Is It Time for a 4-year Family Medicine Residency?

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Changes in the practice environment, the aging population, and limitations on resident work hours are creating unprecedented pressure on the traditional 3-year residency curriculum in family medicine. We are now in the sixth consecutive year of declining numbers of US medical school seniors entering family medicine residencies. It is time for a national debate to consider lengthening the family medicine residency to 4 years. Doing so might improve the quality of training and would not necessarily require additional graduate medical education positions.

Since family medicine was established as the 20th specialty in American medicine in 1969, our discipline has created several major innovations.[1] Family medicine created a multidisciplinary educational model requiring experience on rotations in multiple areas of medicine. Continuity ambulatory training in family medicine centers was required to augment experience obtained on these hospital-based specialty rotations. The biopsychosocial model was used to build the foundation of the new discipline on a philosophy of holistic, patient-centered care. Continuing medical education and recertification were required for family physicians to maintain board certification over the course of their careers.[2]

The creative force behind these innovations has always been the best interests of patients who entrust their care to board-certified, residency-trained family physicians. Taken together, this model of training family physicians established a creative and bold tradition for our specialty, a tradition that attracted many of us to the field. We embraced community-based training, a concept now being adopted by other, more-traditional disciplines such as internal medicine[3] and general surgery.[4]

Over the past 34 years, family medicine has grown into the second largest specialty training system in American medicine.[2] From 15 residencies in 1969, we have now grown to more than 450 programs, and our graduates have established practices across America in rough proportion to the distribution of the country's population.[5] All of this has been accomplished using the basic model of residency education developed by the founders of the specialty. That model is a 3-year residency curriculum characterized by required rotational training in the major specialties of medicine, with a longitudinal component featuring continuity and behavioral training in model family medicine centers.

In spite of these accomplishments, it is widely recognized that family medicine now faces substantial challenges that imperil its future.[2,6,7] The organizations of family medicine have recently sponsored a comprehensive evaluation of the discipline to address these challenges.[8] With the advent, and ultimate failure of, managed care, the world in which we work has changed substantially since family medicine was created. Today, high tech and subspecialty medicine plus chronic disease management are the foci of most academic health centers and large hospital systems, while primary care, including family medicine, often is not considered a key component of medical care. Addressing these challenges will require an examination of the health care economy, our training model, our basic principles, and our model of care delivery. This paper's purpose is to focus on one aspect of this process, reform of the educational model by which family physicians are trained for clinical practice.

What's Wrong With the Current Residency Training Model?

There are three basic reasons why now is the time to address the residency training model. First, there have been important changes in the practice environment that our graduates enter after completing the residency. As the American population ages, our graduates now encounter a growing number of patients with chronic diseases and functional impairments. Our traditional model of training focuses on

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office and hospital visits as the basic units of care. But, more and more of the care needed by our patients occurs in the home, the nursing home, and other venues of care.

Second, there are growing new demands on the residency training environment. Patient care now demands greater mastery of medical information, even as the complexity of that information grows from day to day. There are now educational imperatives to teach evidence-based medicine, continuous quality improvement, population-based medicine, medical ethics, HIV-AIDS care, geriatrics, and sports medicine. None of these curricular areas were included in the original residency model. In addition, there are now rigid limits on resident work hours and a growing list of prescribed curricular areas from the Accreditation Council for Graduate Medical Education.[9] There is more to teach and less time to do the teaching.

Third, the population of residents in our programs is fundamentally different now than at any time in the past. American medical students are, as a group, older and nearly half are women.[10] A significant percentage of them plan to practice part-time, and a majority of them will live in families with more than one career. They are still attracted to the comprehensiveness and continuity offered by family medicine, but increasingly they are concerned about the challenge of learning more and learning faster, while balancing a larger load of personal and professional demands. The problems facing us are complex and are not likely to be corrected by simplistic solutions.

Need for Change

In the past year, the Future of Family Medicine Project, the Association of Family Practice Residency Directors, the Residency Assistance Program, and the Family Practice Residency Review Committee (RRC) have all begun to address the issue of how the family medicine residency should be changed. Most of these discussions have focused on what should be added to the curriculum or how it should be reorganized. But the "elephant in the living room" during these discussions is the need to seriously debate whether or not the goals of a family medicine residency can be accomplished in the traditional 36-month curriculum. Discussions of lengthening the residency have usually been brief due to concerns about the substantial logistical challenges involved if we were to actually do this. Nevertheless, we believe that a serious discussion of lengthening the residency to 4 years should be undertaken immediately and that the future of our discipline could depend on the outcome of such a debate.

