CLER Pursuing Excellence: Faculty Development Innovations in Quality, Safety, Equity, and Value

Lei W. Choi, MD, MPH
Christopher Moriates, MD
Asha S. Payne, MD, MPH
Kalli Varaklis, MD, MSEd
Ralph Gonzales, MD, MSPH
Robert B. Baron, MD, MS

Overview

In 2016 the Accreditation Council for Graduate Medical Education (ACGME) Clinical Learning Environment Review (CLER) Program launched Pursuing Excellence in Clinical Learning Environments (Pursuing Excellence), an initiative to cultivate leaders who would innovate and transform the clinical learning environment (CLE) to improve patient care and the learner experience.[1] One of the main components of this initiative was a 4-year Collaborative called the Pathway Innovators—comprised of a group of teams from 8 Sponsoring Institutions seeking to develop and test new approaches to enhancing integration of health care delivery systems and graduate medical education (GME). This article is the fourth in a 6-part series to chronicle the processes, work, and outcomes of the Pathway Innovators.[2] Collectively, this series will provide an overview of the initiative, detail work on 4 primary drivers serving as the conceptual framework, and outline the initial approach to evaluation. This article focuses on the third driver of the conceptual framework: innovations in faculty development related to quality, safety, equity, and value.

The Pathway Innovators Driver Diagram and Driver 3

The 8 teams that comprised the Pathway Innovators shared a common overall aim: to integrate GME and health care delivery system operations, such that the CLE enables measurable improvement in both learner experience and patient care. The teams used a driver diagram to serve as their conceptual framework and identified 4 primary drivers (see FIGURE 1).[2]

The third of these key drivers focused on establishing effective approaches to faculty development to create engaged and motivated faculty members capable of teaching quality, safety, equity, and value to interprofessional learners in CLEs. The Pathway Innovators recognized that, while there has been much recognition and attention around the need to integrate quality improvement (QI) and patient safety into residency training, many CLEs lack sufficient numbers of faculty members who have the necessary training, skills, and attitudes to ensure that these principles and tools are applied at the bedside and reinforced within CLEs.[3–5] Additionally, national reports from the ACGME CLER Program have shown a high degree of variability between and within institutions in the climate, structures, and practices for ingraining principles of systems-based practice into clinical training for resident and fellow physicians.[6] As such, the Pathway Innovators sought to develop and test scalable strategies to support interprofessional faculty development to create CLEs that enable continuous improvements in patient care and learner experience.[2]

Faculty development for teaching improvement in quality, safety, equity, and value is a form of professional development that requires both basic training and guided application in clinical care.[7,8] Based on the Dreyfus model of skill acquisition from novice to expert, development strategies should allow faculty members to progress along a continuum from competent (all faculty members have foundational knowledge and some improvement experience), to proficient (faculty members are practicing and teaching improvement within the context of their everyday work), to expert (a few faculty members skilled in formal teaching of improvement principles and in creating and disseminating curricula to support the training of others).[3]

The Approach to Advancing Driver 3

In their proposals to become Pathway Innovators, each institution was asked to select one of the 4 primary drivers as the starting place for their work. Notably, none of the teams selected faculty development. Under the guidance of the Pursuing Excellence faculty and staff, the participants addressed this

DOI: http://dx.doi.org/10.4300/JGME-D-21-00793.1

Editor's Note: The ACGME News and Views section of JGME *includes data reports, updates, and perspectives from the ACGME and its Review Committees. The decision to publish the article is made by the ACGME.*

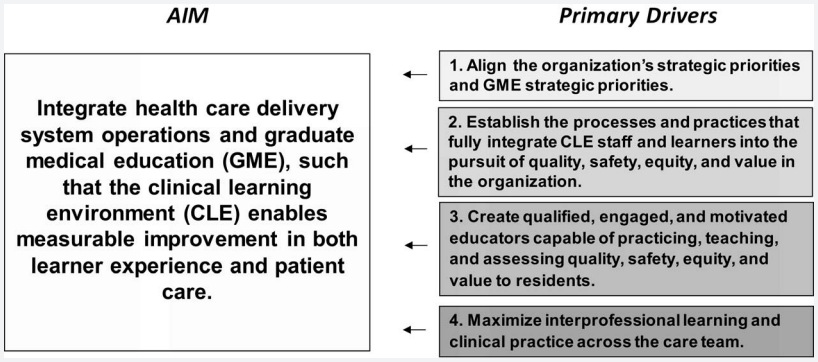

FIGURE 1
Pursuing Excellence Pathway Innovators Collaborative Driver Diagram with 4 Primary Drivers

