

September 2009
Executive Summary

Physician Workforce Study

MASSACHUSETTS MEDICAL SOCIETY PHYSICIAN WORKFORCE STUDY



MASSACHUSETTS
MEDICAL SOCIETY

Every physician matters, each patient counts.

Executive Summary

I. Introduction

The Massachusetts Medical Society (MMS) has studied physician labor market conditions in Massachusetts over the past eight-year period (2002-2009). MMS data reveal that physician shortages continue to pose a problem in Massachusetts.

Current data from the practicing physician survey demonstrate that seven of the eighteen physician specialties studied met the criteria for critical or severe labor market conditions. These include: dermatology, family medicine, internal medicine, neurology, OB/GYN, urology, and vascular surgery. In 2008, 12 specialties were identified as experiencing shortages. Coming off the list were emergency medicine, general surgery, neurosurgery, oncology, orthopedics, and psychiatry.

In addition, our eight-year statistical trend analysis of the labor market conditions of all specialties surveyed found that eight specialties are operating within tight or tightening labor market conditions over the last two to four years. These include the primary care specialties of family medicine and internal medicine as well as dermatology, neurology, neurosurgery, psychiatry, urology, and vascular surgery. These shortages are consistent with reports and studies from the Association of Medical Colleges that find shortages of those physician specialties on a national level.

Given the aging of both patient and physician populations, as well as the move toward a reformed health system with near-universal health care access for Massachusetts' residents, the MMS will continue to monitor both current and longitudinal physician workforce data as the demand for physician services is expected to increase in the coming years.

For the current Workforce Study, MMS evaluated the status of the physician workforce through both primary and secondary research. This research included surveys of practicing physicians, medical staff presidents, department chiefs in teaching hospitals, medical groups, residency and fellowship program directors, and a survey of physician's offices.

II. Physician Shortages

For the fourth consecutive year, the primary care specialties of family medicine and internal medicine continue to operate in tight labor markets. Internal medicine is facing a severe shortage compared to the more critical shortages it faced in the three years prior to 2009. However, family medicine continues to experience the critical shortage it experienced last year, the only physician specialty to be categorized as critical this year. For the first time since the inception of the study, OB/GYN physicians are in short supply and are categorized as severe. This may indicate a worsening in primary care as well, given that women often use OB/GYN physicians as their main source of primary care.

Conversely, neurosurgery, a specialty that has experienced critical/severe shortages since 2002, did not meet the criteria for a tight labor market for the first time this year. Dermatology, a physician specialty that the Society began studying in 2008, continues to face the same severe shortage it faced last year. Urology and vascular surgery continue to trend toward tight labor markets as well. Urology has been classified with severe shortages since 2007 while vascular surgery has been classified as facing severe or critical shortages since 2006.

Table 1
Physician Specialties Classified as Facing Critical or Severe Shortages
by Practicing Physicians
2002-2009 Survey Years

Specialty	2009	2008	2007	2006	2005	2004	2003	2002
Anesthesiology	--	--	Severe	Severe	Critical	Severe	Critical	Critical
Cardiology	--	--	Critical	--	Severe	Severe	Critical	Severe
Dermatology	Severe	Severe	*	*	*	*	*	*
Emergency Medicine	--	Severe	--	Severe	--	--	--	Severe
Family Medicine	Critical	Critical	Severe	Severe	--	--	--	--
Gastroenterology	--	--	Severe	Severe	Severe	--	Critical	Severe
General Surgery	--	Severe	--	Severe	Severe	Severe	Severe	--
Internal Medicine	Severe	Critical	Critical	Critical	--	--	--	--
Neurology	Severe	Severe	*	*	*	*	*	*
Neurosurgery	--	Severe	Critical	Severe	Severe	Critical	Critical	Severe
OB/GYN	Severe	--	--	--	--	--	--	--
Oncology	--	Severe	*	*	*	*	*	*
Orthopedics	--	Severe	--	Severe	Severe	Severe	Severe	--
Pediatrics	--	--	--	--	--	--	--	--
Psychiatry	--	Severe	Severe	Severe	--	--	--	--
Radiology	--	--	--	Critical	--	Severe	Critical	Critical
Urology	Severe	Severe	Severe	**	**	**	**	**
Vascular Surgery	Severe	Severe	Critical	Severe	--	--	Severe	--

* 2008, 2009 data only

** 2007 – 2009 data only

The seven physician specialties categorized as currently operating in critical or severe labor markets are displayed in Table 2 below:

Table 2: Physician Specialties Categorized as Critical or Severe in 2009

Specialty	2009
Dermatology	Severe
Family Medicine	Critical
Internal Medicine	Severe
Neurology	Severe
OB/GYN	Severe
Urology	Severe
Vascular Surgery	Severe

