Statistical Notes for Health Planners



Number 1

INTRODUCTION

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Effective health planning obviously requires the use of reliable data and sound statistical methodology. PL 93-641 is very specific in its requirements:

"(1) The agency shall assemble and analyze data concerning-

"(A) the status (and its determinants) of the health of the residents of its health service area,

"(B) the status of the health care delivery system in the area and the use of that system by the residents of the area,

"(C) the effect the area's health care delivery system has on the health of the residents of the area,

"(D) the number, type, and location of the area's health resources, including health services, manpower, and facilities,

"(E) the patterns of utilization of the area's health resources, and

"(F) the environmental and occupational exposure factors affecting immediate and long-term health conditions.

In carrying out this paragraph, the agency shall to the maximum extent practicable use existing data (including data developed under Federal health programs) and coordinate its activities with the cooperative system provided for under section 306(e).

These statistical notes are designed to help agencies fulfill these requirements by providing the methodology for using existing data available from Federal programs in an easily accessible and easily updated format.

Each note will be devoted to one topic so that all essential information on that topic will be together. It will be as complete as possible in itself without unnecessary duplication of other materials being sent to the planning agencies. For example, the statistical note may state that an age-adjusted rate should be used but will refer to another publication which contains a detailed explanation of precisely how to do the required computation. However, if the required technique is not in a publication which is readily available, the explanation will be included in the note.

The purpose of the notes is not only to provide the methodology but also to encourage planning agencies to assemble and analyze data using identical methods or recommended alternative approaches for comparable results. Differences in definitions, sources of data, terminology, classification, or computational methods which appear to be insignificant can invalidate comparisons. The lack of comparability will not be apparent, that is, the results will appear to be comparable when in fact they are not, unless great care is taken to standardize all procedures. Comparisons over time will also be affected if the individual agency fails to carefully follow the same procedures each year. By specifying the definitions, data sources, and computations for basic measures in this series of notes, these problems of comparability should be lessened. Those agencies which have additional data sources can use the basic sources and computations for comparative purposes and then do the additonal, more sophisticated analyses for their own planning.

Unfortunately, the amount of national information available on a small area basis is severely limited at present. Also, there are no perfect measures of the health status of the population or the status of the health care delivery system. In addition, the methodology required to measure many of the interrelationships between the health care delivery system and the health status of the population still must be developed. Both the data sources and the techniques must be expanded and developed; there are no simple indexes which serve all needs.

There have been many indexes developed but most of them depend on data which are not generally available. A few are theoretical

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models never tested on real data. Some depend on data which were only collected once-that one time was for the development of that particular index. Some have been tried and found useful for specific purposes. Work is continuing on developing indexes and one hopes that a useful one based on reasonably available data will be developed.

In the meantime, agencies must begin operation with what is available now. For that reason, the notes will concentrate on indicators—measures of a single aspect of status which are based on data available to all agencies. The agencies should be able to begin their data management with good basic data using standard techniques. As more data become available and new techniques are developed, tested, and found useful, notes on them will be issued.

We hope that this will be a cooperative venture. If agencies see a need for notes on particular topics or techniques, if new data sources or new methods of using existing data are developed, let us know. The notes should function as a way of sharing information and as a means of making a contribution to the developing field of using statistical data for effective health planning. That is our joint responsibility whether we are working at the local, State, regional, or the Federal level.

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Guidelines for Contributors to Statistical Notes

- 1. Although the notes will be published by the National Center for Health Statistics (NCHS) and distributed to the agencies by the Bureau of Health Planning and Resources Development (BHPRD), authorship is not limited to the staff of those two organizations. Outside contributions are encouraged and welcomed. All contributions which meet the criteria will be reviewed by NCHS and BHPRD.
- 2. The note must relate directly to the data requirements set forth in PL 93-641.
- 3. The note should describe the source, explain the limitations of the data, and specify the statistical procedures so that data prepared by the HSA's can be compared and summarized. Data must be available to all (or almost all) the HSA's. Each term and each step in the calculations must be carefully and explicitly defined.
- 4. Complex formulas for calculations should be placed in an appendix so that the text will not be interrupted.
- 5. Each contributing author will receive individual credit in a byline. The author's organizational affiliation will be in a footnote on the first page.

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