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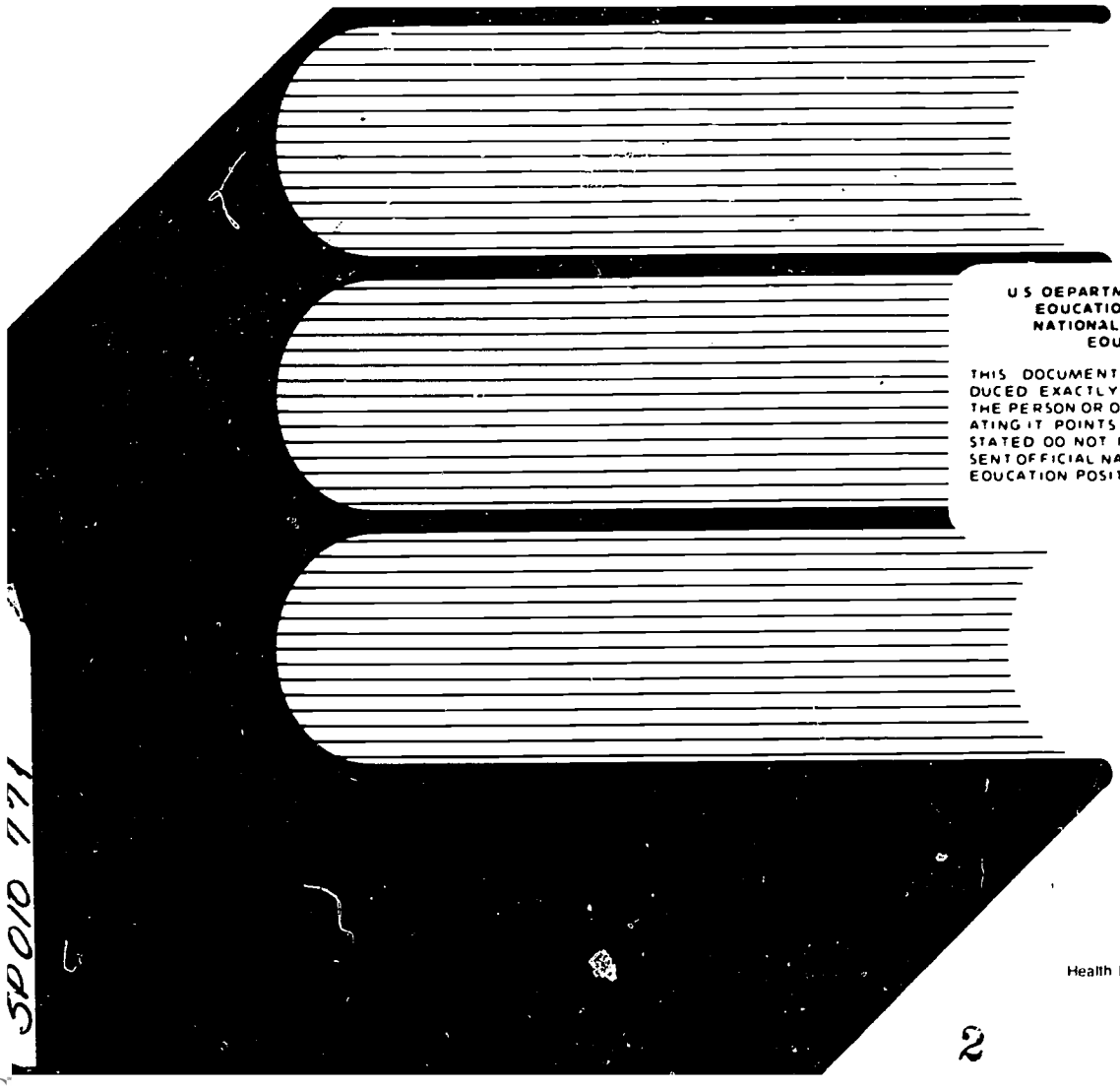
ABSTRACT