challenge collectively. Each team was asked to develop a business plan for faculty development that aligned their goals with those of their CLE. During the Collaborative's learning sessions, the teams were given the opportunity to pitch these plans to their executive leaders, receiving valuable feedback, and in many cases, resources that allowed them to move forward with testing new approaches.

Over the 4 years of the Collaborative, each of the Pathway Innovators teams defined strategies and implemented programs and activities within their CLEs to address faculty development in quality, safety, equity, and value. During the in-person learning sessions, teams shared their progress—successes and challenges—and learned from one another, collecting successful practices and lessons learned to share with the network of more than 800 ACGME-accredited Sponsoring Institutions.[2]

Focus on the Secondary Drivers

In addition to the primary drivers, the teams identified critical secondary drivers to advance the primary driver of effective faculty development (see FIGURE 2).

These secondary drivers focused on providing meaningful experience in quality, safety, equity, and value; recognition and promotion of faculty engagement in continual learning and improvement in the CLE; alignment of professional development with value-based incentives; and purposeful support of faculty with capability to educate, lead, and engage others in these areas.

In the sections below, the Pathway Innovators offer some illustrative examples of how they applied these secondary drivers, shared ideas, and learned from one another. Together, they provide an array of approaches that may be applicable for wider adoption.

Secondary Driver 1: Develop and Communicate Career and Mentorship Opportunities for Educators to Acquire Expertise in Quality, Safety, Equity, and Value

This secondary driver encouraged the Pathway Innovators teams to think about new approaches to

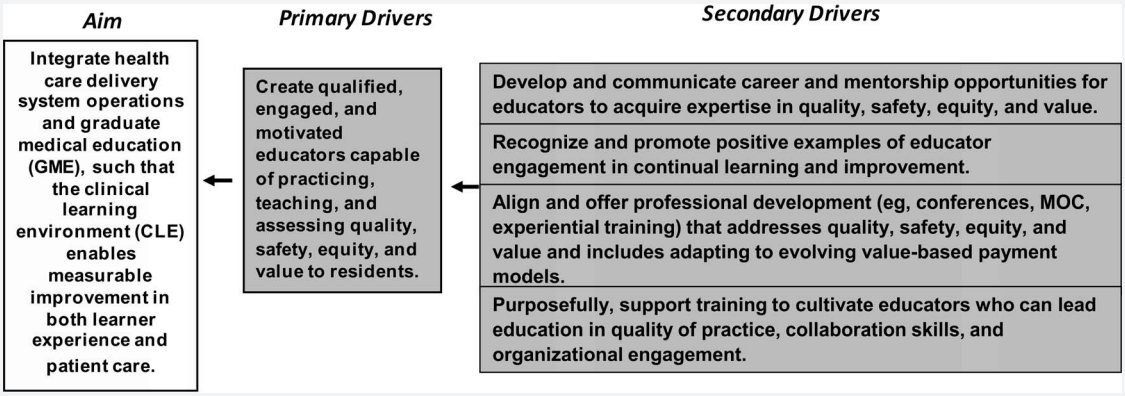

FIGURE 2
Driver Diagram With Secondary Drivers for Faculty Development

faculty development for quality, safety, equity, and value. In doing so, the teams recognized that an optimal learning environment is created by the attitudes, interactions, and behaviors of all members of the interprofessional team.[9] To effect change in this domain, efforts needed to start with broadening the definition of faculty member to include all clinicians who interact with learners within the CLE. It was recognized, however, that due to different backgrounds and experiences, the various health care professions often do not share the same understanding, language, tools, or mental models for improving health care quality, safety, equity, and value. To remedy this, several of the Pathway Innovators teams took the approach of establishing a standard foundation through shared structures, common language, and tools to enhance systems-based practices.

