Shaping GME Through Scenario-Based Strategic Planning: The Future of Family Medicine Residency Training

Stacy Potts, MD, MEd Grant S. Hoekzema, MD, FAAFP Colleen K. Cagno, MD, FAAFP Eileen Anthony, MJ

Introduction

The mission of the Accreditation Council for Graduate Medical Education (ACGME) is to improve health care and population health by assessing and advancing the quality of resident and fellow physicians' education through advancements in accreditation and education. The ACGME's Common Program Requirements are the foundational set of standards (requirements) for the education and preparation of resident and fellow physicians for practice, applicable to all specialties and subspecialties, including family medicine. These requirements set the context within clinical learning environments for development of the skills, knowledge, and attitudes necessary to take personal responsibility for the individual care of patients.

The ACGME's Program Requirements for Graduate Medical Education in Family Medicine are a critical tool to guide family medicine programs in training competent family physicians. Historically, the Review Committee for Family Medicine (RC-FM) was required to review the specialty-specific program requirements to determine necessary revisions every 10 years. In 2019, the ACGME Board of Directors developed an innovative new process for this required periodic revision. Prior to making any revisions, the new process, scenario-based strategic planning, requires all review committees and relevant specialty communities to think rigorously and creatively about what the specialty will look like in the future, well beyond 10-year increments, recognizing that the future is marked with significant uncertainty.

Family physicians provide first contact, comprehensive, compassionate, and high-quality care within the context of patients' families and communities,

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often treating multigenerational members of the same family in continuity over decades. Family medicine is a unique specialty in that it encompasses the care required for the continuum of a patient's lifespan. Residents must develop skills ranging from maternity/ newborn care to end-of-life, palliative, and hospice care. With this broad scope in mind, the process for the development of the newest program requirements for graduate medical education (GME) in family medicine included participation from the entirety of the family medicine community, including recipients of care (through patient focus groups), residents, and multidisciplinary physician participants. These contributors engaged with the Writing Group and ACGME staff members in scenario planning and a national specialty summit of family medicine educators and leaders.

This article will highlight the journey and the outcomes of the expansive family medicine residency requirement revision process.

Current Context

Family medicine was first recognized as a discipline in 1969 when American Boards approved Family Practice as a new specialty. Three independent reports, the Millis Commission Report, the Folsom Report, and the Willard Report, were published, which led to the creation of the specialty of family medicine.²

Drawing on the findings of these reports and their call to action, the initial family medicine program requirements set forth a clear definition of the family physician.³ These requirements defined 4 attributes of a family physician as one who: (1) serves as the physician of first contact with the patient and provides a means of entry into the health care system; (2) evaluates the patients' total health needs, provides personal medical care within one or more fields of medicine, and refers the patient when indicated to appropriate sources of care while preserving the continuity of the patient's care; (3) develops a

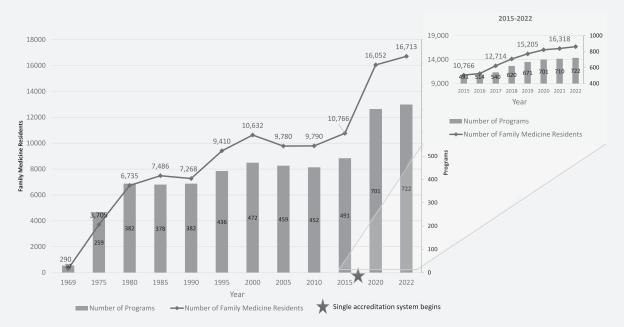


FIGURE 1
Growth of Family Medicine Residency Training (1969-2022)

responsibility for the patients' comprehensive and continuous health care and when needed acts as a coordinator of the patient's' health services; and (4) accepts responsibility for the patient's total health, including the use of consultants, within the context of the patient's environment, include the community and the family or comparable social unit. In short, family physicians must be prepared to fill a unique and specific functional role in the delivery of modern comprehensive health services.

Six years after the American Board of Family Practice incorporation in 1969, there were already 259 family practice residency training programs across the United States.⁴

Over the past 50 years, there has been substantial growth in family medicine training programs and positions. As of 2022, there are more than 720 approved family medicine training programs offering 16 713 training positions (FIGURE 1).