III. Snapshot of 2009 Key Findings across the MMS Physician Workforce Study Surveys

Snapshot Of Findings

Shortages

- In 2009, an analysis of responses by practicing physicians found that seven physician specialties can be categorized as operating in critical or severe labor markets in Massachusetts. These include dermatology, family medicine, internal medicine, neurology, OB/GYN, urology, and vascular surgery. This is a change from 2008 survey findings where twelve specialties were in short supply.
- Results from an eight-year trend analysis of practicing physician survey data reveals that, since 2006, eight specialties have experienced tight labor market conditions: dermatology, family medicine, internal medicine, neurology, neurosurgery, psychiatry, urology, and vascular surgery.
- Physician shortages in Community Hospitals were reported by Medical Staff Presidents to be most acute in the following three specialties: Internal Medicine, Family Medicine and General Surgery.

Access to Care

- The ability of a physician to refer patients to specialists continues to be a problem, with 69% of practicing physician survey respondents reporting difficulty.
- A telephone survey of physician offices indicated the following issues with closed panels and wait times:

Cardiology

Eighty-seven percent of cardiologists are accepting new patients, which is similar to 88% last year. Of those cardiologists who are accepting new patients, the average wait time is 34 days.

Gastroenterology

As was the case last year, 95% of gastroenterologists are accepting new patients. Among those who are accepting new patients, the average wait time has not changed since last year (39 days).

Internal Medicine

Less than half (44%) of internal medicine physicians are accepting new patients, far below the 58% seen last year. Of those internists who are accepting new patients, the average wait time for an appointment is 44 days a decrease from 50 days in 2008.

Obstetrics/Gynecology

Eighty-one percent of OB/GYNs are accepting new patients, down from 92% in 2008. Among OB/GYN physicians accepting new patients, the average wait time is 46 days.

Orthopedic Surgery

Fewer orthopedic surgeons are accepting new patients this year (94%) compared to last year (99%). Among the 94% of orthopedic surgeons accepting new patients, the average wait time is 19 days.

Family Medicine/General Practitioner

Only 60% of family medicine/general practitioner physicians are accepting new patients, down from 65% in 2008 and 70% in 2007. Among those accepting new patients, the average wait time is 44 days, a steady increase from last year (36 days) and 2007 (34 days).

Inadequate Physician Recruiting Pool

- Three out of four practicing physicians (74%) believe that the current pool of physician applicants is inadequate to fill vacant positions.
- Community Hospitals continue to be plagued by the unfavorable consequences of physician shortages in the Massachusetts labor market. In the 2009 survey, 96% of the medical staff presidents at Community Hospitals surveyed reported that the current applicant pool is inadequate to fill existing physician vacancies.
- About half (46%) of the Department Chiefs at Teaching Hospitals believe the current applicant pool is inadequate.

Recruitment Issues

- In 2009, more than half (54%) of physicians responding to the practicing physician survey said that the amount of time needed to recruit physicians has increased over the past three years. Practicing physicians responding to the survey reported recruitment times averaging more than one year for thirteen specialties. These include:
 - Dermatology (28.6 months)
 - Neurosurgery (24.8 months)
 - Neurology (19.2 months)
 - Urology (16.7 months)
 - Family medicine (15.5 months)
 - Orthopedics (17.6 months)
 - Gastroenterology (16.8 months)
 - OB/GYN (14.9 months)
 - Oncology (14.5 months)
 - Internal medicine (13.8 months)
 - Cardiology (13.5 months)
 - General surgery (13.5 months)
 - Vascular surgery (12.5 months).
- Community hospitals have experienced a significant increase in the amount of time to recruit physicians over the past three years. Currently, 91% of medical staff presidents responding to the survey of community hospitals reported an increase in recruitment time, an increase over the average of 75% for the time period 2003-2008.

- Recruitment times at teaching hospitals for the following six specialties averaged more than one year according to responses received from department chiefs at teaching hospitals: dermatology, neurology, neurosurgery, vascular surgery, oncology, and pediatrics.

Job Vacancy Rates

- According to department chiefs' responses, the job vacancy rate for physicians in teaching hospitals in 2008 was 4.6%, 2.4 times as high as that for all occupations in the state (1.9%). The specialties reported by department chiefs in teaching hospitals as having the highest job vacancy rates were:
 - vascular Surgery (16.4%)
 - Dermatology (16.3%)
 - Family Medicine (14.0%),
 - Oncology (12.3%),
 - Neurosurgery (10.0%),
 - Urology (9.3%),
 - Pediatrics (9.0%), And
 - Gastroenterology (6.0%).

Difficulty Filling Vacancies

- Two-thirds (68%) of practicing physician respondents are experiencing difficulty filling vacancies.
- Data from the 2009 MMS Workforce Study reveals that medical staff presidents at community hospitals appear to have significantly more difficulty filling physician vacancies than department chiefs at teaching hospitals. Specifically, the overwhelming majority (96%) of community hospital medical staff presidents reported that they are experiencing difficulty filling vacancies, while approximately half (45%) of department chiefs at teaching hospitals are experiencing this problem.