Examples: At the University of California, San Francisco (UCSF), the Pathway Innovators team introduced a shared curriculum that provided Lean continuous improvement and diversity, equity, and inclusion training for a broad range of clinical faculty and interprofessional team members, health system leaders, and residents, fellows, and students and created a common lexicon to align understanding. A critical strategy was the early adoption of A3 thinking as a standard organizational problem-solving framework. A3 thinking is a structured problem-solving and continuous improvement approach that guides critical reasoning and implementation of effective countermeasures.[10] Health system leaders were trained to apply the A3 framework in understanding and addressing operational priorities; likewise, faculty members, residents and fellows, and medical students were trained to use A3 thinking to approach QI initiatives and care delivery problems. Outcomes from these initiatives were shared in organization-wide forums, such as the annual UCSF Health Improvement Symposium, using standard poster templates modeled on the A3 layout. This broad utilization of common language and infrastructure increased the ability of faculty members to coach and share common mental models for learners to align and integrate the improvement efforts with health system priorities.

The team at the Cleveland Clinic developed a standard curriculum for creating an interprofessional team learning experience called Strengthening Minds by Leveraging Education (SMiLE). This longitudinal curriculum of discussion-based sessions provided interprofessional training in 4 areas: roles and responsibilities, psychological safety, a "day in the life," and teamwork. The team found that using common language and shared mental models brought team members together to improve collective competence and support interprofessional collaboration in education.

Similarly, at the University of Chicago, GME trainees and nursing leaders received shared coaching and guidance from operational and clinical excellence experts. Through a collaborative program called Improving GME Nursing Interprofessional Team Experiences (IGNITE), these interprofessional teams then engaged together in improvement initiatives focusing on unit-based settings as well as across institution-wide priorities.

The Pathway Innovators team at Dell Medical School at The University of Texas at Austin created shared resources to provide asynchronous training in foundational knowledge of QI, safety, equity, and value. They augmented their existing QI training program with new interactive multimedia Discovering Value-Based Health Care learning modules that created a standard, shared model of high-value care concepts applicable to all health professionals at all stages of professional development.[11,12]

Our Lady of the Lake, an independent academic institution in Louisiana, provided "just-in-time" training and resources to faculty members through an initiative known as the QI-on-the-Fly program.[13] The project team created a weekly email QI/patient safety curriculum that was sent to inpatient teaching faculty members, including resources to allow faculty members to facilitate a 15-minute conversation on teaching rounds with their group of learners. This model provided timely, continuous, point-of-use support that taught key QI and patient safety topics to physician educators and other health professionals, who in-turn educated their learners. In addition, the structure and expectation to host these weekly conversations helped reinforce a culture of QI and safety. Faculty members reported that this model made it easy to share with teams "to ignite [patient safety and QI] learning and discussion."[13]

The Pathway Innovators team from Maine Medical Center developed a novel Interprofessional Partnership to Advance Care and Education (iPACE) model to serve as a learning laboratory for just-in-time training and to increase opportunities for faculty members to engage in reflective interprofessional practice.[14] Under iPACE, interprofessional teams partnered daily to provide coordinated patient-centered rounding, cohesive communication, bedside education, and unit-based interprofessional QI projects. This experience allowed for embedding practice of new competencies with daily work and role modeling of continuous QI across diverse interprofessional team members, resulting in improved perception of effectiveness of team-based QI initiatives.

Secondary Driver 2: Recognize and Promote Positive Examples of Educator Engagement in Continual Learning and Improvement and Secondary Driver 3: Align and Offer Professional Development That Addresses Quality, Safety, Equity, and Value and Includes Adapting to Evolving Value-Based Payment Models

The Pathway Innovators teams found that secondary drivers 2 and 3 went hand in hand as both involve identifying levers to incentivize CLEs and their faculty to acquire the skills to actively engage in, teach, and mentor in the areas of quality, safety, equity, and value. Mechanisms for rewarding efforts and achievements in QI and patient safety are important for recruiting and retaining physician leaders in these domains.[15,16] Supporting faculty recognition and promotion was a key component for reinforcing desired QI, safety, equity, and value behaviors and attitudes in CLEs. In addition, recognition and promotion are ways of helping establish shared cultural values, such as "What gets recognized gets repeated."[17]

The approaches the Pathway Innovators teams took to enhancing recognition varied across the spectrum from creating simple opportunities to provide public encouragement and support, to institution-wide awards and invitations to join learning collaboratives, to formal mechanisms for academic promotion and career advancement.

