

COUNCIL ON GRADUATE MEDICAL EDUCATION

Third Report

Improving Access to
Health Care
Through Physician Workforce
Reform:

Directions for the 21st Century

Executive Summary

COUNCIL ON GRADUATE MEDICAL EDUCATION

Third Report

**Improving Access to Health Care
Through Physician Workforce Reform:
*Directions for the 21st Century***

- Changing the Physician Supply
- Increasing Minority Representation in Medicine
- Reforming Medical Education

October 1992



U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
Health Resources and Services Administration

Table of Contents

| | |
|--|-----------|
| Highlights | 5 |
| Findings | 5 |
| Goals | 6 |
| Recommendations for the Nation | 6 |
| Specific Recommendations for Medical Educators | 6 |
| Executive Summary | 7 |
| Findings and Goals | 8 |
| Finding No. 1 | 8 |
| Finding No. 2 | 8 |
| Finding No. 3 | 9 |
| Finding No. 4 | 9 |
| Finding No. 5 | 9 |
| Finding No. 6 | 10 |
| Finding No. 7 | 10 |
| Recommendations for the Nation | 11 |
| National Physician Workforce Goals | 11 |
| Physician Workforce Infrastructure | 11 |
| Financing the Physician Workforce Plan | 12 |
| Specific Recommendations for Medical Educators | 15 |
| Mission Statement and Strategic Plan | 15 |
| Recruitment, Admissions, and Retention Policies | 15 |
| Faculty Composition | 15 |
| Medical Education Objectives | 15 |
| Achieving a More Integrated and Balanced Medical Education Curriculum | 16 |
| Expanding the Medical Education Teaching Environment | 16 |
| Background, Charge, and Principles of COGME | 17 |
| Charge to the Council | 17 |
| Previous Reports | 17 |
| Principles of the Council | 17 |
| Issues for Further Exploration | 18 |
| COGME Members, Subcommittees, and Staff | 19 |
| Members | 19 |
| Council Subcommittees | 20 |
| Physician Manpower Subcommittee | 20 |
| Medical Education Programs and Financing Subcommittee | 20 |
| Minority Representation in Medicine Subcommittee | 20 |
| Staff | 20 |

Highlights

Findings

The Council's seven major findings identify a series of deficiencies in the current physician supply, medical education financing, and health care reimbursement systems, which hinder health care access. The Council's findings conclude that the Nation has:

- Too few generalists (i.e., family physicians, general internists, and general pediatricians) and too many nonprimary care specialists and subspecialists.*
- Access to care problems in inner-city and rural areas that are growing despite substantial increases in the total physician supply.*
- Too few underrepresented minority physicians.*
- Shortages in certain nonprimary care medical specialties, including general surgery, adult and child psychiatry, and preventive medicine, and among generalist physicians with additional geriatrics training.*
- An increasing physician-to-population ratio, which will do little to improve the public's health or increase access and will hinder cost-containment efforts.*
- A system of undergraduate and graduate education that can be more responsive to these regional and national workforce needs.*
- No national physician workforce plan or sufficient incentives in medical education financing and health care reimbursement to attain the appropriate specialty mix, racial/ethnic composition, and geographic distribution of physicians.*

Goals

Based on these findings, COGME recommends adoption of the following national physician workforce goals. The United States should:

- Move toward a system in which 50 percent of physicians practice in the generalist disciplines of family medicine, general internal medicine, and general pediatrics.*
- Increase to at least 50 percent the percentage of residents who complete a three-year training program in family medicine, general internal medicine, and general pediatrics and enter generalist practices.*
- Improve physician distribution to eliminate primary medical care shortage areas and urban/rural disparities.*
- Double the number of entering underrepresented minority medical students from 1,500 to 3,000 by the year 2000, a goal established by the Association of American Medical Colleges.*
- Increase the number of general surgeons, preventive medicine specialists, adult and child psychiatrists, and general internists and family physicians with additional geriatrics training.*

- *Maintain the osteopathic and allopathic physician-to-population ratio at current levels.*

Recommendations for the Nation

The centerpiece of COGME's recommendations is the establishment of a workforce plan, rational medical education infrastructure, and financing strategy to attain the national physician workforce goals. Recommendations include:

- *Establishing a National Physician Workforce Commission and State Commissions to determine local, regional, and national needs.*
- *Implementing the workforce plan through local, State, or regional academic consortia, which might include one or more medical schools, teaching and community hospitals, health maintenance organizations (HMOs), community health centers, and other educational and teaching institutions or agencies.*
- *Allocating residency positions and graduate medical education (GME) funding based on State and regional workforce needs and national goals for aggregate physician supply, minority recruitment and retention, and specialty distribution.*
- *Encouraging allopathic and osteopathic medical schools to not increase enrollment.*
- *Capping Medicare (and other) funded first-year residency positions at 10 percent more than the number of U.S. allopathic and osteopathic medical graduates.*
- *Providing undergraduate financial incentives, including loan and scholarship programs, to recruit and retain more underrepresented minorities and graduate more generalists.*
- *Providing GME financial incentives, through Medicare and other payers, to train more generalists and fewer nonprimary care specialists and subspecialists.*
- *Increasing incentives for primary care practice and service in inner-city and rural areas, through physician payment reform, reduction of administrative burdens, National Health Service Corps (NHSC) scholarship and loan programs, tort reform, and differential Medicare and Medicaid reimbursement for practice in shortage areas.*

