Family Medicine In Massachusetts: Coming Of Age, At Last

N. Lynn Eckhert, MD, DrPH

Regardless of the final details of health care reform, the call for more generalist physicians continues.\(^1\)\(^-\)\(^5\) Numerous policy-making bodies and professional organizations have recommended a shift in the medical work force from a specialist dominance to a greater emphasis on primary care physicians.\(^6\)\(^-\)\(^10\) Prompted by this universal appeal for more generalists, the accelerated momentum for family medicine in Massachusetts is promising.

Albeit a leader in medical education through its support of four medical schools, 2308 medical students, and 4433 resident and fellowship positions, Massachusetts has been slow to adopt educational opportunities in family medicine. In 1993 Massachusetts had 312 accredited graduate medical education programs, only three of which were in family medicine. Those programs prepared 56 residents, less than 1.4 percent of the total medical resident population in Massachusetts. In the 210 training programs within metropolitan Boston, a center for graduate medical education, there are no graduate training programs in family medicine.\(^11\) Yet the future looks promising with the recent approval by the Accreditation Council of Graduate Medical Education of two new family practice residency programs, which enrolled residents in July 1994. Further expansion is anticipated, funded in part by the Robert Wood Johnson Generalist Physician Initiatives awarded to Boston University School of Medicine and the University of Massachusetts Medical School.

Graduate Training in Family Medicine

A pivotal step for family medicine in Massachusetts was taken in the late 1960s when the Commonwealth opened its first Department of Family Medicine at the newly created University of Massachusetts Medical School, the only public medical school in the state. The first family practice residency, the Worcester Family Practice Program, was established in 1974, timed to accommodate students graduating from the first class. Shortly thereafter the program reached its full complement of 36 positions at three family practice sites. In 1979 the University of Massachusetts Medical School began a second family practice residency program in Fitchburg, adding an additional 12 positions. That same year the New England Memorial Hospital opened a family practice residency program in Stoneham, which graduated 31 residents during a 6-year period before closure in 1985.

Nearly a decade without change was followed by a sudden expansion in family practice programs in the early 1990s. The Malden Family Practice Residency, a 12-resident program affiliated with Boston University School of Medicine, opened in July 1993. A year later two programs affiliated with Tufts University School of Medicine at Beverly Hospital and Greater Lawrence Health Center opened with 12 and 24 residents, respectively, doubling the total number of family practice residency positions.

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Development of Family Medicine Educational Programs

The MAFP has been crucial in advocating for family medicine education, initially by supporting the establishment of a family medicine department at the University of Massachusetts Medical School in the 1960s and continuing to its present sponsorship of ongoing educational programs for medical students. In 1991 the Massachusetts chapter formed the Medical School Liaison Committee for the purpose of promoting predoctoral family medical education and fostering cooperation between the four medical schools. The committee's agenda was launched with the establishment of a mentorship program for medical students who attended Boston medical schools without such opportunities. Central to the success of the program were the MAFP members who provided leadership and faculty for the student programs, which now enroll nearly 90 students.13

Heartened by the December 1990 passage of a resolution by the American Medical Association urging its Liaison Committee on Medical Education to encourage strongly every medical school to develop a department of family practice,14 the MAFP submitted a similar resolution to the Massachusetts Medical Society. The resolution, passed by the council in 1991, recommended establishing departments of family medicine at the three Boston schools. In July 1993 John Tudor, MD, president of the American Academy of Family Physicians (AAFP), joined with the leadership of the Massachusetts chapter in meeting the deans of the three Massachusetts schools that did not have family medicine departments to encourage their creation. Concurrently faculty and administration at both Boston University School of Medicine and Tufts University School of Medicine approved the establishment of full departments of family medicine in 1994. Both institutions are in the process of organizing searches for chairpersons for these departments.