This bibliography brings together much of the literature prepared by individuals, organizations, and agencies that have designed or are attempting to design instruments for the definition and measurement of the levels of health within a given population. It includes citations and abstracts of documents identified by the National Health Planning Information Center between May and October 1976 from literature searches of the files of the center, the Clearinghouse on Health Indexes, the National Technical Information Service, Medline, and other automated and manual sources of information. This bibliography does not represent an exhaustive literature search; it was designed to be used as a reference aid to a selection of documents relevant to the methodologies of community health assessment. All references to documents have been classified according to three major subject categories: Health Status Measures, Health Status Assessment Studies, and the Evaluation of Health Care Services. All citations are accompanied by an abstract of the material contained in the document. An author index is included. (MM)

1

Health Planning
Bibliography Series

Selected Bibliographic References on Methodologies for Community Health Status Assessment



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2

The Division of Planning Methods and Technology, BHPRD, through the National Health Planning Information Center, is a primary resource for current information on a wide variety of topics relevant to health planning and resources development. To facilitate the dissemination of information to health planners, the Center will publish selected monographs in three series:

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Selected Bibliographic References on Methodologies for Community Health Status Assessment is the first publication in the Health Planning Bibliography Series.

Selected Bibliographic References on Methodologies for Community Health Status Assessment

November 1976

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Health Resources Administration
Bureau of Health Planning and Resources Development
Division of Planning Methods and Technology
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PREFACE

The National Health Planning Information Center is publishing monographs in both the Health Planning Methods and Technology Series and the Health Planning Information Series. The first series includes primarily state-of-the-art syntheses of the literature on general and technical aspects of methodological approaches to health planning. The second series encompasses monographs on the compilation and development of health planning information.

Topical bibliographies of the health planning literature were originally intended to be included in the Health Planning Information Series. The increased demand from the health planning community for bibliographies on topics related to both health planning information and methods and technology, however, engendered the development of a third series, the Health Planning Bibliography Series. Number 1 in this series is entitled: Selected Bibliographic References on Methodologies for Community Health Status Assessment. This topic was selected to be the subject of the first publication because of the frequent inquiries received by the National Health Planning Information Center for reference material on methodologies for determining health status assessment, particularly the measurement of health status. The need for this bibliography received further reinforcement as a result of discussions between health planners and health statisticians at the 16th Annual Meeting of the Public Health Conference on Research and Statistics, June 14-16, 1976.

The introduction provides information on how this bibliography was developed, the sources of its information, its organization and format, and how to order cited documents. Although extensive, this bibliography, like most bibliographies, is not exhaustive with respect to all available information on the topic. In addition, its usefulness will depend on the individual's prior knowledge of the subject area and the need for selected types of reference tools.

This bibliography was compiled and arranged by the

Reference Staff of the National Health Planning Information Center. Ms. Pennifer Erickson, Clearinghouse on Health Indexes, National Center for Health Statistics, and Mr. Cornelius J. McKelvey, Department of Health Care Administration, George Washington University, assisted in the review of suggested documents to be included in the collection and also recommended additional references.

The National Health Planning Information Center welcomes additional citations relevant to this topic and useful to health planners. To suggest a reference or to donate a document, write to:

National Health Planning Information Center
Acquisitions Department
P.O. Box 31
Rockville, Maryland 20850

Bibliographies in this series will be updated periodically. Copies of all monographs published by the National Health Planning Information Center can be purchased from:

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How to Obtain Documents

All citations to documents, whether published or unpublished, contain source availability information. The availability source for articles published in journals is the name of the journal indicated in the citation after the statement "Pub. in . . ." Issue information (volume, number, etc.) and page numbers are included. Documents which are available from one of the following sources are indicated by a footnote after the source of the document abstract; or in the case of documents available from the National Technical Information Service, a footnote after a special order number.

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U.S. Government Printing Office
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Prepayment required.)

References to documents which are not journal articles or available from one of the above sources contain special availability information after the abstract.

Questions concerning the development of this bibliography should be addressed to:

National Health Planning Information Center
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CONTENTS

INTRODUCTION

In providing for the comprehensive planning and resources development of health care facilities, services, and programs, information on the health status of the population to be served by the planning process must be assembled and analyzed. Although the "health status of a nation is an elusive concept, involving measures that are either nonexistent or, at best, imprecise," much research has been devoted to the development of health status measures and, to a lesser degree, health status assessment methodologies.[1]

This bibliography brings together much of the literature prepared by individuals, organizations, and agencies that have designed or are attempting to design an instrument(s) for the definition and measurement of the levels of health within a given population. It includes citations and abstracts of documents identified by the National Health Planning Information Center between May and October 1976 from literature searches of the files of the Center, the Clearinghouse on Health Indexes, the National Technical Information Service, Medline, and other automated and manual sources of information. This bibliography is not intended to be an exhaustive literature search on the subject. It is designed to be used as a reference aid to a collection of documents relevant to methodologies for community health status assessment. To enhance its use, all references to documents have been classified according to three major subject categories: Health Status Measures, Health Status

[1] U.S. Department of Health, Education, and Welfare, Public Health Service. Forward Plan for Health, FY 1977-81 (June 1975). DHEW Publication No. (OS) 76-50024. Washington, D.C.: U.S. Government Printing Office, 1975.

