Practicability and Priority of Advocated Changes

A RECENT SURVEY (1) of the 1961, 1962, and 1963 volumes of the American Journal of Public Health and Public Health Reports provided a systematic statement of the principal program innovations that are recurrently brought to the attention of local health officials via the printed page. Because of the usual prepublication channels through which such journal articles move, it can be assumed that these topics have been the subject of considerable discussion and debate at professional meetings and between individual health officers. A high degree of awareness of these priorities for change may be thought to exist among most local health officers.

Administrators of local public health departments are indeed entreated to engage in a wide variety of new and different health programs, but it remains to be determined whether these activities are either practicable or feasible today or of high priority for adoption by the departments.

The author has conducted a study to assess the degree to which selected new programs have been adopted by local health departments, and to determine the forces that worked to enhance or to inhibit the adoption of new programs. He thought that one possible barrier to implementing the recommended new programs might be the relative practicability of adopting a new program suggestion. Furthermore, he hypothesized that the matter of relative priority among such mandates for change might also be at work.

Method of Study

The author decided to seek the opinion of 200 public health leaders across the United States, grouped in the following 6 classes:

- 1. All State health officers.
- 2. All State directors of local health services.
- 3. All local health officers with jurisdictions of 500,000 population and over.
- 4. Deans of schools of public health, professors of public health administration, and professors of medical care administration of schools of public health.
 - 5. In the Public Health Service: the Sur-

geon General, division heads, and all regional medical directors.

6. A miscellaneous group of acknowledged leaders not otherwise represented in these categories, including officers and board members of the American Public Health Association and executives of major national voluntary and professional associations.

A questionnaire seeking their opinions on the practicability and priority of the current mandates for programs and changes was developed for mailing. Two separate pretests were conducted preceding the development of the final instrument. A five-position scale of equalappearing intervals was chosen. Respondents would be asked their opinion on the extent to which each of 40 items represented a practicable goal that local health departments in the United States should adopt as a primary responsibility. (A primary responsibility was defined as a responsibility for planning, organizing, or providing a program, or for acting as the prime mover in assuring that the goal was accomplished within the jurisdiction of a local health department.)

Two versions of the questionnaire were prepared. Form A asked the same questions as Form B except in scrambled order. Scrambling was done to detect any bias that might enter into the final analysis as an effect of the order in which the new program statements were presented. Thirty-five statements describing new programs included in the questionnaire were chosen from the literature survey (1), and the major categories of new programs that derived from this review were represented in the questionnaire. An additional five statements describing obviously impracticable programs were inserted in the questionnaire as indicators of possible set response that might occur as respondents ran down the long list of new programs.

In addition to judging the practicability of each of the 40 statements in the questionnaire, the respondents would also be asked to select the five highest priority items for implementation and to give narrative comment or qualifying answer on any of the items.

Six weeks after mailing the initial questionnaire, a duplicate was mailed to nonrespondents. The cutoff date for replying was 4 weeks after the second mailing. By that time 85 percent or 170 of the 200 public health leaders had replied.

Table 1 gives the mail-out and response statistics for the survey. Respondents from local health organizations accounted for 26 percent and from State health agencies, 46 percent of the replies. Inasmuch as the purpose of assessing the relative practicability and priority of mandates related to subsequent measures for their adoption by local health departments, it is important that nearly three-fourths of the respondents were either directly representative of or in positions of direct liaison with local health departments.

Responses were received in approximately the same proportion that questionnaires were distributed (table 1). This consistency held for region of the country and position or agency. The response received from 85 percent of the public health leaders was thus well balanced and represented the balance set when selecting the sample. Therefore, it was with some confidence that the order of the new program mandates, in terms of practicability and priority, was thought to represent the opinions of the original panel of 200 public health leaders.

Analysis determined the differential in response to questionnaire forms A and B.

