

CLER Pursuing Excellence: Designing a Collaborative for Innovation

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This article is the first in a 6-part series to chronicle the processes, work, and outcomes of the ACGME Pursuing Excellence Pathway Innovators Project. These articles provide an overview of the project, detail the 4 drivers developed to define the project, and present the evaluation process developed. This article explains the development of this project, including design, selection, learning, measuring, and next steps.

Compelled by the findings of the report of the Institute of Medicine's *To Err is Human: Building a Safer Health System*,¹ health care organizations have invested in innovative systems-based approaches to improving patient care over the last 2 decades.² While notably successful, there remains room for substantial improvement.² Contemporaneously, the Accreditation Council for Graduate Medical Education (ACGME) and other national organizations have been reexamining the nation's graduate medical education (GME) system to address gaps in readiness of GME graduates in the areas of quality and safety of patient care.^{3–5}

In 2012, the ACGME launched the Clinical Learning Environment Review (CLER) program to provide formative assessment and feedback to the nation's teaching hospitals and medical centers on how successful they are at engaging residents and fellows in patient safety and quality improvement and other key areas of focus in their patient care environments.⁶ Based on opportunities for improvement identified in the CLER Program's formative site visit process^{7,8} the ACGME established the Pursuing Excellence in Clinical Learning Environments

(Pursuing Excellence) initiative to foster a learning community for Sponsoring Institutions (SIs).⁹

The goal of Pursuing Excellence has been to catalyze leaders in GME and executive leaders of the hospitals and medical centers that host GME to identify and test new approaches to transforming the clinical learning environment (CLE) to improve patient care and the learner experience.

Optimizing the CLE for learners requires enhanced models of integration between health care delivery systems and GME. While each CLE can advance its work individually, peer-based learning networks provide environments that encourage experimentation and innovation as well as sharing of successful practices and continual peer review to drive improvement. Pursuing Excellence was established to enhance peer-based learning through 3 components. The first component, known as Pathway Innovators, is a 4-year grant-funded collaborative where medical center leaders and GME leaders commit to significantly changing the culture of their CLE by addressing key gaps in the CLEs as identified in the first *CLER National Report of Findings*.¹⁰ The second component, known as Pathway Leaders, is a series of 18-month collaboratives focused on designing new models of engaging resident and fellow physicians in the CLE's efforts to improve patient safety and implement quality improvement to eliminate health care disparities. In the third component, known as the Pathway Learners, the Innovators and Leaders share their successes through a network of partnering organizations to accelerate adoption of successful practices.

The following is a description of the first of the above-mentioned components of the Pursuing Excellence project, the Pathway Innovators. The Pursuing Excellence Pathway Innovators was a national learning collaborative of leaders from hospitals, medical centers, GME programs, and other stakeholders that generated ideas and tested innovative approaches to improve the quality of CLEs and of

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patient care. This report of the collaborative's design and methods is the first in a series that describes the journey of the Pathway Innovators in the Pursuing Excellence in Clinical Learning Environments initiative.

The Selection Process

The Pursuing Excellence Pathway Innovators collaborative began in February 2016 with a request for applications from SIs committed to enhancing their CLE's ability to engage residents and fellows in systems-based approaches to improve patient care and learner experience. As part of their proposal, applicants were asked to describe an approach to improve 1 of the 4 overarching themes identified in the *CLER National Report of Findings 2016* (BOX),¹⁰ with the expectation that, if selected, they would collaborate to address all 4 themes over the course of the initiative.