Examples (Secondary Driver 2): The QI-on-the-Fly program at Our Lady of the Lake included a shared simple mobile and online platform that allowed users to provide "endorsements," or kudos, for teachers and/or colleagues related to QI and patient safety teaching practices.

Dell Medical School applied a "positive deviance" approach[18–20] to identify clinician-educators who effectively integrate patient safety teaching at the bedside. The group sought nominations annually from learners and faculty members for "Patient Safety Teaching Champions," who were then selected and provided public recognition. These awardees then participated in a longitudinal learning community, which employed experiential learning and critical reflection to better teach and role-model patient safety.

UCSF created formal career development and promotion criteria, including standardized quality/safety portfolios, to recognize QI and patient safety activities.[16,21]

The Pathway Innovators teams also found that tapping into the passions of the frontline providers and engaging them in friendly competitions were ways to provide recognition and spark enthusiasm for engaging in improvement.

Examples (Secondary Driver 3): Informed by the Caring Wisely program at UCSF,[22] and the Shark Tank model used at University of Chicago, the Pathway Innovators team from Dell Medical School reorganized the improvement approach of the department of internal medicine under the banner of Bridges to Better Care, a team-based model focused on supporting clinician-led efforts to improve quality, safety, and value. The initial goal of this model was to generate widespread engagement and frontline clinician leadership of improvement activities that would align with the CLE's goals for improving care. To do so, the Pathway Innovators team implemented Shark Tank challenges to solicit QI ideas from faculty members, resident physicians, and other clinicians. The organization supported and adopted winning proposals, such as an interprofessional social needs assessment program at Dell Seton Medical Center, which provided a platform that was rapidly expanded and impactful during the unexpected COVID-19 pandemic.

Secondary driver 3 recognizes that most physicians and hospitals have targets and goals associated with value-based payment. The Pathway Innovators recognized the potential to design faculty development efforts that simultaneously addressed the goals of educators, faculty, and the executive leaders of CLEs. The teams found that when they presented a business case for aligning these efforts, it often resulted in increased institutional support and resources for engaging residents and interprofessional team members in health care delivery improvement.

Secondary Driver 4: Purposefully Support Training to Cultivate Educators Who Can Lead Education in Quality of Practice, Collaboration Skills, and Organizational Engagement

Secondary driver 4 speaks to the need for CLEs to be purposeful in providing faculty with the support necessary to succeed in engaging in and teaching approaches to improving quality, safety, equity, and value. The Pathway Innovators teams found that program success was often dependent on adequate financial and resource support, including explicitly allocating time for leadership and participation and providing access to resources such as data analysts.

Examples: Children's National Hospital created the Quality and Safety Academy to support the academic productivity of an interprofessional cohort of QI-trained faculty members and staff. The Academy

supports a dedicated QI expert and a statistician, who support all aspects of a QI project, from concept development, to execution, to data analyses, to the dissemination of findings. As a result, the Pathway Innovators team learned that providing dedicated QI resources to faculty members addresses many of the barriers to success in QI and centralizes resources across the institution.

UCSF leadership acknowledged the critical impact of physician faculty member engagement in organizational improvement initiatives, especially those led by residents and fellows. To support physician faculty member involvement, a quality relative value unit (qRVU) reimbursement approach was created to offset the clinical work relative value unit (wRVU) productivity of physicians actively engaged in expert-level QI training and leadership in the Learning Health System Coach Program. This substantial investment has underscored the alignment between the health system and GME to prioritize QI faculty development.

The Importance of Feedback and Evaluation

The Pathway Innovators teams learned that one of the key features of effective faculty development programs is regular provision of feedback to the faculty members in order to assess positive progress and provide opportunity for adjustment.

