Five Key Leadership Actions Needed to Redesign Family Medicine Residencies

STANLEY M. KOZAKOWSKI, MD M. PATRICE EIFF, MD LARRY A. GREEN, MD PERRY A. PUGNO, MD, MPH ELAINE WALLER, BA SAMUEL M. JONES, MD GERALD FETTER JR, MSA PATRICIA A. CARNEY, PHD

Abstract

Background New skills are needed to properly prepare the next generation of physicians and health professionals to practice in medical homes. Transforming residency training to address these new skills requires strong leadership.

Objective We sought to increase the understanding of leadership skills useful in residency programs that plan to undertake meaningful change.

Methods The Preparing the Personal Physician for Practice (P⁴) project (2007–2014) was a comparative case study of 14 family medicine residencies that engaged in innovative training redesign, including altering the scope, content, sequence, length, and location of training to align resident education with requirements of the patient-centered medical home. In 2012, each P4 residency team submitted a final summary report of innovations implemented, overall insights, and dissemination activities during the study.

Six investigators conducted independent narrative analyses of these reports. A consensus meeting held in September 2012 was used to identify key leadership actions associated with successful educational redesign.

Results Five leadership actions were associated with successful implementation of innovations and residency transformation: (1) manage change; (2) develop financial acumen; (3) adapt best evidence educational strategies to the local environment; (4) create and sustain a vision that engages stakeholders; and (5) demonstrate courage and resilience.

Conclusions Residency programs are expected to change to better prepare their graduates for a changing delivery system. Insights about effective leadership skills can provide guidance for faculty to develop the skills needed to face practical realities while guiding transformation.

Stanley M. Kozakowski, MD. is Director, Medical Education Division, American Academy of Family Physicians; M. Patrice Eiff, MD, is Professor of Family Medicine, Oregon Health & Science University; Larry A. Green, MD, is Professor of Family Medicine, Epperson-Zorn Chair for Innovation in Family Medicine and Primary Care, University of Colorado, Denver; Perry A. Pugno, MD, MPH, is former Vice President for Education, American Academy of Family Physicians; Elaine Waller, BA, is Research Associate and P4 Project Coordinator, Department of Family Medicine, Oregon Health & Science University; Samuel M. Jones, MD, is Program Director, Fairfax Family Medicine Residency Program; Gerald Fetter Jr, MSA, is Operations Manager, Medical Education Division, American Academy of Family Physicians; and Patricia A. Carney, PhD, is Professor of Family Medicine and Public Health and Preventive Medicine, Oregon Health & Science University.

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Corresponding author: M. Patrice Eiff, MD, Oregon Health & Science University, 3181 SW Sam Jackson Park Road, Portland, OR 97239, 503.494.6610, eiff@ohsu.edu

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Introduction

Preparing primary care physicians to practice in a patientcentered medical home (PCMH) model requires skills beyond those typically taught as part of clinical training, including use of electronic health records, electronic communication with patients, team-based care, and redesigning care processes toward patient-centeredness.^{1,2} While residency programs routinely undertake minor programmatic revisions, significant transformations in training require leadership, another area where physicians typically do not receive training. A review of the literature reveals a paucity of information on the actions of successful leaders in residency training, as most articles focus on leadership in health systems or clinical practice settings³⁻⁵ of medical school deans or clinical department chairs. 6-9 Understanding leadership actions that successfully guide significant transformations in residency education could help better prepare residency directors for what is needed. We found only 1 article¹⁰ that focused on leadership development in

family medicine as it relates to residency education and practice redesign.