Table 1. Distribution of priority-practicability questionnaires in new public health program survey, by region and service

| Region and service | Num- ber mailed | Num- ber re- turned | Per- cent re- turned | | |
|---|-----------------------|------------------------------|-------------------------------|--|--|
| U.S. region: WestEast | 38 69 | 32 55 | 84. 2 79. 7 | | |
| South Middle | 53 40 | 50 33 | 94. 3 82. 5 | | |
| Type of service: State health de- | | | | | |
| partment officers Local health service | 51 | 43 | 84. 3 | | |
| directors | 31 | 31 | 100. 0 | | |
| Local health officers_Schools of public | 40 | 33 | 82. 5 | | |
| health faculties Public Health | 25 | 17 | 68. 0 | | |
| Service | 19 | 13 | 68. 4 | | |
| Other | 34 | 33 | 97. 0 | | |
| Total | 200 | 170 | 85. 0 | | |

Although four items showed a significant difference between responses elicited on the two versions of the questionnaire, a chi-square analysis of responses to each of the remaining items failed to support the hypothesis that forms A and B were independent of one another. Analysis indicated that any effect on the order of presentation was absent or negligible.

Similarly, when all questionnaire items were arranged in rank order of practicability or priority, the five obviously impracticable items that had been inserted always were lowest on both forms. This suggests that the respondents were selective in answering and that little or no set response entered into completion of the rather lengthy questionnaire.

Practicability and Priority

Owing to the nature of the survey instrument, it was possible to separate into four classes the 35 bona fide new program statements, including those with—

- 1. Practicability and high priority.
- 2. Practicability but low priority.
- 3. Impracticability but high priority.
- 4. Impracticability and low priority.

In allocating the questionnaire items to one of these four classes, an item that achieved a mean score of 4 or greater in the opinion of all respondents was classified as practicable. The range was 1, very impracticable, to 5, very practicable. Inasmuch as the instrument permitted only five items to be classified as high priority, an item had to be selected by 25 percent or more of the respondents as one of the five having highest priority. The four classes of program statements describing the programs recommended for adoption were listed in the following tabulation in descending order of practicability and priority.

Practicable-High Priority Programs

Health aspects in total community planning Continuing research and evaluation

Comprehensive data on characteristics of community health resources and facilities

Joint planning with other agencies and departments Comprehensive maternal and infant care

Practicable-Low Priority Programs

Reference center for all data on state of community health
Accident prevention

Sanitary surveillance over operations of medical institutions

Water pollution control

Eradication of tuberculosis

Encouragement of proper nutrition

Home nursing services

Health aspects of housing in urban renewal areas

Air pollution control

Services for ex-mental patients

Early discovery of chronic diseases

Communitywide screening for detection of chronic diseases

Planning with regard to economic consequences

Impracticable-High Priority Programs

Integrating community health facilities and resources

Impracticable-Low Priority Programs

Family planning, birth control, or population control Surveillance and control of industrial radiation Organizational center for mental health services Presence or development of rehabilitation services Use of social science techniques in health planning Organizational focus for comprehensive health care Application of eradication techniques and philosophy Surveillance and control of medical radiation Prevention and treatment of alcoholism Assurance that health problems of aged are being met Improvement in quality of medical care Direct medical care services Prevention and correction of hearing and speech defects and noise control Psycho- and medico-social problems of youth Organized delivery of medical care in the community Prevention of suicide

Impracticable-low priority category. These programs may be characterized as either nontraditional or impinging on private medical practice. Two programs at the top of the category, however, do not fit these characteristics, and might easily be moved into the bottom ranges of the practicable-low priority group; however, because of the rigidity of the scoring method, they appear where they are. These programs and perhaps others high in the same category, might be tried on a limited basis by local health departments. They have the advantage of divisibility, which may contribute to their position as less impracticable than the programs following them.

The factors of impingement on private medical practice and unfamiliarity come into sharp relief in the programs ranking well down in the impracticable-low priority group. For example, programs dealing with medical radiation, the health of the aged, quality of medical care,

correction of hearing and speech defects, and the organization of medical care services might be thought to have a common disadvantage, in the mind of the respondents, by suggesting governmental intervention in aspects of the private practice of medicine: indeed, control of such practice in two instances. Certainly, activities devoted to the eradication of disease, prevention and treatment of alcoholism, problems of urban youth, and prevention of suicide belong in the category of nontraditional programs, where contention or lack of knowledge perhaps act as barriers. Divisibility (or limited application) is not a feature of the most impracticable-low priority programs. They infer doing for all or for none.