Assessment Studies, and Health Status and the Evaluation of Health Care Services. The following sections provide information on the overall organization of the bibliography, the format of the document reference, the source of the document abstract, and information on how to obtain the cited document. An author index is included after the last subject section.

Organization

All references, although not mutually exclusive, have been assigned to one of three major subject headings. Section I on "Health Status Measures" includes citations and abstracts to documents whose subject area primarily concerns the development of health status indexes and indicators, as well as measurement techniques pertinent to defining the health status of a given population. The use of economic and demographic predictors of health status, as well as mortality and morbidity statistics as variables for determining community health status, is included in this section. The majority of the references in this section were obtained from the files of the Clearinghouse on Health Indexes, the National Center for Health Statistics. The Clearinghouse on Health Indexes defines a "health index" as:

> "a health index is" a measure which summarizes data from two or more components and which purports to reflect the health status of an individual or defined group.[2]

[2]U.S. Department of Health, Education, and Welfare, Public Health Service, Health Resources Administration, National Center for Health Statistics. Clearinghouse on Health Indexes, Cumulated Annotations, October 1973-December 1974. DHEW Publication No. (HRA) 76-1225. Washington, D.C.: U.S. Government Printing Office, 1976.

Section II contains references related to "Health Status Assessment Studies." The application of health status measures to determine the health status of a given population is included in this section. Several community health surveys and accompanying methodological information are cited. References to documents concerning demand/need characteristics for health care services, however, are not included.

The last section, although not extensive, contains references to documents which use health status indices/indexes as outcome and evaluation measures, as opposed to process measures. References in the "Health Status and the Evaluation of Health Care Services" section are selective with respect to measuring the impact of a given health care facility, service, or program on the health status of a defined population.

Format

All references, except in Section I, "Health Status Measures," are arranged alphabetically by title within each section. The words "an," "the," and "a" are to be ignored in locating a document reference by title if the first word of the title is one of these words.

In Section I, five articles which appeared in Inquiry as point-counterpoint editorial discussions are grouped together. The series of articles begins with "Alternative Estimations of Population Health Status - An Empirical Example" and ends with "Reply to Torrance's Comment on 'Alternative Estimations of Population Health Status.'" These references are sequenced together as a unit not only because of their relatedness, but also as an example of the divergent views on this subject.

Following the title, the reference includes, if applicable, the name(s) of personal author(s) and corporate author(s). Publication information for journal articles follows with "Pub. in . . ." Unpublished documents are cited as (Unpublished) prior to the abstract. An abstract or summary of the document's content, along with information (except for journal articles) on how to obtain the document, follows the reference citation. An "Author Index" for all personal authors cited in the bibliography is included after Section III, "Health Status and the Evaluation of Health Care Services."

Sources of Document Abstracts

All citations to documents included in this bibliography, whether published or unpublished, are accompanied by an abstract of the material contained in the document. The source of the document abstract is indicated by initials within parentheses after each abstract. The initials refer to the following sources:

(AA)	Author Abstract
(AS)	Author Summary
(AA-M)	Author Abstract-Modified
(AS-M)	Author Summary-Modified
(CH-P)	Clearinghouse on Health Indexes Abstract
(NHPIC)	National Health Planning Information Center Abstract
(NTIS)	Abstract obtained from the National Technical Information Service Files

References which were obtained from the files of the Clearinghouse on Health Indexes are also noted with an asterisk after the cited source of the document abstract.

I

HEALTH STATUS MEASURES

"Acute Disability in Childhood: Examination Between Various Measures"

Schach, Elisabeth; Starfield, Barbara
Pub. in Medical Care, Vol. 11 No. 4, p297-309, 1973.

