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The virtual absence of a comprehensive national physician workforce policy represents a public policy failure. We are now approaching 50 years of essentially unplanned growth in the number of physicians entering practice, well in excess of population growth and unresponsive to documented needs for primary care practitioners versus specialists. Consequently we have seen only limited improvement in either the serious geographic maldistribution of physicians or the longstanding imbalance between generalists and specialists. Over the past 15 years, numerous careful analyses have projected that the mismatch between supply and need will continue to worsen, and yet public policy makers seem largely oblivious to these warnings.

A National Physician Workforce Policy

Recent workforce policy statements from key national organizations—exemplified by a recent joint consensus position statement of six organizations including the American Medical Association and the Association of American Medical Colleges¹—encourage action. The

larger national public policy arena must take up the challenge. Key elements of the solution include a national policy making board insulated as much as possible from political special interests, direct Federal funding of medical schools and residency programs, and substantial revision of Medicare and Medicaid funding provisions to encourage residency position numbers more consistent with need.

Recent Workforce Analyses

The two papers in this issue of *Public Health Reports* (Simon et al.² and McClendon et al.³) as well as numerous other analyses, such as those by Weiner,⁴ Kindig,⁵ and COGME,⁶⁻⁸ have carefully elucidated the chronic workforce crisis. The current status can be summarized succinctly. If we seek to simply maintain the current physician-to-population ratio (approximately 200 physicians per 100,000 population), we must reduce the number of physicians by 29% overall, including 33% in non-primary care specialties and 20% in primary care

disciplines. In a managed care-dominated system, conservative estimates indicate that we must downsize further: 43% reduction overall, 52% in non-primary care specialties, and 29% in primary care.³

One could reasonably argue against maintaining current ratios given that physician production exceeded population growth by 63% between 1950 and 1990. A 1980 analysis by the Graduate Medical Education National Advisory Committee (GMENAC) forecast a physician glut by 1990 and an even greater surplus by the year 2000—yet the physician-to-population ratio has continued to increase. The GMENAC projection particularly emphasized the excess supply of subspecialists and potential shortages in primary care; in reality, between 1965 and 1992, the primary care physician-to-population ratio increased only 13% while the specialty physician-to-population ratio increased 121%.³ More recent analyses and recommendations have continued to underscore the oversupply and imbalance problems and have recommended increasingly blunt and intrusive solutions, but thus far with little comprehensive impact on the national policy arena. In 1994 the Council on Graduate Medical Education (COGME) recommended a 20% decrease in first-year residency positions to 110% of annual U.S. medical school graduates, down from 140%. It should be noted that the increase in the numbers of residents during the past decades was largely the result of international medical graduates pursuing graduate medical education in the United States.⁶⁻⁸

Despite these compelling analyses and policy recommendations, the responses of both public policy makers and academic medicine have been slow. The Pew Health Professions Commission conference in March 1995 recommended reducing the physician workforce and the number of medical school slots and noted further that few specialty societies have carefully studied future workforce requirements.⁹ The Institute of Medicine's January 1996 report, *The Nation's Physician Workforce: Options for Balancing Supply and Requirements*, similarly noted the critical need to avoid a physician oversupply and recommended a reduction in residency positions, although it disagreed with the Pew Commission recommendation to limit the number of medical students.¹⁰

Policy Vacuum

The neglect of a national workforce policy contributes to several major problems in the health care sys-

tem. First, the mismatch between primary care physician supply and need reduces access to care for underserved populations. In spite of the massive increase in physician production since 1950, geographic maldistribution continues as a serious problem. According to the widely accepted Federal criterion for underservice—designation as a Health Professions Shortage Area (HPSA)—in 1994, 45 million people lived in areas with inadequate primary care services. These 2577 HPSAs were defined as areas with primary care physician-to-population ratios of less than 29 per 100,000 (compared to the national primary care physician-to-population ratio of 67 per 100,000). Clearly, market forces operating during the past several decades have not solved the underservice problem for these 45 million people, and the numbers make it quite clear that simply continuing to increase the supply of physicians will not solve the access problem.

Second, the current situation creates increased pressures for escalation of overall health care costs. A comparison of the differences among states in health expenditures has demonstrated that the number of specialist physicians per 100,000 population is a significant predictor of higher expenditures.¹³

Third, medical education funding incentives contradict workforce needs. Federal and state support for medical training has diminished while Medicare reimbursement policies continue to reward teaching hospitals for maintaining high levels of residency positions. In addition, teaching hospitals are facing increasing competition in the delivery of clinical services. For these reasons, academic institutions have emphasized enhanced clinical services as a source of revenue to support their educational and research mission. Consequently, medical schools have disproportionately recruited faculty in the subspecialties that most enhance the clinical revenue stream. Both academic medicine's scholarly mission and its obligation to pursue rational workforce goals focused on societal need are reflected in changes in the way

medical schools allocate funds. Since the early 1960s, medical schools have: (a) increased their dependence on clinical service revenue from 6.4% to 46.5% of budget; (b) decreased their commitment to education, as reflected in a reduction in share of budget for instructional expenditures from 37.5% to 26%; (c) increased expenditures on clinical services from 11.1% to 23.7%; and (d) increased faculty recruitment emphasis on clinical departments such that in 1991 full-time faculty in clinical departments exceeded those in basic science departments by 384% (59,189 full-time clinical faculty versus 15,432 basic science faculty), compared to 79% in 1961.^{11,12}

Potential Solutions

The problem demands a national policy solution, not an uncoordinated series of state experiments, given the inherent mobility of the profession and its importance as a national asset. The solution will require ongoing analysis, an apolitical national policy making authority, and substantial change in the methods of financing the

nation's academic medical enterprise.

