Action Research for Improvement of Community Health Services

LEE HOLDER, M.P.H., GEORGE JAMES, M.D., M.P.H., and DEAN W. ROBERTS, M.D., M.P.H.

SCIENTIFIC and technological knowledge is growing at a rate unequaled in the history of time. Knowledge of optimal health practices is increasing and far exceeds the actual acceptance in adoption of new practices by the populous—indeed, even the professional.

The Surgeon General's Report on Smoking and Health has linked cigarette smoking with lung cancer—yet people continue to smoke. The Papanicolaou smear test can detect uterine cancer in early, curable stages—yet women continue to die from this disease. Venereal diseases are both preventable and curable—yet the rates are increasing, particularly in the teenage population. Administrators agree on the desirability of cooperation and coordination of health activities—yet we hear words such as "overlap," "duplication," "gaps," and "fragmentation," in describing community health services as they are organized and delivered throughout our nation today.

The Performance Gap

The gap between that which is actually known to be good health practice and that which is actually practiced by the people can be called the performance gap. It is also known as the behavioral gap. One of the challenges facing us is how to narrow this gap by influencing a change in the attitudes, motivation, and behavior of people—and organizations, for that matter—in the light of new information and knowledge.

Our challenge in public health today, on a national scope, is to establish goals that can serve as directional guidelines and to develop ways and means by which communities can take practical steps toward the achievement of relevant health goals, thereby reducing the performance gap and improving community health services. This is a process of innovation and change—for the patient, the health professional, health organizations, the community, and the nation.

Goals are useful only if they are meaningful and relevant and can be implemented. We must speed up the process of gaining new knowledge, diffusing information and ideas throughout the country, and actually putting new findings into practice.

To be applicable and acceptable to the public, health goals, and methods to meet the goals, must be relevant. If, for example, the prevention of lung cancer is a goal and since research findings link cigarette smoking to lung cancer, we could use the following methods of applying this new knowledge:

1. Persuade people to give up smoking. While this is possible in some cases, it is not a realistic and relevant method for the public as a whole because of prevalent attitudes and habits of the people.

2. Manufacture a safe cigarette—if researchers can produce it. By being more acceptable,

Mr. Holder is director of the community action studies project, National Commission on Community Health Services, Inc., Bethesda, Md. Dr. James is commissioner of health, New York City Department of Health, and chairman of the advisory committee to the community action studies project. Dr. Roberts is executive director of the National Commission on Community Health Services, Inc., Bethesda.

such a method might be more realistic toward attainment of the goal and have a better chance of succeeding than the first method.

A case could be made for many other public health goals, for example, prevention of dental caries by topical application of fluorides on an individual basis versus fluoridation of public water supplies. Obviously, the latter method is more realistic and relevant.

Although outstanding research efforts are being conducted by many agencies and groups, sporadic and poor mechanisms often are used for getting the knowledge of these findings into the mainstream of community activity. The performance gap and the implementation lag are becoming more and more unacceptable to the American people. Although we have a national health agency on a governmental level (the Public Health Service), many voluntary health agencies on the national level, and departments of public health and organized voluntary health agencies at the State level, we do not have organized health services in every community, either governmental or voluntary. Herein lies one gap: the inability to provide services based on new knowledge at the grassroots.

There has been lack of agreement on goals in public health and ways and means of identifying and meeting the health needs of people. This is further complicated by the magnitude of the problems and the complexities of agencies and organizations devoted to meeting these needs. When we talk of community health services, for example, we are talking not merely about health departments or voluntary health agencies but of industrial health programs, health programs of civic clubs, and the services of physicians, dentists, pharmacists, and other private practitioners. We are speaking of hospitals, both private and governmental, and complex phenomena that really cannot be called a system.

Need for New Approach

Charges of disorganization in community health services throughout the nation have been increasing in recent years. Concern about growing fragmentation of services and planning and rising costs of health and medical care has given rise to renewed interest in doing something corrective. An outgrowth of this concern led to the establishment of the National Commission on Community Health Services, Inc., in 1962.

In 1945 the Haven Emerson report on "Local Health Units for the Nation" was published. It proposed setting quantitative standards for improving health services by establishing a local health department in each jurisdiction of the nation with a specified population. The report further proposed personnel standards; for example, 1 physician (health officer) for each health unit, 1 nurse per 5,000 population of the area, and so on. It also suggested the basic services that each health department should offer.