Practicable-low priority category. The ability to try or apply a program on a limited basis characterizes most of the items rated as practicable but of low priority. Although the items on control of air and water pollution may not properly belong in this category—the manner of their presentation in the questionnaire might be thought of as forcing a practicable rating they do conform to the divisibility criterion. From another point of view, the respondents may have seen such programs (morbidity and mortality data, accident prevention, institutional sanitation, nutrition, home nursing, housing sanitation, and water and air pollution control) as natural adjuncts to or derivatives from present and more basic services and therefore found them to be practicable. Their close relation to present and more basic services might also account for their failure to achieve a priority rank in the minds of respondents.

Of least practicability are the four programs that deal with ex-mental patients, chronic illness, casefinding, and planning based on economics. Each has in common its involvement with other agencies or the medical profession; the last three are hardly divisible functions. It might therefore be suggested that these reasons account for their relatively conservative rating in the practicable category. As with the two top impracticable items, because of the rigidity imposed by the scoring system these items were considered practicable but might well have fallen into the impracticable listing.

Practicable-high priority category. Two of these top-ranking items were particularly sub-

ject to a wide range of comprehension. Maintaining comprehensive data on the characteristics of community health resources and facilities might have easily been misconstrued as keeping in mind a general knowledge of the number of physicians, hospital beds, and other resources. The sense of the program statement, culled from the literature from which it was derived, is that the health department would maintain a complete, up-to-date, and accessible inventory of all health resources and facilities, with capacities, competencies, costs, and limitations. Had all respondents held in mind this more embracing definition of the program statement, one wonders whether the function might have ranked so high.

Similarly, respondents considered comprehensive services for maternal and infant care to be a practicable program for implementation by local health departments and of high priority for adoption. Again, it might be questioned whether respondents uniformly understood the comprehensive nature of the program suggested by this item. As a new program, such care implies the complete organization of all maternal and infant services of the community so that every mother and infant in the community would, by full, part, or nonpayment, be assured of comprehensive and continuing medical service.

The remainder of the practicable-high priority programs are administrative in nature, with activities that might well be adopted in small measure by local health departments without total commitment. They are programs using words such as integration and planning, which permit wide latitude in individual understanding. Little contention is associated with such programs, for they do not seriously impinge on private medical practice or the beliefs of other special groups. It is critically important that local health departments engage in such activities. The joint planning of such programs by all agencies and organizations concerned can have nothing but wholesome results, for by joint planning, the needs, concerns, and activities of others can effectively be integrated with health department activities.

The health aspects of total community planning also hold promise of aborting many of tomorrow's health problems by preventing the

occurrence of environmental, social, and economic conditions that might eventually prove destructive to health. Research and evaluation are thought by many to be an inseparable part of good management, as they certainly contribute to the technical advancement of public health.

In joint and total planning and in research and evaluation, wide ranges in probable applications are possible. Joint planning might mean occasional meetings with one or two other agencies. Health in total community planning might mean an annual audience with a planning commission. Research and evaluation might mean collecting service statistics relating to the hour-by-hour activities of staff members. Certainly, minimal implementation of practicablehigh priority programs is indeed practicable. Whether adoption in the fullest sense would be as practicable and of high priority is another matter. This study is not concerned with the extent of commitment to any program that best represents "assuming the primary responsibility." Future studies can determine this.

Divisibility, lack of contention, and lack of uniform definition seem to characterize the programs that were considered by the respondents as being the most practicable or the least impracticable. There was a high rate of agreement among the six occupational categories and the four regional divisions of respondents. Table 2 identifies questionnaire items judged by the respondents generally as being practicable or impracticable and of high or low priority. Opinions by region and occupation are contrasted with total ratings.

