Conference Report

Evaluation in Public Health

THE First National Conference on Evaluation in Public Health evolved from a need for pooling the experience of the many individuals and groups concerned with evaluation of public health activities and stimulating the development of more effective evaluative techniques. Dr. Vlado A. Getting, professor of public health practice, School of Public Health, University of Michigan, was chairman of the planning committee. He opened the conference by stating its two main objectives: to bring together the work of many in the evaluation of public health so that all may profit; and to determine which steps logically might be taken next to improve the practice of evaluation of public health activities.

Background

Indirectly, the conference was an outgrowth of a recommendation made in 1953 by the Association of State and Territorial Health Officers:

"That a joint committee be established, representing the Public Health Service, Children's Bureau, and the Association of State and Territorial Health Officers, to develop quantitative and qualitative measurements which could be used to evaluate public health programs."

More immediately, it resulted from a meeting called in Buffalo, N. Y., on October 10, 1954, by the chairman of the association's representatives to the joint committee, Dr. J. D. Porterfield, director of the Ohio State Department of Mental Hygiene and Correction. In addition to the representatives of the Federal agencies and the State health officers, there were representatives from several organizations, which had planned or initiated studies concerned with evaluation of public health activities.

A planning committee was appointed to convene a 2-day working conference to learn more of what each group is doing and to develop a cooperative plan in which the various individual contributions could be dovetailed for the maximum contribution to the development of quantitative and qualitative measurement in public health practice.

Membership of the planning committee comprised representatives of the American Public Health Association, the Association of Business Management in Public Health, the Association of State and Territorial Health Officers, and the Children's Bureau and Public Health Service of the Department of Health, Education, and Welfare. These five agencies, in cooperation with the University of Michigan School of Public Health, sponsored the First National Conference on Evaluation in Public Health.

Structure

The conference was designed to enable the participants to discuss methods of evaluation as they applied to one of five specific health activities. A maximum of 20 persons participated in the discussions of each section. Participants were selected on the basis of their demonstrated interest in evaluation, and they were chosen from a wide range of professional

The First National Conference on Evaluation in Public Health was held at the School of Public Health, University of Michigan, September 12 and 13, 1955. This summary of the recommendations of the conference and some of its discussions was prepared by the Division of General Health Services, Bureau of State Services, Public Health Service, at the request of the conference's planning committee.

disciplines: medicine, nursing, engineering, dentistry, sociology, administration, and psychology.

The plenary orientation session was followed by simultaneous sessions of the five sections. Section discussions were related to selected specific programs: tuberculosis control, fluoridation of water supplies, accident prevention, prematurity, and cancer control. These specific topics encouraged the consideration of concrete examples of methodology. Discussions were aimed at bringing out the component processes of evaluation which might, or might not, be common to other public health practices.

Digests of the section discussions were summarized by a resolving committee chaired by Dr. Herman E. Hilleboe, commissioner of health of New York State. The committee's summary report was presented at the final plenary session for discussion and action by the entire conference.

Planning—Anderson

The keynote address for the conference was delivered by Dr. Otis L. Anderson, chief of the Bureau of State Services, Public Health Service, whose formal topic was planning in relation to evaluation.

Dr. Anderson posed two basic tenets: first, that planning for the evaluation of a program should be interwoven with planning for the program itself; second, that evaluation techniques should be applied in the improvement of planning.

He enumerated the several successive phases of program planning, viewed in its broadest sense, as follows:

1. Determination of specific problems or needs.
2. Delineation of long-term and short-term goals or objectives.
3. Assessment of resources available or obtainable, including public opinion, professional attitudes, and degree of cooperation which might be expected; funds; personnel; facilities; technical knowledge, and so forth.
4. Selection of program methods or activities to be used to gain objectives.
5. Continuous or periodic evaluation of achievement or progress toward attainment of short-term and long-term goals—both quantitative, or measurable, and qualitative, or judicious appraisals.
6. Change in goals, redirection of program, or replanning, as indicated by accomplishment, by concurrent shifts in circumstances, improvements in useful knowledge, and altered resources.
7. Evaluation of final results.

Built-In Evaluation

In this pattern of program planning, the speaker explained that evaluation is built right into the plan as an identified, integral part. Evaluation cannot be considered an adjunct to public health program development, to be pursued or omitted as convenience dictates. It must be involved as an essential ingredient of of program design, serving a definite purpose. Dr. Anderson demonstrated the application of this concept to a number of specific programs.