This study was designed to develop and test new measures of acute childhood disability against standard measures used in surveys performed by the National Center for Health Statistics. Child-specific measures defined as days with specific disability in terms of eating and sleeping problems and irritability within a 2-week period were compared with the prevalence of bed days, restricted activity days and other health problems in the same period and of chronic disease, impairment or handicaps. Results are based on a random sample of 1103 children under age 15. Includes 12 references. (AA-M)*

An Age Predictive Index for Health Status

Abrahamse, Allan F.; Kisch, Arnold I.
The Rand Corporation, Santa Monica, California, 1975.

A new health status index, defined to be that linear combination of 6 health-related physical measurements which best predicts a person's chronological age, is derived. 5313 records from the national Health Examination Survey for 1960-62 are used. The principal assumption is that, for a given age, there are "normal" levels of these physical parameters. Deviations from the norm which classify the individual as either younger or older than his actual chronological age, are felt to relate to the overall health status. Limitations are discussed. Includes 8 references. (AA-M)*

"Alternative Estimations of Population Health Status: An Empirical Example"

Scheffler, Richard M.; Lipscomb, Joseph
Pub. in Inquiry, Vol. 11 No. 3, p220-228, 1974.

As its prime purpose, this paper shows how sample survey data can become the crucial input for two alternative health status indexes. Expected pecuniary benefits of disease programs are estimated in a form more comparable to the expected physiological-emotional benefits of programs, as indexed by other researchers in this field. The methodology of the approach is illustrated with data from the Survey of Economic Opportunity. Directions for further research development are discussed. Includes 17 references. (CH-P)*

"Alternative Estimations of Population Health Status: Further Comments and a Suggestion"

Chen, Martin K.
Pub. in Inquiry, Vol. 12, p354-358, December 1975.

The validity, interpretability, and underlying rationale of Scheffler and Lipscomb's two population models, H and H_1 (measure of physiological-emotional and pecuniary aspects of disease-specific functional disability) are criticized, and a revision of model H_1 is proposed. It is argued that the derivation of indexes (weights) in model H was too subjective to be valid (von Neumann-Morgenstern standard gamble method notwithstanding). A double-accounting problem is isolated in model H_1 which results in a product of two not independent parameters: the length of disability is shown to have been counted first in the transformations of least-squares regression weights and again as a distinct parameter of the model. A model incorporating more specific use of the same data on length of disability is sketched. Notes and references accompany the text. (NHPIC)

"A Comment on 'Alternative Estimations of Population Health Status'"

Torrance, George
Pub. in Inquiry, Vol. 12 No. 1, p70-72, 1975.

The Scheffler and Lipscomb proposal of 2 alternative formulations of a health status index (Inquiry (Chicago) 11(3): 220-228) contains a number of deficiencies. Two minor computational errors could be rectified, but the conceptual shortcomings are more serious. Model 1 requires more finely specified health states, while model 2 is of questionable value to a decision-maker. Finally, both models measure, not the health status of a population, but rather the health status of those members of a population still alive. Includes 8 references.(AS-M)*

"Reply to Martin K. Chen"

Scheffler, Richard M.; Lipscomb, Joseph
Pub. in Inquiry, Vol. 12 No. 4, p354-358, 1975.

In responding to Chen's comments on their paper "Alternative Estimations of Population Health Status: An Empirical Example," (Inquiry (Chicago) 11(3): 220-228, 1974), the authors focus on the following points: 1) the double accounting problem; 2)use of preference weights; 3) aggregation of disease specific data; and, 4) Chen's proposed M and F indexes. Includes 7 references.(CH-P)*

"Reply to Torrance's Comment on 'Alternative Estimations of Population Health Status'"

Scheffler, Richard M.; Lipscomb, Joseph
Pub. in Inquiry, Vol. 12 No. 1, p73-77, 1975.

The authors respond in depth to the 3 conceptual issues raised by Torrance: 1) the inclusion of death as 1 of the health states; 2) the definition of health states along a continuum; and 3) the aggregation of the monetary and utility indexes. The computational errors noted by Torrance are also discussed. Includes 7 references. (CH-P)*

"Application of the G-Index to Selected Disease Groups in Epidemiology"

Chen, Martin K.
Presented at the Joint Meeting of Professional Associations of the U.S. Public Health Service, Las Vegas, Nevada, June 2-5, 1975.