Retention Issues

- Respondents from both the Practicing Physician Survey and the Department Chiefs of Teaching Hospitals Survey reported that they were experiencing considerable difficulty in retaining family medicine physicians over the past three years. The 2009 survey data showed that half of Practicing Physicians (58%) and Department Chiefs of Teaching Hospitals (50%) were experiencing retention problems for this specialty.
- Among Medical Staff Presidents at Community Hospitals, 61% reported that retention has become more difficult over the past three years.
- Forty-three percent of medical directors of medical groups surveyed said that, over the past three years, their ability to retain existing staff has become more difficult, a decrease from 77% last year.

International Medical Graduates

- The reliance on International Medical Graduates (IMGs) as a source of new hires in teaching hospitals has increased over the past three years. In 2005, only 19% of the new

hires in teaching hospitals were IMGs according to department chiefs. In 2009 study, the percentage of new hires who were IMGs increased to 26%.

- According to responses from the survey of program directors of Massachusetts resident and fellow programs, IMGs also played an important role in filling physician residency slots. Between 2007-2008 approximately 18% of residency positions were filled by IMGs.

Residents and Fellows

- On average, over the past ten years, more than half (56%) of residents and fellows left Massachusetts according to results from the survey of program directors of Massachusetts resident and fellow programs.
- Program directors of residency and fellowship programs rank both the practice environment and the salary level for residents and fellows who plan to work in Massachusetts very low. Only 15% of program directors reported the practice environment to be favorable, and only 4% rated salary levels as favorable. These rates are the lowest they have been since 2003.
- Program directors rank housing costs (88%), cost of living (85%), and salary level (67%) as the most unfavorable factors in residents and fellows' choice to practice in Massachusetts.
- Intellectual opportunities (83%), research opportunities (73%), and strength of peer group (75%) received the highest rankings for most favorable factors influencing residents' and fellows' choice to stay in the state in survey responses from the program directors of Massachusetts resident and fellow programs.

The Impact of Shortages on Staffing and Service Provision

- One in four practicing physicians (26%) indicated that physician supply problems are making it necessary to alter services, while 29% have had to adjust staffing levels due to shortages in physician supply.
- Survey findings demonstrate that physician shortages have impacted the provision of services and staffing patterns within hospitals. Specifically, 43% of the Community Hospitals and 32% of the Teaching Hospitals reported that physician shortages have necessitated alteration in the provision of their services. Sixty-four percent of the Community Hospitals and 39% of the Teaching Hospitals responded that physician supply problems necessitated adjustments in their staffing patterns.
- Medical groups are also experiencing problems with staffing levels and service provision due to the physician shortages. Half (50%) of medical directors of medical groups indicated that they have had to alter the provision of services and adjust staffing levels due to physician supply problems.

The Impact of Professional Liability Fees

- Roughly one-half (46%) of practicing physicians indicated that their practice is being altered or limited because of the fear of being sued.
- More than half of practicing physicians in the following physician specialties said they had limited or altered their practice because of the fear of being sued: orthopedics (71%), urology (64%), neurosurgery (62%), gastroenterology (62%), OB/GYN (60%),

emergency medicine (59%), cardiology (53%), family practice (51%), internal medicine (51%).

- Fourteen percent of practicing physician respondents said that professional liability rates have caused them to limit their scope of practice.
- The following specialties had the highest percentage of respondents indicating that professional liability rates had caused them to limit their scope of practice: OB/GYN (43%), orthopedics (38%), neurosurgery (38%), family practice (28%), general surgery (28%), urology (27%).
- One in five (21%) practicing physicians surveyed said that professional liability costs were greater than 15% of their total operating costs. Specialties with the highest percentage of practicing physicians reporting professional liability fees exceeding 15% of total operating costs are: OB/GYN (77%), general surgery (59%), neurosurgery (57%), and emergency medicine (40%).