Furthermore, for the past two decades the AAFP has played a prominent role through its efforts to promote student interest in family practice. In 1988 the AAFP Board of Directors created the Student Interest Task Force, a coalition from the AAFP, the Society of Teachers of Family Medicine, the American Board of Family Practice, the Association of Family Practice Residency Directors, and the Association of Departments of Family Medicine, to develop a major initiative encouraging medical students to seek family practice as a career choice. Similarly, the MAFP supported student interest by sponsoring an annual family medicine program for medical students statewide and by funding student attendance at national, regional, and state meetings.

Predoctoral Education in Family Medicine

Parity in medical education for family medicine was achieved in February 1993, when the Liaison Committee on Medical Education adopted an amendment to the standards for medical school accreditation establishing family medicine as the sixth discipline in which clinical experience should be offered. The document stated,14

Clinical education programs involving patients should include disciplines such as family medicine, internal medicine, obstetrics and gynecology, pediatrics, psychiatry and surgery. Schools that do not require clinical experience in one or another of these disciplines must ensure that their students possess the knowledge and clinical abilities to enter any field of graduate medical education.

Table 1 lists the medical schools, administrative structures, and family medicine programs at the four Massachusetts medical schools, as well as data on graduates selecting primary care residencies.

Medical Student Selection of Family Practice in Massachusetts

Not surprisingly, the New England region consistently has had the lowest percentage of students selecting family practice as a career choice, falling below the 11 percent national selection. Although not the lowest state nationally, Massachusetts has ranked last in the Northeastern region for students selecting family practice residency positions.15 In 1992, 5.3 percent of Massachusetts graduates selected family practice as a career choice.

Table 1 displays the average percentage of students entering the primary care fields of internal medicine, pediatrics, and family practice in each of the medical schools for the years 1988 through 1992. Only the University of Massachusetts Medical School, with an annual average of 15 percent for the 5-year period, exceeded the national average for the same period.

Data from the four medical schools for 1993 to 1995 indicate a marked increase in choice of family practice by medical students enrolled in...
Table 1. Characteristics of Family Medicine at Massachusetts Medical Schools.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Boston University</th>
<th>Harvard University</th>
<th>Tufts University</th>
<th>Massachusetts University of Massachusetts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administrative structure</strong></td>
<td>Voted to establish a department, 1994</td>
<td>None</td>
<td>Voted to establish a department, 1994</td>
<td>Department</td>
</tr>
<tr>
<td><strong>Mentorship</strong></td>
<td>MAFP Program</td>
<td>MAFP Program</td>
<td>1st- and 2nd-year preceptorship</td>
<td>1st- and 2nd-year preceptorship</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Required clerkship</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>6 weeks in 3rd year</td>
</tr>
<tr>
<td><strong>Student data 1988–1992</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average number of graduates per year</td>
<td>153</td>
<td>150</td>
<td>144</td>
<td>96</td>
</tr>
<tr>
<td><strong>Entered primary care residency</strong>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal medicine</td>
<td>43 (28)</td>
<td>29 (19)</td>
<td>46 (32)</td>
<td>25 (26)</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>8 (5)</td>
<td>21 (14)</td>
<td>10 (7)</td>
<td>10 (11)</td>
</tr>
<tr>
<td>Family practice†</td>
<td>6 (4)</td>
<td>2 (1)</td>
<td>4 (3)</td>
<td>15 (15)</td>
</tr>
</tbody>
</table>

MAFP — Massachusetts Academy of Family Physicians.

*Excludes preliminary medicine, combined medicine-pediatric programs.
†During the same period 11.7 percent of students nationally and 6.9 percent of students from the New England medical schools selected family practice residencies.15

Massachusetts medical schools (Peter Shaw, PhD, letter, 6 July 1995, and Toby Wesselhoeft, MD, MPH, letter, 5 July 1995).16-18 Compared with data from 1988 through 1993, when an average of 27 students from the four medical schools entered family medicine residency programs, there was nearly a doubling of student interest in 1994 and 1995. In these 2 years match data show that 44 students in 1994 and 51 students in 1995 selected family medicine. The overall percentage of 6.6 percent for 1994 and 1995 remains below the national average, but the doubling of interest occurred at the two medical schools developing new family medicine departments, Boston University and Tufts University School of Medicine.