While primary care physicians (PCPs) represent only one-third of the physician workforce in the United States, they are the first contact with the health care system for most patients. In 2010 the Department of Health and Human Services' Council on Graduate Medical Education (COGME) recommended that 40% of the physician workforce be comprised of PCPs, demonstrating that optimal health outcomes are achieved with this proportion. However, a report published by the Robert Graham Center in August 2021 showed that the number of PCPs in the United States has been declining for decades. In addition, there exists considerable variation in the ratio of PCPs

per capita by state.⁵ Overall trends of this report highlighted a shrinking national PCP workforce.⁵

The goal of the revisions to the family medicine residency program requirements was to consider the origins and the values that served as the foundation of our specialty while at the same time preparing family physicians for independent practice *in the future* across diverse communities and programs.

The Journey

The newly developed ACGME revision process provides an innovative and comprehensive approach for developing specialty-specific program requirements that guide the specialty of family medicine into the future. The Writing Group was convened to include members from the RC-FM and other key voices, including a public member, an ACGME Board member, a resident, and a non-family medicine physician. The Writing Group was encouraged to consider a blank slate and not to simply edit the existing program requirements. The goal of the process was to develop evidence-based, future-oriented requirements that would prepare future family physicians for independent practice. The multistep process involved stakeholders from within and outside the specialty of family medicine, including unique focus groups of patients and health care leadership (FIGURE 2).

The scenario planning process was a key element to revision development allowing consideration of alternate futures and the design of a model family

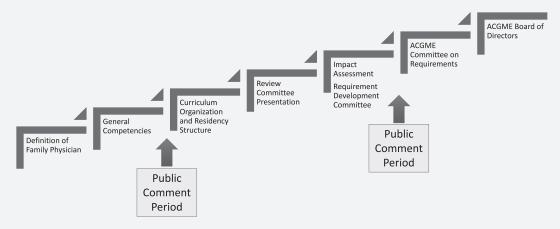


FIGURE 2
Program Revision Process

physician that would work best across those futures. Forty-five participants gathered virtually in November 2020 to provide general insights into the future of family medicine and the training necessary to prepare residents for that future.

Parallel to the scenario planning process, the American Academy of Family Physicians and the American Board of Family Medicine (ABFM) convened a diverse group of thought leaders in family medicine to collect and evaluate the evidence base for training needs. The Starfield Summit IV: Re-envisioning Family Medicine Residency Training gathered in December 2020, producing an endurable collection of scholarly work published in Summer 2021.

The main themes and key strategies developed through the scenario planning process were shared for public comment in early 2021, allowing further consideration of the bold new vision of family medicine.

The ACGME stakeholders summit "Shaping GME: Future of Family Medicine" occurred in June 2021, allowing digestion of the public comment and further development of the structure for the new requirements. The Writing Group then drafted the new specialty-specific program requirements in line with the Common Program Requirements.

The Writing Group presented the progress to the community of family medicine in multiple venues, gathering input along the way. A second public comment period in Fall 2021 allowed for the community of family medicine to consider the impact of the new requirements in diverse communities and programs. The Writing Group then used the comments and impressions from the feedback to amend and adjust the new requirements and submitted them to the Committee on Requirements. Final revisions will be presented to the ACGME Board of Directors.

Family Physician of the Future: Themes and Strategies From Scenario Planning

The themes and strategies defined through the scenario planning process and refined by the Starfield Summit and public comment focused the work of the Writing Group on how to craft the major program requirement revisions. The 7 main themes and associated strategies are further described in the BOX.

The care of a population of patients is most effectively understood at the community level, which is where training requirements should be focused. The Community Focused Population Health theme-related strategies were to establish and engage a community council, intentionally train in community-centric low-resource settings, train to understand the impact of socioeconomic conditions on health care, and apply the knowledge of population health to the scope of practice.

The care of patients in family medicine requires treating the whole patient, and that treatment needs to be based on sound, clinically competent care. The Holistic Comprehensive Clinically Competent theme preserves the critical role of being a comprehensive personal physician. The strategy to incorporate this was to ensure comprehensive care that included all types of people, settings, disease states, and time-scales.

It became clear that any program requirements that would prepare a family physician for the future would need to intentionally include strategies that promoted the theme of Lifelong Adaptive Learning. The competency and value of learning how to learn were highlighted by the concept of the master adaptive learner.

