ABSTRACT

State laws enacted between 1985 and 1992 were reviewed to examine state involvement in influencing the supply and distribution of generalist physicians. Forty-seven states enacted 238 relevant laws during this period. In 1991 and 1992, 36 states enacted 98 laws, as compared with 1985 and 1986, when 8 states enacted 12 laws. Legislation addressed planning and oversight; financial incentives to institutions, students, and residents; and strategies to enhance the practice environment. A new strategy is to link funding to measurable outcomes, such as the career choices of a state medical school's graduates. Few states devoted resources to evaluate their efforts. (Am J Public Health. 1995;85:405-407)

the Supply and Distribution of Generalist Physicians, 1985 to 1992 Marc L. Rivo, MD, MPH, Tim M. Henderson, MSPH, and

Debbie M. Jackson, MA

State Legislative Strategies to Improve

Introduction

Consensus is widespread that physician work force imbalances hinder efforts to provide quality and affordable health care to all Americans.¹⁻⁴ Although attention has primarily focused on federal strategies,5 state involvement in physician work force policy began more than 50 years ago and predates federal involvement.^{6,7} Today, it appears that continued state concerns about access to primary care may be accompanied by increased legislative activity to improve the supply and distribution of generalist physicians.^{8,9} The purpose of this article is to determine the nature and magnitude of such state involvement.

Methods

Relevant state laws enacted and reports published between 1985 and 1992 were collected and analyzed as part of the Intergovernmental Health Policy Project's state legislative tracking service. In addition, key state contacts were interviewed. The data were analyzed to determine the number of laws enacted annually and the principal strategies adopted. In addition, we prepared a qualitative analysis of each state and of selected laws of particular interest (this analysis is available on request).

Results

Between 1985 and 1992, 47 states enacted 238 laws to improve generalist physician supply and distribution (Figure 1). Seven states enacted laws in 1985 and 3 in 1986, in comparison with 23 in 1991 and 25 in 1992. Eight bills were passed in 1985 and 4 in 1986, as compared with 46 in 1991 and 52 in 1992.

State legislative strategies focused on five areas: (1) planning and oversight, (2) building primary care teaching capacity, (3) student and resident loans and scholarships, (4) enhancing the practice environment, and (5) reducing licensing and malpractice barriers. The number of states enacting laws in each of the five categories between 1985 and 1992 is shown in Figure 2.

Thirty-three states enacted legislation establishing planning and oversight roles for state government. Typically, states established task forces and commissions to study the problem and provide policymakers with appropriate recommendations. The recommendations often included establishing a unit in the state health department or rural health office to implement and coordinate activities.

Thirty-three states enacted legislation providing institutional incentives to build primary care teaching capacity, particularly in underserved rural and inner-city communities. Commonly, states would target medical education funds to develop or expand family practice residencies or departments. Several state laws established or augmented federally funded Area Health Education Centers, which are part of a program that links academic health centers with community-based teaching sites around the state.

Thirty-five states enacted legislation establishing medical student and resident scholarship or loan programs. These financial incentives were used to recruit students from underserved rural or urban areas, to influence primary care specialty choice (typically defined as family practice, general internal medicine, and gen-

Marc L. Rivo and Debbie M. Jackson are with the Division of Medicine, Bureau of Health Professions, Health Resources and Services Administration, Rockville, Md. Tim M. Henderson is with the Intergovernmental Health Policy Project, George Washington University, Washington, DC.

Requests for reprints and the complete report should be sent to Marc L. Rivo, MD, MPH, Division of Medicine, HRSA, 5600 Fishers Ln, Room 9A-27, Rockville, MD 20857.

This paper was accepted September 27, 1994.

Note. The views expressed in this article are the authors' and do not necessarily reflect those of the Department of Health and Human Services or George Washington University.





eral pediatrics), and to encourage practice in a state shortage area. Commonly, local government or private sector matching funds were required.

Thirty-four states enacted legislation to enhance the practice environment for generalist physicians, particularly in underserved communities. Only five such laws were enacted prior to 1989. Strategies included recruitment and placement services, income subsidies or income tax credits, and increased Medicaid reimbursement for primary care services in underserved areas. A number of states funded more comprehensive approaches to improve health care delivery systems.

Twenty-two states enacted legislation, the majority in 1991 and 1992, to reduce administrative and legal barriers to practice. For example, states offered malpractice premium discounts and subsidies and indemnification or immunity from malpractice suits to those providing prenatal and primary care services in shortage areas.

Many states implemented multiple approaches. Eight states (Florida, Hawaii, Louisiana, Maine, Minnesota, New York, Washington, West Virginia) enacted laws targeting all five strategies, and 13 states addressed four of the strategies.

In general, few bills specified measurable goals or outcomes (e.g., increase to 50% the percentage of graduates choosing generalist careers or eliminate all primary care shortage areas by the year 2000). The enacted legislation also devoted minimal funds and little attention to evaluating the impact of the initiatives on the state's physician supply, specialty mix, and geographic distribution.