Specific Recommendations for Medical Educators

A physician workforce plan and financing strategy will help our Nation respond to societal needs for more minority and generalist physicians and for access to more primary care services, particularly in underserved inner-city and rural areas. Achieving these national workforce goals will also require the commitment and leadership of our Nation's medical educators. The Council's vision of a medical education system that is responsive to our Nation's health care needs in the 21st century will be reflected in the institution's:

- *Mission statement and strategic plan.*
- *Recruitment, admissions, and retention policies.*
- *Medical education objectives and curricula.*
- *Faculty composition and reward system.*
- *Medical education and teaching environment.*
- *Linkages with a variety of teaching sites.*

Executive Summary

In 1988, when COGME issued its first report to the Secretary of the Department of Health and Human Services (DHHS) and Congress, it expressed concern that physician specialty and geographic maldistribution was growing despite an increasing aggregate supply of physicians. At that time, concerns about access to health care and rising health care costs had not yet been thrust into the national spotlight. Similarly, physician workforce policy was not high on the national agenda.

The historical context of this report is vastly different. Today, the health care system is acknowledged to be in crisis. While health care expenditures exceeded \$650 billion in 1990 and are projected to reach \$1 trillion in 1995, 37 million Americans remain medically uninsured, and millions more face barriers to basic health care. Furthermore, the Nation's basic health status indicators, which are in some measure influenced by access to health care, lag behind most economically developed countries. There is now recognition that health care reform to ensure all Americans access to basic care is not possible without physician workforce reform.

It is in this context that COGME has been examining physician workforce supply and distribution and its impact on ensuring access to care for all Americans. Over the past two years, the Council has focused on the following seven major questions:

1. Do we have an adequate mix of generalists and specialists to provide the most efficient and the most cost-effective system of quality care for all Americans?
2. What implications do problems of access have for recommendations on physician workforce, supply, and distribution?
3. What is the status of minority representation in medicine and what effect does it have on minority health as well as the health of the public in general?
4. What are the supply needs of specific medical specialties?
5. Do we currently have adequate numbers of total physicians? Will the projected supply of physicians be adequate?

6. Can our medical education system be more responsive to the health care needs of the Nation?

7. What are the factors that have hindered efforts to attain the appropriate composition, specialty mix, and geographic distribution of physicians to ensure access to care for all Americans?

Over the two-year period since its last report, the Council received a broad range of input. This included solicited papers covering supply and demand for physician workforce, barriers to access to physician services, and updated need-based requirements for selected specialties. The Council limited its review of workforce assessments to the following specialties: general/family practice, general internal medicine, general pediatrics, general surgery, obstetrics/gynecology, adult and child psychiatry, preventive medicine, and the area of geriatrics as an added qualification to family practice and internal medicine.

The Council received significant testimony at plenary sessions and before its three subcommittees on Physician Manpower, Medical Education Programs and Financing, and Minority Representation in Medicine. Representatives from major organizations and policy-making bodies, including the major allopathic and osteopathic hospital and medical education organizations and major specialty organizations, have testified on aspects leading to this third report. Major foundations have provided testimony, including the Josiah Macy, Jr. Foundation, the Robert Wood Johnson Foundation, the Pew Charitable Trusts, and the Kellogg Foundation. Representatives of State and local concerns, such as the New York State Council on Graduate Medical Education and the National Conference of State Legislatures, also testified. In addition, COGME has reviewed the latest recommendations from medical educators and policymakers on medical education reform policy.

This third report to Congress and the Secretary of DHHS provides the Council's findings, goals, and recommendations to address these major physician workforce issues of today and the underlying principles that guided its deliberations.

Findings and Goals

Finding No. 1

The Nation has too few generalists and too many specialists.

Goal: The United States should move toward a health care system in which 50 percent of physicians practice in the generalist disciplines of family practice, general internal medicine, and general pediatrics. Consequently, at least 50 percent of residency graduates should complete a three-year training program and enter practice as generalists.

- The growing shortage of practicing generalists (i.e., family physicians, general internists, and general pediatricians) will be greatly aggravated by the growing percentage of medical school graduates who plan to subspecialize. The expansion of managed care and provision of universal access to care will only further increase the demand for generalist physicians.

- Increasing subspecialization in U.S. health care escalates health care costs, results in fragmentation of services, and increases the discrepancy between numbers of rural and urban physicians.

- A rational health care system must be based upon an infrastructure consisting of a majority of generalist physicians trained to provide quality primary care and an appropriate mix of other specialists to meet health care needs. Today, other specialists and subspecialists provide a significant amount of primary care. However, physicians who are trained, practice, and receive continuing education in the generalist disciplines provide more comprehensive and cost-effective care than nonprimary care specialists and subspecialists.

Finding No. 2

Problems of access to medical care persist in rural and inner-city areas despite large increases in the number of physicians nationally.

Goal: All primary medical care shortage areas should be eliminated and disparities between the metropolitan and nonmetropolitan distribution of physicians should be reduced.

- Access to primary care services is especially difficult in rural and inner-city areas. Many factors

contribute to the problems of access, including economic and social circumstances of rural and inner-city areas as well as the shortage of minority and generalist physicians.