Consider the following reasons for a 4-year residency: First, there is more to teach now than ever before if our specialty wants to continue to be comprehensive in its scope of practice. Each new iteration of our program requirements precipitates a cacophony of demands for more curricular focus on a growing laundry list of areas that we address only superficially. Our residencies struggle to address the aging population, the growing number of people with chronic illnesses and disability, challenges in medical ethics, practice quality improvement, hospice care, medical economics, research skills, and behavioral counseling techniques to promote behavior change to name a few.

Entire fields of study have been created since the first 3-year family medicine curricula were developed. In 1969, there were no American textbooks of geriatrics or sports medicine. HIV-AIDS did not exist. The only way to include these issues in the residency curriculum now is to spend less time on other things. We have increasingly heard calls to reduce hospital or obstetric training. Although a persuasive case can be made that these skills are as important as ever, particularly for rural and small-town practice, fewer family physicians are doing obstetrics, and many are doing less hospital medicine. Some family physicians do a lot of obstetrics, sports medicine, or geriatrics, sometimes to the exclusion of other components of family medicine. A 4-year curriculum would allow better attention to all aspects of family medicine, but it might also permit greater depth of training in particular areas of practice focus.

Second, the 3-year duration of training is not as long as it used to be. As residents in the 1970s, we averaged 10 hours per day for 5 days each week and were on overnight call at the hospital every third night. The average work week for family medicine residents often exceeded 100 hours. While few would seriously argue that this intensity of training was a good idea overall, it did allow as much experience as possible to be crammed into the 36-month program. The ACGME now limits resident work hours to 80 per week,[11] and night call is often covered by "night-float residents" who go home during the day. When fully implemented, the restriction on work hours will reduce the available hours for training by at least 20%. As a result, there already has been a drop in the number of office visits, hospital procedures, and obstetric deliveries done by family medicine residents. Low visit volume in the family medicine center and insufficient obstetric deliveries are now the two most common citations from the RRC when residencies are reviewed.[12] The reduction in work intensity is a positive change for residents and for their patients, but it is surely eroding the quantity of experience in a 3-year program.

Third, a significant minority, and now perhaps a majority, of our faculty and residents may favor such a change. A survey of residency directors, residents, and practicing family physicians in 2000 found

that 27%, 32%, and 28% respectively favored changing to a 4-year residency model.[13] This survey was done before the recent downturn in student interest in family medicine had become a clear trend. It was done before the collapse of managed care and before the Future of Family Medicine Project had been undertaken. Were this survey to be repeated today, it is hard to imagine that these percentages wouldn't be higher. There have always been a few people in our field who have advocated for a longer residency. But today, the number of people favoring such a change may be at an all-time high.

Fourth, our specialty is failing to attract sufficient students into our residency programs. The declining fill rate of family medicine residencies is now a clear 5-year trend.[14] In the 2003 Match, only 2,239 of 2,940 positions were filled in the Match (76.2%), and only 1,234 of these positions (42%) were filled with graduates of US medical schools. Foreign medical graduates now comprise a majority of entering family medicine residents. Many of these residents are well prepared to enter residency training, but many more require remediation of basic skills before they can be successful family physicians. This increases the pressure on our residency programs to ensure that all of our graduates have the necessary skills to excel in practice.

Fifth, quality of care and quality of service are both lacking in American health care systems, and family medicine is the foundation of the system. Reports from the Institute of Medicine have defined a significant gap between the kind of care we are capable of providing in American medicine and the quality of care the American people actually receive.[15,16] Closing this "quality chasm" will require us to reengineer models of care delivery, but few family physicians have been trained to address this level of practice reorganization. Family medicine isn't just any specialty. We aspire to be the foundation on which American health care is built. This foundation will remain shaky at best without a major reorganization of the educational model of our residencies. Where will we find the time to do this in the 3-year model?

Sixth, we are at risk of becoming a stagnant field, focused on our past and on our traditions with insufficient innovation. The recently completed study by the University of Arizona has defined some of the reasons why more US medical school graduates don't choose to enter family medicine residencies.[17] Among the most concerning findings of this study are the data suggesting that many students now view family medicine as a throwback to the medicine of the past. We justifiably counter these arguments by focusing on the high job satisfaction of family physicians[18] or that information technology at the point of care brings us into the future.[2] But will such satisfaction survive the rigors of a failing health care economy? Our academic departments have failed to generate the kind of practice innovation that will attract the most creative students. These are precisely the students that family medicine will need to thrive in the future as the health care system is redesigned. But, this innovation will not occur within the constraints of an already crowded 3-year curriculum.