The Preparing the Personal Physician for Practice (P⁴) project, which involved 14 diverse family medicine residencies, 11 is the first coordinated national residency redesign project in family medicine designed to prepare family physicians to practice in PCMHs. It was conducted during a time of substantial evolution of the medical home model, thus creating a challenging context to redesign programs toward a model of practice that had not yet been clearly defined. The P4 project began in 2007 and was completed in 2012, although follow-up data collection using graduate surveys concluded through 2014. Participating programs implemented a spectrum of innovations and challenged basic assumptions in family medicine education developed more than 40 years earlier. Innovations involved altered scope, content, sequence, length, location, and structure of training.¹² P⁴ residencies experienced varying degrees of success in their implementation and measurement activities, which can be considered from the perspective of implementation science.¹³

As a requirement of the P⁴ project, the core residency teams from participating programs submitted final reports using a standardized structure that prompted them to write about the successes and challenges experienced. We conducted a narrative analysis of the data to identify leadership actions associated with the process of successful transformation, and this report describes the 5 leadership actions that were associated with successful implementation of P⁴ innovations and residency redesign.

Methods

The evaluation process for P⁴ is described in detail elsewhere.¹² All participating programs and the evaluation team at Oregon Health & Science University received an exemption, waiver, or approval for project activities from their respective Institutional Review Boards. In 2012, each participating program completed a summary of activities using a standardized report template. The reports described innovations, key implementation steps, enablers/facilitators, barriers/challenges, outcomes, adoption considerations, and anticipated next steps. The summary also included information on residency characteristics, insights, and dissemination activities. The summaries were supplemented by process reports maintained by the evaluation team, using information from initial site visits and followup telephone interviews every 3 to 6 months. Using these documents, we conducted a narrative analysis to identify leadership actions undertaken as implementation proceeded.14 The authors (S.M.K., M.P.E., L.A.G., P.A.P., S.M.J.) have extensive experience leading family medicine

What was known and gap

Transforming residency education to address new practice skills needed requires leadership.

What is new

Five leadership actions were associated with successful residency redesign in family medicine—managing change, developing financial acumen, adapting best evidence to local conditions, creating and sustaining a compelling vision, and demonstrating courage and

Limitations

Self-reported data with reporting bias; results may not generalize beyond family medicine.

Bottom line

Faculty and staff development for leadership roles in residency redesign may help better prepare graduates for practice.

residencies, and 1 (P.A.C.) has expertise in narrative analysis and consensus facilitation.

Narrative analysis refers to the study of narrative materials, which can range from oral life stories collected for research purposes to written narratives found in the private, public, or political realms. 15 The technique is inherently interdisciplinary, and there is no single method of analysis. In our study, 3 primary coders independently reviewed the summary reports and, using constant comparative analysis techniques, 15 independently identified leadership actions they felt were associated with successful transformation in the residency. During a 2-day retreat held in September 2012, coders met at a consensus session where emergent themes were presented and discussed and the predominant actions identified. The remaining authors served as a reactor panel and helped to refine the thinking on leadership actions. This helped maximize the credibility of the analysis, as the authors represented multiple perspectives, and challenged the interpretations. This process resulted in the emergence of 5 leadership actions.

Results

The 5 leadership actions and exemplars or specific quotes taken from the narrative documents are presented in the TABLE.

Action 1: Manage Change

Leaders of programs that achieved their planned innovations used many skills related to change management science and classic project management, shown in the BOX. A number of the programs faced significant unanticipated challenges with an ever-shifting environment. These included loss of financial support, anticipated and unexpected institutional changes, turnover of executives and faculty with loss of