Table 2 displays the ratio of Massachusetts medical school graduates to number of in-state spaces available for training in internal medicine, pediatrics, and family medicine. The ratios show that for each medical student selecting a 1st-year position, there are 3.3 spaces available in internal medicine, 1.7 positions for pediatrics, and 0.6 for family medicine. Thus for the 5-year period from 1988 to 1992, there were more than sufficient spaces in internal medicine and pediatrics to accommodate all graduates wanting to remain in Massachusetts for graduate medical education.

During the same period, however, Massachusetts became an exporter of medical students selecting family practice careers, because 45 percent of interested students could not be accommodated by the available positions. By opening four new positions in 1993 and adding 12 1st-year positions in July 1994, the medical community was able to meet the needs of the average number of Massachusetts medical students wishing to enter family medicine from 1988 to 1992. Nevertheless, the growth in family medicine educational programs, the availability of mentorships, and the two new academic departments, all of which are associated with increased student selection of family practice careers, have already resulted in a demand for more family medicine residency positions by the graduating classes of 1994 and 1995.

It is hoped that this increasing interest in family medicine will spark further growth of family practice residency training. In fact, 1995 National Residency Match Program data indicate an extraordinary interest in family practice training in New England. The six New England states of

Table 2. Statewide Positions and Residency Preference for 1992 Graduates in Primary Care in Massachusetts.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Internal Medicine</th>
<th>Pediatrics</th>
<th>Family Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students selecting discipline</td>
<td>141</td>
<td>47</td>
<td>29</td>
</tr>
<tr>
<td>Number of 1st-year positions available in Massachusetts</td>
<td>464</td>
<td>79</td>
<td>16</td>
</tr>
<tr>
<td>Ratios of positions to students</td>
<td>3.3</td>
<td>1.7</td>
<td>0.6</td>
</tr>
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</table>
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont sponsor 13 programs. Of the 96 available 1st-year positions, 94 (97.9 percent) were filled in the 1995 match compared with a nationwide fill rate of 87.1 percent. The decline is attributed to the aging population of the six-state region.

Of whom had family practice residency training. Of family physicians and general practitioners, 67 percent setts programs have served New England as an important resource for family physicians in the New England region. Thus Massachusetts.

After development of the specialty in 1969, when the American Board of Family Practice was formed, there were 1380 general and family practitioners in Massachusetts. Two decades later they were reduced by one-third to 912 family physicians and general practitioners, 67 percent of whom had family practice residency training. The decline is attributed to the aging population of general practice physicians and an insufficient number of resident graduates each year to keep up with the annual losses.

The 1990s look more promising. The physician decline is leveling off. An increased number of family practice graduates are expected to remain in the area, and others are expected to relocate to Massachusetts. As of 1994, 263 physicians have completed family practice training in Massachusetts, 31 graduates from the New England Memorial Hospital Program and 232 from the University of Massachusetts Medical School programs (UMass). Follow-up data on the graduates of the UMass programs indicate that most graduates practice family medicine within the New England states, and one-half of all graduates stay in Massachusetts. For those who completed their residency training within the past 5 years, more than 80 percent have remained in Massachusetts. Of those leaving Massachusetts, all but a very few graduates each year are practicing in the New England region. Thus Massachusetts programs have served New England as an important resource for family physicians in the six-state region.

During the past decade the practice environment for family physicians has changed remarkably. As a result of a competitive health care marketplace with a high penetration of managed care plans, the hiring of family physicians has accelerated. Initially recruited by health maintenance organizations to provide only urgent care services, family physicians are now being sought to provide comprehensive family medicine services.

The Future
Perhaps the Massachusetts medical education system, a resource for specialty training at the national and international level, will never reach the 50:50 specialist-generalist ratio for graduate medical education positions currently advocated. In any event, progress toward improving the imbalance should continue. The recent growth of family medicine, a discipline in which Massachusetts medical schools have been reluctant participants, is impressive indeed. This development has been encouraged by the advocacy efforts of MAFP, sparked by the Robert Wood Johnson Generalist Physician Initiative program, and reinforced by the establishment of two new departments of family medicine at Tufts University and Boston University schools of medicine.