- Minority physicians and physicians in the three primary care specialties (family practice, general internal medicine, and general pediatrics) are more likely to serve inner-city populations. Family physicians and general surgeons are more likely than other specialties to serve rural populations. The decline in numbers of general surgeons entering rural practice is little recognized and has significant implications for access to trauma services in rural settings and to the fiscal viability of rural hospitals.

- Consequently, more minority and generalist physicians must be educated and educational programs should specifically address skills needed in these settings. This must be accompanied by sufficient incentives to enter and remain in inner-city and rural practice and the development of adequate health care systems in which they can practice.

- Access to one important component of primary medical care, obstetrical services, has been in the national spotlight. Problems are greatest in rural and inner-city areas. Causes include economic and sociocultural factors and the availability of obstetricians, family physicians, and nurse midwives. While the total number of obstetricians continues to increase, the proportion providing obstetrical services decreases dramatically with the number of years in practice.

- Less than 10 percent of obstetricians practice in rural settings. Consequently, family physicians historically provide the majority of rural obstetrical care. In recent years, however, the proportion of family physicians providing obstetrical services has also markedly declined. While rising malpractice claims clearly have contributed to the decreasing provision of obstetrical care, other factors such as unpredictable hours, also seem to have contributed to these decisions.

Finding No. 3

The racial/ethnic composition of the Nation's physicians does not reflect the general population and contributes to access problems for underrepresented minorities.

Goal: The racial/ethnic composition of the physician population should reflect the overall population's diversity. The Nation should adopt the goal of the Association of American Medical Colleges to double the number of first-year entering underrepresented minority medical students from 1,500 to 3,000 by the year 2000.

- Although African Americans, Hispanic Americans, and Native Americans compose 22 percent of the total population and will constitute almost one-fourth of all Americans by the year 2000, they represent only 10 percent of entering medical students, 7 percent of practicing physicians, and 3 percent of medical faculty.

- Increasing the percentage of underrepresented minorities in the medical profession is vital as a means of improving access to care and health status of these vulnerable and underserved populations. Minority physicians tend to practice more in minority/underserved areas, reduce language and cultural barriers to care, and provide much needed community leadership.

- Strategies to increase minority enrollment must emphasize increasing and strengthening the applicant pool, the acceptance rate from within this pool, and the student retention rate. These strategies must take into account disproportionately high rates of poverty, poor health status, poor schools, and a continued lack of access to educational and career opportunities. They must include both traditional short-term efforts and long-term strategies targeting younger students early in the education pipeline.

Finding No. 4

Shortages exist in the specialties of general surgery, adult and child psychiatry, and preventive medicine and among generalist physicians with additional geriatrics training.

Goal: The percentage of physicians trained and certified in the specialty fields of general surgery, adult and child psychiatry, and preventive medicine, and the percentage of family physicians and general internists with additional geriatrics training should be increased.

- The future growth in general surgical services is likely to exceed the growth in the supply of general surgeons. Aging of the U.S. population will increase demand for surgical services, and the number of physicians in general surgery is inadequate to meet a growing need for trauma care services and for surgical care in rural areas. The training curricula for general surgery need to be broad-based to ensure that graduates have sufficient knowledge and skills to manage the wide array of surgical problems that may be seen in rural and inner-city areas.

- The burden of psychiatric illness in both children and adults indicates a need for more psychiatrists and child psychiatrists. However, effective demand for psychiatric care is constrained by limited insurance coverage.

- Continued shortages remain in the field of preventive medicine, which includes specialty areas of public health, general preventive medicine, occupational medicine, and aerospace medicine. These physicians make significant contributions to our Nation's year 2000 health objectives. Although four qualified students apply for each training slot, the greatest barrier to training physicians in preventive medicine is the virtual absence of GME funding.

- Additional emphasis is warranted in the area of geriatrics, given the aging of the population. Family physicians and general internists must be trained to provide comprehensive care for the elderly. Strategies should be developed to train more generalist physicians and support those who are interested in pursuing additional training in geriatrics.

Finding No. 5

Within the framework of the present health care system, the current physician-to-population ratio in the Nation is adequate. Further increases in this ratio will do little to enhance the health of the public or to address the Nation's problems of access to health care. Continued increases in this ratio will, in fact, hinder efforts to contain costs.

Goal: The aggregate allopathic and osteopathic physician-to-population ratio should be maintained at current levels.

- Efforts to solve problems of access to health care by increasing the total physician supply have been largely unsuccessful. A growing physician

oversupply is projected, which will hinder efforts to contain costs.

- Consequently, the number of physicians educated should be reduced. Strategies to improve access to care should, instead, focus on altering the specialty mix, racial/ethnic composition, and geographic distribution of physicians.

Finding No. 6

The Nation's medical education system can be more responsive to public needs for more generalists, underrepresented minority physicians, and physicians for medically underserved rural and inner-city areas.

Goal: Undergraduate and graduate medical education should increase its emphasis upon meeting regional and national physician workforce needs.

- The Nation's system of undergraduate and graduate medical education, taking place in 141 osteopathic and allopathic medical schools and in more than 1,500 institutions and agencies, has responded effectively to many of the Nation's health care needs. During the past 25 years, our Nation's medical education system has responded to public demands to increase the numbers of physicians, advance biomedical research, and develop new medical technology. These responses have resulted in a doubling of the physician supply and the establishment of a biomedical research and medical technology infrastructure that is unsurpassed.