The University of Rochester created a Rochester Improvement Science Education (RISE) assessment tool that included patient safety, performance improvement, quality measurement, and team dynamics measures. This rubric emphasizes learner experience and is used to identify local educational needs and monitor progress. Other programs within the Collaborative adopted versions of RISE to evaluate their own programs.

Approaches to Common Barriers

Nearly all of the Pathway Innovators faculty development programs faced the same high-level barriers of inadequate allocated time and financial support, insufficient alignment between GME and the health system, and challenges articulating shared expectations and outcomes. They found that one of the key structures to overcoming these barriers were "bridging leaders" who have defined roles in both educational and health system realms.[23,24] Bridging leaders can directly serve to translate across structures and support adequate investments from each group to support successful faculty development programs. For example, at Children's National Hospital, the Quality and Safety Academy leadership reports directly to both the institution's designated institutional official and the chief quality and safety officer. The Pathway Innovators also utilized coaching from the ACGME and other experts to prepare their business plans, which were presented to both medical school and health system leadership.

Another universal challenge encountered by the Pathway Innovators teams was lack of standard measurement metrics and data collection procedures to understand the progress and impact of faculty development innovations on health care delivery system outcomes across the programs. To address this need, the Collaborative assembled a team of domain experts from each of the Pathway Innovators institutions. Together they constructed and tested a novel assessment tool that incorporated 4 areas of focus into the measurement strategy: (1) site-specific project measures; (2) Collaborative measures in each of the driver areas; (3) measures of change in the CLE; and (4) new measures of interprofessional learning at the point of care. The evaluation process and assessment tools will be described in greater detail in the final article of this series.

Many of the Pathway Innovators teams noted they are still early in their journey to develop effective strategies to address equity; other teams are further along, such as UCSF's diversity, equity, and inclusion training programs. This is an area that will require ongoing focus and innovation.

Lessons Learned

While each Pathway Innovators team developed and implemented its own individualized plan for faculty development in their CLE, as they shared their work, a concrete set of 6 principles emerged (see BOX). While not every team applied every principle, all agreed that this set of principles provided important lessons learned to share with the broader GME/CLE community.

The first of these principles is to create common structure, language, and tools to address quality, safety, equity, and value for use by the clinical care team. The CLE is a shared space, yet often health care professionals have developed and implemented siloed quality and safety initiatives largely within their professions or educational curricula. Creating a common structure and language promotes shared expectations, consistency, and cohesiveness and builds a foundation for strong communication throughout the organization. The second principle notes that once there is common structure and language, the team needs to create opportunities for interprofessional experiential application and learning.[7] This is particularly important for ingraining these practices into daily work in the CLE.

BOX 6 Core Principles for Successful Faculty Development Strategies

1. Set a standard foundation through shared structures, common language, and tools.
2. Incorporate interprofessional experiential application within the clinical learning environment.
3. Build engagement and alignment across health system leaders, all clinical teachers, and learners.
4. Advocate for adequate financial, time allocation, and resource support.
5. Create opportunities for recognition and promotion.
6. Develop clear plans for feedback and evaluation.

The third principle is to build engagement and alignment across health system leaders, clinical teachers, and learners. The Pathway Innovators found this principle was key not only to faculty development, but also foundational to all the efforts within the Collaborative. The Pathway Innovators teams learned that aligning efforts across all key stakeholders promotes buy-in, efficiency, and effectiveness and is critical to ensuring successful implementation of widespread systems-based practice programs.[25,26] It also set the teams up for success in addressing the next principle of advocating for adequate financial, time allocation, and resource support. In many CLEs, efforts to improve health care quality, safety, equity, and value often compete with time and resources allocated to clinical responsibilities. Under the guidance of the Collaborative's faculty, the Pathway Innovators teams each developed a business plan that clearly articulated the need for and approach to faculty development and specified the necessary resources. Important to their plans was the ability to demonstrate how the efforts in faculty development aligned with and assisted the CLE executive leaders in achieving the organization's goals, such that improvement efforts were viewed as complementary to rather than competing with clinical responsibilities—a key component of a comprehensive plan to optimize care. Finally, the Pathway Innovators teams found that creating opportunities for recognition and promotion and developing clear plans for providing faculty and learners with feedback and evaluation (principles 5 and 6) were essential in recruiting and retaining teachers and learners who embrace and support efforts to improve quality, safety, equity, and value.