For students to consider family practice seriously as a career choice, family medicine must be prominent in the mainstream of the educational, clinical, and research processes. The selection of family medicine as a career path is substantially higher among students in schools with family medicine departments than among those students in schools without these departments. Three decades ago Robert Haggerty, noted pediatrician and then medical director of the Family Health Program at Harvard Medical School, speaking on family medicine before the annual congress on medical education, stated:

"Without departments of family medicine teaching some of the basic principles of family care (but not the techniques) and carrying on research, it is no wonder that medical students, failing to have any reinforcement of early attitudes (an essential to any conditioned reflex), show a decrease in interest in this field."

Positioning family medicine as a full department within a medical school requires an infrastructure that can promote family medicine as a recognized academic discipline with commitment to teaching, research, patient care, and service. Through the Establishment of Departments of Family Medicine program under Title VII of the Public Health Service Act, federal funds have been available to two Massachusetts schools to support the organization of a departmental administrative unit. Furthermore, program development and innovation are being enhanced by predoctoral training funds at two Massachusetts schools, and faculty development monies at one institution are also funded through Title VII. Congress is de-
liberating whether to consolidate primary care disciplines and reduce or possibly eliminate Title VII funds, which would have a negative impact on the Massachusetts programs, particularly those recently opened or those in early developmental stages.

At the residency level, the national recommendations on reforming graduate medical education translate into a major reduction in residency slots and a reallocation of residency positions across specialties. If, as advocated by the Council on Graduate Medical Education and the Physician Payment Review Commission, the total number of residency positions is reduced to 110 percent of graduating medical students, the impact on Massachusetts will be profound. Depending on whether the reductions are based on physician population ratios, primary care population ratios, or a prorating of the present system, the reduction in positions in Massachusetts could range from 26 to 58 percent, or 1144 to 2569 positions. If one-half of all residency positions were designated for primary care training and one-half of these generalist positions as recommended by the American Academy of Family Physicians were in family medicine, the number of family practice residency slots in Massachusetts would need to increase fourfold to eightfold, reaching 470 to 808 positions to meet training demands. The capacity to meet even one-half this need within Massachusetts is unattainable at the present time.

Call for Action
Family medicine is in a unique position in Massachusetts. While most graduate medical education programs fear reduction, family medicine has an opportunity for expansion. Perhaps this expansion will differ from the unrestrained, decentralized growth driven primarily by the academic health centers. That process resulted in a 19 percent increase in graduate medical positions between 1988 and 1992, with the majority of new spaces made available in the medical subspecialties. I hope the lessons learned from this lack of a coherent policy will not be repeated with the growth of family medicine. As the debate on graduate medical education reform proceeds at the national level, Massachusetts should step forward and begin a dialogue on planning for family medicine. Instead of being a reluctant participant in family medicine education, Massachusetts could become a model for cooperation between medical schools.

Before the national discussions advocating regional coordinating efforts for graduate medical education took place, the MAFP set the stage for communication among the four Massachusetts medical schools by establishing the Medical School Liaison Committee and the Residency Committee. Building upon this foundation of collaboration, a formal discussion should begin on strategies for strengthening the family medicine workforce in Massachusetts. A new statewide commission should craft a white paper on family medicine addressing the central issues underlying regional planning: population needs, access, geographic distribution, educational opportunities, residency training, faculty and funding capacity, employment opportunities, and retention. The membership of the commission should be expansive, embracing the major stakeholders in developing a family medicine workforce: medical educators, the public, the government, physicians, consumers, the health delivery network, academic health centers, and third-party payers.

On the one hand, the high penetration of managed care in Massachusetts has accelerated the interest in family medicine education by rapidly increasing the demand for more family physicians. On the other, the fierce competition between the health care establishment and its educational affiliates will likely be divisive in the efforts for statewide collaborative residency development. If these barriers could be overcome, the commission might develop a cogent plan to address the critical policy issues for developing a family medicine workforce that integrates with other providers in delivering needed primary care and preventive services to the people of Massachusetts.

References