Family medicine at its heart is a relational specialty; therefore, the theme of Relationship-Based Communication showcases the epitome of the personal

physician. The strategies that would promote this theme would need to include training in interpersonal communication and relationship building as well as an emphasis on interprofessional learning environments.

Family medicine is a specialty that interacts with all parts of the health system. The theme of Collaborative Team-Based Leadership was supported in all scenarios. The strategies adopted to address this critical set of skills include training in leadership and management skills, training to understand physicians' roles as educators, and in some cases, followers. The latter strategy recognizes other members of the team may be qualified to assume the role of leader or provide direction in the care of the patient.

The future-oriented scenario planning process highlighted the need for family medicine physicians to integrate technology in a discerning way. The strategies to promote the theme of Technology Integration included developing critical reasoning in the use of technology, embracing educational technologies to optimize the teaching of medicine, and ensuring that technology is used in service of patient-centered care.

The importance of Values Driven Professionalism emerged as a critical theme. The strategies to promote these values in our training environments include recruiting diverse representative residents, faculty, and staff, as well as helping residents understand cultural humility and the importance of diversity, equity, and inclusion.

Future of Family Medicine Residency Training: Curriculum Development

To meet the goals for the family medicine physician of the future, the Writing Group was tasked with reenvisioning the specialty-specific program requirements starting with a blank slate. Several areas were identified as key changes to allow for the development of a future family medicine physician that would incorporate the aforementioned themes. These curricular areas were the focus of several major revisions to the curriculum.

A major focus of training in family medicine moving toward managing a panel of patients reflects the direction of primary care, away from volume-based care toward value-based payment models. This shift is a critical step in shaping the training of family medicine residents for future practice and in keeping with a mantra in family medicine that the "practice is the curriculum."

The Writing Group chose a strategy of moving from proscriptive numerical requirements to more

BOX Summary of Themes and Strategies

Community Focused Population Health

- 1.1 Establish and engage with community council
- 1.2 Training for community-centric low resource setting
- 1.3 Train in understanding of impact of socioeconomic conditions impacting health care
- 1.4 Training in applying population health knowledge to scope of practice

Holistic Clinically Competent Care

2.1 Comprehensive clinical care—includes people, settings, disease states, timescale

Lifelong Adaptive Learning

3.1 Prepare for career-long adaptive learning

Relationship-Based Communication

4.1 Training for interpersonal communication and relationship building

Collaborative Team-Based Leadership

- 5.1 Train in interprofessional leadership and management skills
- 5.2 Train to be leaders, followers, and educators of diverse teams

Technology Integration

- 6.1 Critical reasoning in use of technology
- 6.2 Embrace educational technology
- 6.3 Technology in service to patient-centered care

Values Driven Professionalism

- 7.1 Recruit diverse, representative residents, faculty, and staff
- 7.2 Understanding cultural humility and diversity, equity, and inclusion
- 7.3 Look for family medicine values in recruitment
- 7.4 Train to exemplify family medicine values in independent practice

curricular flexibility for programs to adapt to the needs of their unique communities, while still meeting the goal of producing comprehensive personal physicians.

The patient voice, whether through the input of public members of the ACGME Board of Directors and Review Committees or through direct focus groups, has informed the Writing Group regarding its importance in GME. Therefore, the Writing Group has proposed requiring a patient advisory council for each family medicine practice, an essential move toward a training system with a more patient-centered focus.

The concepts of competency-based medical education and master adaptive learning emerged around required individualized education plans for lifelong learning. The assessment of progress toward competency for independent practice will require a resident to individualize their education to a degree to address

areas needed for their future practice and for faculty to teach and guide this progression toward mastery. Expanded elective opportunities guided by faculty mentors were a significant piece of this educational shift.

Maternity care has a central role in family medicine, but it is difficult to have uniform requirements due to regional practice variations. Our stakeholders agreed that all residents must have training in the pregnancy and birth experience and the requirements to care for a family-newborn dyad. These are central tenets to why the specialty is called "Family Medicine." However, the skills and experience needed for the independent practice of obstetrical care need to be more robust. Thus, we have proposed tiered requirements around the experiences required for minimum exposure and independent practice.

