HOD ACTION: Council on Medical Education Report 3 adopted as amended and the remainder of the report filed.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 3-I-08

Subject: Barriers to Primary Care as a Medical Career Choice

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Referred to: Reference Committee K
(Lynn M. Kirk, MD, Chair)

Resolution 601 (I-07), "Barriers to Primary Care as a Medical Career Choice," which was submitted by the Mississippi Delegation and adopted as amended, asked that our American Medical Association explore the barriers to primary care medicine as a career choice and the impact of these barriers on the profession of medicine as a whole and on access to health care in the United States, and report back at the 2008 Interim Meeting its findings and plan of action (Policy D-200.983, AMA Policy Database).

This report will: (1) describe physician selection of primary care practice, including the initial choice of a primary care specialty; (2) identify barriers impacting the choice of a primary care specialty and primary care as a field of practice; (3) summarize current factors that have the potential to overcome the barriers and enhance selection of primary care practice; (4) review current AMA policy and identify gaps that should be filled; and (5) suggest strategies for collaborative action.

For purposes of this report "primary care" physicians are defined according to AMA policy as family physicians, general internists, general pediatricians, and obstetricians-gynecologists (Policy H-200.997). Further, AMA policy states that

> Primary care consists of a broad range of personal medical care (preventive, diagnostic, palliative, therapeutic, curative, counseling and rehabilitative) in a manner that is accessible, comprehensive, and coordinated by a licensed MD/DO physician over time. (Policy H-200.969).

While data related to obstetrics-gynecology will be included in the background, most references consulted for the report include only family medicine, general internal medicine, and general pediatrics as the primary care (generalist) disciplines.

Participation in Primary Care

There are two general decision points related to eventual primary care practice that will be considered in this report. The first is choosing a residency position in a specialty defined above as primary care. The second is the decision to enter and remain in practice in these specialties.

Entry into a Primary Care Residency

Interest in pursuing the four specialties defined by the AMA as "primary care" has varied over time, especially among US medical school graduates (see Table 1 in the Appendix comparing the percentage of positions in the National Resident Matching Program (NRMP) Match filled by US graduates in 1992, 1996, 2000 and 2008). For those years, the percent of US graduates choosing

family medicine declined from 73% of positions filled by US graduates in 1996 to 44% in 2008. Also for those years, the fill rates for US graduates in internal medicine varied from 55-59%, for primary care internal medicine varied from 59-63% (for 1996, 2000, and 2008), for obstetrics-gynecology varied from 72-86%, and for pediatrics varied from 64-77%. Between the benchmark years, the number of positions offered through the match in family medicine and primary care internal medicine have decreased. While US graduates' interests varied across specialties, in 2008 the overall fill rate for positions through the National Resident Matching Program (NRMP) was 90% or higher in all the primary care specialties, due to international medical graduates entering into positions unfilled by US graduates. The initial fill rates for residencies in internal medicine and pediatrics do not, however, take into account the numbers of individuals who eventually will subspecialize.

Entry into Practice in a Primary Care Specialty

Entry into a residency in a primary care specialty does not necessarily mean that the individual will enter practice as a generalist physician. The percentage of internal medicine residents who choose to subspecialize increased from 52% in 1995 to 62% in 2005.[1] For pediatrics, subspecialization rose from 27% in 1995 to 42% in 2005.[1] Recent data indicated that 55% of internal medicine residents and 39% of pediatric residents completing training in the 2006 academic year had entered subspecialty training in the 2007 academic year.[30] These figures likely represent a floor. For example, in a recent national study of fourth-year medical students, few of those who were entering residencies in internal medicine expressed interest in general internal medicine.[31]

The availability of subspecialty training opportunities in pediatrics and internal medicine is increasing. The number of first-year subspecialty training positions has been increasing in pediatrics (from 796 in 1999 to 1205 in 2006)[32] and in internal medicine (frm 3257 in 1999 to 3784 in 2006).[33]

The Need for Physicians in Primary Care Practice

Many reports and publications agree that the aging of the population and the increased incidence of chronic disease will result in an increased need for primary care physicians who provide care to adults. For primary care physicians in general or specific primary care disciplines, shortages have been reported or are anticipated in the near future based on population growth and increasing need.[1-4] For example, deficits of 35,000 - 40,000 adult generalists have been projected by 2025.[1]

Absolute numerical projections of future need for primary care physicians are complicated by the current geographic maldistribution, as well as the current number of uninsured and underinsured individuals in the US. For example, the introduction of a requirement for health insurance in Massachusetts appears to be exacerbating an existing shortage of primary care physicians in that state.[5-6] Demand for primary care physicians will only increase as more of the US population is covered by health insurance.