Career Satisfaction

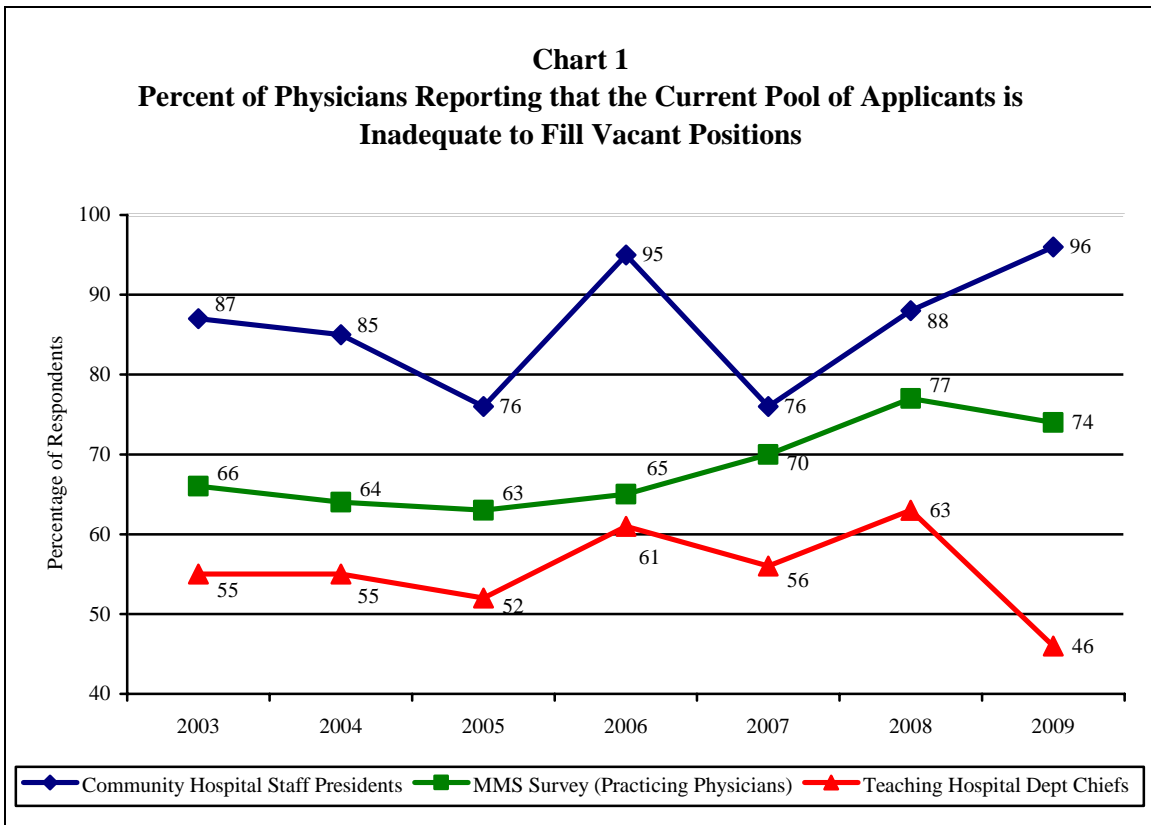
- Forty-two percent of practicing physicians were dissatisfied or very dissatisfied with the current physician practice environment. Since 2002, nearly one-half of the physicians surveyed have consistently responded that they are very dissatisfied or dissatisfied with the Massachusetts practice environment.
- Forty-four percent of physicians said they are dissatisfied or very dissatisfied with the number of hours spent on patient care versus administrative tasks. However, more than half of family medicine physicians (59%), internal medicine physicians (56%), and orthopedic physicians (56%) reported being very dissatisfied or dissatisfied with this trade-off in hours.
- One of the most disconcerting conclusions from the survey data is that one out of four physicians currently practicing in Massachusetts indicated that they are contemplating a career change because of the current practice environment in Massachusetts.
- Overall, 16% of practicing physicians would not choose medicine as a profession again considering the current practice environment. One in four neurosurgeons (29%), orthopedic surgeons (27%), and general surgeons (24%) would not choose to practice medicine again, while one in five family medicine physicians (20%) would choose another profession.
- More than half (57%) of the practicing physicians surveyed indicated that they view their current income levels to be very non-competitive/non-competitive when compared to their specialty counterparts in other states. Eighty-five percent of practicing physicians believe that over the next five years their salary levels will either decline or remain the same.
- Nearly one in five (18%) practicing physicians are contemplating a move out of state due to the current practice environment.