- Today, the medical education system must respond to the Nation's health care and physician workforce needs in the 21st century. These include the need for more minority and generalist physicians, more primary care research, and increased access to primary care, particularly in underserved rural and urban communities. Changes in the institutional mission, goals, admissions policies, curriculum, faculty composition and reward system, and the site for medical education and teaching are necessary to respond to these needs.

Finding No. 7

The absence of a national physician workforce plan combined with financial and other disincentives are barriers to improved access to care.

Goal: In order to improve access to care, a national physician workforce plan, infrastructure, and approach should be established that **combines** financial and other incentives and disincentives to achieve national physician workforce goals.

- There is no national physician workforce plan for the United States to meet the current and projected future health care needs of the American people. In addition, there is no coordinated financing strategy and integrated medical education system to implement such a plan. Instead, such critical policy issues as the aggregate physician supply and specialty mix are the result of a series of individual decisions made by the 126 allopathic and 15 osteopathic medical schools and nearly 1,500 institutions and agencies that currently sponsor or affiliate with GME training programs.

- The medical education financing and health care reimbursement systems create significant barriers to students who wish to become generalists, physicians who wish to practice in underserved areas, and to the provision of basic primary care and preventive services to all Americans.

Recommendations for the Nation

An adequate supply, mix, and distribution of physicians and other health professionals is needed to ensure basic and essential health care to all citizens. Deficiencies in the Nation's medical education financing and health care reimbursement systems significantly hinder our ability to achieve this fundamental goal. The Council recommends the following measures which, if implemented, would establish a national physician workforce plan and infrastructure to meet the Nation's basic health care needs in the 21st century.

National Physician Workforce Goals

1. The Nation should adopt the following overall national physician workforce goals to ensure the proper supply, mix, and distribution of physicians needed to ensure access to basic and affordable health care for all Americans:

- a. The provision of health care in the United States should be based upon a system in which 50 percent of physicians practice in the generalist disciplines of family practice, general internal medicine, and general pediatrics.
- b. All primary care shortage areas should be eliminated and disparities between the metropolitan and nonmetropolitan distribution of physicians should be reduced.
- c. The racial/ethnic composition of the physician population should reflect the overall population's diversity. The Nation should adopt the Association of American Medical Colleges' goal of increasing the number of first-year entering underrepresented minority students from 1,500 to 3,000 by the year 2000.
- d. The percentage of physicians trained and certified in the specialty fields of general surgery, adult and child psychiatry, and preventive medicine should be increased.
- e. The percentage of family physicians and general internists who receive additional training in geriatrics should be increased.
- f. The aggregate allopathic and osteopathic physician-to-population ratio should be maintained at current levels. Consequently:
 - There should be no increase in the aggregate number of first-year enrollments in U.S. medi-

cal and osteopathic medical schools. At the same time, medical schools should maintain and expand their commitment to recruiting minority students and training generalists.

- The total number of entry residency positions should be limited to the number of U.S. allopathic and osteopathic medical school graduates plus 10 percent (exceptions should be made for exchange visitor international medical graduates).

Physician Workforce Infrastructure

2. Congress should establish a National Physician Workforce Commission to develop and recommend the necessary policies to attain the national physician workforce goals, project and monitor physician workforce trends, and revise the workforce goals and policies as necessary. This new entity should:

- a. Serve in an advisory capacity to the Secretary of DHHS and all appropriate congressional committees with jurisdiction involving undergraduate and graduate medical education.
- b. Make recommendations on Federal and other financing of medical education.
- c. Have broad representation, including physicians, medical educators, students, residents, and representatives of hospitals, HMOs, community health centers, business, labor, government, third-party payers, and consumers.
- d. Have an adequate State and regional physician workforce data base from which to evaluate trends and make recommendations.
- e. Have sufficient staff and funding to permit its effective operation.
- f. Coordinate its recommendations with the Physician Payment Review Commission and the Prospective Payment Assessment Commission.
- g. Replace COGME and assume its charge.

3. States should be encouraged to establish State or regional Physician Workforce Commissions to study physician workforce needs and trends and set workforce goals. The State Commissions should have broad representation of key leaders in medical education, and representatives of profes-

sional communities, hospitals, HMOs, community health centers, business, labor, government, third-party payers, and consumers.

4. The National Commission should be responsive to the workforce needs identified by State Commissions and develop a mechanism to facilitate cooperation and collaboration between itself and the State and regional entities.

5. General principles that should be considered by the National Physician Workforce Commission include the following:

- a. The national workforce plan could be implemented through local, State, and regional academic consortia. Each academic consortia might include one or more medical schools, teaching and community hospitals, community health centers, HMOs, and educational institutions from primary school through college.
- b. Under this plan, residency positions and GME funding should be allocated based on State and regional workforce needs and national goals for aggregate physician supply, minority recruitment, and specialty distribution.
- c. All payers should contribute to GME, including Medicare, Medicaid, private insurers, self-insured employee plans, and HMOs and other managed/coordinated care systems.
- d. The funds from the Public Health Service, Health Care Financing Administration, and private sources should be utilized to assist in meeting overall physician workforce goals.