<u>Barriers to the Selection of a Primary Care Specialty</u>

There are a number of general factors that have been cited as barriers to physicians initially choosing a primary care specialty.

Lifestyle Factors

In the 1990s, the literature on specialty choice began to include "lifestyle" factors as important determinants. Controllable lifestyle has been defined to include such factors as leisure time (time for family and activities outside of work) and predictable work hours.[7] About 7300 fourth-year medical students responded to a question in the 2007 Association of American Medical Colleges Medical School Graduation Questionnaire (AAMC GQ) about the importance of lifestyle in determining their specialty choice. Almost three-quarters of respondents noted that lifestyle issues had at least a moderate influence on their specialty choice (31% of respondents reported that lifestyle had a strong influence on their choice and 40% responded that lifestyle had a moderate influence).[8]

In general, primary care specialties (family medicine, general internal medicine, general pediatrics) are classified as having an "uncontrollable"[9] or an "intermediate" lifestyle,[7] as opposed to specialties such as radiology, dermatology, and emergency medicine, which are classified as "lifestyle friendly."[7]

Practice-related factors, such as increases in documentation requirements and productivity pressures, have had a negative impact on work-life balance and on physician satisfaction with practice. The amount of time available for primary care physicians to interact with individual patients has decreased and the overall workload has increased.[25] This, coupled with reimbursement limitations (see Anticipated Income), acts as a significant barrier.

Debt Level/Anticipated Income

Medical student debt continues to rise. Data from US medical schools indicated that the average debt for indebted graduates in 2007 was $126,714, a 43% increase from the debt of graduates in 2000. In 2007, about 38% of all graduates and 50% of graduates from private schools had debt over $150,000.[10]

Debt was reported to be a factor in specialty choice for a significant number of fourth-year medical students. In the 2007 AAMC GQ, about one-quarter of respondents indicated that debt had at least a moderate influence on their choice of specialty (8% reported a strong influence and 18% a reported a moderate influence.[8] However, in a recent national study of internal medicine specialty choice debt was not a major factor.[31] The conflicting findings in studies on the impact of debt likely indicate that debt interacts with other factors.

Income considerations also play a role in specialty choice decisions among medical students and residents.[11] Data on physician incomes across practice types are not readily available. For physicians in medical groups, compensation, especially starting salaries, are lower for primary care physicians.[11-12] In a 2007 national survey of primary care physicians, 45% of pediatricians, 60% of family physicians, and 67% of internists described the net income from their practices as "disappointing."[13] The impact of anticipated income on specialty choice, independent of other factors, is not clear. In a survey of medical students at two institutions,[7] students choosing general pediatrics and family medicine were significantly more likely to value lifestyle factors over income. In the 2007 AAMC GQ, about half of respondents stated that income had at least a moderate influence in their specialty choice (12% of respondents reported that salary expectations had a strong influence and 39% that salary had a moderate influence).[8] The interaction of debt levels and income expectations in specialty choice is complex, but likely important.

Admissions and Educational Opportunities

Admissions criteria and the educational opportunities provided during medical school have an impact on the overall percentage of students choosing primary care specialties. In a study of primary care physicians, around 40% had decided to pursue primary care before medical school, yet this preference may not be recognized in admissions criteria.[34] In addition, educational opportunities that have been shown to be influential in influencing primary care career choice, such as through Area Health Education Centers (AHECs) and Title VII of the Health Professions Education Assistance Act[34] have experienced reduced funding (see Council on Medical Education Report 1-I-08, Effectiveness of Strategies to Promote Practice in Underserved Areas).

Access to Role Models/Specialty Prestige

Medical students consider role models and mentors to be a major factor in their choice of specialty. In the 2007 AAMC GQ, about three quarters of respondents reported that mentors had at least a moderate influence (42% of respondents considered that mentors had a strong influence and 33% that mentors had a moderate influence).[8] There has been limited availability of primary care role models within academic medical centers where the primary care specialties seem to suffer from lower prestige.[14] Primary care mentors may be found among the community physicians who serve as preceptors for medical students. However, the availability of these physicians to participate in teaching is decreasing (see Council on Medical Education Report 2-I-08, "Update on the Availability of Clinical Training Sites for Medical Student Education"). The absence of appropriate role models is likely a cause of the loss of interest in primary care as students proceed through medical school.[4,14]

In summary, the initial choice of whether to pursue a primary care specialty and the subsequent choice of whether to remain in a primary care practice (such as general internal medicine and general pediatrics) is influenced by a variety of factors. Such things as lifestyle and work issues, income needs and expectations, and perceptions of the specialty currently to act as negative influences. These all will need to be addressed in order to overcome these barriers.