The G-Index uses a mathematical principle called direct proportionality by which expected mortality and morbidity rates of the study group comparable to those of the reference population are computed. Differences in the expected and observed rates among the study group are incorporated into the G-index in terms of productive years unnecessarily lost. Data from the National Center for Health Statistics are used to compute the G-index for disease-specific groups. Includes 1 reference. (CH-P)*

75-4006[2]

An Approach to Developing Health Indicators

Oborn, Parker; Slaughter, Ellen; Dewell, Ardeth; Whiteneck, Gale, Welch, Henry
Denver University, Colorado Center for Social Research and Development, May 1974, 51p.

This study is directed toward the development of a conceptual framework in which health variables can be analyzed as part of the process of constructing a workable health resource allocation model. After reviewing the literature and the state of the art of the use of statistical health indicators, the authors apply cluster analysis and factor analysis in arriving at dimensions, or groupings of variables from health and socio-economic data for the states of Colorado, Montana, North Dakota,

and South Dakota. In addition to profiling the four states, there is analysis of the constraints on the utilization of data in health planning. The authors conclude that health indicators can be a useful tool to policy makers if they are carefully developed and applied, and if the constraints and options open to decision-makers are kept in mind. (NHPIC)

1
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"Approaches to an Epidemiology of Health"

Terris, Milton
Pub. in American Journal of Public Health, Vol. 65 No. 10, p1037-1045, 1975.

A new definition of health within the World Health Organization framework and the relationship of this concept to disease and illness is presented. Various approaches to epidemiological studies of health are discussed. Includes 21 references. (AA-M)*

Comments on Health Indicators: Methodological Perspectives

Bice, Thomas W.
Johns Hospiks University, Baltimore, Maryland, 1973. (Unpublished)

This paper examines the critical conceptual and methodological problems in the construction of health indicators in five sections: what should social indicators indicate?; the current status of health indicators; "positive" vs "negative" health status indicators; index of health status; and, other health indicators. Discussion focuses on the development of practical approaches to health measures including the ability to relate input and output. Includes 25 references. (CH-P)*

73-0264 141[2]

Comparison of Factor Analytic Methods in the Development of Health Related Indexes for Questionnaire Data

Ware, John E.; Miller, William G.; Snyder, Mary K.
Southern Illinois University School of Medicine Technical Report No. MHC 73-1, Carbondale, Illinois, 1973.

In this report the authors address 2 questions regarding the use of factor analysis in the development of health related indexes: 1) is there a preferred factor analytic strategy and 2) to what extent is a particular index likely to result from a given factor analytic method. Comparisons were made among 6 readily available methods on data obtained from 903 persons. The authors conclude that factor analysis increases the interpretability and reliability of results and the Comrey method which requires user participation is preferred. Includes 31 references. (AS-M)*

74-4073 132[2]

"The Concept of Health: An Historic and Analytic Examination"

Dolfman, Michael L.
Pub. in Journal of School Health, Vol. 43 No. 8, p491-497, 1973.

In this article, the historic examination traces the evolution of the definition of health from 1000 A.D. to the present. The analytic examination critically reviews some of the more recent health concepts and definitions. Includes 22 references. (CH-P)*

"The Concept of Health Status"

Twaddle, Andrew C.
University of Missouri, Columbia
Pub. in Social Science and Medicine, Vol. 8, p29-38, 1974.

Given the historical and conceptual links between the concepts of status and role (1-3), it is surprising that relatively little attention has been given to the problem of conceptualizing health as a social status. This problem is the focus of the present paper. It is argued that health and illness can be conceptualized in a specifically sociological frame of reference, with respect to biophysical changes in the organic states of individuals. Toward this end we will review the limited literature on the concept of health status and studies linking social stratification, ethnicity, and situational factors with differences in the designation of

individuals as "sick". This leads to the presentation of a model focusing on the process of status designation with special attention to the circumstances under which individuals are defined as well or ill. Insofar as behaviors are the result of roles, and roles are determined by social statuses, the concept of status becomes an especially important sociological problem. With reference to studies of illness behavior and the sick role, it is one with which the field of medical sociology has yet to come to grips. Our attention is directed to that problem. (AA)*

Conceptual Problems in Developing an Index of Health

Sullivan, Daniel F.
DHEW, PHS, HRA, National Center for Health Statistics, Vital and Health Statistics Series 2, No. 17, May 1966, 22p.

