HOD ACTION: Council on Medical Education Report 4 adopted and the remainder of the report filed.

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 4-A-10

Subject: Educational Strategies to Promote Physician Practice in Underserved Areas

Presented by: Susan Rudd Bailey, MD, Chair

Referred to: Reference Committee C
(Floyd A. Buras, Jr., MD, Chair)

Policy D-200.980[2], "Effectiveness of Strategies to Promote Physcian Practice in Underserved Areas," (AMA Policy Database) asks that our American Medical Association (AMA), through its Initiative to Transform Medical Education, study the following areas:

(a) medical school admissions policies designed to attract medical students who will practice in underserved areas or with underserved populations;
(b) the availability of educational opportunities for medical students and residents in rural and urban underserved areas; and
(c) the efficacy of community-based initiatives such as Area Health Education Center programs and their impact on the supply of physicians to the area.

This report provides a summary of the evidence that these three related strategies can encourage physicians to practice in underserved areas and to provide care to underserved populations.

THE EFFECTS OF MEDICAL SCHOOL ADMISSIONS POLICIES AND PRACTICES

The Eighteenth Report of the federal Council on Graduate Medical Education (COGME), titled New Paradigms for Physician Training for Improving Access to Health Care, recommended that:

> (T)here must be an incentive for medical schools to admit minority students as well as students from underserved urban and rural areas. This would increase the likelihood that graduates would return home to practice medicine.[1, p.6]

There is evidence in support of the importance of premedical characteristics, especially rural background, on the choice of a rural practice location.[2] For example, in a study of physicians practicing in rural Pennsylvania, it was found that growing up in a rural area was the most important independent predictor of their decision to engage in rural practice.[3] Medical school programs that selectively recruit students from rural areas, therefore, have a significantly higher percentage of graduates in rural practice than the average.[4] This outcome is typically, however, also linked to also providing educational experiences in rural areas.[5]

The Institute of Medicine report *In the Nation's Compelling Interest: Ensuring Diversity in the Health-care Workforce*, stated that:

> (R)acial and ethnic minority health-care clinicians are significantly more likely than their white peers to serve minority and medically underserved communities…[6, p29]

For example, in a study of fourth-year medical students responding to the Association of American Medical Colleges Medical School Graduation Questionnaire in 2003 and 2004, students from groups typically underrepresented in medicine were significantly more likely to plan to serve the underserved.[7] One example is the Drew/UCLA program that is a track within the UCLA/David Geffen School of Medicine jointly sponsored by UCLA and the Charles R. Drew University of Medicine and Science. Among its goals is to "…train physicians and allied health professionals to provide care with excellence and compassion, especially to underserved populations." In a study of the practice locations of students graduating from the UCLA/Drew program, underrepresented race/ethnicity was an independent predictor of future practice in a (primarily urban) disadvantaged area. It was also the case that program graduates who were not from racial and ethnic groups underrepresented in medicine also were more likely to practice with disadvantaged populations than their peers in the regular UCLA curriculum.[8]

In summary, it appears that admissions policies independently and in association with targeted educational experiences act to increase the likelihood of physician practice in an underserved area or with an underserved population.[9,10]

THE EFFECTS OF EDUCATIONAL OPPORTUNITIES

Various types of training experiences have been shown to have an impact on the intention to or the decision of physicians-in-training to enter practice in rural or urban underserved areas.

Experiences During Medical School

Experiences during medical school may be of short duration, for example, a single clerkship or preclinical preceptorship in a rural or underserved area, or of longer duration, such as longitudinal third-year clinical experiences that include many clinical disciplines.

For example, the West Virginia Rural Health Partnerships program included opportunities for medical students to spend at least 12 weeks in a rural setting. An evaluation of student response to the experience revealed increased awareness of social responsibility and interest in service to indigent populations.[11] Even a relatively short (four-week) rural primary care clerkship led to more positive perceptions of rural practice.[12] Short-term experiences may not alone lead to an actual decision to practice in an underserved area.

Longitudinal clinical experiences during medical school seem to have the greatest impact on eventual practice, especially when coupled with admissions policies that focus on relevant applicant characteristics. Participation in the Minnesota Rural Physician Associate Program (RPAP), a longitudinal third-year preceptorship program in a rural area, resulted in 59% of participants choosing rural practice as compared with 18% graduates of the same medical school who did not participate.[13] Admission to the RPAP takes into account applicant demographic characteristics (such as rural background) and motivation for rural practice.