<u>Current Circumstances and Initiatives for Change</u>

Enhancing interest in primary care requires overcoming the forces that have a negative impact. The following illustrates some current proposals and recommendations, as well as circumstances that may help to overcome the previously-identified barriers.

Addressing Medical School Debt in the Context of Primary Care Practice

There are longstanding scholarship and loan repayment programs designed to stimulate interest in primary care, especially related to practice in underserved areas.[15] Programs have been established at the federal, state, community, and institutional level. Such programs will be discussed in more detail in Council on Medical Education Report 1-I-08, "Strategies to Promote Physician Practice in Underserved Areas."

For most medical students educational costs continue to increase and debt continues to rise. Many of the scholarship and loan repayment programs only apply to primary care physicians who choose to practice in underserved areas. It is encouraging that some newer approaches are emerging. For example, some medical groups are using loan repayment as a recruitment tool for primary care physicians (see Primary Care Reimbursement). Local and regional programs are

showing promise for both recruitment and retention of primary care physicians to underserved areas.

Primary Care Compensation

Since the first implementation of the resource-based relative-value scale, relative value units per Medicare beneficiary have grown substantially, but this growth has not been distributed evenly across specialties.[29] There have been many calls to increase reimbursement for primary care services, for example, under Medicare. The June 2008 Medicare Payment Advisory Commission (MedPAC) report to Congress "Reforming the Delivery System" noted that primary care services are undervalued. The report recommended that a "budget neutral payment adjustment" should be made for "primary care services billed under the physician fee schedule and furnished by primary care focused practitioners."[16] The report recommended that adjustments should be made for a subset of E&M services within the statutory definition of primary care."[16-17] Changes such as these to the RVUs used in Medicare have been cited as important to address the reimbursement disparity between primary care and specialist physicians.[18-19]

The AMA/Specialty Society RVS Update Committee (RUC) has been active in attempting to address the issue of primary care reimbursement. Board of Trustees Report 14 from the 2008 Annual Meeting, "The RUC: Recent Activities to Improve the Valuation of Primary Care Services," summarized the improvements to E&M payment in 2007 due to the RUC's efforts. There are still important barriers to be overcome, however. In an AMA survey of the use of the RBRVS by non-Medicare payers, payers applied the highest conversion factors to surgery and the lowest to primary care.[20] Medicare has yet to cover care coordination services, described by the CPT Editorial Panel and valued by the RUC. A decision to provide payment for these services, such as telephone calls, team conferences, and counseling would directly benefit primary care physicians and their patients.

There are some preliminary but encouraging signs related to primary care physician income, especially for physicians practicing in or employed by groups.[20] Recent reports note increasing signing bonuses for employed primary care physicians, as well as loan repayment opportunities offered as a benefit.[21]

Practice Models

The issue of work-life balance within the primary care specialties is beginning to be addressed in several ways. These include various approaches to reorganizing how care is delivered.

There has been considerable discussion within and across primary care disciplines directed at conceptualizing the delivery of primary care services. For example, the "patient-centered medical home" model is being pilot-tested through private payers (United Health Group) and in Medicaid (North Carolina Medicaid medical home program).[16] A three-year medical home Medicare demonstration project will begin on January 1, 2009 in rural, urban, and underserved areas in up to eight states. The RUC has provided comments to the Centers for Medicare and Medicaid Services (CMS) related to the development of reporting mechanisms and underlying data that CMS will use in determining payments in the demonstration project.[28] The RUC was congressionally mandated to develop a case management fee and valuation.[28] Described in detail in Council on Medical Education Report 4-A-08, "Educational Implications of the Medical Home Model," the medical home model seeks to deliver coordinated care through the ongoing relationship of a patient and a physician trained to provide first contact and ongoing care. The general concept of the medical home has been endorsed by the American Academy of Family

Physicians, the American Academy of Pediatrics, and American College of Physicians, and the American Osteopathic Association.

The hospitalist movement originated for a number of reasons, including time pressures on primary care physicians.[22] Various surveys of physicians[23-24] have showed somewhat positive results related to satisfaction with hospitalist systems and ultimate effects on primary care physician workload.

