

PRIMARY HEALTH CARE: WORLDWIDE INTEREST... AND A U.S. PERSPECTIVE

Joseph M. Baldi¹

Important changes in U.S. medical care policies have reflected the current U.S. and world emphasis on extension of primary care. This article describes various Public Health Service activities designed to improve primary care services for areas in need within the United States.

Primary health care has received such great attention over the past few years that one might well ask why such worldwide interest has focused on the subject. For example:

- The number one health priority identified by the U.S. Congress in the Health Planning and Resources Development Act of 1974 is "the provision of primary care services for medically underserved populations, especially those that are located in rural or economically depressed areas."

- The United States Public Health Service established what it called the Rural Health Initiative in 1975 and the Urban Health Initiative in 1976. Both are efforts to expand the country-wide system of community-based clinics that provide primary care services to areas experiencing serious health care problems.

- Many other nations of the Americas, including Mexico, are quite concerned about providing health services to people living in rural areas and to the urban poor.

- The Pan American Health Organization's United States-Mexico Border Health Association held a workshop on primary

health care in Juárez, México, on 12-13 December 1977.

- The World Health Organization sponsored a World Conference on Primary Health Care in Alma-Ata, the Soviet Union, in September 1978.

The principal reason for such interest may well be that most of the world's nations are questioning the structure and effectiveness of their health care systems and of "traditional" approaches to health care. Former Canadian Minister of Health Marc Lalonde, in his book *A New Perspective on the Health of Canadians*, has forced the world community to evaluate its health professions and its views on health care. His constructive criticism and ideas about traditional health care systems are being taken quite seriously by a growing number of people in the United States and in many countries around the world.

Defining Primary Health Care

Phrases such as "primary health care" that refer to complex ideas or systems tend to be interpreted differently by different countries, and even by different health care professions within a given country. To take one example, the legal authorities under which the Health Services Administration of the U.S. Public Health Service

¹Public Health Adviser, United States Public Health Service, Health Services Administration, Bureau of Community Health Services.

operates include the following services within their definition of mandatory primary care services:

- 1) diagnostic, treatment, consultative, referral, and other (outpatient) services rendered by physicians, physician assistants, nurse practitioners, nurse clinicians, dentists, and other qualified dental personnel;
- 2) diagnostic laboratory and radiologic services;
- 3) emergency medical services;
- 4) preventive health services including immunizations, prenatal and postpartum care, children's eye and ear examinations, voluntary family planning services, and preventive dental services; and
- 5) transportation services as needed.

In addition to the aforementioned comprehensive and mandatory services that must be provided by all recipients of federal funds for primary care programs (sections 329 and 330 of the Public Health Service Act-P.L. 95-626), the law also refers to "supplemental (primary care) services" that, unlike the services mentioned above, are optional and may be provided. These services include:

- 1) home health care;
- 2) extended care facility services;
- 3) mental health services;
- 4) rehabilitative services;
- 5) social services; and
- 6) health education.

When talking about "primary health care" in the United States, some people would consider it within the comprehensive context cited above. But many others would view primary care in limited or categorical terms—to include such things as screening or immunization campaigns, emergency care or services, well child clinics, or health education.

Also, while regarding all primary care services as having value, over the past few years the U.S. Public Health Service has sought to encourage health care professionals and the general public to view primary

care as a total system or approach that includes an extremely important and frequently overlooked component—self-care and preventive measures.

In addition, in other countries the meaning of the term "primary care" may differ from any of its customary meanings in the United States. Some countries use the term to assign priority to a full range of health care problems or needs generally related to public health that are of "primary" or principal concern. Alternatively, the term is sometimes used to refer to the first level of the health care system (ambulatory and emergency services), as opposed to the more sophisticated services at the secondary and tertiary levels that are generally provided by hospitals, university medical clinics, or research centers.

To help put these various definitions into context, it is worth recalling a statement made by Dr. John S. Millis, Chancellor Emeritus of Case Western University, at the Northeast Canadian-American Health Conference held at Boston in November 1976. As Dr. Millis explained, the essence of effective primary health care is to "(1) promote the availability of services to a broad spectrum of the population; (2) promote the dissemination of information and knowledge to use these services widely; and (3) encourage the people to use this knowledge on their own behalf."

