REPORT OF THE COUNCIL ON MEDICAL EDUCATION

CME Report 4-A-07

Subject: Incentive Programs to Improve Access to Care in Underserved Areas

Presented by: Melissa K. Thomas, MD, PhD, Chair

Referred to: Reference Committee C (Edward C. Tanner, MD, Chair)

Resolution 810 (I-05), which was submitted by the American Academy of Pediatrics and adopted as amended by the House of Delegates, asked that our American Medical Association

> Conduct an analysis of the creative use of tax credits, student loan deferment and loan forgiveness programs, J-1 visa waivers, and practice subsidies as financial incentives to physicians for providing care in identified underserved areas.
>
> Work with state medical societies and other appropriate entities to identify, catalogue, and evaluate the effectiveness of incentive programs, including the J-1 visa waiver program, designed to promote the location and retention of physicians in rural and urban underserved areas and, consequently, improve patient access to health care in these areas.

Scope of Study

This preliminary report summarizes the published literature on the structure and outcomes of various public and private sector incentive programs designed to attract physicians to practice in underserved rural and urban areas. It is meant to identify gaps that will require additional research and to promote dialogue among various stakeholder groups about best practices and effective models.

Categories of Incentive Programs and Their Outcomes

A number of types of programs have been created with the explicit goal of motivating physicians to practice in underserved areas.

Educational Opportunities

Some medical schools have developed educational tracks that focus on rural primary care. For example, the Jefferson Medical College Physician Shortage Area Program (PSAP) selects applicants from small towns in Pennsylvania and links them with family medicine faculty as mentors. The students meet regularly and work clinically with PSAP faculty and typically take required family medicine and outpatient rotations in rural areas. There is a small amount of financial aid in the form of repayable loans associated with the program.[1-2] Another model of a rural educational track is a longitudinal experience where students spend much of the third year in rural communities with a preceptor and his/her colleagues. Examples include the Minnesota Rural Physician Associate Program and the New York Rural Medical Education Program.[3-4] All these programs demonstrate significant retention in primary care and rural practice, in part because of the existing interest and commitment of students they select to participate.

The Area Health Education Center (AHEC) program was established in 1972 to improve the supply and distribution of generalist physicians and other health practitioners. Since the beginning of the program, AHECs have been involved in the training of medical students and resident physicians in rural areas and have shown some success as part of the efforts to enhance workforce distribution.[5-6]

Beginning in 1978, Title VII of the Public Health Services Act has provided funding for the development of educational programs at the medical school and residency program levels, and for faculty development in generalist disciplines.[7] Data indicate that Title VII funding is associated with, and likely causally linked to, increases in the number of family physicians in rural and low-income communities.[8-9]

Scholarship and Loan Repayment Programs

Scholarship and loan repayment programs have been created in the public sector at the federal and state levels and also in the private sector. At the federal level, the National Health Service Corps (NHSC) is the largest source of funding opportunities. It has been in existence since 1970, placing primary care physicians and other health personnel in rural areas.[10] Initially, the NHSC concentrated on offering scholarships to individuals willing to commit to spending a period of time in designated underserved areas after completion of their training. Relatively low retention rates led to an increase in the NHSC use of the loan repayment option, where physicians do not have to commit to service until they are ready to begin practice and more certain of their career goals.[11] Beyond the service provided by obligated physicians, the NHSC has been shown to have additional benefits. Counties staffed by NHSC physicians also experienced an increase in non-NHSC primary care physicians.[12]

In the mid-1980s, states began to expand programs that offered financial incentives in return for service, including scholarship and loan repayment programs, loan programs, and direct financial incentive programs. Between 1990 and 1996 the number of state-based programs more than doubled.[13] A 1996 study on the outcomes of state-based programs[14] showed that physicians serving obligations to state programs were more likely to remain in practice in needier areas and care for more patients insured by Medicaid and the uninsured than non-obligated physicians. In addition, a study from Oklahoma indicated that a state-based incentive program led to higher retention of physicians in the state than did the NHSC.[15] This is likely due to the fact that state programs are utilized by and target state residents and physicians trained in the state.[16]

J-1 Visa Waiver Programs

In this type of program, international medical graduates who entered the US on the J-1 (Exchange Visitors) visa can waive the two-year home country physical presence requirement if they provide service in an underserved area.[17] The most numerically-significant example of J-1 visa waiver programs is the Conrad-30. In this, states are allotted 30 J-1 visa waiver positions (all 50 states participate).[18] Programs are run through State Departments of Health. The US Department of Health and Human Services (DHHS) also has a J-1 visa waiver program that places physicians in severely underserved health professions shortage areas.[18] Only 4 physicians were placed by DHHS in 2005, while many states regularly fill their Conrad-30 allotment.[18]