Although these guidelines and standards were a great step forward at that particular time, they had limitations. For example, the standards frequently were inapplicable to the actual situations in many communities. They were often misinterpreted and became ceilings rather than baselines for providing health services. The report focused on governmental health departments. It did not allow sufficient flexibility for dealing with some of the problems facing our nation today; subsequently, the standards were outdated. For example, today we have increasing problems in chronic illness which were not as acute in Emerson's day. Ionizing radiation was not the problem in 1945 that it is today. The migration to the urban-suburban areas has increased and created new and different kinds of problems. New chemicals used in industry, agriculture, and the home present new kinds of environmental hazards. In addition, the uniqueness of each community situation requires flexibility to meet the needs of the people of that particular community. For example, Newark, N.J., probably could not use the same standards as Burlington, Vt., or Enid, Okla., because of different types and intensities of problems and differences in the communities themselves.

National Commission Approach

The National Advisory Committee on Local Health Departments, a committee of the National Health Council, was established to aid in implementing the Haven Emerson findings. After years of discussion and planning, the

National Conference of Regional Forums

Sponsored by National Commission on Community Health Services

SAN FRANCISCO: Sheraton Palace Hotel, September 8–11, 1965. Chairman: Dr. John W. Knutson, professor of preventive dentistry and public health, University of California Medical Center, Los Angeles.

CHICAGO: Palmer House, September 15–18, 1965. Chairman: Dr. Edwin L. Crosby, executive vice president and director, American Hospital Association, Chicago.

ATLANTA: Dinkler Plaza Hotel, September 22–25, 1965. Chairman: Dr. John H. Venable, director, Georgia State Department of Public Health, Atlanta.

PHILADELPHIA: Benjamin Franklin Hotel, September 29–October 2, 1965. Chairman: Dr. Leroy E. Burney, vice president of health sciences, Temple University, Philadelphia.

group decided that it needed to sponsor a national commission approach—a national study of the nation's health—to point the direction for community health services, to think ahead into the future as to emerging needs and trends, and to recommend ways and means for solving the nation's health problems. The proposal for this national commission study was developed and funded initially by the Kellogg Foundation, the Bureau of State Services of the Public Health Service, and the McGregor Fund. Additional funds subsequently were received from various private and governmental sources.

Co-sponsors of the commission are the American Public Health Association, a professional membership group, and the National Health Council, composed of more than 70 national voluntary health agencies. The commission is incorporated in Maryland as a nonprofit, temporary, independently operating organization, established for a 4-year period (1962–66) "to collect and study facts about community health services, needs, and problems, and to promote the translation of the resulting knowledge into effective community health services."

The commission is carrying out three projects:

NATIONAL TASK FORCES PROJECT: Six national task forces, composed of experts within specific fields, were organized to study basic issues facing the nation in delivering community health services. The task forces are not conducting original research but are pooling the collective wisdom of the members to arrive at a consensus of desirable goals toward which the country should be working. These six task forces are gathering information on environmental health, health manpower, health care facilities, organization of community health services, comprehensive personal health services, and financing community health services and facilities.

COMMUNITY ACTION STUDIES PROJECT: Organized for the primary purpose of identifying and analyzing principles and methods that facilitate effective community action for the improvement of community health services. The primary purpose of this paper is to discuss the activities of this project.

COMMUNICATIONS PROJECT: Developed to facilitate the work of the other two projects through effective communications. Included in its activities are publication of a monthly newsletter, entitled *Community Health*, development of a communication plan for dissemination of information on the commission and its findings, establishment of a speaker's bureau, and plans for a series of forums and conferences. Four regional forums will be held in September 1965, designed to review preliminary reports from the national task forces and community action studies projects (see box). At a national conference to be held in May 1966, the commission's "Report to the Nation" will be presented.

Focus on action. Action in the health field, particularly at the community level, is the primary interest of the community action studies project, and indeed the entire national commission. Regardless of the goals for community health, the plans ultimately must be implemented before improvement will occur. The gap between what is scientifically known to be good health practice and that which is actually practiced is too great to accept. Not only must we have acceptable and realistic health goals, but we must develop the ways and means of motivating individuals, groups, agencies, and communities to accept these goals, develop plans to achieve them, and actually implement the goals.

All six national task forces are considering planning aspects within their respective fields of interest. For example, the task force on

health care facilities is not only identifying needs in the health facilities field but is projecting goals for the future and suggesting ways and means of bridging the gap between the present and the future.

Community studies. While the commission in general and the task forces in particular are interested in health goals for the next several decades, the communities throughout our country are interested in ways and means of identifying and achieving acceptable, attainable community health goals for the more immediate future. This means that communities must identify their problems, decide on goals, set priorities, develop plans of action, and implement programs for change. Isolating problems is a first step in this process. Improving health services through the dynamics of local decision making is an end product in this complex process.