Dr. Millis also noted the difficulties involved in trying to implement activities or programs designed to attain these three objectives. In his words, "primary care is so inclusive and heterogeneous it is difficult to deal with conceptually. It involves the services of a wide number of professionals (and specialists), many of whom are in short supply or not well distributed for easy patient accessibility. Few of these individuals are associated with highly visible institutions."

Resource Allocation

Regardless of what country we examine, we find health professionals do experience

common challenges and frustrations. Clearly, any country's specific health care problems and priorities will vary according to its social, economic, political, and demographic structures. Some considerations are common to all countries. For instance, even affluent nations (including the United States) have become increasingly aware that the human and financial resources available to deal with the full range of health care needs and problems are, after all, limited.

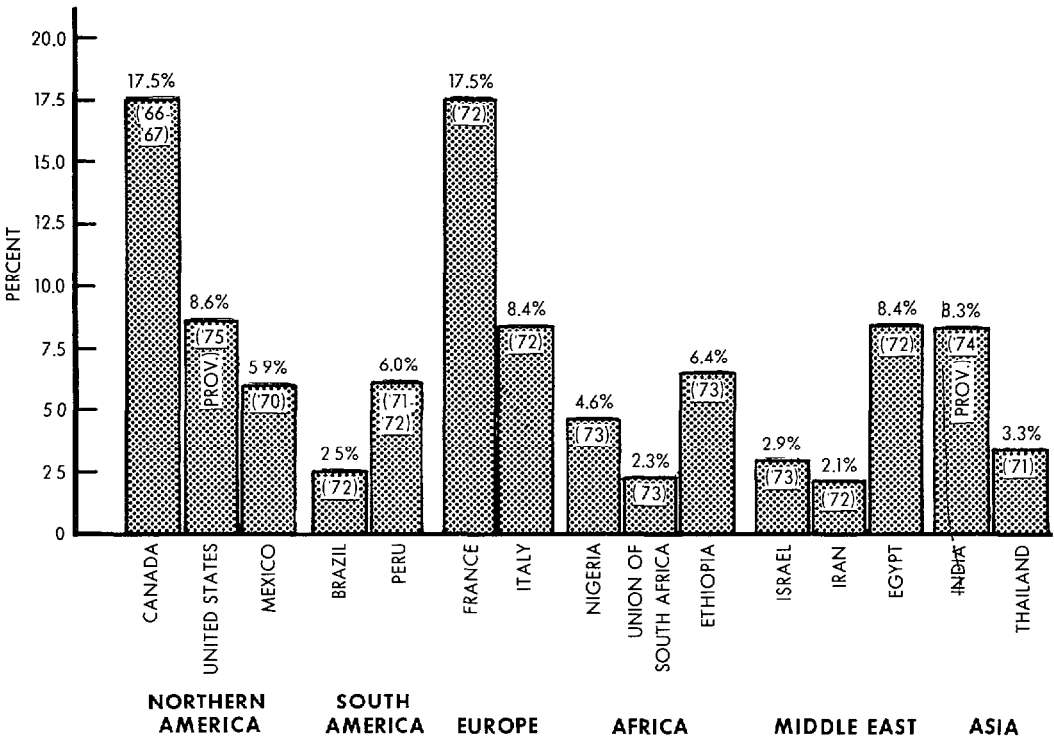
As Figure 1 shows, the nations of the world devote varying percentages of their total budgets to health care services for their citizens. Equally important, or perhaps more important, than the per capita allocation of government funds for health care, however, is the manner in which those funds are being spent—particularly those

allocated for primary health care. So the questions to ask are: How effective is the allocation of these funds? and Are a nation's people healthier from both a physical and emotional point of view?

In general, when assessing national health care systems and the allocation of health care funds, at least two subjects should be examined. These are, first, the administrative, organizational, and financial problems of the health care system; and second, a subject that Marc Lalonde has addressed so simply but effectively, whether we have the right health priorities—i.e., Are we spending our monies on the most needed or beneficial programs or service?