TABLE LEADERSHIP ACTIONS SUPPORTING RESIDENCY REDESIGN	
Actions	Exemplars
Manage change	 "It's probably easier to 'blow everything up and start all over' but we have to keep moving and caring for our patients. We don't have the luxury of stopping the merry-go-round. We must 'build the airplane in the air." "Internally, it has given everyone a feeling of a shared vision and a 'we're doing something hard but necessary' cohesiveness."
Develop financial acumen	 "Our P⁴ experience led to better understanding and appreciation for the precarious nature of family medicine residency funding and the need for financial flexibility to implement innovative ideas." "A key component of doing this project was obtaining a 3-year grant to support a project coordinator and related activities for the project. We used these resources very frugally and stretched these funds out to cover the full 5-year P⁴ project cycle." "Do not underestimate the need for commitment of resources and support from leadership. Our P⁴ endeavor was a department priority in its infancy, but when leadership changes occurred and department priorities shifted, our ability to commit resources to education and innovation changed."
Adapt best evidence educational strategies to the local environment	 " because not all family physicians practice the same scope of family medicine, a 'one size fits all' curriculum is simply outdated and counterproductive." "Although our expertise is the 'process' of practice, our current educational paradigm is centered on content." "A proactive approach, careful negotiation of resident duties and educational opportunities, and active resident involvement with planning and sensitivity to issues of equality were all essential factors in the success of our transition."
Create and sustain a vision that engages stakeholders	 "The P⁴ project imbedded into the program's DNA a desire to be at the forefront of innovation by exploring/implementing the advanced PCMH particularly as it could be applied to rural practice." "The innovative curriculum became a way for the program to create a unique identity, distinguishing it from the other [named state residency is located] residencies, and later, from residencies across the country." "The lack of shared language is a rate-limiting step in the introduction of curricular innovation."
Demonstrate courage and resilience	"What was once a passion, at times, became a burden and reminder of unrealized goals." "Committing to innovation can affect culture in a residency, despite the outcome of the innovation itself." "Accreditation is not a barrier to innovation in ways one might expect. For us, innovation did not cause an accreditation problem; it is the administrative burden of accreditation tasks that interfere with the time one can devote to innovation."

Abbreviations: P4, Preparing the Personal Physician for Practice; PCMH, patient-centered medical home.

critical institutional memory, and a natural disaster. Successful leaders demonstrated the capacity to adapt to these environmental changes. For example, when lack of mature practice information systems presented a barrier to accessing data to manage change, successful programs altered the pace of projects and used different data sources. Other examples of adaptations include changing meeting structures to enhance communication and involve a broader input on decisions, and using retreats that involved sharing, learning, and reflecting, which led to increased shared responsibility for change. In their reports, successful leaders described the complexity of work involved with managing repeated changes to resident schedules. Several programs identified talented individuals with unique skills, such as process engineering, who helped meet the needs of residency and institutional stakeholders, while simultaneously orchestrating components of a new individualized curriculum. Leaders recognized the opportunity to build on initial

BOX MANAGING CHANGE

- Effectively communicating the vision of a better future for the
- Articulating the value innovations added to stakeholders
- Building effective relationships and high-functioning teams
- Measuring, evaluating, and communicating progress
- Having flexibility when undertaking course readjustments as

successes and used this momentum to scale efforts up to achieve a greater impact. For example, 1 residency used its expertise in evidence-based medicine to focus on bringing evidence to the precepting during active patient care.

Action 2: Develop Financial Acumen

Leaders of successful programs demonstrated financial acumen related to the unique nature of graduate medical education, as well as general business finance. Effective leaders determined the financial worth of their programs and effectively communicated this and the value of the innovation to stakeholders. They also generated new financial resources to cover added expenses, and recognized that innovations required time for planning, implementation, and administrative coordination, while building these financial and time considerations into their budgets.

Action 3: Adapt Best Evidence Educational Strategies to the Local Environment

Leaders of successful innovations used knowledge of education science in the design and implementation of transformation processes, focusing on how innovative programmatic changes made sense from an educational perspective. It was not uncommon for leaders to find that many faculty members lacked core skills needed to practice and teach in rapidly evolving high-performance health care systems. Faculty also described the need for residents and

faculty to become colearners. This leveling of roles between faculty and residents produced a learning community with multidirectional learning and enhanced education, without diminishing patient services. The requirement to balance service and education required careful consideration, with many innovations disrupting traditional service arrangements. A few programs had to scale back or modify innovative ambulatory educational experiences because their sponsoring institutions relied on residents to cover hospital services.

Action 4: Create and Sustain a Vision That **Engages Stakeholders**

Successful leaders managed a complex set of relationships with local stakeholders, aided by their ability to articulate and sustain a compelling vision. Participation in P⁴ provided a degree of prestige, and leaders of successful change efforts took advantage of this cache, using the P⁴ label in communications with stakeholders to garner resources and engagement. One program created specific terminology to describe its curricular innovations to enable others to imagine the desired educational experiences.