To gain additional insight into the complexities of community study and action, the commission developed a self-study program wherein the following 21 areas throughout the nation were selected to participate with the community action studies project in its program.

ARKANSAS: Ouachita County, Camden
CALIFORNIA: San Mateo County
IDAHO: Idaho Falls
ILLINOIS: Sangamon County, Springfield
MARYLAND: Prince George's County
MASSACHUSETTS: Springfield
MINNESOTA: Saint Louis County, Duluth
NEVADA: Washoe County, Reno
NEW JERSEY: Cape May County and Newark
NORTH CAROLINA: Halifax County
OHIO: Lucas County, Toledo
OKLAHOMA: Garfield County, Enid
OREGON: Lane County, Eugene
PENNSYLVANIA: Bucks County
SOUTH CAROLINA: Charleston
TENNESSEE: Chattanooga and Knox County
TEXAS: San Antonio
UTAH: Salt Lake City
VERMONT: Burlington

These communities were selected from the 131 that expressed interest in the program. They are in various geographic regions of the country and have differing densities of population. Four communities have a population in excess of 500,000. Eleven are in the population range of 100,000 to 500,000. Six have populations of less than 100,000. Every region of the United States is represented. The communities were selected in six increments of two to nine communities each and the programs phased for beginning during the period from April 1963 to May 1964. Completing the study process normally takes 1 to 2 years, depending in part on the size of the community and the resources available for the study effort.

Each community program is a self-study in that it is organized, staffed, and financed from resources within the community. It is not a commission study as such. The community action studies project provides limited self-study consultation, assistance in methodological development of studies, and periodic conferences in which communities can exchange ideas and experiences, identify community health issues, and make suggestions and recommendations to the commission.

The focus of the community self-studies, from the standpoint of the community action studies project, is to gain insight into the dynamics of community action by using a method called process analysis. The commission wants to know what it can learn from the communities in their study efforts that will help other communities conduct successful health studies. Through these studies, the commission is (*a*) demonstrating the effectiveness of self-study methods as a tool for achieving action on community health problems, (*b*) developing and testing methods and techniques for community self-study, and (*c*) identifying and assessing factors that facilitate or inhibit action on health problems.

Significant community forces taking leadership roles in virtually all the 21 community studies include: city and county governments, industries, medical societies, hospital and related facilities, voluntary health councils, health departments, health and welfare councils, universities and colleges, and civic organizations. The study mechanisms within each community are being sponsored by the major health agencies and interested groups within each respective community.

The community action studies project has drafted a planning guide which is serving as a framework for approaching the systematic as-

sessment of community health services. Local study groups have the option of using the planning guide, modifying or adapting it to suit their needs, or not using it at all. This set of questionnaires suggests that a study of community health services can be conducted by study leaders looking first at the basic health needs of people and second at ways and means of meeting the identified needs.

A model structure for a community self-study consists of three phases (factfinding, goal setting, and action) containing the following seven steps.

1. Develop a profile of the economic, environmental, demographic, and social factors to serve as a baseline from which to identify and project community health needs.
2. Establish the status of behavioral factors relating to health services: attitudes, motivation, and behavior.
3. Assess health services, facilities, and resources.
4. Identify adequacies and inadequacies of present services.
5. Establish priority health goals, based on the identified needs and resources.
6. Plan programs of action (a blueprint by which plans can be put into action).
7. Implement the action plan and evaluate the effectiveness of getting action on recommendations.

Many studies stop at the fourth step: identifying adequacies and inadequacies of present programs. There is good reason to believe that an action potential is increased by establishing priority health goals, planning a definite course of action, and mobilizing community forces to implement the necessary action.

Retrospective studies. We are conducting a study to analyze the community factors responsible for implementation of recommendations of community health studies. This is an attempt to determine why some studies are successful in achieving action results and others are not.

In the first phase, we found that 2,002 community health studies were conducted in the United States from 1955 to 1963—at a rate of virtually one each day. What consequently happened to these studies? Do the reports collect dust on shelves or have community health services been improved? A sample of 500 of the 2,002 study reports (identified as a universe) is being analyzed for content and recommendations. Followup questionnaires are being sent to three knowledgeable persons in each community in which the studies were conducted to ascertain what has happened since the study was completed. Based on these responses, the researchers will develop an index of implementation to differentiate between high, medium, and low action results.

A second phase of this study will entail community followup to develop a deeper understanding of behavioral determinants of community health action. After a process of identifying communities comprising the highest and lowest implementers in the study sample, the researchers will conduct interviews with a portion of the health and nonhealth leaders in selected communities, based on the process analysis approach. A subsample of 20 communities will be studied in depth in this phase.