Financing the Physician Workforce Plan

6. A multifaceted incentive/disincentive approach should be used to achieve these workforce goals. The net impact of any financing strategy must, therefore, be to support the following goals:

- To increase the number of underrepresented minorities recruited.
- To increase the number of medical graduates entering generalist medical practice to at least 50 percent and concurrently decrease the percentage who choose subspecialties.
- To increase the number of general surgeons, adult and child psychiatrists, and preventive medicine specialists.
- To increase the number of family physicians and general internists receiving additional training in geriatrics.
- To eliminate primary medical care shortage areas.

Financing strategies must address undergraduate and graduate medical education, as well as the physician practice setting. The following is one approach toward achieving these goals. The Council expects to continue to study additional options as part of its future work.

A. Undergraduate Medical Education

7. Each medical school should establish and attain objectives for the composition and specialty mix of its graduates in support of the above national goals.

8. Financial incentives must be realigned to reward medical schools for recruiting more underrepresented minorities and for graduating more future family physicians, general internists, and general pediatricians. The major revenue sources of undergraduate medical school budgets are Federal and State funds and income generated from faculty practice plans. Federal and State strategies to increase minority representation and the production of generalists must focus on these funding streams.

9. Primary care scholarships and/or low interest rate loans should be established for students who commit themselves to generalist careers. Funding would have to be repaid if the graduate chooses a nonprimary care specialty or subspecialty.

10. Public and private incentives should be increased to assist medical schools in raising the minority applicant pool, selecting more minorities, retaining more minority students, and expanding the number of minority faculty.

a. Funding to the DHHS Centers of Excellence program should be increased to reward medical schools for demonstrated excellence in educating minority medical students.

b. Funding to the DHHS Health Careers Opportunity Programs should be increased, and the program expanded to secondary schools, such as magnet high schools, with expertise in preparing underrepresented minority youngsters for the health professions.

c. A national minority recruitment/counseling/advisory clearinghouse should be established to assist and better prepare potential medical school applicants from underrepresented minority populations.

d. The private sector should be encouraged to support the nationwide replication of programs that have been successful in increasing the minority applicant pool.

e. Active collaboration among major medical groups, such as the American Medical Association, Association of American Medical Colleges, National Medical Association, Association of American Indian Physicians, and the InterAmerican College of Physicians and Surgeons, should be encouraged with the goal of increasing minority recruitment and retention.

11. Government should assist medical schools in developing a critical mass of faculty in the generalist disciplines. This critical mass of strong academic faculty will assist in providing an educational milieu that fosters selection of a primary care specialty.

a. Funding through the National Institutes of Health and the Agency for Health Care Policy and Research should be increased for research in primary care, health services delivery, and patient care outcomes, as well as for the development of research faculty in the primary care disciplines.

b. Title VII grants to assist in the development of Departments of Family Medicine should be maintained and new funding should be made available to assist in strengthening Divisions of General Internal Medicine and Pediatrics.

c. Physician payment reform must continue and should be extended to private payers to correct the imbalance between the income generated by generalist and subspecialist faculty practice plans.

12. Government should assist medical schools in their efforts to increase education in ambulatory and community settings.

a. Title VII grants for predoctoral education should be expanded to assist medical schools in enhancing education in the primary care specialties.

b. Legislation for Area Health Education Centers should be modified and expanded to facilitate community-based primary care education for medical students at every medical school.

B. Graduate Medical Education

13. The number of Medicare and other funded first-year entry residency positions should be capped at 10 percent more than the number of U.S. allopathic and osteopathic medical school graduates.

14. Financing strategies should support the goal that at least 50 percent of medical graduates should complete a three-year residency program and enter generalist practice and that the percentage who choose subspecialties should concurrently decrease.

The following is one approach toward these goals:

a. Medicare direct and indirect GME payments should be limited to residency training for initial certification or five years, whichever is less. Residency programs in preventive medicine should also receive Medicare GME payments. There should be exceptions to initial certification limits for training in child psychiatry and geriatrics.

b. Increased direct medical education (DME) payments should be allocated to family practice residency programs.

c. Increased DME payments should be allocated to internal medicine and pediatric residency programs that develop an agreed-upon curriculum that specifically prepares graduates for primary care practice. These increased payments will reimburse programs for the higher costs of training in the primary care setting.

d. Incentive salaries should be made available to residents in family practice, internal medicine, and pediatrics, who sign a contract indicating their intention to complete their three-year program and enter generalist practice, with a year-by-year payback for those who choose to subspecialize.

e. Because residents in allopathic family practice and osteopathic general practice programs are more likely to remain generalist physicians and practice in needy rural areas than other physicians, incentives to increase the number of family practice and osteopathic general practice residents should be a high, short-term priority.

f. Because of the significant decline in internal medicine and pediatric graduates completing three-year residencies and entering generalist careers and the concurrent growth in those choosing to subspecialize, both disciplines are strongly encouraged to review their workforce needs for generalists and subspecialists and to develop curriculum and training opportunities commensurate with those needs.

15. To facilitate the expansion of ambulatory/outpatient GME and to encourage innovative program development and growth, all approved GME programs, including those based in community settings, should be eligible for Medicare direct and indirect GME reimbursement.

16. Changes in the Medicare portion of GME financing should be budget neutral. Savings in direct and indirect GME from capping slots and eliminating payments beyond the initial certifica-

tion or five years (with the previously noted exceptions) should be directed to:

- a. Training conducted in primary care ambulatory/community training sites.
- b. Innovative programs to train generalist physicians for rural and urban medically underserved areas.
- c. Innovative programs to increase minority representation in the physician workforce pool.