After review by a selection committee comprised of numerous representatives from 21 partnering organizations in health care and education,⁹ and a series of site visits to the semifinalists, the following 8 ACGME-accredited institutions were invited to participate in Pursuing Excellence as the Pathways Innovators:

- Children's National Medical Center, Washington, DC
- Cleveland Clinic Foundation, Cleveland, OH
- Maine Medical Center, Portland, ME
- Our Lady of the Lake Regional Medical Center, Baton Rouge, LA
- Strong Memorial Hospital of the University of Rochester, Rochester, NY
- The University of Texas at Austin Dell Medical School, Austin, TX
- University of California, San Francisco School of Medicine, San Francisco, CA
- University of Chicago Medical Center, Chicago, IL

These organizations and their teams represent a geographically and educationally diverse set of SIs, ranging from 3 to more than 80 residency and fellowship programs, and from 52 to more than 1200 residents and fellows.

The ACGME provided each SI with funding of up to \$75,000 per year over the 4 years, with each recipient institution providing matching or exceeding funds.

BOX *CLER National Report of Findings 2016* Overarching Themes

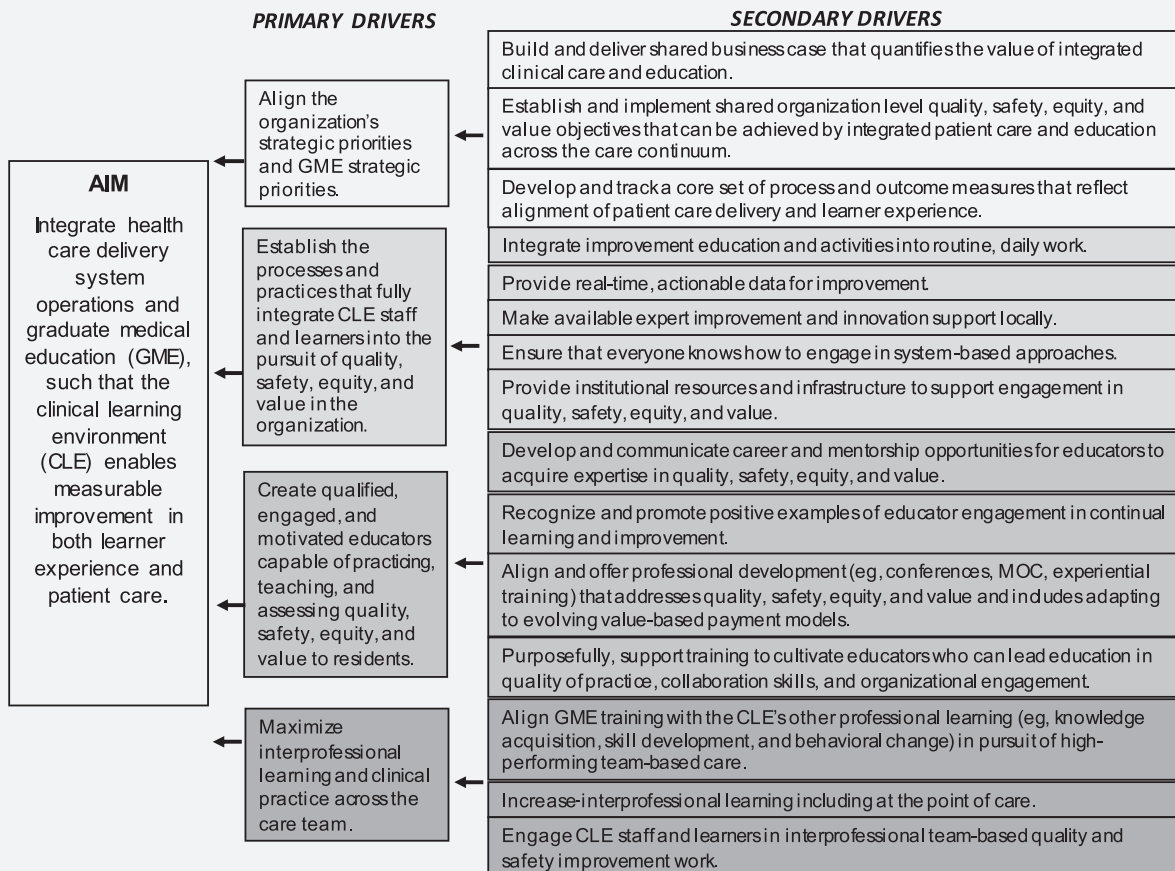
- Clinical learning environments vary in their approach to and capacity for addressing patient safety and health care quality, and the degree to which they engage residents and fellows in these areas.
- Clinical learning environments vary in their approach to implementing graduate medical education. In many clinical learning environments, graduate medical education is largely developed and implemented independently of the organization's other areas of strategic planning and focus.
- Clinical learning environments vary in the extent to which they invest in continually educating, training, and integrating faculty members and program directors in the areas of health care quality, patient safety, and other systems-based initiatives.
- Clinical learning environments vary in the degree to which they coordinate and implement educational resources across the health care professions.

