## Transforming Primary Care Clinical Learning Environments to Optimize Education, Outcomes, and Satisfaction

Kathleen Klink, MD

Dr. Klink is the Deputy Chief Officer (Acting), Chief, Health Professions Education, Office of Academic Affiliations, Veterans Health Administration. Correspondence: Dr. Klink (kathleen. klink@va.gov) This issue features the first of 5 case studies (See, Huddling for High-Performing Teams, p. 16) that illustrate strategies intended to redesign primary care education at the Veterans Health Administration (VHA), using interprofessional workplace learning. All have been implemented in the VA Centers of Excellence in Primary Care Education. These models embody visionary transformation of clinical and educational environments that have potential for replication and dissemination throughout VA and other primary care clinical educational environments. Additional case studies will appear in subsequent issues.

broad consensus exists that US health care is now becoming more complex than at any other time in prior decades, potentially contributing to less than optimal outcomes, inadequate or unnecessary care, dissatisfied users, burned-out providers, and excessive costs.1 To reduce health system dysfunction, experts have looked to primary care to improve care continuity, coordination, and quality. The patient-centered medical home was designed to create environments where patients can access skilled professionals for both immediate and long-term needs across the health care spectrum, including nursing, pharmacy, social work, mental health, care coordinators, and educators.2

In 2010, the VHA of the Department of Veterans Affairs (VA) introduced a patient-centered model of primary care known as the patient-aligned care team (PACT). Each enrolled veteran is assigned to a PACT that is staffed by the enrollee's personal provider, clinical staff, and appropriate professionals who work together to respond to patients in the context of their unique needs. In addition to the primary care provider (physician, physician assistant, or nurse practitioner), a nurse

care manager, licensed vocational nurse or medical assistant, and an administrative professional, each PACT team is staffed by pharmacists, social workers, and mental health specialists. An especially important, and possibly unique, aspect of the VA PACT model is the integration of traditional primary care services with mental health access and care. This clinical interprofessional collaboration requires new educational strategies to effectively train a workforce qualified to work in, lead, and improve these settings.<sup>3</sup>

Although clinical environments are undergoing rapid change, curriculum for the health professions trainees has not adapted as quickly, even though it has been widely recognized that both should evolve concurrently.4 Curriculum emphasizing interprofessional practice, in particular, has been insufficiently implemented in educational settings.<sup>5</sup> Static clinical learning environments pose a risk to future systems that will flounder without prepared professionals.6 Professional organizations, consensus groups, and medical education expert recommendations to implement interprofessional training environments have been met with relatively slow uptake in part because the challenges to implementation of scalable platforms for interprofessional clinical education are not trivial.7-9

This issue of *Federal Practitioner* introduces the first of 5 case studies that describe the implementation of instructional strategies designed and implemented by faculty, staff, and trainees. Each case embodies a unique approach to curriculum design and implementation that illustrates the collaborative innovation required to engage trainees with patients, with one another from differing professions, and with their faculty. The required flattening of the traditional hierarchy of staff in medical settings necessitates modification

of clinical faculty and trainees skills. Didactic sessions are limited, and the focus is on experiential teaching and learning.<sup>10</sup>

As will be seen through the lenses of the cases presented in this series, the investments (including the time line to shift attitudes and change culture) required to achieve measurable outcomes are substantial. These investments not only are monetary, but also include addressing change management, conflict resolution, enhancement of communication skills, employee engagement, and leadership development.

The VA supports a comprehensive health system distributed throughout the nation with more than 1,000 points of care and more than 150 medical centers. Less recognized is that VA is the largest clinical learning platform in the US: More than 120,000 students and trainees enrolled in more than 40 different health professions and disciplines participate in VA clinical training programs annually. The VA has incorporated multiple innovative care designs, such as PACTs, along with educational and clinical leadership to create experiential workplace learning environments where structure, processes, and outcomes can be observed, adjusted, measured, and potentially duplicated.

This approach was key for the initial 5 of the current 7 Centers of Excellence in Primary Care Education (CoEPCEs) launched by VA in 2011, and from which the 5 cases in this series have evolved. 12 The CoEPCE was developed as a demonstration project to show how to develop the interprofessional primary care curriculum for health professions that the PACT model requires. The CoEPCE, having trained more than 1,000 learners to date, has informed the PACT model to distinguish between PACTs whose mission is to provide clinical care from those that have the additional role of educating health professions trainees. The PACTS with this additional obligation are called interprofessional academic PACTs (iAPACTs). The iA-PACTs incorporate features to accommodate clinical teaching and learning, including logistic challenges of scheduling, additional space requirements, faculty assignments, and affiliations with the academic institutions that sponsor the training programs.

Foundational concepts of the CoEPCE

include those inherent in primary care, plus interprofessional practice where trainees of multiple professions are integrated into the care model to create a transformed workplace learning environment. 13,14 Curricular domains of shared decision making among team members and their veteran patients, interprofessional collaboration, sustained relationships, and performance improvement are all required elements integral to the design and implementation of all CoEPCEs. 13 This purposeful design provides clinical and educational infrastructure for interprofessional practice that simultaneously and seamlessly integrates both priorities of transforming clinical care and education.