Of the 18 items judged by all the respondents as a group as being practicable, 5 were rated impracticable by local health officers. These items concern health aspects of total community planning, programs for ex-mental patients, chronic disease screening, nutrition, and planning based on economic considerations. One might hypothesize that the less optimistic judgment by local health officers may be based on unsuccessful attempts to implement such programs. Since the five programs represent considerable departure from classic local health programing, the doubts voiced by local health officers as to their practicability may also be based on preoccupation with more basic services and general in-

ability, due to staff and budgetary limitations, to dilute present staff commitments. It may also be that this group of "firing line" respondents perceived the full weight of accruing responsibility in a practicable-high priority program and hesitated to endorse difficult programs with high ratings of practicability.

Comments of Respondents

In addition to selecting practicability ratings for each of the 40 items and designating those of highest priority, 65 percent of the respondents attempted to qualify their statement ratings. The average respondent usually commented on 9 or 10 questionnaire statements. Forty-six percent of the commentaries supported the statement and the respondent's opinion, and 54 percent explained the practicability rating given to an item. Seventeen of the 35 bona fide new program statements included in the opinion questionnaire were judged by the respondents as being impracticable. The narrative comments of the respondents were useful in understanding the reasons a particular

Table 2. Practicability and priority of new health programs as judged by 170 public health leaders, by region, position, and agency

| Program | West | East | Central | South | Total | State health officers | State directors of local health services | Local health officers | Schools of public health faculties | Public Health Service | Other |
|--|------------------|--------------------|-------------|---------------|----------------------|--------------------------|--|--------------------------|--|--------------------------|-------------------|
| Joint planning with other agencies | AB B AB | AB B AB A | B AB | AB B AB | AB B AB | AB B AB | AB B AB A | AB B B | AB B AB A A | AB AB AB AB | AB B AB |
| Improve quality of medical careOrganizational focus for comprehensive care_Continuing research, evaluationEradication of tuberculosisEradication as philosophyEarly detection of chronic illnessScreening for chronic illness | AB A A | AB B AB A | AB A | AB A | AB A A | AB A | AB A | AB A | B AB A | A A A AB A | AB A |
| Comprehensive maternal, infant careControl of medical radiationAccident preventionSocial science in public healthFamily planning, birth controlReferral center, community health data | A A A A | AB A A | A A A | B A A | AB A A | A A A | AB A A B A | AB A A A | A B A | AB AB AB A | AB A A A |
| Comprehensive data on facilities, resources_ Home nursing services Development of rehabilitation services Prevention and treatment of alcoholism Health problems of the aged Problems of urban youth Encouragement of proper nutrition | A | A A A | AB A | AB A | AB A | A A A | A A | AB A | AB A A A | AB A A A | A A A A |
| Planning based on economic considerations. Air pollution control | A A | A A A | A A A | AB A A | A A A | A A A | AB A A | A A | A | A A A | A A A |
| Housing in urban renewal areas | | A | A AB | A | AA | A A | A | AA | A | A | A |

LEGEND: A, practicable; B, high priority; AB, practicable and high priority.

new program, broadly treated in the professional literature, was judged to be impracticable. If these comments truly indicate the reasons why the majority rated the items as impracticable, an analysis of their comments would seem to be in order.

Questionnaire items pertaining to direct medical care services, social sciences in public health, alcoholism, hearing and speech, and suicide—all judged to be impracticable programs—received substantial commentary suggesting that their impracticability rests on limitations inherent today in local health departments: budgets, knowledge, staff competencies, and so on.

As the listing shows, items pertinent to the quality of medical care, comprehensive health services, problems of youth, hearing and speech, and suicide were considered to be impracticable by respondents. Their comments mainly indicate that restrictions as to the proper role of the health department (that is, collaborative only, cooperative, or so on) are the reasons for the impracticability rating.

Three items deal with integration of health resources serving as the focus for community mental health services and family planning activities. Judged impracticable, the bulk of comments associated with these items suggest that local conditions such as vested interests, móres, and religious convictions probably make the adoption of such new programs impracticable.