Design of the Collaborative

Each of the selected SIs was asked to assemble a committee of core GME and executive health care leadership, including the chief executive officer (CEO), chief medical officer (CMO), chief nursing officer (CNO), and designated institutional officer (DIO). Each SI was also asked to assign a day-to-day project manager and engage an improvement coach, an evaluator, and other relevant members to comprise a core team. Subsets of the local teams were expected to attend 3 in-person learning sessions each year; the CEO and a member of their organization's governance were asked to participate in the fall learning session each of the 4 years.

The members of the ACGME Pursuing Excellence team, working with the Institute for Healthcare Improvement, developed a driver diagram to guide the Pathway Innovators in their collaborative efforts. This improvement tool, used to identify the factors influencing the achievement of an aim,¹¹ provided an organizational framework for the learning sessions (FIGURE 1). During the first 2 years of the collaborative, the teams reviewed the driver diagram components and modified the descriptive language to reflect their learning.

A key objective for the Pathway Innovators was for GME leaders to develop a deeper understanding of CEO, CMO, CNO, and board member perspectives on improving patient safety and health care quality. Using this C-suite and governance lens, teams were tasked with creating business plans for developing faculty members' knowledge and skills in the field of quality and patient safety (FIGURE 1, driver 2), and

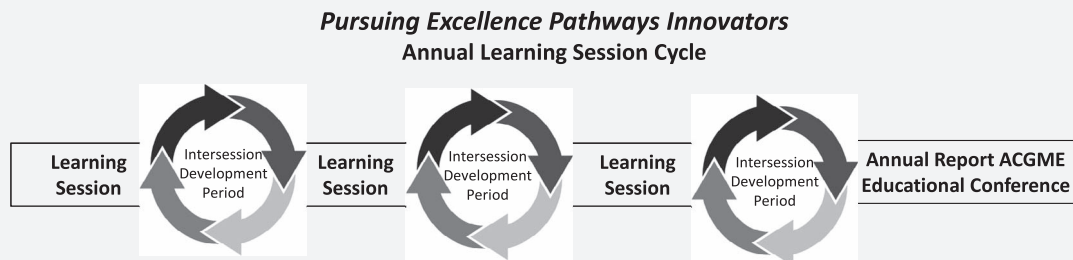
**FIGURE 1**

ACGME Pursuing Excellence in Clinical Learning Environments Driver Diagram

later the improvement of interprofessional clinical learning (FIGURE 1, driver 4).¹² As part of the development process, each team pitched their initial draft business plans to a panel of CEOs and board members from institutions in the collaborative other than their own, for feedback during the learning sessions.

The annual structure of the learning collaborative was a continual improvement cycle that was based in a learning session followed by intersession development period (FIGURE 2).