The problem of measuring levels of health is discussed with view to identifying measures indicative of changing health status in the United States population. It is observed that changing health problems and programs have impaired the utility of traditional mortality rates in measuring levels of health. The development of new indexes of health requires first the determination of what is to be measured. Two essential characteristics of an index of health status are identified. It must be (1) sensitive to the need for and adequacy of health activities and (2) composed of measurable components. Several concepts of a population's level of health are examined in view of these requirements, leading to the conclusion that a measure of health in terms of mortality and morbidity seems appropriate. This requires an operational definition of morbidity. Examination of various methods of defining and measuring morbidity suggests that formulation of a concept of the total impact of illness might serve this purpose. The impact of illness is defined in terms of forms of disability which might be measured by cross-sectional surveys. Sources of data, problems of reliability and validity, and the use of such a measure in construction of an index are discussed. A list of references is included. (NHPIC) 3

Construction of Scales Measuring Health and Health Related Concepts from the Dayton Medical History Questionnaire

Stewart, Anita; Ware, John E.; Johnston, Shawn
The Rand Corporation, Santa Monica, California, 1975.

Preliminary steps in developing measures of health, attitudes toward health care, health-related behavior and life changes are

outlined. Questionnaires were administered to 835 persons in Dayton, Ohio, the first study site of the Health Insurance Study (Rand Corporation). Mental health, physical disabilities, physical health perceptions and chronic functional limitations due to health are some of the scales developed. Criteria inherent in factor analytic, Likert and Guttman techniques of scale construction were used. Results are presented. Includes 23 references. (AA-M)*

75-5223[2]

A Consumer Oriented Strategy for the Measurement of Health

Hennes, James D.
Planning and Evaluation Unit, Department of Education, Denver, Colorado. (Unpublished)

Health is a characteristic of individual health care consumers. When consumers were asked what they meant by health, and when existing health indices were reviewed, at least 3 dimensions emerged that should be spanned in a comprehensive measure of health: 1) a conceptual domain of physical and psychosocial health; 2) a criteria dimension of function, feeling-state and symptoms; and 3) a methodology of assessing health by self-reports from consumer vs. observing the individual and his behavior. Additional factors are considered. Includes 10 references. (AA-M)*

74-3409 123[2]

"Contemporary Epidemiology"

White, Kerr L.
Pub. in International Journal of Epidemiology, Vol. 3 No. 4, p295-303, 1974.

The role of epidemiology as the ombudsman among the health sciences is described in this paper presented to the International Epidemiological Associations' Seventh International Scientific Meeting held at Brighton, England in August 1974. It is asserted that the epidemiological perspective has the capacity to develop the innovative approaches necessary to the understanding and amelioration of the impact of health services. The need for the development of a theoretical framework to address such deleterious influences on health as noise pollution, jet fatigue, occupational stress, domestic violence, sexual strife, emotional deprivation, and drug abuse is presented.

It is argued that such a theoretical framework could be expanded into a comprehensive health information system which would be population-based, problem-oriented, person-specific, provider-specific, period-specific, and practical in format. References accompany the text. (NHPIC)

"A Decision Theory Approach to Measuring Severity in Illness"

Gustafson, David H.; Holloway, Donald C.
Pub. in Health Services Research, Vol. 10 No. 1, p97-106, 1975.

The purpose of this study was to evaluate the applicability of a multiattribute utility model for measuring the severity of a patient's illness. The model's estimates were compared with survival rates of more than 6,000 actual patients and with physician's rankings of hypothetical patients. Although continued validation is needed, the multiattribute utility model appears to have potential as an index for illness severity and possibly, health status. This could aid in health service decision-making without requiring massive data collection efforts. Includes 15 references.(AA-M)*

"Definition and Measurement of Disability"

Slater, S.B.; Vukmanovic, P.; Prvulovic, T.; Cutler, J.
Pub. in Social Science and Medicine, Vol. 8 No. 5, p305-308, 1974.

This article describes 6 different measures of disability which were devised for a study begun in 1972 intended to develop methods for estimating the prevalence of disability and for identifying possible causes and consequences. The project is being conducted in Belgrade, Yugoslavia on a sample of 8,000 men and women aged 35-54 years. The authors discuss the cross-national aspects of the 6 definitions. At its present stage, the study is largely heuristic and methodological; if efforts prove productive, replication in other countries will be reasonable. Includes 32 references. (CH-P)*

"Development and Validation of Scales to Measure Key Health Concepts--Current Status"

Ware, John E.
Presented at a National Center for Health Services Research seminar April 2, 1975.