17. Financing strategies should support the goal of increasing the percentage of residency graduates in the specialty fields of general surgery, adult and child psychiatry, and preventive medicine, and the percentage of family physicians and general internists with additional geriatrics training. In addition to the previously mentioned approaches:

- a. Incentive salaries should be made available to residents who sign a contract indicating their intention to complete their program in the above fields, with a year-by-year payback for those who choose to train and practice in another specialty or subspecialty.
- b. Increased direct GME payments should be allocated to general surgery programs that contain an agreed-upon curriculum that specifically prepares graduates for general surgical practice, especially in rural and inner-city areas.
- c. Increased direct GME payments should be allocated to adult and child psychiatry programs.
- d. Preventive medicine residency training programs should receive Medicare GME reimbursements for the entire three-year period. (Currently, Medicare payments are made only for residents in their clinical training year, which takes place only in the first year.)

18. Primary care residency programs providing substantial training in urban or rural underserved areas or serving a substantial percentage of medically underserved populations should be reimbursed for generalist residents under Medicare DME at a higher rate.

C. Practice Environment

19. The economic incentives to enter generalist fields must be increased and incentives to specialty practice must be reduced by extending physician payment reform to include all third-party payers.

20. Partial loan forgiveness should be provided for residents entering practice as family physicians, general internists, and general pediatricians.

21. Solutions must be found to reduce administrative burdens in medical practice imposed by the third-party payers. These burdens are primary causes of the increasing disillusionment among generalist physicians in practice.

22. Tort reform must be implemented to reduce malpractice barriers to the provision of needed primary care services, such as prenatal care.

23. Major incentives in Medicare and Medicaid reimbursement should be implemented to encourage physicians to provide primary care services to underserved rural and urban populations. These additional payments would assist in offsetting the heavy burden of unreimbursed care provided by physicians in these settings.

24. Federal and State programs, including the NHSC Scholarship and Loan Forgiveness Program, must be maintained, enhanced, and expanded to address the relative undersupply of physicians in rural and inner-city areas. Such programs should be maintained indefinitely in the most severe shortage areas that have little likelihood of attracting physicians.

25. Physicians in shortage areas are overworked, isolated, and frequently overwhelmed by the complex business of medicine. Systems of health care delivery and professional support will enhance the attractiveness of practice in shortage areas.

Specific Recommendations for Medical Educators

The attainment of these workforce goals will require a partnership between government and the medical education system, which comprises medical schools, hospitals, and other educational institutions and agencies. It will require government to establish and implement a national workforce plan with a set of goals, a rational education infrastructure, and a financing mechanism, as previously recommended. It will also require the commitment and leadership of our Nation's medical educators. The following recommendations describe the Council's vision of a medical education system that is responsive to our Nation's physician workforce needs in the 21st century.

Mission Statement and Strategic Plan

26. The institution's mission statement recognizes responsibility and accountability to societal needs for more generalist physicians, more underrepresented minority physicians, more primary care research, and the provision of more primary medical care, particularly to underserved urban and rural communities.

27. The strategic plan contains quantifiable outcome measures for these societal needs, including the percentage of:

- a. graduates choosing generalist careers;
- b. underrepresented minorities who apply and matriculate;
- c. required educational experiences in community and underserved settings; and
- d. graduates choosing to practice in underserved rural and urban areas.

Recruitment, Admissions, and Retention Policies

28. The medical school's admissions policy, structure, and function reflect the need to recruit and admit more students who are inclined to select the generalist disciplines of family practice, general internal medicine, and general pediatrics.

29. The medical school's admissions policies, structure, and function reflect the need to recruit and admit more minority students in medical school.

a. The school establishes a minority recruitment/retention section with underrepresented minority participation, or individuals committed to the goals, and minority participation on the admissions committee.

b. Emphasis is placed on the development and support of programs that improve the size and quality of the minority applicant pool by focusing on early intervention. The school participates in forums and networks involving students in high school, elementary school, and primary levels, including kindergarten, to expose minority youngsters to health professions role models, encourage their interests and pursuits in health, and provide networks of mentoring programs to assist and support students inclined toward health careers.

c. The school provides ongoing support to ensure the successful progress of these students through their education.

Faculty Composition

30. The institution's departments and faculty composition are more balanced, with increased representation of generalist physicians, minority physicians, primary care researchers and physicians, and other health care providers from community settings.

31. The institution's system of advancement and tenure rewards faculty with demonstrated excellence in teaching in the same manner it recognizes excellence in biomedical research.

32. The institution involves large numbers of community-based primary care physicians and other providers as preceptors, teachers, and role models for medical students and residents and gives significant academic recognition and adequate reimbursement or other rewards (e.g., locum tenens coverage for continuing medical education for their contribution).

Medical Education Objectives

33. The institution incorporates effective adult education techniques in its curriculum. Self-directed learning and problem-solving directed skills are emphasized throughout the curriculum for students and residents to learn to acquire detailed information and to apply such knowledge effectively.

34. The institution emphasizes effective communication skills to improve the doctor/patient relationship.

35. The institution provides mandatory multicultural awareness/sensitivity sessions for students, residents, and faculty.