In the United States we are becoming increasingly aware of the impact that the environment, diet, exercise, and emotional health have on disease and disease preven-

Figure 1. Health expenditures as a percentage of total government expenditures in selected countries.



Source: World Health Organization, *World Health Statistics Report*, volume 28, Number 11, Geneva, 1975.

tion. For example, high infant mortality rates in some parts of the U.S. are as much related to pollution by wastes and lack of potable water as to other medically preventable conditions. We also believe that providing citizens with better information about the impact of diets and life-styles on health has helped contribute to a gradual decline in the incidence of cardiovascular diseases. Another important point to recognize is the need for a change of attitude among health care professionals, allied health care personnel, and patients. Specifically, health care personnel need to share more information with their patients, and the patients need to assume more responsibility for their own health care; what is desired, in essence, is a partnership between providers and patients. All these things—dissemination of new information about diseases and disease prevention, altering the structure of health care, and changing the attitudes of health care personnel and patients—fall mainly within the purview of the primary care system and primary health care providers.

Let us now briefly examine the allocation of central government funds for health care, focusing on allocations to the different levels (primary, secondary, and tertiary) of the system and using data from the U.S.

Federal Government as an example. The data presented (Table 1) are not amenable to being broken down directly into primary, secondary, and tertiary care levels; but it is possible to consider hospital and nursing home care together as roughly equivalent to secondary and tertiary care.

The major health care expenditures that increased most sharply from 1960 to 1975 were in the areas of nursing home and hospital care. In particular, the increase in hospital care costs—from 32.9 per cent of total expenditures in 1960 to 39.3 per cent of the total in 1975—was by far the most dramatic increase in overall health costs. The reasons for this increase are obviously complex. It should be noted, though, that hospital care is generally associated with the more sophisticated and costly secondary and tertiary levels of care. A significant increase in the amount of health care dollars associated with these levels of care does mean that, proportionately, fewer dollars are going to primary care.

Although these data are specific for the United States, people familiar with health care systems in other countries find surprising similarities. In general, a disproportionate percentage of health care resources (human and financial) goes to support large hospitals, to operate medical and research

Table 1. Distribution of total U.S. national health expenditures, by major category, in fiscal years 1960 and 1975.

| Expenditure category | FY 1960 | | FY 1975 | |
|---------------------------|-----------------------|------------|-----------------------|------------|
| | US dollars (billions) | % of total | US dollars (billions) | % of total |
| Hospital care | 8.5 | 32.9 | 46.6 | 39.3 |
| Physician services | 5.6 | 21.6 | 22.0 | 18.6 |
| Drug and drug sundries | 3.6 | 13.9 | 10.6 | 8.9 |
| Dentist services | 1.9 | 7.5 | 7.5 | 6.3 |
| Research and construction | 1.7 | 6.6 | 7.2 | 6.1 |
| Nursing home care | 0.5 | 1.9 | 9.0 | 7.6 |
| All other expenditures | 4.1 | 15.6 | 15.6 | 13.2 |
| Total | 25.9 | 100.0 | 118.5 | 100.0 |

Source: American Medical Association, *Socioeconomic Issues of Health*, 1974 (p. 147) and 1977 (p. 175). Chicago, Illinois.

centers, and to develop and utilize expensive equipment and technology. This is true for Brazil, Egypt, and Romania, as well as for Canada and the United States.

Moreover, most of these vast resources go to large cities in the United States and to national or state capitals in other countries. Not surprisingly, it is difficult if not impossible to gain access to this level of care in most countries' smaller cities and rural areas; and the remaining health resources allocated for primary care services are usually inadequate relative to the vast existing demand for services at the primary level. Also, the services provided are usually extremely fragmented and difficult to coordinate; and in terms of the demands for available services at each level of care, the demand for the vast range of primary care services is the most difficult to meet.

U.S. Government Initiatives

Within this context, it may be useful to review what the U.S. Department of Health, Education, and Welfare and its Public Health Service are doing to improve the network of primary health care services in the United States.

Legislation

To begin with, a number of the department's efforts are aimed at ensuring that major national health planning legislation adequately addresses the requirement that primary care be strengthened and that health resources be allocated to those urban and rural areas in greatest need.