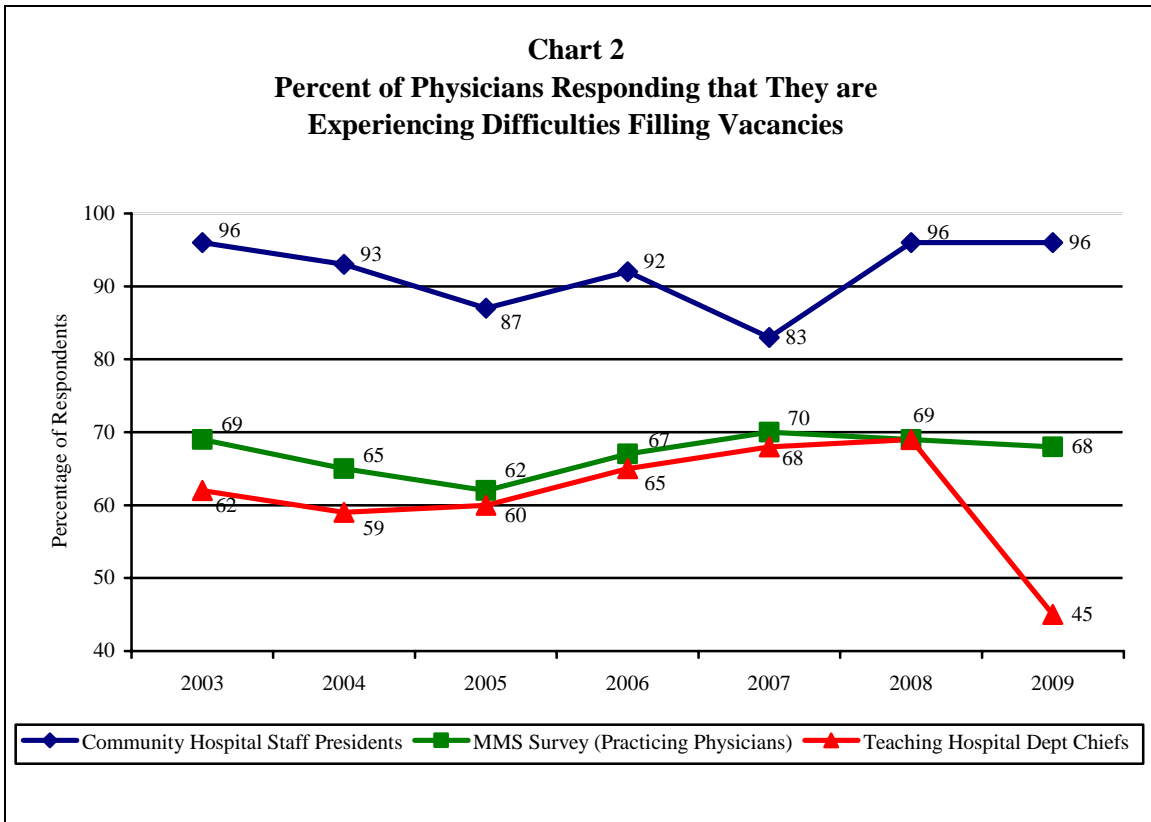
IV. Evaluating Physician Recruitment

In previous MMS Physician Workforce Studies, a wide range of comments have been made about the inadequacy of the current pool of physicians from which to recruit physicians. Among physician respondents, the factors constraining the physician pool include

noncompetitive salaries, early retirement, dissatisfaction with the work environment, and high professional liability fees. According to data from the Program Directors of Massachusetts Residents and Fellows Survey, there is supporting data that one-half of the residents and fellows trained in Massachusetts medical schools prefer to pursue their careers elsewhere.

Charts 1 and 2 below include trend data from the Practicing Physician Survey, the Department Chiefs of Teaching Hospitals Survey, and the Medical Staff Presidents of Community Hospitals Survey, three surveys included in the MMS Workforce Study. Chart 1 provides data on the inadequacy of the current pool of physician applicants while Chart 2 provides data on the percentage of physicians experiencing difficulty filling vacancies.





The survey data in these two charts indicate that there are structural labor market problems inherent in the operations of Community Hospitals. Specifically, the overwhelming majority (96%) of community hospital medical staff presidents responded that the current pool of physicians is inadequate and that they are experiencing difficulties filling vacancies. The recent sharp decline in the proportion of Department Chiefs in Teaching Hospitals reporting difficulty in filling vacancies may reflect sampling variation, rather than a substantial improvement in labor market conditions.

Given the labor market problems indicated in the findings from the Medical Staff Presidents of Community Hospitals survey, a more detailed analysis of the structural problems Community Hospitals are facing may be seen when the survey data are disaggregated by specialty. The results are shown in Table 3.

Table 3
Physician Specialties with Shortages Identified by
Medical Staff Presidents of Community Hospitals

Specialty	Percent Identifying Specialty Shortages at Their Hospital	
	2009	Mean 2003-2008
Anesthesiology	13	34
Cardiology	21	25
Dermatology*	33	32
Emergency Medicine	21	13
Family Medicine	58	34
Gastroenterology	17	32
General Surgery	50	35
Internal Medicine	75	45
Neurology*	29	32
Neurosurgery	13	38
OB/GYN	29	28
Oncology*	29	24
Orthopedics	38	34
Pediatrics	4	9
Psychiatry	25	31
Radiology	17	27
Urology**	29	30
Vascular Surgery	21	20
Average	29%	29%

* 2008, 2009 data only

** 2007-2009 data only

Two interesting conclusions are readily apparent from these responses:

- First is the dramatic increase in the 2009 percentage responses in three specialties highlighting that shortages exist. These three specialties were:
 - Internal Medicine
 - Family Medicine
 - General Surgery