The vision is to create the clinical learning environments necessary to produce the high-functioning individuals and teams needed to assure beneficial patient care outcomes as well as professional and personal satisfaction within the care team. The goal is to improve the PACT model of care in VA as a vehicle to enhance primary care services, to support changes in policy and practice that improve veterans' care, safety, experience, health and well-being, and prepare a highly skilled future workforce for VA and for the nation as a whole.<sup>15</sup>

As all the cases in this series illustrate, the trainees are deeply embedded into clinical care and-very importantly-processes of patient care provision in consideration of all the patients care needs, using a holistic care model. As integrated team members, trainees from multiple professions learn with, from, and about one another as professionals and, as importantly, learn to appreciate the array of skills each brings to patient care, thus transforming their personal as well as professional learning experience. A highly relevant finding is that faculty and leadership—along with the trainees-have also learned, benefited, and transformed their thinking and attitudes, contributing to a cultural shift that is less hierarchical and more inclusive of all team members. A recently released external evaluation of the CoEPCE in their iAPACT environments indicates promising patterns of clinical outcomes with indications of improved staff satisfaction and less burnout. Better understanding of these innovations across and beyond the evaluated sites will be the topic of subsequent inquiries.16

These case studies demonstrate how education can be designed to advance the quality of care and improve the clinical teaching and learning environment, and educational outcomes. These cases are not intended to be recipes but rather exemplify the ingredients required to provide enough information and background to illustrate the transformational process. Superficially the cases may seem simple, but deeper examination reveals the complexity of confronting the challenges of day-to-day clinical work and redesigning both clinical and educational parameters.

These are real cases about real people working hard to revise a fragmented system and build a better future. The true purpose of these case studies is to inspire others to pursue educational modernization and excellence. In fact, there is no other satisfactory choice.

## **Author disclosures**

The author reports no actual or potential conflicts of interest with regard to this article.

## Disclaimer

The opinions expressed herein are those of the author and do not necessarily reflect those of *Federal Practitioner*, Frontline Medical Communications Inc., the US Government, or any of its agencies

## References

- Dzau VJ, McClellan MB, McGinnis M, Finkelman EM, eds. Vital Directions for Health and Health Care: An Initiative of the National Academy of Medicine. https://nam.edu/initiatives /vital-directions-for-health-and-health-care. Published 2017. Accessed August 19, 2018.
- US Department of Health and Human Services, Agency for Healthcare Research and Quality. Defining the PCMH. https:// pcmh.ahrq.gov/page/defining-pcmh. Accessed August 19, 2018.
- US Department of Veterans Affairs, Patient Care Services. Patient aligned care team (PACT) https://www.patientcare .va.gov/primarycare/PACT.asp. Updated September 22, 2016. Accessed August 19, 2018.
- Gilman SC, Chokshi DA, Bowen JL, Rugen KW, Cox M. Connecting the dots: health professions education and delivery

- system redesign. Acad Med. 2014;89(8):1113-1116.
- Josiah Macy Jr. Foundation. Conference recommendations: transforming patient care: aligning interprofessional education with clinical practice redesign. http://macyfoundation.org /docs/macy\_pubs/TransformingPatientCare\_ConferenceRec .pdf. Published January 2013. Accessed August 19, 2018.
- Áccreditation Council for Graduate Medical Education. Clinical learning environment review. https://www.acgme.org/What -We-Do/Initiatives/Clinical-Learning-Environment-Review -CLER. Accessed August 19, 2018.
- Cox M, Cuff P, Brandt B, Reeves S, Zierler B. Measuring the impact of interprofessional education on collaborative practice and patient outcomes. *J Interprof Care*. 2016;30(1):1-3.
- National Collaborative for Improving the Clinical Learning Environment. Envisioning the optimal interprofessional clinical learning environment: initial findings from an October 2017 NCICLE symposium. https://storage.googleapis.com/wzukusers/user-27661272documents/5a5e3933a1c1cKVwrfGy/NCICLE%2IP-CLE%20Symposium%20Findings\_011218%20update.pdf. Published January 12, 2018. Accessed August 19, 2018.
- Institute of Medicine of the National Academies. Interprofessional Education for Collaboration: Learning How to Improve Health from Interprofessional Models Across the Continuum of Education to Practice: Workshop Summary. https://doi.org/10.17226/13486. Published 2013. Accessed August 22, 2018.
- Harada ND, Traylor L, Rugen KW, et al. Interprofessional transformation of clinical education: the first six years of the Veterans Affairs Centers of Excellence in Primary Care Education. J Interprof Care. 2018;20:1-9.
- US Department of Veterans Affairs, Office of Academic Affiliations. 2017 statistics: health professions trainees. https:// www.va.gov/OAA/docs/OAA\_Statistics.pdf. Accessed August 19. 2018.
- US Department of Veterans Affairs, Office of Academic Affiliations. VA centers of excellence in primary care education. https://www.va.gov/oaa/coepce. Updated July 24, 2018. Accessed August 19, 2018.
- US Department of Veterans Affairs, Office of Academic Affiliations. Academic PACT. https://www.va.gov/oaa/ apact. Updated April 3, 2018. Accessed August 19, 2018.
- US Department of Veterans Affairs, Office of Academic Affiliations. VA academic PACT: a blueprint for primary care redesign in academic practice settings. https://www.va.gov/oaa /docs/VA\_Academic\_PACT\_blueprint.pdf. Published July 29, 2013. Accessed August 19, 2018.
- US Department of Veterans Affairs, Office of Academic Affiliations. Centers of Excellence in Primary Care Education. Compendium of five case studies: lessons for interprofessional teamwork in education and workplace learning environments 2011-2016. https://www.va.gov/OAA/docs/VACaseStudies CoEPCE.pdf. Published 2017. Accessed August 19, 2018.
- US Department of Veterans Affairs, Quality Enhancement Research Initiative. Action-oriented evaluation of interprofessional learning efforts in the CoEPCE and iA-PACT environments. https://www.queri.research.va.gov/about/factsheets /InterProfessional-PEI.pdf. Published June 2018. Accessed August 19. 2018.