Key elements of a rational strategy:

- Implementing policy through a board comprising public members appointed for terms of long duration and supported by an adequately funded analytical staff to develop the essential database and objective measures needed for rational workforce decisions.
- Remodeling Medicare funding to reduce incentives for teaching hospitals' excess residency positions and emphasis on training of specialists. The recently implemented Graduate Medical Education Demonstration Project in 41 New York teaching hospitals, which will reduce New York residency slots by 20% to 25% over the next six years, provides some hope for bold Medicare policy changes on a national scale. However, it is essential that such efforts go beyond the demonstration stage and become elements of a comprehensive national policy, in contrast to past fragmented and

Key elements of the solution include a national policy making board, direct Federal funding of medical schools and residency programs, and substantial revision of some Medicare and Medicaid funding provisions.

limited experiments.

- Providing direct Federal funding for both undergraduate and graduate medical education. Direct funding of medical education will greatly diminish medical schools' dependence on clinical revenues to support education and will consequently decrease the incentive to recruit excess subspecialty faculty and the related bias toward subspecialty education. Residency funding should also be tied to medical schools, not just to teaching hospitals.
- Supplementing the resident workforce in teaching hospitals with non-physician providers and assuring appropriate third-party payment for their services. This issue most significantly affects hospitals in underserved urban areas, many of which rely heavily on appointments of international medical graduates to fill residency positions.
- Addressing the problem of geographically underserved areas (including HPSAs). The existing National Health Service Corps and Neighborhood Health Center structures serve as the principal vehicles for confronting this problem, but their current funding is woefully inadequate. Furthermore, a national physician workforce policy must include creative incentives for recently minted and currently practicing physicians to serve full-time or part-time in underserved areas, through these existing vehicles and others. Such incentives for service to the underserved need not be excessive given the medical profession's tradition of—and often articulated commitment to—public service.
- Create new and expanded approaches to physician compensation differentials favoring primary care disciplines, subject to periodic revisions based on supply/need projections.

Conclusion

A rational national physician workforce policy is a half century overdue. While some have argued that market forces will correct workforce flaws, 50 years of experience have demonstrated the error in that reasoning. Furthermore, the hope that managed care market forces will lead to effective workforce corrections reflects wishful thinking. While recent analyses of managed care trends, such as the paper by Simon et al.,² indicate an increased emphasis by managed care organizations on primary care physician recruitment and compensation, these trends are insufficient to solve the half-century-long workforce problem. If we rely on managed care to solve the problems inherent in the current composition of the physician workforce, we will likely commit the public policy error of "leaving the runway landing lights on a little longer for Amelia Earhart," in the words of

economist Walter Heller.

We need a comprehensive national physician workforce policy with mandated periodic revisions based on objective measures and a policy making process protected as much as possible from special interest politics. This will require implementation through an apolitical national policy board adequately funded, staffed, and provided with a comprehensive, objective database. The need for a stable, rational, effective health care workforce policy has never been greater.

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References

1. Mitka M. Consensus panel offers response to oversupply. *AMA News* 1997;40(8):1,39.
2. Simon CJ, Dranove D, White WD. The impact of managed care on the physician marketplace. *Public Health Rep* 1997; 112:222-30.
3. McClendon JM, Politzer RP, Christian E, Fernandez E. Downsizing the physician workforce. *Public Health Rep* 1997; 112:231-9.
4. Weiner J. Forecasting the effects of health reform on U.S. physician workforce requirements. *JAMA* 1994;272:222-30.
5. Kindig D. Strategic issues in managing the future physician workforce. In Altman S, Reinhardt U, editors. *Strategic choices for a changing health care system*. Chicago: Health Administration Press; 1996. p. 149-82.
6. Council on Graduate Medical Education (US). Fourth report: recommendations to improve access to health care through physician workforce reform. Rockville (MD): Department of Health and Human Services; 1994.
7. Council on Graduate Medical Education (US). Seventh report: physician workforce funding recommendations for Department of Health and Human Services' Programs (1995). Rockville (MD): Department of Health and Human Services; 1995.
8. Council on Graduate Medical Education (US). Eighth report: patient care physician supply and requirements: testing COGME recommendations. Rockville (MD): Health Resources and Services Administration; 1996 Jul. Pub. No. HRSA-P-DM 95-3.
9. Pew Health Professions Commission. *Critical challenges: revitalizing the health professions for the twenty-first century*. San Francisco: UCSF Center for Health Professions; 1995 Dec.
10. Lohr K, Vanselow N, Detmer D. From the Institute of Medicine: the nation's physician workforce; options for balancing supply and requirements. *JAMA* 1996;275:748.
11. Ganem JL, Beran RL, Krakower JK. Review of US medical school finances, 1993-1994. *JAMA* 1995;274:723-30.
12. Jolin L, Jolly P, Krakower JK, Beran RL. US medical school finances. *JAMA* 1992;268:1149-55.
13. Kindig D, Libby D. Setting state health spending limits. *Health Affairs* 1994;13(2): 288-9.