Achieving a More Integrated and Balanced Medical Education Curriculum

36. The basic sciences are incorporated within a clinical context throughout the undergraduate curriculum.

37. Undergraduate and graduate training includes social, behavioral, and humanistic aspects of health and health care delivery. Instruction is provided from faculty, researchers, and clinicians in fields such as nursing, psychology, public health, medical sociology, medical education, health services delivery, and bioethics.

38. Undergraduate and graduate training emphasizes the importance of team approaches to health care delivery. They include experience working as a team member with other health care professionals and training in utilizing the skills and expertise of physician assistants, nurse practitioners, nurses, pharmacists, public health professionals, social workers, and other health care professionals and ancillary personnel.

39. Experimental primary care programs and curricula are offered that may help reach the identified goals. Such models emphasize generalist practice and community-based training. The effectiveness and productivity of the fourth year of medical school should be examined.

40. Undergraduate and graduate training contains well-defined curricula, educational objectives, and evaluation methods, including outcome measures, to assess the effectiveness of the education experience.

Expanding the Medical Education Teaching Environment

41. The curricula and clinical rotations provide all students and residents with a balance between hospital-based, subspecialty training and community-based, primary care training. A much greater proportion of medical training is shifted to outpatient and community-based sites where the majority of medical care is provided.

42. The community-based educational experiences are developed and managed with significant

community participation and involvement.

43. Academic consortia are developed to link together the various settings in which undergraduate and graduate medical education are provided, including community hospitals, community health centers, HMOs, and public health departments.

Background, Charge, and Principles of COGME

The Council on Graduate Medical Education (COGME) was authorized by Congress in 1986 to provide an ongoing assessment of physician workforce trends and to recommend appropriate Federal and private sector efforts to address identified needs. The legislation calls for COGME to serve in an advisory capacity to the Secretary of DHHS, the Senate Committees on Labor and Human Resources and Finance, and the House of Representatives Committees on Energy and Commerce and Ways and Means. By statute, the Council terminates on September 30, 1996.

The legislation specifies that the Council is to comprise 17 members. Appointed individuals are to include representatives of practicing primary care physicians, national and specialty physician organizations, international medical graduates, medical student and house staff associations, schools of medicine and osteopathy, public and private teaching hospitals, health insurers, business, and labor. Federal representation includes the Assistant Secretary for Health, DHHS; the Administrator of the Health Care Financing Administration, DHHS; and the Chief Medical Director of the Veterans Administration.

Charge to the Council

Although called the Council on Graduate Medical Education, the charge to COGME is much broader. Title VII of the Public Health Service Act in Section 799(H), as amended by Public Law 99-272, requires that COGME provides advice and makes recommendations to the Secretary and Congress on the following:

1. The supply and distribution of physicians in the United States.
2. Current and future shortages or excesses of physicians in medical and surgical specialties and subspecialties.
3. Issues relating to foreign medical school graduates.
4. Appropriate Federal policies with respect to the matters specified in (1), (2), and (3) above, including policies concerning changes in the financing of undergraduate and graduate medical edu-

cation programs and changes in the types of medical education training in graduate medical education programs.

5. Appropriate efforts to be carried out by hospitals, schools of medicine, schools of osteopathy, and accrediting bodies with respect to the matters specified in (1), (2), and (3) above, including efforts for changes in undergraduate and graduate medical education programs.

6. Deficiencies in, and needs for improvements in, existing data bases concerning the supply and distribution of, and postgraduate training programs for, physicians in the United States and steps that should be taken to eliminate those deficiencies. The Council is to encourage entities providing GME to conduct activities to voluntarily achieve the recommendations of this Council under (5) above.

Previous Reports

The Council was asked by Congress to issue its first report by July 1, 1988, and subsequent reports every three years. Since its establishment, COGME has submitted the following reports to Congress:

- First Report of the Council, Volume I and Volume II (1988).
- Second Report: The Financial Status of Teaching Hospitals and the Underrepresentation of Minorities in Medicine (1990).
- Addendum to the Second Report: The Financial Status of Veterans Administration Teaching Hospitals (1990).
- Scholar in Residence Report: Reform in Medical Education and Medical Education in the Ambulatory Setting (1991).

Principles of the Council

In making these recommendations to Congress and the Secretary, the Council's deliberations have been guided by the following principles:

- The primary concern of the Council must be the health of the American people. There must be ensured access to quality health care for all. Concern for the well-being of the health professions, medical schools, and teaching hospitals, while im-

portant, must be secondary to the previously mentioned concerns.

- The Council should consider the diverse needs of the various geographic areas and segments of the population, such as rural and inner-city areas and minority and disadvantaged populations.

- A goal of the Council is increased representation of minorities in the health professions. Targeted programs are appropriate and a necessary means of achieving this objective.

- The Council must consider the interrelationship between services provided by physicians and those provided by other health professions.

- Although the Council supports the continuation of successful private sector initiatives, it recognizes that an active Federal and State role has been and will continue to be needed to address the specific problems of distribution, quality, and access to health care.

- The Council should be concerned about effects on total health care costs in the Nation. The Council must consider the financial and programmatic impact of its recommendations on the Federal budget, both short and long term.

- The Council recognizes that health care in the United States is not a closed system; therefore, its deliberations must be guided by an international perspective.

- The Council must consider changes in demographics (e.g., the aging population), disease patterns (e.g., increasing prevalence of the acquired immunodeficiency syndrome [AIDS]), patterns of health care delivery (e.g., increased emphasis on ambulatory care), and the unmet needs for prevention and care.