Barriers

What are the barriers to lengthening the family medicine residency to 4 years? A principal barrier is convincing our sponsoring hospitals to do this, because of concerns about the added costs of training for an additional year. We believe, however, that a 4-year model could be implemented with little additional costs. If every family medicine residency reduced its class size by 25%, a 4-year curriculum could be instituted without additional residency positions. The typical small community-based residency would change from 4-4-4 to 3-3-3-3. The typical large program would go from 12-12-12 to 9-9-9-9. Making this change would decrease the number of first-year positions by 25% from 2,940 to 2,205. If we had this number of first-year positions in the 2003 Match, our fill rate would have been 100%, and our fill rate with US seniors would have been 56%.

Would making this change further reduce the number of students entering family medicine? It is reasonable to think that some of the 1,234 US seniors who chose family medicine might have chosen another field if the training took 4 years. But student interest is strong in many fields that have even longer residencies. It is also quite possible that we would attract some of the students who otherwise would enter other fields. A recent report from the Society of General Internal Medicine suggests that other disciplines are also considering the change to a 4-year curriculum.[3] It seems likely to us that the other primary care fields would follow our lead. But even if they didn't, our primary concern should be the quality of care offered by our graduates. In our 34-year history, we have never gone wrong basing our decisions on the best interests of our patients. Family medicine has achieved success thus far by leading, not by following. The best students will see the logic to this change. Aren't they the ones we most want to attract anyway?

Conclusions

We believe that a public debate should be held regarding the concept of lengthening the family medicine residency to 4 years. The decline in student interest and the ACGME work hours restrictions offer us an ideal opportunity to make this change without requiring additional residency positions. The founders of our specialty were bold leaders when they created model

family medicine centers and the recertification process. We should follow their example.

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References

1. Saultz JW. An overview and history of the specialty of family practice. In: Saultz JW. Textbook of family medicine. New York: McGraw-Hill, 2000.
2. Graham R, Roberts RG, Ostergaard DJ, Kahn NB, Pugno PA, Green LA. Family practice in the United States: a status report. JAMA 2002;288(9):1097-1101.
3. Future of general internal medicine: report and recommendations. Task Force on the Future of General Internal Medicine. Washington, DC: Society of General Internal Medicine, 2003.
4. Hunter JG, Deveney KE. Training the rural surgeon: a proposal. Bulletin of the American College of Surgeons 2003;88(5):13-20.
5. Fryer GE, Green LA, Dovey SM, Phillips RI. The United States relies on family physicians unlike any other specialty. Am Fam Physician 2001;63:1669.
6. Sandy LG, Schroeder SA. Primary care in a new era: disillusion or dissolution? Ann Intern Med 2003;138:262-7.
7. David AK. Necessary change in family medicine: entering adulthood. Fam Med 2003;35(3):217-9.
8. Future of family medicine home page. Available at www.futurefamilymed.org. Accessed June 12, 2003.
9. ACGME Outcomes Project: general competencies. Accreditation Council for Graduate Medical Education. Available at www.acgme.org/outcome/comp/compMin.asp. Accessed June 12, 2003.
10. Association of American Medical Colleges: medical school facts: applicants, matriculants, and graduates. Available at www.aamc.org/data/facts/start.htm. Accessed June 12, 2003.
11. Resident duty hours language: final requirements. Accreditation Council for Graduate Medical Education. Available at www.acgme.org/. Accessed June 12, 2003.
12. Areas of frequent citation. Accreditation Council for Graduate Medical Education Residency Review Committee for Family Practice. www.acgme.org/. Accessed June 12, 2003.
13. Duane M, Green LA, Dovey S, Lai S, Graham R, Fryer GE. Length and content of family practice residency training. J Am Board Fam Pract 2001;15:201-8.
14. National Resident Matching Program information 2003. Leawood, Kan: American Academy of Family Physicians, 2003.
15. To err is human: building a safer health system. Committee on the Quality of Health Care in America, Institute of Medicine. Washington, DC: National Academy Press, 1999.
16. Crossing the quality chasm: a new health system for the 21st century. Committee on the Quality of Health Care in America, Institute of Medicine. Washington, DC: National Academy Press, 2001.
17. McCanse C. University of Arizona study results shed light on medical students' specialty choice. FP Report 2002;8(12).
18. Weaver SP, Mills TL, Passmore C. Job satisfaction of family practice residents. Fam Med 2001;33(9):678-82.