The 1974 Health Planning and Resource Development Act created a nationwide system of state and regional health planning agencies (the health systems agencies). At the present time, more than 200 such agencies have been designated, either fully or conditionally. Within the Act, the Congress identified 10 national health matters for the department and the

health systems agencies to address and for which resources should be allocated. Of these various matters, as previously noted, the first priority was assigned to "provision of primary care services for medically underserved populations." The regulations that will implement the law are currently being developed, and the Public Health Service and representatives of rural and economically depressed areas are monitoring the regulatory process carefully to ensure that the promotion of comprehensive primary care receives appropriate attention.

Over the past two years, high-level departmental and Congressional staff members have been discussing the need to strengthen the nationwide network of primary care clinics supported by the Public Health Service before implementing a system of national health insurance. In November 1977, the Secretary of Health, Education, and Welfare, Joseph Califano, said he hoped that, with Congressional and departmental support, the number of people receiving comprehensive primary care through these clinics would increase from the present 6 million (as of late 1977) to 20 million in fiscal year 1982. It is important for us to develop this capability, he asserted, in order to make certain that citizens who live in medically underserved urban and rural communities are assured access to health care before and during the transition to a national health insurance system.

Specific U.S. Programs

The Rural Health Initiative and the Health for Underserved Rural Areas Program are good examples of the Public Health Service's attempts to develop primary care capability and to allocate available resources more effectively to areas of greatest need. The Rural Health Initiative delivers primary care services to populations in greatest need, while the Health

for Underserved Rural Areas Program supports research and demonstration projects that will hopefully guide future rural health policies. Rural areas around the country that have the most need for primary care services have been determined in accord with the following criteria:

- *Medically underserved areas* have been designated according to a formula that takes into account the percentage of residents under the poverty level, the percentage of residents over age 65, the infant mortality rate, and the physician to population ratio.

- *Health manpower shortage areas* have been determined by measuring the ratio of residents to primary care physicians or of residents to other health personnel.

- *High infant mortality areas* have been defined by the Public Health Service as areas where the infant death rate exceeds 22.0 deaths per 1,000 live births (a rate approximately 50 per cent above the national average).

- *High impact migrant and seasonal farmworkers areas* have been defined by the Public Health Service as single or multicounty areas that have 4,000 or more migrant or seasonal farmworkers.

After assembling the above information, the Public Health Service's Bureau of Community Health Services identified 242 rural counties (all part of "non-standard metropolitan statistical areas") that met at least three of the four criteria cited and that benefited from no Public Health Service resources. A list of county names and maps pinpointing areas of need and the location of Public Health Service resources were sent to regional office staff members to assist them in working with these communities to develop primary care capabilities. In addition, technical assistance consultants were hired to assist the regional office staffs and these priority communities in developing the capabilities necessary to implement primary care projects.

Over the past four years the Bureau of Community Health Services has supported

Rural Health Initiative and Health for Underserved Rural Areas projects. These projects, when they become fully operational, will reach approximately three-quarters of the original 242 priority counties and many other counties which have since been given priority designation.

Since June 1975, 120 Health for Underserved Rural Areas and 492 Rural Health Initiative primary care projects have been funded. These projects will provide services to all or part of the following areas not previously served:

- 1,408 rural counties;
- 1,402 of 2,400 rural counties designated as medically underserved areas;
- 866 of 1,542 rural counties designated as health manpower shortage areas;
- 351 of 740 areas designated as high infant mortality areas; and
- 11 of 13 rural high migrant impact areas.

It is expected that these Rural Health Initiative and Health for Underserved Rural Areas projects will employ 4,040 staff members, of whom approximately 960 will be physicians and at least an equal number will be physician assistants, nurse practitioners, or registered nurses.

In 1977, the Health Services Administration and the Bureau of Community Health Services undertook a similar effort to develop comprehensive primary care clinics in underserved urban areas around the country. Following the strategy employed in rural areas, the Bureau has identified urban communities of especially great need; for the past two years and into the future it will allocate resources to them and will assist them in developing primary care capabilities.