Each institution planned to host 1 learning session; the ACGME hosted 3 sessions. Through these immersive opportunities, the visiting teams and the ACGME team were able to experience the host teams' work in their local CLE. This format also provided access to resources and speakers at local sites that enhanced session activities. Intersession team calls and peer calls facilitated team communication and learning opportunities outside the formal learning sessions. Learning sessions were designed to include time for individual team development ("I" time) and time for collaborative team building ("We" time). The

**FIGURE 2**

Pursuing Excellence Pathways Innovators Annual Learning Session Cycle

TABLE

Pathway Innovator's 4-Year Curriculum

Learning Sessions	Primary Driver 1	Primary Driver 2	Primary Driver 3	Primary Driver 4
Year 1: Learning Sessions 1–3				
Collaborative Team and Community Building	XX	X		
Engaging Leadership and Governance About GME Value	XX	X		
Foundations of Faculty Engagement		X	XX	
Building a Business Plan for Faculty Development		X	XX	
Measurement Strategy		XX	X	
Year 2: Learning Sessions 4–6				
Elements of an Interprofessional Culture	X			XX
Relational Coordination for Engagement and Measurement	X			XX
Value of a Learner Environment	X		XX	
Leveraging Resources: Health Systems Engineering Analysis		XX	X	
Bringing Innovation to Scale	X	XX		
Year 3: Learning Sessions 7–9				
What It Means To Be a Change Agent	XX	X		
Designing and Implementing an Interprofessional Clinical Learning Environment	X			XX
Integrating the Patient Voice		X		XX
Designing for the Future	X	XX		
Building the Readiness Model		XX		X
Year 4: Learning Sessions 10–12				
GME in Time of Change	XX			X
Strategies for Moving Forward	XX			X
Designing the Campaign for Change		X		XX
Creating a Common Conversation About Value	XX			X
Health Equity as Part of Practice		XX		X

Abbreviation: GME, graduate medical education.

Note: Driver emphasis: XX, primary; X, secondary.

sessions followed a cycle of concept introduction, skill development, and product delivery that repeated each of the 4 years of the collaborative. The objectives of each learning session derived from the primary drivers and addressed assessment, faculty engagement and development, executive rounds, interprofessional learning, peer consult, partnership, and collaboration strategies.

The Pathway Innovators collaborative included 12 learning sessions that took place over the 4 years. The TABLE lists the main learning activities that took place

each year and which driver the activity addressed as well as if the driver was a primary or secondary focus of the activity.

Three learning sessions were conducted each year of the collaborative. Each learning session was designed to address a different aspect of the primary drivers and built upon work from the previous session. The first year focused on integrating GME into the CLE executive leadership's strategic approach to optimizing patient care, identifying faculty development needs, and creating a business plan for faculty development

(drivers 1 and 3). In year 2 engagement with executive leadership expanded to include a member of the organization's governance. At the same time, the teams worked on establishing processes and practices for faculty members and learners to engage in quality and safety (driver 2), implementing faculty development activities in the business plan (driver 3), and introducing interprofessional learning concepts (driver 4). Goal alignment continued in the third year, engaging the executive leadership and members of governance (driver 1). Faculty development plans expanded to be interprofessional along with the quality and safety activities for learners and staff (drivers 3 and 4). Proposals for enhancing the interprofessional CLE were finalized and initiated (driver 4). The fourth and final year of the collaborative deepened the work in quality and safety and expanded to address value and equity (drivers 1, 2, 4). Work in each of the drivers continued while sustainability and spread strategies were developed and implemented.

Building Teams

Prior to joining the collaborative, each of the SI teams participating in the Pathway Innovators had varying experience engaging in cross-organization or cross-institution initiatives. Over the course of the first year, the teams focused on building local capacity while also learning about the other teams in the collaborative. Developing the local team required the CEO, CMO, CNO, DIO, coaches, evaluators, and others to collaborate and engage in new ways. By assigning specific roles, leveraging expertise, and integrating a shared vision of the collaborative goals, interprofessional teams emerged in each of the institutions.

Measuring the Collaborative Work

The members of the ACGME Pursuing Excellence team recognized that paramount to the success of the initiative would be the demonstration of its success and impact through tangible measures. The Pathway Innovators measurement strategy included 4 areas of focus:

- **Project measures** were site specific and tracked the progress of the individual institution's interventions.
- **Collaborative measures** examined the impact of work in each of the driver areas across various audiences within all 8 institutions.
- **CLE measures** were aggregated, and deidentified data based on information gathered on CLER site visits provided additional context for the goals set out in the driver diagram.
- **New measures** were based on innovations taking place within the collaborative to promote interprofessional learning at the point of care.