- Second, at the other end of the distribution there seems to be some lessening in the shortages of the labor market conditions in 2009 vis-à-vis the 2003-2008 survey averages for the following six specialties:
 - Anesthesiology
 - Gastroenterology
 - Neurosurgery
 - Pediatrics
 - Psychiatry

- Radiology

V. Regional Disparities across the Principal Urban Labor Markets in Massachusetts

The geographic distribution of medical care facilities and healthcare professionals and the state of local physician labor markets clearly impact the provision of medical care. In earlier reports, when analyzing the findings of the Practicing Physician Surveys, we disaggregated the survey data into five labor market areas based on the locations of the facilities and physicians. This year we included an additional analysis of urban areas by primary care specialty. However, a limited sample response from Pittsfield (Berkshire County) from primary care physicians meant that only four of the five originally analyzed areas could be included in this year's report. These include:

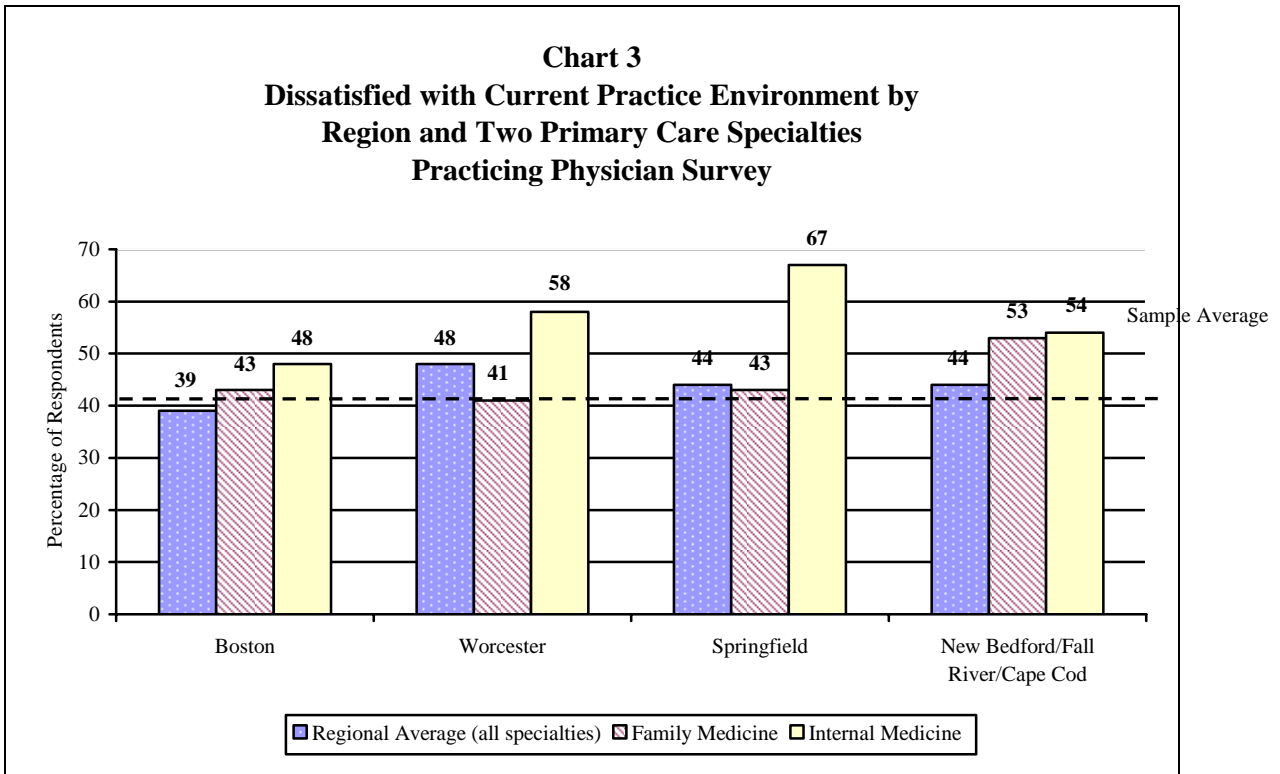
- Boston metropolitan area
- New Bedford/Fall River/Barnstable County (Cape Cod)
- Springfield urban area
- Worcester urban area

These geographic regions are defined by the metropolitan statistical areas (MSA) used by the Dartmouth Atlas on Health Care methodology.

In this regional analysis we include aggregate data for a composite measure of the eighteen specialties. This year we broaden the analysis to highlight the responses for two of the very important primary care specialties—family medicine and internal medicine. Unquestionably, these two specialties are now operating in the most stressed labor markets. Therefore we are particularly interested in developing a better understanding of the urban and regional dimensions of their local labor markets as well as their findings in comparison to the survey sample as a whole.