Every phase of positive program planning contains an element of evaluation, he said. Assessment and judgment are involved, and decisions must be made whether we are determining the extent of a problem, public opinion, resources available, or completeness of technical knowledge or whether we are establishing objectives or choosing methods for action geared to achieving the objectives. Each decision depends upon considering and choosing among alternatives. This weighing of evidence throughout the planning process is an informal, almost subconscious type of evaluation—but evaluation, nonetheless. Often, by careful analysis, it is possible to identify important related facts of which we had not been aware, thus "firming up" a base for our decisions.

Only when evaluation is built in as one dimension of program planning will it assure that proper provision has been made for validly appraising the success or failure of the program and that there is guidance for reconsideration of objectives and redirection of program, as such changes are indicated. Through prompt adjustment of program, much effort and expense that otherwise might be wasted can be saved. Available resources can be rechanneled without delay into more productive and more needed activities. Unless this is done, the program plan becomes static and sterile, and

completely valueless as an administrative tool.

For any program, Dr. Anderson said, there is a better chance of achieving long-range objectives if planning provides for progress evaluation of intermediate steps and of objectives at frequent intervals. Such evaluation yields immediate results. Concurrent evaluations make it possible to identify difficulties or barriers as they occur and to apply necessary adjustments.

On the other hand, if evaluation is delayed until objectives are achieved, the program may never be evaluated. Or if the appraisal is arbitrarily timed—in conection with a reorganization or a change in administration—we may find that for a long time we have been engaging in fruitless endeavor, and that the advance in measurable program achievement, the end and aim of program planning, has not been accomplished.

Need of Evaluation—Kandle

Dr. Roscoe P. Kandle, deputy commissioner of health of New York City, talking on the need and place of evaluation in public health, urged that a fresh start be made in the evaluation of public health practices, with renewed ambition and new perspectives. The public health profession is now on "dead center" with respect to evaluation in public health, he stated.

He praised the work of past years by the Committee on Administrative Practice of the American Public Health Association, supported by the Commonwealth Fund and by other groups, in developing various methods of appraisal and evaluation of specific public health techniques. He also noted outstanding current work, such as that in evaluating several methods of tuberculosis control, in pinpointing specific causes of infant mortality and in appraising the effectiveness of efforts to reduce these problems, in carrying out precise studies of diagnostic tests and practices for control of coronary disease and hypertension, and in developing new methods and formulas for determining the number of public health nurses needed for adequate service to a community.

Nevertheless, the evaluation of widely used public health practices remains a major weakness, Dr. Kandle stated. Growth of programs has outstripped our ability and ambition for appraisal. He directed attention to several barriers which have not been penetrated successfully:

1. There is a strong tendency to think of effort rather than of accomplishment. There are not many practical indexes of accomplishment.

2. There is a lack of true perception and precise knowledge of people's actions and beliefs about health and the changes we are trying to encourage them to make. To evaluate without taking into account the factors of the people's understandings and feelings is foolish and wasteful.

3. It is difficult to devise simple, practical evaluation procedures which can be built into everyday practice.

4. We are apt to conform too rigidly to narrow public health traditions. This produces stereotyped thinking, which limits critical, incisive analysis of our accomplishments and fresh and original approaches to our problems.

Report of Resolving Committee—Hilleboe

The extent to which the conference attained its objectives is reflected in the summary report of the Resolving Committee which was presented by Dr. Hilleboe.

Dr. Hilleboe reported that he found many similar opinions among the representatives of the five sections. He emphasized that when evaluation in public health is discussed, there must be understanding about what is to be accomplished. Accordingly, a program is needed. We also must have a plan of operation which is, of course, based on the program plan. If we evaluate what we are doing in the light of what we set out to do, then we are moving in the right direction, he said.

We can evaluate a technique, a research project, a study, an activity, an objective, a purpose, or a total program, Dr. Hilleboe continued. We need to evaluate the yardsticks, the tools of measurement, themselves. It is also true that we can do some administrative evaluation, and its importance in carrying out all of our public health programs should not be forgotten. We can evaluate both performance and measures of performance; ultimately, we must evaluate performance against our stated objectives.

This basic principle came out time and again in many of the sectional discussions, Dr. Hilleboe reported. Highlights of the rest of his report included the following:

It is possible to become so absorbed in one particular technique that an undue amount of time is spent in evaluating that single technique. Sooner or later we must determine the value of the technique to the activity in which it is used. The activity in turn must be related to objectives, and they, in turn, to the purpose of the entire program.

Evaluation in public health becomes meaningful when it originates from a critical attitude of mind and intellectual curiosity. Those are fundamental ingredients. Program evaluation requires the same meticulous skills and methodology that the epidemiologist employs in the study of an acute or chronic disease. It is not enough to make measurements; what is needed is the measurement of results. Reliable and valid techniques can produce measurable results if expertly used. Precise evaluation studies are really research projects of one kind or another, and are quite similar, in fact, to the epidemiological field studies made by health department personnel. Both use the scientific method to obtain unbiased results.