Use of information systems/electronic health records, protocols, decision-support systems, and other readily accessible tools have been advocated as means to mitigate the complexity of managing patients with acute and chronic conditions over time.[25] Such systems, functioning well, could enhance efficiency for an individual physician and a physician group, but evidence in support of the benefit for physicians is lacking. However, the widespread adoption of such technology has been hampered by high monetary and time costs for system implementation, lack of system interoperability, and lack of physician familiarity and experience.

In summary, while there are some encouraging signs, there are a number of gaps in all the cited areas. Additional progress is needed to promote the selection of primary care practice among physicians.

Current American Medical Association Policy and Directives for Action

Our AMA has general policy in support of an adequate primary care workforce. For example, selected policies include enhancement of:

- educational opportunities, including federal support for expansion of training opportunities at the medical school and graduate medical education levels (Policy H-200.997), curriculum offerings (Policies H-200.969, 200.975), and availability of role models for trainees (Policy H-200.973);
- reimbursement and recruitment efforts (Policy H-200.997); and
- financial aid options for students choosing primary care (Policies H-200.956, H-200.973, H-200.975)

Such activities should be undertaken in collaboration with primary care specialty groups (H-200.977, H-200.997).

Conclusions and Recommendations

There is growing evidence that access to care for many Americans is being negatively impacted by a shortage and maldistribution of primary care physicians.[26-27] Much work remains to be done to remove the current barriers to the choice of a primary care career. AMA policy, while general, supports many of the initiatives that are needed. Therefore, the Council on Medical Education recommends that the following action plan be adopted and that the remainder of this report be filed:

1. In collaboration with relevant specialty societies, that our AMA take the following actions related to reimbursement for primary care physician services:
    a. Continue to advocate for the recommendations from the AMA/Specialty Society RVS Update Committee (RUC) related to reimbursement for E/M services and coverage of services related to care coordination, including patient education, counseling, team meetings and other functions.

b. Work to assure that private payers fully recognize the value of E&M services, incorporating the RUC recommended increases adopted for the most current Medicare RBRVS. (Directive to Take Action)

2. In collaboration with relevant specialty societies, that our AMA study the following related to new models of provision of primary care services (such as the medical home concept):
   a. the impact on primary care physician work-life balance and satisfaction,
   b. the growth/expansion of such models in the public and private sectors,
   c. the availability of expanded public- and private-sector funding at the national and local levels to support implementation of such models.
   d. the impact on primary care physician compensation
   The results of the study should be reported no later than the 2010 Annual Meeting of the AMA House of Delegates. (Directive to Take Action)
   e. options that explore additional funding.

3. That our AMA support existing programs and advocate for the introduction of new programs in the public and private sectors that decrease the debt load of physicians who choose to practice in a primary care specialty. (Directive to Take Action)

4. That our AMA continue to monitor trends in the choice of a primary care specialty and the availability of primary care graduate medical education positions. (Directive to Take Action)

5. That our AMA collaborate with appropriate organizations to support the development of innovative models to recruit medical students interested in primary care, to train primary care physicians, and to enhance the image of primary care practice. (Directive to Take Action)

6. That our AMA collaborate with appropriate organizations in urging medical schools to develop policies and to allocate appropriate resources to activities and programs that encourage students to select primary care specialties, including:
   a. admissions policies
   b. utilization of primary care physicians in the roles of teachers, mentors, and role models, and
   c. educational experiences in community-based primary care settings.
   (Directive to Take Action)

Fiscal Note: $1000 for advocacy activities and data gathering.

APPENDIX

TABLE 1

	Positions Filled Through the Match		
	Number of Positions	% Filled with US Graduates	Total % Filled Through the Match
1992			
Family Medicine	2486	58.2	67.5
Internal Medicine*	4773	55.9	85.4
Obstetrics-Gynecology	1109	85.2	96.6
Pediatrics*	2039	64.2	82.1
1996			
Family Medicine	3137	72.6	90.5
Internal Medicine*	4654	59.0	94.0
Primary Care Internal Medicine	566	59.9	88.7
Obstetrics-Gynecology	1125	86.0	96.9
Pediatrics*	2017	76.7	97.5
2000			
Family Medicine	3183	57.1	81.2
Internal Medicine*	4810	58.2	93.4
Primary Care Internal Medicine	473	59.4	94.1
Obstetrics-Gynecology	1119	75.1	92.1
Pediatrics*	2114	76.4	95.2
2008			
Family Medicine	2636	43.9	90.6
Internal Medicine*	4858	54.8	97.8
Primary Care Internal Medicine	264	62.9	96.2
Obstetrics-Gynecology	1163	72.1	99.0
Pediatrics*	2382	67.6	96.3

* categorical only

Data from the National Resident Matching Program

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