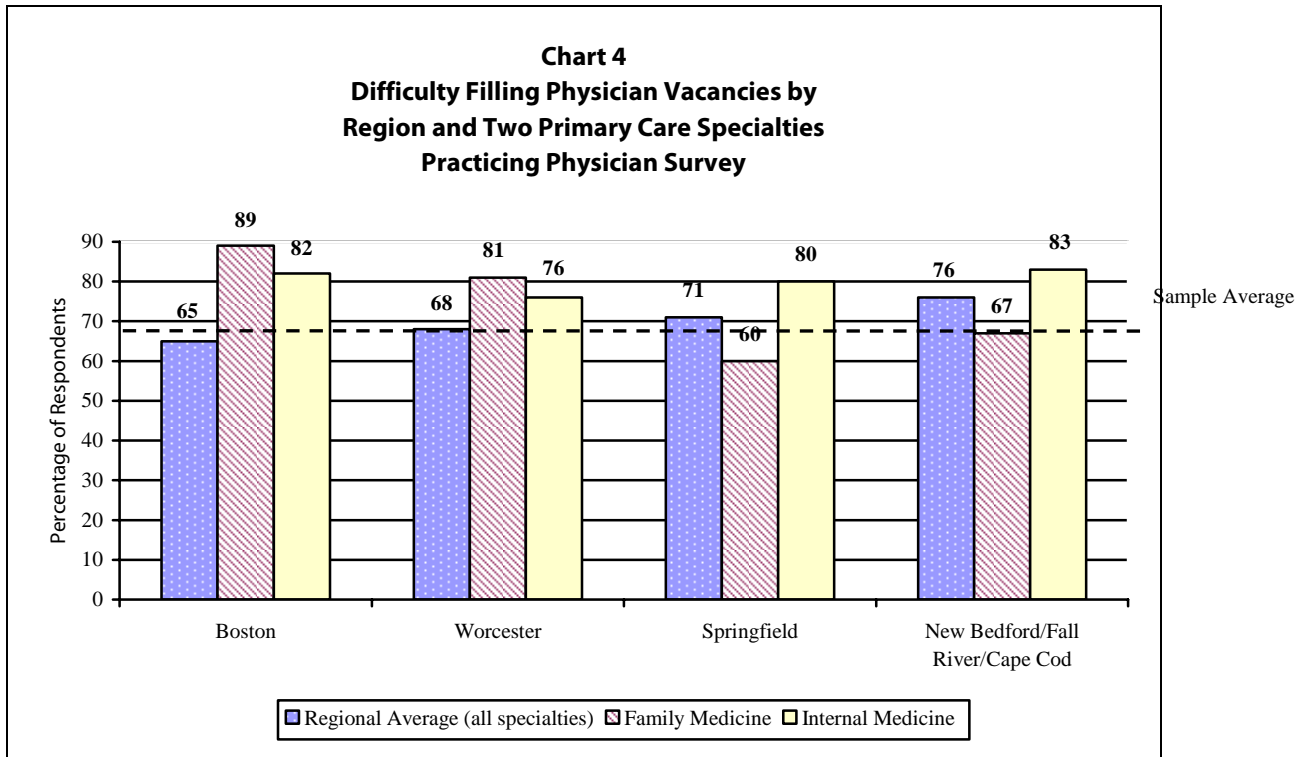
For each of the four areas, we show the average response rates for all eighteen specialties in aggregated form as the “regional average (all specialties)” along with the specific responses for the two primary care specialties. In each chart and table, we have also shown the total sample averages for responses from physicians across the state as a whole. In the charts, sample average is represented by a dotted horizontal line.

The relevant survey responses for those physicians who expressed dissatisfaction with the current practice environment are highlighted in Chart 3.



The first conclusion drawn from this analysis is that measures of physician dissatisfaction among all physicians in Boston, Worcester, Springfield, and New Bedford/Fall River/Cape Cod are roughly similar ranging from 39% dissatisfaction in the Boston area to 48% in Worcester. Second, family medicine physician dissatisfaction is relatively similar across regions ranging from 41% in Worcester to a high of 53% in the New Bedford/Fall River/Cape Cod region. Third, in all four regions, the percent of internal medicine physicians expressing dissatisfaction with the current practice environment is well above the sample average for all physicians. The ratio is particularly high in Springfield where two-thirds (67%) of internal medicine physicians are dissatisfied with the current practice environment.

Responses to the survey question concerning the degree of difficulty in filling vacancies are shown in Chart 4.