The evaluation process should employ scientific measurement and comparison in public health practice as in other fields. Certainly the public health profession should use a scientific method whether it is in administration, or the evaluation of a technique, or the activities or programs that make up the substance of public health. Evaluation studies to be sound require appropriate samples.

In evaluating techniques, reliability, validity, yield, cost, and acceptance, must be measured. But when objectives and programs are considered, the factors of adequacy and efficiency must be added to our evaluation. Cost must be taken into account because all program plans depend upon money for continued operation. It is essential to determine if the evaluation is going to be worth the time, effort, and money spent in relation to the limited resources available for all health department work.

The human factor must be recognized in the evaluation process. Suggested changes in program content and direction may threaten the security of the individuals concerned, so evaluation must consider human relations in public health.

The several sections of the conference are in general agreement. One of the strong currents running throughout the whole discussion was the feeling that there is considerable value in exchanging ideas and experiences on evaluation, that the conference has been profitable, and that constructive, definite recommendations resulted.

It appears that the initial need is to have a small group, perhaps taken from this conference, start work on developing acceptable and unified terminology and definitions. This will enable public health people to communicate with each other more easily and precisely and to talk more profitably about evaluation.

Many of the health organizations represented here, both public and private, can look at some of their programs to see if some new evaluation projects can be set up. Within the next 12 months some evaluation projects could be started where they have not been carried on before. Every full-time health unit can begin some evaluation work even if it is only the testing of a minor technique or administrative procedure. It is up to us to find the resources within our own departments and do something in evaluation that we haven't done before. Then we can communicate with one another and exchange information of mutual benefit.

There should be another conference of this type, in about a year, to which all of us can bring the results of our new evaluation projects for open discussion. Prior to the proposed conference, copies of reports of projects can be distributed so that criticism and discussions of these evaluation projects may be more concentrated when we do convene. This would lead naturally to still further evaluation.

From our intense discussions of the past 2 days have come principles and practices in evaluation which can be useful to many health workers throughout the world. To set up a clearinghouse on evaluation in public health would be a natural followup, one which would enable all to keep abreast of present and future development in this field. It would provide for continuous exchange of experience and other information, and duplication of effort in pur-

suing the same types of evaluation might be avoided. Thus we would get the greatest benefits possible out of the human effort and the monetary expense involved.

Such a course of action may well herald a new and exciting era for public health in a changing world.

Conference Action—Witmer

Discussion of the Resolving Committee's report was opened by Dr. Helen L. Witmer, director of research, Children's Bureau, Department of Health, Education, and Welfare, who emphasized that difficulty in keeping on a straight track in planning for program evaluation arises from the fact that programs are so complex. She likened them to social institutions which, she said, can easily be divided into their component parts: purpose or objectives; personnel and clientele; rules—legal, ethical, technical (instruments, procedures, techniques); and equipment—facilities, including money activities.

One of two pertinent questions might then be asked regarding each element:

1. Is it scientifically valid? (Does the kind of staff, equipment, and procedures used lead to the desired results?) or
2. Is it good (the staff or the results) according to accepted standards?

Ideally, standards should be based on scientific validation. When this is not possible they must be based on judgment and experience. The main thing in planning and carrying out evaluation is clarity of purpose and direction.

Most of the audience discussion pertained to the recommendations proposed by the Resolving Committee. The final action of the conference was the adoption of the following recommendations:

Copies of the full Proceedings of the First National Conference on Evaluation in Public Health may be purchased from the University Publications Distribution Service, 311 Maynard Street, Ann Arbor, Mich.

The clearinghouse function recommended by the conference has been delegated to the Subcommittee on State and Local Health Administration of the Committee on Administrative Practice of the American Public Health Association. Forms for registration of projects may be obtained from Dr. Vlado A. Getting, chairman of the subcommittee, whose address is School of Public Health, University of Michigan, Ann Arbor, Mich.

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1. That a small group be designated to develop uniform, acceptable terminology for general use in public health evaluation. (This recommendation was prompted by the fact that all groups reported that confusion concerning terminology had characterized and hindered their discussions.)
2. That each health agency represented start some evaluation project within the next 12 months and carefully document the methodology used.
3. That another conference be held within one year for the purpose of reviewing the projects and determining methods and techniques which could be used by other agencies.
4. That a clearinghouse be established for continuous exchange of experience and prevention of duplication of effort in the development of methods and criteria for evaluation.
5. That the necessary staff and financial support be obtained to set up this central agency on evaluation.