These major changes in our curriculum require the right personnel and resources. Family physician faculty play the central role, and programs need to ensure that the family medicine faculty role model the scope of practice that allows a program to meet its mission of training its residents for practice. Recognizing that those faculty alone cannot teach our residents everything they need to learn, others may be more suitable to teach specific skills, including other non-physician professionals. This emphasis serves the dual purpose of utilizing local teaching resources effectively and role modeling interprofessional teambased care.

Advancing Innovations in Residency Education: Length of Training

Since the start of accredited training programs, the ideal length of family medicine residency training has been unclear and controversial. In the early 2000s, thought leaders in the specialty asked whether programs should be extended to 4 years. In contrast, others speculated that a competent family medicine physician could be trained in 2 years, like the training model in Canada. A length of training pilot study, which began in 2012, reported data across 17 residency programs that participated in the pilot. The main conclusion was that adding a fourth year was financially feasible, but other comparisons across programs were not possible.

To determine the feasibility and assess other outcomes, a larger cohort of 4-year programs is needed. The ACGME and ABFM have announced a collaboration to further explore the outcomes of an additional fourth year of education and training in family medicine through the Advancing Innovation in Residency Education (AIRE) process. The model

of AIRE is based on program design that emphasizes competency-based training while allowing programs to innovate around program requirements while reporting outcomes and lessons learned during the process. The ACGME and ABFM look to involve approximately 10% of accredited programs in this innovation and have announced this initiative at the AAFP Residency Leadership Summit and the ACGME Annual Educational Conference meetings.

The goal of this initiative is not to merely extend training time but to study how innovation in curriculum and assessment methodology can advance skills needed to address the health needs of the nation.⁸

Lessons Learned

As the second specialty to participate in the new ACGME requirement revision process, the Writing Group was afforded the opportunity to reflect and improve on the internal medicine's experience and learn new insights from the family medicine experience for the process in the future. The critical components of the process included the breadth of the scenario planning process, the incorporation of evidence, and broad stakeholder engagement (FIGURE 3).

Change is hard. Working to engage stakeholders and promote transparency through the process was critical to helping the community stay in step with the process and the change that is coming.

Beware unintended consequences. Allowing for 2 public comment periods and multiple presentations with question-and-answer sessions provided ample feedback and valuable insights into missed opportunities and potential unintended consequences.

Return to vision again and again. Throughout the process, there were challenges with the comfort of what is. The Writing Group challenged itself repeatedly to evaluate the way things are done to ensure that there is purpose and outcomes that matter.

Family medicine physicians are essential to improving health care and population health in our nation. Through the extensive and inclusive revision process, the new specialty-specific family medicine program requirements are poised to provide programs the necessary resources, structure, and flexibility to advance the quality of resident education and prepare the next generation of family physicians to care for diverse communities.

Thinking Outside the Box: Develop the definition of a family medicine physician in 2040 or beyond Scenario Design strategies to meet the training **Planning** needs for the future family medicine physician

Building Evidence-Based Requirements:

- Collaborative partnership to review literature and understand evidence for training requirements' outcomes
- Starfield Summit December 2020 engaged community of family medicine in what programs need to do to best prepare family medicine physicians for the future

Evidence Stakeholder Base Engagement

Transparency and Partnership:

- Broad stakeholders group included patients, residents, faculty, practicing family physicians, interdisciplinary and interprofessional colleagues, and health system leadership
- Partnership with community of family medicine organizations

Key Components of the Scenario Planning Process

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Stacy Potts, MD, MEd, is a Professor, Department of Family Medicine and Community Health, UMass Chan Medical School; Grant S. Hoekzema, MD, FAAFP, is Chair, Review Committee for Family Medicine, Accreditation Council for Graduate Medical Education (ACGME), Chairman, Department of Family Medicine, Mercy Hospital St. Louis, and Adjunct Professor, Family and Community Medicine, Mercy Family Medicine Residency; Colleen K. Cagno, MD, FAAFP, is a Professor, Department of Family and Community Medicine, College of Medicine-Tucson, University of Arizona; and Eileen Anthony, MJ, is Executive Director, ACGME-Review Committee for Family Medicine

Corresponding author: Stacy Potts, MD, MEd, UMass Chan Medical School, stacy.potts@umassmemorial.org, Twitter @potts_stacy