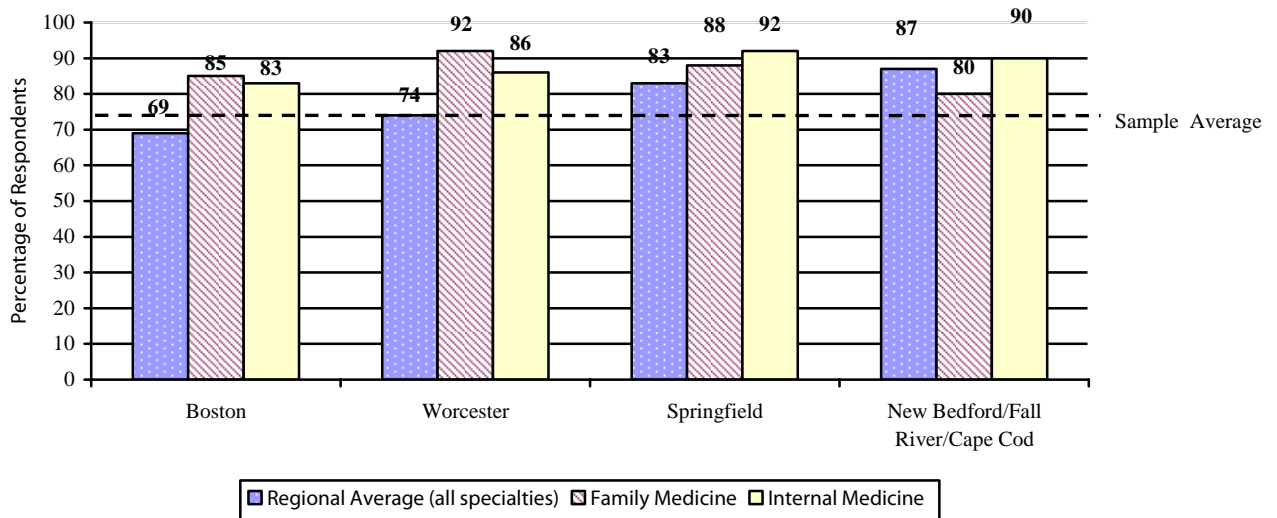


There are three important findings to consider in this regional analysis of physician vacancies:

- First are the modest regional disparities across the composite responses for all eighteen specialties. The Springfield and New Bedford/Fall River/Cape Cod areas are slightly above the sample average. Across the four urban labor markets, two-thirds to three-fourths of all physicians surveyed responded that they encountered difficulty in filling their job vacancies. Response rates in this high range can only describe labor markets that are at least somewhat stressed, and physician shortages are likely to be commonplace.
- Second is that physician recruitment for family medicine physicians in the Springfield and New Bedford/Fall River/Cape Cod areas seem to be somewhat less severe than in the other two urban areas. There are relatively high responses in terms of the degree of difficulty in filling existing vacancies for family medicine physicians in the Boston and Worcester urban areas. While there are undoubtedly a number of reasons for this, higher practice costs in these areas may be a factor.
- Third is that regional labor markets for internal medicine are stressed across all four regions, including the Boston area. More than three-fourths of internal medicine physicians in all areas cited difficulty in filling job vacancies.

The adequacy of the existing labor pool from which to recruit from the perspective of practicing physicians was also examined in this year's study. The survey results are shown in Chart 5.

**Chart 5
Current Pool of Physician Applicants Inadequate by
Region and Two Primary Care Specialties
Practicing Physician Survey**



The response rates for the family medicine and internal medicine physician specialties, in most cases, follow a consistent pattern of being above the total sample and their respective urban composite specialty rates. Clearly these findings fit generally with the earlier observation that these two specialties are indeed operating in critical or severe labor markets across these four urban labor market areas. However, it is interesting to note that, in the New Bedford/Fall River/Cape Cod area, the percentage of responding physicians indicating that the current pool of family medicine applicants was inadequate was lower than for internal medicine applicants and applicants in all specialties combined.

VI. Conclusions and Policy Considerations

The current and long-term shortages in the physician labor markets will continue to deteriorate if not addressed as Massachusetts continues its efforts to achieve near universal health care for its residents. MMS' eighth annual Physician Workforce Study again identifies serious concerns in many specialties, including primary care. The following policy recommendations address many of the key findings from the 2009 MMS Physician Workforce Study.

Recommendations

Work with stakeholders to advocate for appropriate physician workforce policies within Chapter 305, including policies that address the emerging health care payment reform initiatives.

Support physicians in Massachusetts regarding their needs, in order to successfully transition to a new payment model. If physicians feel practice viability is unsustainable under a new payment system, Massachusetts may experience further recruitment and retention problems.

Reduce barriers to the recruitment and retention of physicians. This includes reducing medical debt and easing the impact of the high practice costs in Massachusetts.

Work with stakeholders to create a practice environment that:

- significantly reduces administrative burden allowing for more patient care;
- enables better coordination of care across specialties and between inpatient and outpatient settings;
- supports the use of electronic health records (EHRs), registries and timely accurate data for improving care;
- improves the current professional liability environment and;
- encourages a healthy balance of work and non-work activities, including implementation of appropriate support for practice viability.