The study will be completed by early 1966. Three kinds of reports are anticipated from this research activity: (*a*) a profile of studies conducted in the United States in the past decade, (*b*) conditions of high and low study implementers (that is, community factors), and (*c*) factors of implementation with a conceptual model for community action.

Community readiness. Some communities are apparently unready to take any action to solve their health problems, yet others are ready, willing, and able to correct existing problems and to plan ahead to avert problems. We are interested in knowing the reasons for these apparent differences. As health practitioners, we should profit from knowledge about how one could identify a community that is ready for action or motivate a community to move from a state of unreadiness to a state of readiness for acting to improve health services. The community action studies project has received a Public Health Service grant to study these factors, and we anticipate the development of a clearer set of hypotheses about community readiness to be completed by early 1966.

A random sample of 15 of the 36 counties in the State of Oregon has been drawn for analysis. Interviews with positional leaders, such as the president of the medical society, the health officer, newspaper editor, county commissioner,

and other key people—persons whose decisions influence action within the community and attitudes about health and nonhealth issues—are being conducted to learn about community problems and issues. Concurrently, a statewide sample of people is being studied.

Independent variables of the study relate to: (*a*) range of population, economics, urban characteristics, health statistics, and (*b*) characteristics of the political systems and decision-making processes with regard to health and nonhealth issues. Dependent variables in the study are concerned with plans and planning within communities. Mental health planning is being included as a content area for study since a great deal of effort has been expended over the past several years in an attempt to foster mental health services and facilities. Documentation of these planning efforts has been excellent. In some communities the impact has been significant; in others, there has been virtually no impact as a result of statewide planning efforts.

Special studies. Some communities have had demonstrable success in achieving action for improving community health services and facilities and can serve as examples for other communities. Some of these special activities have resulted from self-study and some through commission activity; others through administrative action and a variety of other mechanisms. It is the primary objective of the special-studies activity to identify selected programs, document their development, and highlight the factors of success.

Process analysis. Recognizing that the community is dynamic and constantly changing, we can try to trace the chain of activities as problems are recognized, debated, and acted on or discarded. Process analysis is a method of inquiry, developed to study principles and methods of effective health action by analyzing what happens in continuing community efforts. The researchers or process analysts are interested in knowing who does what, when, how, and why in relation to health issues and also to the more general issues that provide the context for and may shape the success or failure of the health programs. The social scientists tell us that health affairs are not isolated but are entangled with political, economic, and broad social trends.

More and more, contemporary problems of health and illness call not for clear-cut applications of known techniques, as in the control of certain infectious diseases, but for widespread community efforts, as in chronic diseases. The voluntary aspect is implicit in the recognition of problems, financing, and deciding to do something. Public awareness is essential to the acceptance of suggested casefinding, treatment, and especially preventive measures. If, as the public health maxim has it, "the community is the patient," we must discover what the patient is like, who can treat it, and how.

To do this, interdisciplinary teams of social scientists from five universities have coordinated efforts to develop this methodology and to conduct the fieldwork necessary to carry out the program. Teams of political scientists, economists, social psychologists, sociologists, health educators, and others are working with community study leaders in an effort to analyze critically what is happening within the communities and to interpret results. Through a series of questionnaires and interviews with community leaders, the process analysts are looking at such things as perceived community issues, motivation of community leaders for participating in studies, reasons why communities get involved in the study of health services, "power structure" considerations, and so on. They are looking at the variations of study operations and procedures; for example, structure, organization, staffing, methods, financing. Major emphasis will be placed on the dependent variables—the action outcomes accruing from the study efforts. We hope to identify the facilitating and inhibiting factors that influence success or failure of action efforts.

Unique Aspects of Commission Approach

The commission's program, and especially the research activities of the community action studies project, has some unique aspects:

1. It is organized on a local, as well as a national, study basis through community self-studies and the national task forces—in themselves unique in commission approaches.

2. This is a nationwide endeavor involving literally thousands of people, both professional and nonprofessional. Health programs serving

some 8 million people will be affected by decisions being made in the 21 communities included in the project.

3. Persons in voluntary and governmental agencies are working hand-in-hand to carry out this national study endeavor.

4. Through the national task forces, the commission is using the best available expertise in health and related fields and is bringing key persons together to "gaze into the crystal ball" for guidelines to future community health.

5. The community action studies project is making significant use of social scientists in a coordinated, operational research setting. Although this is an ideal often referred to in the literature, it has never been accomplished to the extent utilized in the community action studies project.

6. The approach is pragmatic, combining study with concurrent action. Social science research studies are underway at the same time communities are making definite plans for action. The problems are so urgent that communities simply cannot wait for the answers. We must proceed with the most current knowledge at hand and add to that knowledge as it becomes available.