The control of radiation hazards both in industry and medical practice was judged to be impracticable. Comments offered on such programs centered about whether all local health jurisdictions or only large urban health departments would find it feasible to adopt such activities. These two programs also received substantial comment, which suggests that they are largely preempted by others, that the necessary legal authority is lacking, or that necessary consultative and coordinative functions are not yet developed.

Two categories describe about half of the total comments: limitations inherent in today's local health department and specifically delineated roles (cooperative or coordinative) for local health departments. Where items were qualified by either comment, they were uniformly

judged to be impracticable by all respondents. Respondents may think that until such limitations or health department deficiencies are surmounted there would be little practicability in adopting certain new programs. Therefore, it was found that the practicability of a number of new mandates rests on the physical ability of a local health department to engage in innovative programs. One conclusion implicit here is that a large health department would ordinarily have a more substantial staff with more diversified competency, which would tend to make the adoption of such programs more practicable.

On the other hand, the roles that are specified in qualifying commentaries on a number of innovations suggest that respondents envision "watchdogging" for local health departments rather than outright adoption and operation of several programs (2). Hence, if the programs associated with such a qualification are judged as being impracticable, the respondents may be suggesting that the program itself may be practicable but that it would be impracticable for adoption by a local health department. As stated previously, comments in this category applied most heavily to programs dealing with quality of medical care, development of comprehensive health services, problems of urban youth, correction of hearing and speech defects, and prevention of suicide. It may then be inferred that although these programs are felt to be impracticable as a primary responsibility of local health departments, they are not necessarily impracticable for adoption within a community.

Possible Bias in Opinions

Bias could have entered into the opinions expressed by some respondents if they, as authors, suggested the new program in the literature from which the questionnaire items were derived. Authorship might certainly be thought to exert a biasing effect on the opinions of the respondents, as they would surely judge a program they suggested to be practicable.

Analysis disclosed that 25 respondents contributed papers on which the questionnaire was based. True to their earlier convictions, 20 of the 25 respondents retained the opinions stated in their articles and rated questionnaire items

pertaining to their writings as either very practicable or practicable. Each of the remaining five apparently changed his mind and rated questionnaire items pertinent to his published statements as very impracticable, impracticable, or he was undecided. Most of the respondent-authors could have been biased by their writings when answering the survey questionnaire; however, only four items had been treated by more than two respondents. Except for these, any bias associated with pride of authorship could hardly have affected the total rating of most questionnaire items, since respondent-author comments represented only about 1 percent of responses to all but four items.

Of the four questionnaire items related to programs about which more than two respondent-authors had written, two were judged by the 170 respondents to be of low practicability. Obviously, any favorable bias that respondent-authors might have applied did not elevate these items into a more favorable position.

The remaining two items with substantial relationship between respondent and author fell into the high-practicability, high-priority range. Omitting the respondent-authors from the scoring calculations, however, did not significantly alter the position of these items in the category of high practicability and high priority. It appears therefore that although some bias occurred, based on authorship, it did not affect the total practicability rating of any one item. It seems appropriate to suggest that the assignment of practicability and priority ratings represents a valid reflection of the opinions held by the 170 public health leaders who participated in the opinion study.

Summary

A survey of the 1961, 1962, and 1963 volumes of The American Journal of Public Health and Public Health Reports disclosed that 36 distinct new program or activity areas had been suggested for implementation by local health departments. Two hundred public health leaders across the nation were asked their opinion as to the practicability and priority of adoption by local health departments, as a primary responsibility, of 35 specific new programs that were selected from the surveyed literature. Replies were received from 170 public health leaders.

Eighteen of the advocated programs were judged by these respondents to be practicable to some degree; 17 were considered to be impracticable in varying degrees. Only six of the new programs attained the status of high priority, and five were rated high priority and high practicability. The more divisible a program—the greater is its feasibility for limited trial with a limited clientele—the higher was its practicability score and the more involved with the private practice of medicine, the less practicable it was considered to be. The respondents seemed to judge programs that defy precise definition as being of higher practicability and priority than those with specific functions that are easily defined.

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