Action 5: Demonstrate Courage and Resilience

Successful leaders showed courage and resilience to their faculty, residents, and staff, while managing many risks. They were willing to redesign residency programs and simultaneously meet patient care, educational, and local institutional demands. Leaders pushed boundaries and interpreted selected rules as mere guidelines. Some programs that were denied a waiver by the Family Medicine Review Committee for a curricular change moved forward by pushing the limits of the program requirements to implement the innovation. An example is a program that sought to extend the length of residency by introducing residency-level experience for medical students. After medical school leaders were unwilling to adopt this change, leaders redirected their efforts and restructured the curriculum to focus on teaching residents the principles of the PCMH, health behavior change counseling skills, and improved continuity of care.

Many P⁴ programs "flipped" their traditional educational footprint (sequence and structure of curriculum) to create radically different educational programming. Successful programs were committed to educating others rather than letting a lack of understanding of the new approach stop the effort. This created a psychologically safe environment to help the organization adapt to change.

Discussion

The P⁴ project represents the largest organized attempt in the United States to transform the foundational principles that provide the basis of family medicine residency education. We identified 5 leadership actions associated with successful residency redesign—managing change, developing financial acumen specific to the residency, adapting sound educational strategies to local conditions, articulating and sustaining a compelling vision, and demonstrating courage and resilience in the face of adversity. They are similar to those described for successful practice transformation, 16-18 and are also consistent with the general leadership literature. 19-21 The leadership actions were important for improving the clinical learning environment while concomitantly transforming resident education to address important new primary care competencies. All activities occurred in the context of a continually evolving model of care.

The characteristics of project leaders extended beyond the execution of the components of change management (eg, vision setting, communication, negotiation, and engagement). Leaders embodied the core leadership elements described by Kouzes and Posner¹⁹ to "inspire a shared vision," "challenge the process," "enable others to act," and "encourage the heart." Summary reports revealed that leaders were forward-thinking and credible as they created innovation, and at the same time these leaders were colearners. Adapting educational strategies to the local environment requires traditional change management skills, and willingness to share leadership and a "learning together" approach—themes consistent with transformative learning in adult education.²²⁻²⁴ Successful leaders demonstrated an understanding of residency financing and financial planning, and were resourceful in finding new ways to fund their transformation.²⁵ This is similar to reports on the use of evaluation and management in generating additional revenues that can be invested to implement the transformation toward the PCMH.²⁶

The 5 leadership actions we identified may also be relevant to implementing changes needed by residency programs as they transition to the Accreditation Council for Graduate Medical Education's new accreditation system.²⁷ The ACGME's new approach advances accreditation based on educational outcomes and includes structured evaluation against milestones using improved resident assessment tools.

Professional development targeted at enhancing the skills of faculty leaders in the 5 domains we identified could assist in the successful spread of change in residency programs. The Primary Care Faculty Development Initiative (a pilot project funded by the Health Services Resource Administration and supported by the American Boards of Family Medicine, Internal Medicine, and Pediatrics, and the Josiah Macy Jr. Foundation) enabled faculty teams from family medicine, internal medicine, and pediatric

residencies to work together to redesign primary care training to allow residents to practice in a rapidly evolving health care system.²⁸ This and other faculty development efforts may benefit from the leadership lessons learned from the P⁴ project.

Our analysis has several limitations. We used selfreported data, which may be subject to documentation bias. The reported leadership actions represent the consensus of all authors; however, the authors may not have identified all possible themes in the narrative material. Future research should focus on the environmental factors that support transformation efforts, along with leadership attributes and actions leading to successful transformation.

Conclusion

We identified 5 leadership actions associated with successful innovation in residency training. Explicit development of faculty and staff for their leadership roles in residency education and redesign may help programs better prepare graduates for future practice.

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