In Summary

From the start of the Collaborative, the Pathway Innovators teams recognized the need to address the substantial gaps in faculty development regarding formal training in quality, safety, equity, and value if they were to create CLEs that cultivate systems-based ideals to improve care for patients. In conclusion, the teams offer the following recommendations to leaders with similar aspirations for organizational change:

1. Create a business plan that clearly articulates the benefits, scope, and needs for a comprehensive faculty development program and garner institutional buy-in from both educational and health systems leadership.
2. Expand common definitions of faculty development to include shared programs for all members of the interprofessional team who interact with learners.
3. Establish or adopt common didactic and experiential curricula for all members of the interprofessional patient care team.
4. Develop mechanisms to garner widespread enthusiasm and engagement, secure necessary financial and resource support, and recognize and promote leadership and practices that support the mission and vision of each institution.

References

1. Wagner R, Weiss KB, Passiment ML, Nasca TJ. Pursuing excellence in clinical learning environments. *J Grad Med Educ*. 2016;8(1):124–127. doi:10.4300/JGME-D-15-00737.1
2. Passiment M, Zaveri P, Traboulsi EI, et al. CLER Pursuing Excellence: designing a collaborative for innovation. *J Grad Med Educ*. 2020;12(4):512–517. doi:10.4300/JGME-D-20-00712
3. Baron RB, Davis NL, Davis DA, Headrick LA. Teaching for quality: where do we go from here? *Am J Med Qual*. 2014;29(3):256–258. doi:10.1177/1062860614525031
4. Association of American Medical Colleges. Teaching for Quality: Integrating Quality Improvement and Patient Safety across the Continuum of Medical Education. https://www.aamc.org/media/26316/download. Accessed August 5, 2021.
5. Crosson FJ, Leu J, Roemer BM, Ross MN. Gaps in residency training should be addressed to better prepare doctors for a twenty-first-century delivery system. *Health Aff (Millwood)*. 2011;30(11):2142–2148. doi:10.1377/hlthaff. 2011.0184
6. Nasca TJ. Introduction to the CLER National Report of Findings 2018. *J Grad Med Educ*. 2018;10(suppl 4):7–10. doi:10.4300/1949-8349.10.4s.7
7. Tomolo AM, Lawrence RH, Aron DC. A case study of translating ACGME practice-based learning and improvement requirements into reality: systems quality