We have good reason to believe that the sudden drop in the national infant mortality rate from 16.1 deaths per 1,000 live births in 1975 to 15.2 in 1976, and 14.1 in 1977 is due in part to our support of 612 new primary care projects with over 1,200 clinic sites since June 1975. These encouraging

data have strengthened the Public Health Service's resolve to continue developing primary care capabilities in underserved urban and rural areas.

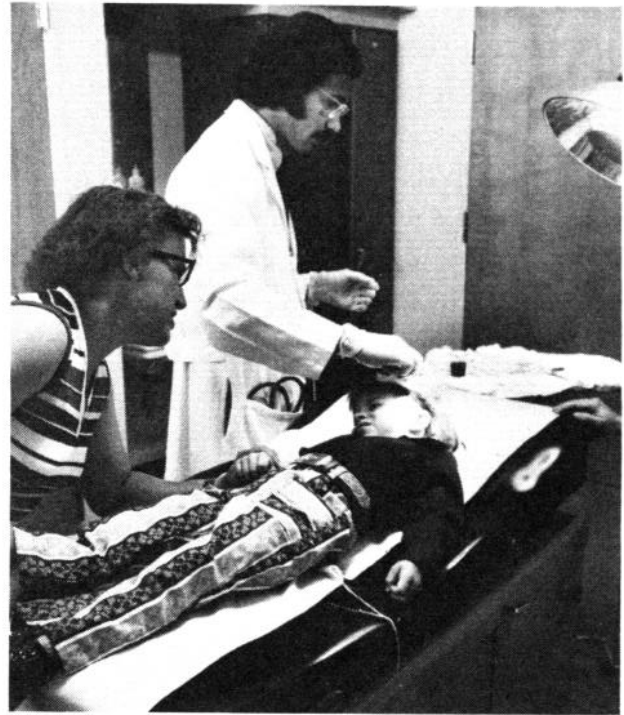
Inter-Agency Coordination

By itself, however, allocation of additional Public Health Service funds for major urban and rural health problems is not sufficient. Among other things, it is necessary to confront a major difficulty within the U.S. health care system itself—that being the fragmentation and lack of coordination among the many federal and state government health and health-related programs.

Over the past three years, the Department of Health, Education, and Welfare and the Public Health Service have encouraged efforts to promote more effective linkages or working relationships between primary care programs within our agency, within the department, and within other federal departments (particularly the Department of Agriculture and the Department of Labor). The Bureau of Community Health Services, for example, has undertaken several integration efforts designed to strengthen and broaden the network of comprehensive primary health care systems providing care for residents of underserved areas. To cite specific examples, during the past two years the Bureau has promoted:

- Linkages with community mental health centers administered by the Alcohol, Drug Abuse, and Mental Health Administration. Three million dollars of the Bureau's FY 1980 funds have been allocated to 95 of our urban and rural community health centers to hire professional mental health specialists who arrange for federally funded mental health centers to provide services to Bureau grantee patients.

- A joint agreement (signed in September 1978) between the Health Services Administration and the Alcohol, Drug Abuse, and Mental Health Administration. The purpose of the agreement is to train Health Services Administration primary care project providers to deal



Primary care physician attends to an emergency.

better with patients suffering from alcohol, drug abuse, general emotional problems, or mental health problems.

- Collaboration with the Department of Agriculture. An agreement between the Department of Health, Education, and Welfare and the Department of Agriculture (dated September 1978) will annually set aside US\$25 million in Department of Agriculture Community Facility Loan Program funds fiscal years 1979 through 1982 for the purpose of constructing, renovating, or modernizing primary care clinics operated by community organizations supported by the Public Health Service.

- Collaboration with the Department of Labor. Using the authority of the Department of Labor Comprehensive Employment and Training Act, in 1979 500 people were placed in Health Services Administration primary care projects and trained to carry out a variety of health jobs—from those of pharmacy aides to those of outreach workers.