J-1 visa waiver programs have been shown to increase the availability of physicians in rural underserved areas, but do not necessarily lead to the retention of these physicians in the community.[19-21]

Tax Credits and Practice Support

A number of states have introduced tax credits for physicians practicing in rural areas. For example:

- Georgia provides a $5000 income tax credit for rural physicians.
- Montana provides a tax credit for four years from the time the physician begins practice in a rural area (with a payback requirement if the physician ceases to practice in the rural area within four years of the taxable year).
- Louisiana allows a tax credit of a maximum of $5000 per taxable year (for a maximum of five years) for physicians practicing in a small community. As with Montana, there is payback provision if the physician leaves rural practice before a specified time.
- Oregon grants $5000 in personal income tax credits to physicians practicing in rural areas or associated with specific categories of rural hospitals.

In January 2007, the Rural Physicians Relief Act of 2007, was introduced in the US Senate (S.290). This legislation offers a $1000 tax credit for each month that a physician provides service in a designated "frontier" service area, or treats a high percentage of patients from these areas.

Other types of practice-related incentives also exist. For example, geographic adjustment indices (GPIC) have been created within Medicare to limit downward cost adjustment related to practicing in rural areas. A 2005 study by the Government Accountability Office, however, found that GPICs had a negligible effect on physicians' decisions to locate in rural areas, since the impact on income was generally quite modest (typically 2-3%).[22]

The provision of locum tenens support for physicians in rural areas is another type of practice support. In 1993, the New Mexico state legislature awarded funding to the University of New Mexico School of Medicine to support primary care physicians and residents providing coverage to physicians practicing in rural/medically underserved areas. In the first three years of operation, placements occurred in 28 of New Mexico's 33 counties, with overwhelmingly positive reviews.[23]

<u>Summary and Lessons Learned</u>

There has been some evaluation of the efficacy of incentive programs. A comprehensive analysis of lessons learned from programs that provide financial support in return for service[11] showed the following:

- Unfavorable contract terms, such as low financial benefits or high penalties/service requirements, reduce medical student and physician interest in service programs.
- High concordance between the needs and interests of physicians and the characteristics of the practice site increase physician and site satisfaction and enhance retention.
- High penalties for physicians who buy-out or do not complete their obligations enhance completion but reduce satisfaction and ultimate retention. Loan repayment programs, which are designed for more mature physicians who understand their needs and career goals, have high completion rates, generally without the need for significant buy-out penalties.
- Physicians participating in state-run loan repayment programs remain in their service sites longer than comparable young physicians not in a loan repayment program remain in their first practice site.

The study concluded that retention was enhanced by placing physicians in well-run practices in communities that match with and serve their needs.

Similar findings came from a study comparing state scholarship and loan repayment programs.[14] Participants in loan repayment, direct incentive, and loan programs for residents (low interest loans that require repayment) completed their programs in over 90% of cases. In contrast, service completion rates in scholarship programs were lower (an average of 66%).

Retention rates were highest for loan repayment, direct incentive, and loan programs.[14] J-1 visa waiver programs are an important source of physicians for health shortage areas, but more analysis is needed of long-term retention.[19-20]

Recommendations

While there have been studies of the efficacy of certain types of incentive programs (especially public sector scholarship/loan repayment in return for service), a comprehensive analysis comparing all types of support programs has not been attempted. The outcomes of tax incentive and practice support programs on recruitment and retention, especially, have not been broadly studied. Also, other strategies to address workforce maldistribution, such as mandatory service for physicians, are only beginning to be explored. For example, the federal Council on Graduate Medical Education has commissioned some informational reports on the desirability and feasibility of mandatory service programs.

Based on this preliminary analysis, 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, in collaboration with state and medical specialty societies, continue to collect and disseminate information on the efficacy of various types of incentive and other programs designed to promote recruitment and retention of physicians in underserved areas. (Directive to Take Action)

2. That, based on the analysis of the efficacy of the various types of incentive programs, our AMA advocate to the federal government, the states, and the private sector for enhanced support for successful models. (Directive to Take Action)

3. That a report on the outcomes of further study and actions taken related to incentive programs to improve access to care in underserved areas be prepared for the 2008 Interim Meeting of the House of Delegates. (Directive to Take Action)

Fiscal Note: $7500 for staff time for data collection and analysis and for advocacy.

Complete references for this report are available from the Medical Education Group.