engineering and developing companies and running teams and psychology, which is all QI. We are more than just these people and I don’t know that [the residents] appreciated that quite frankly. I think they may have once they started to learn who we [were].”</p>

(continued)

Table 1. (continued)

Aim	Pearls	Pitfalls	Quotes Selected from PFA focus group session
Ensure PFA comfort with participation	<p>Emphasize the importance of a patient- and family-centered care culture that supports PFA involvement throughout the organization. Institutions need to understand their local context and culture prior to involving PFA.</p> <p>Ensure each project team has at least 2 PFA and consider pairing new PFA with an advisor who has prior experience with the curriculum. Experienced PFA can pass on their learning, encouragement, and conviction to new advisors.</p>	<p>Do not assume PFA will feel comfortable joining a class of physician residents. Check in early and often, perhaps with a quick debrief after each session.</p> <p>PFA may not be familiar with the schedule, work-life and terminology of a medical resident. Provide an orientation for PFA and empower PFA to feel comfortable asking about terms unfamiliar to them.</p>	<p>"I don't speak Medicine. I understand basic terms. I understand certain things, but there would be times when there would be things going on and it sounded like a foreign language to me. It was out of my wheelhouse. There were times when I asked and 'oh, that's what you are talking about' and then I understood."</p> <p>"I think if there were a new advisor coming in, it would be great to have [other PFA], or me, or [other PFA] come in and talk with them and maybe review the curriculum and just say what our experience was."</p>
Provide a clear structure and manage logistics	<p>Elucidate how the PFA will contribute (eg, attending sessions, contributing, coauthorship in scholarly products). Create a syllabus or document that outlines the curriculum goals and technology that will be used.</p> <p>Encourage PFA to attend all sessions. Recruit PFA early and provide them with the schedule ahead of time to ensure they are available for the majority of sessions.</p>	<p>Understand PFA may face technology or structural barriers and be unfamiliar with the physical environment. Ensure PFA have the same access to curricular materials as the residents, including ability to view and discuss PHI. Consider logistics such as parking, finding the classroom, contact phone numbers, and participant names. Provide reminder emails the day before the session and summary emails after the sessions.</p>	<p>"I thought that the curriculum was very well organized. . . [faculty] were flexible when things didn't work in one particular direction, you added something else, another tool that might help people get where they needed to [be]."</p> <p>"I would . . . add that the communications, [because] you can't work with people if you don't have good communications. . . . You were great with the emails. Everybody was. [Faculty] and those with our group about [explaining] responsibility [and] expectations. . . ."</p>

Abbreviations: QI, quality improvement; PFA, patient and family advisor.

^a A focus group session was held with the PFA at the end of the curriculum with the goal of obtaining feedback for quality improvement purposes with the goal of optimizing the curriculum for future years.

preexisting PFA programs may have a more difficult time identifying PFAs with the experience and means to participate. One of the fundamental lessons we learned from feedback is the importance of a pre-curriculum orientation where PFAs can meet with faculty and previous advisors with experience in the curriculum. Orientation materials should include clearly defined responsibilities and expectations for PFAs, as well as session dates, parking instructions, and curricular materials. Communication should be clear, and no assumptions should be made about preexisting PFA knowledge of working with residents. Furthermore, it is imperative to establish the expectation for all participants that the participating residents and PFAs will be fellow learners and teammates. Taking time to develop and nurture interprofessional relationships at the beginning is fundamental to developing the trust and mutual respect necessary for a successful QI team.

The longitudinal design of the curriculum is predicated upon consistent attendance, with each session building off the prior as part of the QI process. However, the inherent inconsistencies and demands of a resident's schedule make it likely that some residents will miss sessions due to night float rotations or vacation. Likewise, PFAs may also have to miss sessions, resulting in possible gaps in perspective or missed opportunities for bidirectional learning. PFA continuity in future iterations of this curriculum will be paramount to maintain successful integration. Although the core faculty group has remained constant since the inception of our longitudinal QI curriculum, volunteer PFAs may not remain involved for more than 1 or 2 years. Thus, having a system where an "experienced" PFA who has previously participated in the curriculum is paired with a new PFA may serve to ease the transition for the new advisor into their role and provide peer-support in a team heavily comprised of resident physicians.

Fundamentally, QI is a deliberate learning process and it is important to foster a learning environment where the team is committed to shared inquiry and develops genuine interest in their projects. Identifying what aspects of curriculum were important for learners to choose, and what was necessary for them to take as a given, required a critical balance that ultimately affects learning and deliverables. In our experience, freedom to identify a QI opportunity within the broad domain of patient experience ultimately led teams selecting clinically focused projects that were outside the personal experience of PFA, limiting their contributions to problem analysis or solution development. What was apparent through observation by faculty facilitators during the sessions, however, was that even brief comments, direct questions, or pointed observations offered by PFAs from their informed experiences was enough to refocus the group on the patient and family perspective.

Limitations

As our aim was to describe the integration of PFA alongside academic learners, our results and conclusions are based

upon faculty observation, reflection, and feedback obtained during post-curriculum focus group sessions. The goal of the focus group sessions was to improve future iterations of the curriculum, and not to formally evaluate the curriculum itself. Although review of the focus group transcripts was done independently by each author, the analysis was not intended to meet the formal standards of qualitative research. Lastly, while the curriculum was designed around ACGME milestones, residents were not formally evaluated to determine whether specific competencies were satisfied.

Authors' Note

This work did not constitute research based on the definition of research activity adopted by the UVM Institutional Review Board and was exempt from ethics review.

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