7. New methodological techniques are being developed which will be of future assistance to communities. Process analysis is one of the social science tools being developed and used. Development of the study instruments and models of community action are other examples.

8. Traditional approaches to community health are being challenged in the quest for new approaches and new methods of doing things.

9. The concept of four regional forums, to serve as a device for getting grassroots reaction to preliminary reports, followed by a national conference of commission findings, is unique in commission work. The commission is asking for active participation, ideas, and reactions from lay and professional persons throughout the nation, on a regional basis.

10. The national commission has a period of promotion and implementation built into the design of the national study. This is unique in that most commissions are terminated when their findings are published. They do not institute an implementation plan.

11. Our follow-through and implementation efforts will be facilitated nationally by the two sponsoring agencies. Dr. George James, coauthor, who is chairman of the community action studies project advisory committee, also is president of the National Health Council. Dr. Ernest Stebbins, chairman of the national task forces project advisory committee, is president-elect of the American Public Health Association.

12. The American Medical Association has established a formal liaison with the commission and has been actively involved throughout its work at both local and national levels.

13. While the task forces are looking at "ideal" forward-looking health goals, the 21 participating communities are developing goals that are realistic to the situation at hand. The processes and methods of reaching these present-day goals can be used to attain future goals in these and other communities.

Summary

The National Commission on Community Health Services is an independent, temporary 4-year study commission with the goal of collecting and studying facts about community health services, needs, and problems and promoting and translating the resulting knowledge into effective community health services. The commission has no particular point of view and is considering all available information at local, State, and national levels. Many people are involved on the national level, particularly through the six task forces that are studying the basic issues facing the nation in delivering community health services; and at the local level, mainly through the community action studies project—organized for the primary purpose of identifying and analyzing principles and methods that facilitate effective community action.

To gain insight into the complexities of community study and action, the national commission developed a self-study program wherein 21 community areas throughout the nation were selected to participate with the community action studies project in its program. These communities were selected from the many that applied to the commission for participation. They are in various geographic regions of the

country and have differing densities of population. Four communities have a population in excess of 500,000. Eleven are in the population range of 100,000 to 500,000. Six have populations of less than 100,000. Every region of the United States is represented. The communities were selected in six increments of two to nine communities each and the programs phased for beginning during the period from April 1963 to May 1964. Completing the study process normally takes 1 to 2 years, depending in part on the size of the community and the resources available for the study effort.

The commission will begin formulating its study recommendations after a series of regional forums are held in September 1965 to review preliminary findings of the commission projects. In May 1966 the commission will submit a "Report to the Nation" at a national conference, to be followed by a period of promotion and implementation.

The national commission is accepting the challenge of redefining community health goals for the nation and bridging the gap between findings and practice. The exact goals and recommended mechanisms for effective translation of findings into action are moot questions at this point. By setting the wheels in motion to establish a National Commission on Community Health Services, the sponsoring agencies (American Public Health Association and National Health Council) have provided a mechanism for action research to improve the nation's health services.

Population Studies

With the support of a $3 million Ford Foundation grant, the University of Michigan has initiated a program coordinating multidisciplinary studies of population problems. Three major centers now combine the resources of widely divergent units of the university, which have been conducting research and training programs in the field.

The Population Studies Center of the College of Literature, Science, and the Arts, established in 1961, trains students, conducts basic research on human population dynamics, and assists developing countries in their studies. Current activities in Taiwan, Korea, India, and Thailand will be continued on a larger scale under the Ford grant.

A Center for Research and Training in Reproductive Biology will be established under the grant and will concentrate on basic biomedical research on reproduction and contraception. This center anticipates that it will be able to provide consultants to local, State, national, and international communities to aid in the development of laboratories and training and service programs.

The third center will be concerned with the development of overall programs to promote rational reproduction in population groups. In addition to seeking answers to the immediate questions and problems, the new Center for Population Planning in the School of Public Health will explore a number of new lines of research including the relationship of population growth and density to health and economic and social development, the prevalence and effects of induced abortion, analysis of administrative problems influencing development of population fertility and mortality, and relationships between contraceptive use and illegitimate births.

The Ford Foundation grant will be divided among the three centers and the policy committee which coordinates their activities. Of the $3 million grant, $1,500,000 will be used for 5-year support of Population Studies Center, $700,000 for 3-year support of the Center for Population Planning, and $570,000 for 3-year support of the Center for Research and Training in Reproductive Biology. The remaining $230,000 will be administered by the committee as a discretionary research fund for the next 10 years.