Discussion

This analysis indicates that states are increasingly concerned with and involved in improving the supply and geographic distribution of generalist physicians as part of their health care reform agendas. Recent reports suggest that state legislative activities in this area has reached unprecedented levels. In 1993, almost 300 related state bills were introduced and a record 99 became law in 40 states, a near doubling of the 1992 totals.¹⁰

However, state legislative involvement varies widely. Some states have little or no physician workforce legislation or programming. The most advanced states are beginning to accumulate and monitor data to determine physician work force needs and measure progress. More recent approaches to expand access to primary care services have focused on enhancing the practice environment for generalist physicians, as well as physician assistants and nurse practitioners, by increasing primary care reimbursement; expanding Medicaid managed care; reducing administrative, legal, and practice barriers to practice; and improving health care delivery systems. More state legislatures appear to be carefully accounting for all state support for medical education, including policies and subsidies that defray general operating costs or affect faculty practice plan reimbursement. In 1992, state support for medical education was estimated at \$3 billion, a large portion of which appears to be unrestricted.11,12

More states appear to be linking funding to specific and measurable outcomes. Minnesota, in 1992, and North Carolina, Tennessee, Washington, and Wisconsin, in 1993, enacted legislation instructing their medical schools to attain a set goal (typically at least 50%) for the desired mix of each school's graduates who select generalist careers. Such outcome-based public policy is increasing seen as good government and as applicable to the medical education system.^{13,14}

During the past year, the Council on Graduate Medical Education, Physician Payment Review Commission, and Pew Health Professions Commission each have recommended ways that states could assume a greater role in producing the physicians needed to meet their populations' health care needs.^{15–17} The apparent unprecedented state involvement in influencing the supply and distribution of generalist physicians may stimulate efforts to clarify federal, state, and private sector roles and better coordinate efforts. □

Acknowledgments

We acknowledge and appreciate the assistance of the following individuals in the study and in the preparation of this article: Richard E. Merritt, director, and Linda Lipson and Peter DiBiaso, research analysts, Intergovernmental Health Policy Project, George Washington University, and Florence Foss, policy analyst, and Paul Gilligan, biostatistician, Division of Medicine.

Copies of the complete report, "A Review of State Legislation Related to Increasing the Training, Supply, Recruitment, and Retention of Primary Care Physicians: 1985–1991," can be obtained from the authors. The report includes state-by-state legislative summaries, descriptive profiles for the five strategies, and selected state legislation.

References

- Geiger HJ. Why don't medical students choose primary care? Am J Public Health. 1993;83:315–316.
- Rivo ML, Satcher D. Improving access to health care through physician workforce reform: third report of the Council on

Graduate Medical Education. JAMA. 170; 1074–1078.

- Grumback K, Lee PR. How many physicians can we afford? JAMA. 1991;265:2369– 2372.
- Schroeder SA, Sandy LG. Specialty distribution of U.S. physicians: the invisible driver of health care costs. *N Engl J Med.* 1993;328:961–963.
- Rivo ML, Jackson D, Clare L. Comparing physician workforce reform recommendations. JAMA. 270;1083–1084.
- Mason HR. Medical school, residency, and eventual practice location: towards a rationale for state support of medical education. JAMA. 1975;233:49–52.
- Strosberg MA, Mullan F, Winsberg GR. Service-conditional medical student aid programs: the experience of the states. J Med Educ. 1982;57:586–592.
- Gamliel A, Mullan F, Politzer R, Stambler H. Availability of primary care personnel: the states speak out. *Arch Intern Med.* 1992;152:268–273.
- Donohoe EA. Physician distribution and rural health care: an overview of state legislative activity, 1984–1989. Acad Med. 1990;65(suppl):92–113.

- 10. Intergovernmental Health Policy Project. *Primary Care News.* Washington, DC: George Washington University; 1994.
- Krakower JY, Jolly P, Beran R. US medical school finances. JAMA. 1993;270: 1085–1091.
- Bernstein B, Ensminger B. It's time to fund physician shortage programs by abandoning unrestricted state subsidies to medical schools. J Health Polit Policy Law. 1983;8: 221–234.
- 13. Schroeder S. Academic medicine as a public trust. JAMA. 1989;262:803-812.
- Osborne D, Gaebler T. Reinventing Government. Reading, Mass: Addison-Wesley Publishing Co Inc; 1992.
- Council on Graduate Medical Education. Fourth Report to Congress and the Health and Human Services Secretary. Washington, DC: Health Resources and Services Administration, Bureau of Health Professions; 1994.
- 1994 Annual Report to Congress. Washington, DC: Physician Payment Review Commission; 1994.
- Pew Health Professions Commission. Primary Care Workforce 2000: Federal Policy Paper. San Francisco, Calif: Center for the Health Professions, University of California at San Francisco; 1994.