improvement projects as the key component to a comprehensive curriculum. *Qual Saf Health Care*. 2009;18(3):217–224. doi:10.1136/qshc.2007.024729
8. Batalden PB, Davidoff F. What is "quality improvement" and how can it transform healthcare? *Qual Saf Health Care*. 2007;16(1):2–3. doi:10.1136/qshc.2006.022046
9. National Collaborative for Improving the Clinical Learning Environment. Achieving the Optimal Interprofessional Clinical Learning Environment: Proceedings From an NCICLE Symposium. https://doi.org/10.33385/NCICLE.0002. Accessed August 5, 2021.
10. Shook J, Womack J. *Managing to Learn: Using the A3 Management Process to Solve Problems, Gain Agreement, Mentor and Lead*. Cambridge, MA: Lean Enterprises Inst Inc; 2008.
11. The University of Texas at Austin Dell Medical School. Discovering Value-Based Health Care: Interactive Learning Modules from Dell Med. http://vbhc.dellmed.utexas.edu/. Accessed August 5, 2021.
12. Moriates C, Valencia V, Stamets S, et al. Using interactive learning modules to teach value-based health care to health professions trainees across the United States. *Acad Med*. 2019;94(9):1332–1336. doi:10.1097/ACM.0000000000002670
13. Roy MH, Pontiff K, Vath RJ, Bolton M, Dunbar AE. QI-on-the-fly: continuous faculty development to enhance patient safety teaching and reporting. *J Grad Med Educ*. 2016;8(3):461–462. doi:10.4300/JGME-D-15-00716.1
14. Maine Medical Center. The Interprofessional Partnership to Advance Care and Education (iPACE). https://ipace.us/about/. Accessed August 5, 2021.
15. Taylor BB, Parekh V, Estrada CA, Schleyer A, Sharpe B. Documenting quality improvement and patient safety efforts: the quality portfolio. A statement from the Academic Hospitalist Taskforce. *J Gen Intern Med*. 2014;29(1):214–218. doi:10.1007/s11606-013-2532-z
16. Staiger TO, Mills LM, Wong BM, Levinson W, Bremner WJ, Schleyer AM. Recognizing quality improvement and patient safety activities in academic promotion in departments of medicine: innovative language in promotion criteria. *Am J Med*. 2016;129(5):540–546. doi:10.1016/j.amjmed.2016.01.006
17. Baumgartner N. Build a culture that aligns with people's values. *Harvard Business Review*. Published online April 8, 2020. https://hbr.org/2020/04/build-a-culture-that-aligns-with-peoples-values. Accessed August 5, 2021.
18. Gawande AA. The Bell Curve. *The New Yorker*. Published December 6, 2004. http://www.newyorker.com/magazine/2004/12/06/the-bell-curve. Accessed August 5, 2021.
19. Pascale R, Sternin J, Sternin M. *The Power of Positive Deviance: How Unlikely Innovators Solve the World's Toughest Problems*. 1st ed. Boston, MA: Harvard Business Review Press; 2010.
20. Zanetti CA, Taylor N. Value co-creation in healthcare through positive deviance. *Healthc (Amst)*. 2016;4(4):277–281. doi:10.1016/j.hjdsi.2016.06.003
21. Sehgal NL, Neeman N, King TE. Early experiences after adopting a quality improvement portfolio into the academic advancement process. *Acad Med*. 2017;92(1):78–82. doi:10.1097/ACM.0000000000001213
22. Gonzales R, Moriates C, Lau C, et al. Caring wisely: a program to support frontline clinicians and staff in improving healthcare delivery and reducing costs. *J Hosp Med*. 2017;12(8):662–667. doi:10.12788/jhm.2786
23. Myers JS, Tess AV, McKinney K, et al. Bridging leadership roles in quality and patient safety: experience of 6 US academic medical centers. *J Grad Med Educ*. 2017;9(1):9–13. doi:10.4300/JGME-D-16-00065.1
24. Gupta R, Arora VM. Merging the health system and education silos to better educate future physicians. *JAMA*. 2015;314(22):2349–2350. doi:10.1001/jama.2015.13574
25. Moriates C, Arora VM. Achieving alignment in graduate medical education to train the next generation of healthcare professionals to improve healthcare delivery. *Healthcare*. 2018;6(4):242–244. doi:10.1016/j.hjdsi.2018.04.002
26. Traboulsi EI, Blanchard AK, Passiment MP, et al. Pursuing Excellence: driving GME integration with health system strategic priorities. *J Grad Med Educ*. 2021;13(1):153–160. doi:10.4300/JGME-D-20-01540.1

Lei W. Choi, MD, MPH*, is Professor of Medicine and Medical Director of the Continuous Improvement Department, University of California, San Francisco; **Christopher Moriates, MD*,** is Assistant Dean for Healthcare Value and Associate Chair for Quality & Safety, Dell Medical School, The University of Texas at Austin; **Asha S. Payne, MD, MPH,** is Associate Professor of Pediatrics and Emergency Medicine, Children's National Hospital; **Kalli Varaklis, MD, MSEd,** is Designated Institutional Official, Maine Medical Center; **Ralph Gonzales, MD, MSPH,** is Chief Innovation Officer, University of California, San Francisco; and **Robert B. Baron, MD, MS,** is Professor of Medicine; Associate Dean, Continuing Medical Education, University of California, San Francisco.

* Denotes co-first authors.

The authors would like to thank Robin Wagner, RN, MHSA, whose contribution of editing was vital to completing the manuscript.

Corresponding author: Lei W. Choi, MD, MPH, University of California, San Francisco, lei.choi@ucsf.edu