As a collaborative designed to catalyze innovation, it was important to provide mechanisms for assessing the progress of the individual institutions and the collaborative toward achieving the aim identified in the driver diagram. The measurement strategy outlined above provided individual and group accountability for each of the teams in the Pathway Innovators as their work progressed.

Next Steps

The overarching goal of the Pursuing Excellence Pathway Innovators collaborative was to use social learning tools to implement a peer-based longitudinal learning collaborative to optimize CLEs of ACGME-accredited SIs. Future topics in this publication series about the Pathways Innovators will include strategic alignment of health system and GME strategy (and the new role of the DIO); innovations in engaging residents, fellows, and faculty members in improving quality, safety, equity, and value; innovations in creating a collaborative interprofessional CLE; and lessons learned along the Pathway Innovators journey.

References

1. Institute of Medicine Committee on Quality of Health Care in America; Kohn LT, Corrigan JM, Donaldson MS, eds. *To Err Is Human: Building a Safer Health System*. Washington, DC: National Academies Press; 2000.
2. Bates DW, Singh H. Two decades since to err is human: an assessment of progress and emerging priorities in patient safety. *Health Aff (Millwood)*. 2018;37(11):1736–1743. doi:10.1377/hlthaff.2018.0738.
3. Committee on the Governance and Financing of Graduate Medical Education; Board on Health Care Services; Institute of Medicine. Eden J, Berwick D, Wilensky G, eds. *Graduate Medical Education That Meets the Nation's Health Needs*. Washington, DC: National Academies Press; 2014.
4. Josiah Macy Jr. Foundation. Ensuring an Effective Physician Workforce for the United States: Recommendations for Graduate Medical Education to Meet the Needs of the Public. November 2011. https://macyfoundation.org/assets/reports/publications/jmf_gme_conference2_monograph%282%29.pdf. Accessed June 30, 2020.
5. Nasca TJ, Philibert I, Brigham T, Flynn TC. The next GME accreditation system—rationale and benefits. *N Engl J Med*. 2012;366(11):1051–1056. doi:10.1056/NEJMSr1200117.

6. Weiss KB, Bagian JP, Nasca TJ. The clinical learning environment: the foundation of graduate medical education. *JAMA*. 2013;309(16):1687–1688. doi:10.1001/jama.2013.1931.
7. Wagner R, Koh NJ, Patow C, Newton R, Casey BR, Weiss KB, et al. Detailed findings from the CLER National Report of Findings 2016. *J Grad Med Educ*. 2016;8(2 suppl 1):35–54. doi:10.4300/1949-8349.8.2s1.35.
8. Koh NJ, Wagner R, Newton R, Casey BR, Sun H, Weiss KB, et al. Detailed findings from the CLER National Report of Findings 2018. *J Grad Med Educ*. 2018;10(4 suppl):49–68. doi:10.4300/1949-8349.8.2s1.35.
9. 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.
10. Bagian JP, Weiss KB, CLER Evaluation Committee. The overarching themes from the CLER National Report of Findings 2016. *J Grad Med Educ*. 2016;8(2 suppl 1):21–23. doi:10.4300/1949-8349.8.2s1.21.
11. Centers for Medicare and Medicaid Services. Defining and Using Aims and Drivers for Improvement. <https://innovation.cms.gov/files/x/hciatwoaimsdrrs.pdf>. Accessed June 30, 2020.
12. Weiss K, Passiment M, Riordan L, Wagner R. Achieving the Optimal Interprofessional Clinical Learning Environment: Proceedings From an NCICLE

Symposium. <https://www.ncicle.org/ip-cle-symposium>. Accessed June 30, 2020.



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