Another example with a positive outcome is the Community Partnerships Program at East Tennessee State University. In this program, the university partnered with two rural counties to offer interdisciplinary community-based educational experiences for medical and other health professions students over a three-year period. Graduates were more likely to demonstrate interest in and to eventually deliver care to the underserved.[14]

Experiences During Residency Training

Rural training tracks were created to encourage and support family medicine residents in entering rural practice. These programs have consisted of one year spent in an urban setting and two years in a rural location.[9] In an analysis of program outcomes, about three-quarters of graduates of these programs were practicing in a rural area.[15]

A University of Wisconsin urban underserved family medicine training track was created in Milwaukee, with the goals of recruiting physicians from groups underserved in medicine and of educating all residents to care for urban underserved populations. The curriculum of the program provided education in urban underserved medicine as well as general family medicine content. The outcomes were that more physicians from minority groups graduated from the track and that more track graduates entered practice in an underserved area than did graduates from the traditional program.[16]

THE ROLE OF AREA HEALTH EDUCATION CENTERS (AHECS)

The national AHEC program was established in 1972 as a means to address shortages and maldistribution of primary care physicians and other health professionals. Among the strategies to accomplish this goal, AHECs have been instrumental in providing access to community-based training in primarily rural underserved areas for medical and health professions students and resident physicians.[17] As of 2005, there were 46 AHEC Programs and 180 affiliated AHECs. The AHEC Programs typically are statewide and the affiliated AHECs are regional, serving defined areas within states.[18]

AHECs have played an important role in the clinical education of medical students and resident physicians. In 2001, about 20% of all medical students received part of their clinical training at an AHEC site.[18] Experiences in AHEC sites span the medical education continuum, from a first-year primary care preceptorship at the University of Florida[19] through the South Carolina AHEC family practice residency program.[20]

As described previously, experiences in rural locations contribute to the likelihood that physicians will practice in rural areas. More specifically, experiences associated with an AHEC at the residency level resulted in a number of program graduates practicing in medically-underserved areas.[20] In-state retention of family medicine graduates tends to be higher in AHEC-based rather than academic health center-based residencies.[17]

EXISTING AMA POLICY

AMA policy strongly supports the development or expansion of educational opportunities for medical students and resident physicians in rural and inner city areas, as a means to encourage eventual practice in these underserved locations (Policies H-200.972, #3; H-465.988, #1,2). Existing policy also recommends that health professions curricula should emphasize the needs of underserved populations (H-200.987, #1). There is no policy on admissions policies and practices or policy recommending linking the admissions process with educational activities for medical students and residents in underserved areas.

CONCLUSION AND RECOMMENDATIONS

Admissions policies and practices directed at attracting students and resident physicians from rural or urban underserved areas can result in physicians more likely to provide care to the underserved. Educational opportunities for medical students and resident physicians in underserved areas or with underserved populations, independently or linked to admissions policies and practices, also show a positive outcome. Combining targeted admissions with longitudinal educational experiences has the best possibility of achieving the desired outcome.

Based on the preceding analysis of published information, the Council on Medical Education recommends that the following be adopted and that the remainder of this report be filed:

1. That our American Medical Association (AMA) encourage medical schools and residency programs to consider developing admissions policies and practices and targeted educational efforts aimed at attracting physicians to practice in underserved areas and to provide care to underserved populations. (New HOD policy)

2. That our AMA encourage medical schools and residency programs to continue to provide courses, clerkships, and longitudinal experiences in rural and other underserved areas as a means to support educational program objectives and to influence choice of graduates' practice locations. (Directive to Take Action)

3. That our AMA encourage medical schools to include criteria and processes in admission of medical students that are predictive of graduates' eventual practice in underserved areas and with underserved populations. (Directive to Take Action)

4. That our AMA continue to advocate for funding from public and private payers for educational programs that provide experiences for medical students in rural and other underserved areas. (Directive to Take Action)

5. That section two of Policy D-200.980 be rescinded. (Rescind HOD Policy)

Fiscal Note: Less than $500.

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