Manpower Resources

Obviously, health personnel are an invaluable element in overall health care resources. In this vein, the Public Health Service's National Health Service Corps is recognized as an integral part of the U.S. community-based comprehensive primary

health care strategy. The corps is responsible for recruiting and placing physicians, dentists, nurse practitioners, physician assistants, and other health professionals in rural and urban areas with health manpower shortages. Over the past two years, the corps and Bureau of Community Health Services staff members have sought to place increasing numbers of corps personnel in bureau primary care projects that have experienced difficulty recruiting key health care providers. Placement of corps staff members in community health center, migrant health center, rural health initiative, and health for underserved rural areas projects (rather than in small, independent sites) appears to have been a correct decision. Their placement in such Bureau projects—where the opportunities for peer contact and for hospital and specialty backups are much greater—has increased corps assignee job satisfaction and retention rates. Conversely, this placement of corps personnel has meant that more Bureau primary care projects are staffed and that they are capable of providing services to more people. Because this strategy was found so effective, 70 per cent of all corps personnel were assigned to Bureau projects during 1978 and 1979.

Because the Health Professions Educational Assistance Act of 1976 amended the Public Health Service Act to permit increased numbers of medical students and students of other health professions on federal scholarships to enter the National Health Service Corps, it is anticipated that overall corps strength will increase rapidly over the next few years. Official estimates project that the number of scholarship recipients entering the corps will increase from 179 in 1977 to 770 in 1979 and 1,570 in 1982, swelling overall corps membership to 2,060 in 1979 and 4,803 in 1982. The Public Health Service hopes that if it can meet or come close to meeting these projections, it will have taken a major stride toward reversing and correcting the health



Awaiting pre-natal care visit at urban primary care center.

manpower distribution problem in the United States.

In discussing problems of health manpower distribution in the United States, however, one should not overlook the increasingly important role of mid-level health care providers. Nor should one neglect the important health care financing mechanisms that will encourage physicians and mid-level providers to practice in underserved urban and rural areas. Nurse practitioners and physician assistants have played an increasingly important role in complementing physicians, particularly in medically underserved areas, in recent years. The U.S. Government has taken the lead in creating and financing training programs for these health professionals, but these programs have been used less extensively than they might have been. This is largely because until recently, Medicare (the federal health financing program for the elderly) did not reimburse for services these professionals provided without on-site physician supervision, and because in 34 of 50 states Medicaid (the federal health financing program for the poor) likewise did not reimburse for services provided by mid-level personnel without on-site supervision.

Fortunately, passage of the Rural Clinic Services Act in 1977 removed major barriers to the full use of mid-level health care providers. The Act requires Medicare and Medicaid reimbursement for clinic services provided by nurse practitioners and physician assistants in medically underserved rural areas. It also includes an urban research and demonstration provision that will allow the Department of Health, Education, and Welfare to explore appropriate methods and rates of reimbursement for services provided by mid-level personnel in urban areas.

Concluding Remarks

The current worldwide interest in pri-

mary health care, I believe, has arisen from analysis and questioning of health conditions, health care financing and health institutions by health professionals of many countries, including the U.S., during the latter half of the 1970s.

As the foregoing examples help to demonstrate, these health professionals are now working to better define and strengthen the primary health care component of their health systems. In so doing, they should continually question whether funds allocated for health care are targeted correctly, whether health priorities have been identified accurately, and how health resources can be used to better serve people in all countries.

SUMMARY

Primary health care has received great attention over the past few years from many nations of the Americas, including the United States. At present a number of important trends in U.S. medical care—involving dissemination of new information about diseases and disease prevention, alteration of the health care structure, and adoption of new attitudes by health care personnel and patients—fall mainly within the purview of the primary care system and primary health care providers.

In this regard, two U.S. Government undertakings known as the Rural Health Initiative and the Health for Underserved Rural Areas Program provide good examples of official efforts to improve primary care capabilities. In

connection with these efforts, U.S. counties in particular need have been identified, and 612 projects have been funded. These projects will provide primary care services to all or part of 1,408 county or multicounty areas not previously served.

Overall, there is good reason to believe that the decline in the U.S. infant mortality rate—from 16.1 deaths per 1,000 live births in 1975 to figures of 15.2 in 1976 and 14.1 in 1977—have been partly due to support provided by the U.S. Public Health Service for primary care projects since 1975. These encouraging figures, in turn, have strengthened official resolve to continue developing primary care capabilities in underserved parts of the country.

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