- The Council believes that a strong system of medical education must be maintained in order to expand medical knowledge and provide access to quality medical care through an adequate supply of appropriately educated physicians.

- American medical education should provide a basis for physicians of the future to be able to deliver continually improving patient care through a better understanding of disease processes and their clinical manifestations. The education system should prepare physicians to appropriately apply new techniques of diagnosis, treatment, and prevention in a compassionate and cost-effective manner.

Issues for Further Exploration

The Council recognizes that there are a number of issues requiring further exploration. Among these are the following:

- The Nation's voluntary system of specialty certification, medical education accreditation, and licensure, which have a significant impact on physician workforce supply and distribution.

- The important role of physician assistants, nurse practitioners, and certified nurse midwives in delivering primary care, when working in collaboration with generalist physicians.

- Representation of women in medicine, particularly in academic roles.

- The State's role, including model initiatives, in addressing workforce data needs, supply, and distribution.

- Other financing and infrastructure approaches that have potential to attain the stated workforce goals.

COGME Members, Subcommittees, and Staff

Members

David Satcher, M.D., Ph.D., Chairperson
President, Meharry Medical College
Nashville, Tennessee

Stuart J. Marylander, Vice Chairperson
President and Chief Executive Officer
Triad Healthcare
Encino, California

Paul C. Brucker, M.D.
President, Thomas Jefferson University
Philadelphia, Pennsylvania

Jack W. Colwill, M.D.
Professor and Chairman, Department of Family
and Community Medicine
University of Missouri-Columbia
Columbia, Missouri

Lawrence U. Haspel, D.O.
Executive Vice President, Hospital Operations
Chicago College of Osteopathic Medicine
Chicago, Illinois

William S. Hoffman, Ph.D.
Director, UAW Social Security Department
Detroit, Michigan

Pedro Ruiz, M.D.
Professor, Department of Psychiatry
Baylor University College of Medicine
Houston, Texas

Juereta P. Smith, R.N., J.D.
Associate Counsel
Corporate Counsel, USAA
San Antonio, Texas

Margaret T. Stanley, M.H.A.
Administrator
Washington State Health Care Authority
Olympia, Washington

Robert L. Summitt, M.D.
Dean, College of Medicine
University of Tennessee
Memphis, Tennessee

Eric E. Whitaker, M.P.H.
Past President, American Medical Student
Association
Medical Student, University of Chicago
Pritzker School of Medicine
Chicago, Illinois

Modena H. Wilson, M.D.
Director, Division of General Pediatrics and
Adolescent Medicine
The Johns Hopkins University School of Medicine
Baltimore, Maryland

Charles E. Windsor
President and Chief Executive Officer
St. Mary's Hospital
East St. Louis, Illinois

George D. Zuidema, M.D.
Vice Provost for Medical Affairs
The University of Michigan
Ann Arbor, Michigan

Fitzhugh Mullan, M.D.
Director, Bureau of Health Professions
Health Resources and Services Administration
Public Health Service
Rockville, Maryland

Robert G. Eaton
Associate Administrator for
Program Development
Health Care Financing Administration
Washington, DC

Elizabeth M. Short, M.D.
Associate Chief Medical Director
for Academic Affairs
Department of Veterans Affairs
Washington, DC

Council Subcommittees

Physician Manpower Subcommittee

George D. Zuidema, M.D., Chairperson

Jack M. Colwill, M.D.

William S. Hoffman, Ph.D.

Fitzhugh Mullan, M.D. (ASH)

Pedro Ruiz, M.D.

Juereta P. Smith, R.N., J.D.

Modena H. Wilson, M.D.

Charles E. Windsor

Staff Liaison:

Jerald M. Katzoff, Division of Medicine

Medical Education Programs and Financing Subcommittee

Lawrence U. Haspel, D.O., Chairperson

Paul C. Brucker, M.D.

Robert G. Eaton (HCFA)

Stuart J. Marylander

Elizabeth M. Short, M.D. (VA)

Margaret T. Stanley, M.H.A.

Robert L. Summitt, M.D.

Eric E. Whitaker, M.P.H.

Staff Liaison:

Debbie M. Jackson, M.A.,

Division of Medicine

Minority Representation in Medicine Subcommittee

Juereta P. Smith, R.N., J.D., Chairperson

Jack M. Colwill, M.D.

William S. Hoffman, Ph.D.

Stuart J. Marylander

Pedro Ruiz, M.D.

Robert L. Summitt, M.D.

Eric E. Whitaker, M.P.H.

Staff Liaison:

Lanardo E. Moody, M.A.,

Division of Medicine

Staff

Marc L. Rivo, M.D., M.P.H., Executive Secretary
Director, Division of Medicine

Carol S. Gleich, Ph.D.

Chief, Special Projects and Data Analysis Branch

F. Lawrence Clare, M.D., M.P.H.

Deputy Executive Secretary

Chief, Data Analysis Section

Jerald M. Katzoff

Staff Liaison, Physician Manpower Subcommittee

Debbie M. Jackson, M.A.

Staff Liaison, Medical Education Programs and Financing Subcommittee

Lanardo E. Moody, M.A.

Staff Liaison, Minority Representation in Medicine Subcommittee

Eva M. Stone

Committee Management Assistant

Susan S. Sumner

Secretary



U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
Health Resources and Services Administration