The scale to measure perceptions regarding health developed by Ware and his colleagues, consists of 6 dimensions: current health; prior health; health outlook; resistance to illness; lack of health anxiety; and, acceptance of the sick role. The first 4 represent individual health level and the latter 2, health state response. This research group has developed other scales to measure patient satisfaction and health values. (CH-P)*

75-1927[2]

Development of Positive Indices of Health

Goldsmith, C.H.
McMaster University, Hamilton, Ontario. (Unpublished)

The development of a lay-interviewer administered questionnaire is described; its purpose is to predict health status using at least 1 positive health index. Questions of demographic function and morbidity, as well as items related to the W.H.O. components of health, are included. The instrument was tested on a sample of 274 persons selected from a family practice associated with the University. To determine predictability of health professional assessment, each subject was also rated by his physician. Preliminary conclusions are presented. Includes 8 references. (CH-P)*

74-5147 118[2]

Development Possibilities for Social Indicators in the Health Field

Williams, Alan
University of York, York, England, 1975. (Unpublished)

The feasibility of establishing a chain of evaluative studies which would link measures of social functioning used in decision-making and evaluation at a low level, with larger scale survey work on these same dimensions for development as aggregative health indicators is explored. The author starts with the clinical level and proceeds to higher level decisions in health care policy. At each stage, the common elements from which indicators can be developed, are identified. Includes 57 references. (CH-P)*
75-5213

"Disability: A Model and Measurement Technique"

Williams, R.G.A.; Johnston, M; Willis, L.A.; Bennett, A.E.
Pub. in British Journal of Preventive and Social Medicine
Vol. 30, p71-78, 1976.

Current methods of ranking or scoring disability tend to be arbitrary. A new method is put forward on the hypothesis that disability progresses in regular, cumulative patterns. A model of disability is defined and tested with the use of Guttman scale analysis. Its validity is indicated on data from a survey in the community and from postsurgical patients, and some factors involved in scale variation are identified. The model provides a simple measurement technique and has implications for the assessment of individual disadvantage, for the prediction of progress in recovery or deterioration, and for evaluation of the outcome of treatment regimes. Includes 17 references (AA)*

Disability Components for an Index of Health

Sullivan, Daniel F.
DHEW, PHS, HRA, National Center for Health Statistics, Vital and Health Statistics Series 2, No. 42, July 1971, 38p.

The concept of total annual volume of disability as a component for a joint mortality-morbidity index of health is defined operationally, and empirical data are presented showing the distribution of disability estimates based on that concept. Analyses of these data illustrate how such a measure can be used to delineate the nature of health problems in population subgroups. The concept proposed is an aggregative measure of several forms of disability, classified as short-term, long-term noninstitutional, or long-term institutional, the third classification being further delineated as to type of institutionalization, i.e., homes and schools, mental hospitals, or other hospitals. The common element in all episodes of disability is the disruption of normal social activity. The report presents an overview of the concept of total volume of disability, and then analyzes mid-1960's Health Interview Survey data as to total volume of disability by age group (children, young adults, middle-aged adults, and the aged) and by type of disability, and changes over time in measures of disability. It is noted that the principal merit of the concept of total volume of disability is the degree to which it permits summarization of otherwise diverse measures of the impact of illness; however, no firm conclusions are drawn concerning the value of the measures considered as indicators of change in the impact of nonfatal illness over time. Major difficulties encountered in attempting to describe the relation of disability in its various forms to specific illness conditions are pointed out, as are problems involving the comparability of criteria used to

determine long-term, noninstitutional disability. In addition, a significant gap exists in the data required for regular computation of the measure. Technical notes and definitions are appended. Tabular data and a list of references are included. (NHPIC) 3

"Eliciting Preferences and the Construction of Indifference Maps: A Comparative Empirical Evaluation of Two Measurement Methodologies"

Vertinsky, I; Wong, E.
Pub. in Socio-Economic Planning Sciences, Vol. 9 No. 1, p15-24, 1975.

The paper reports results of experiments (N=23) conducted to evaluate 2 methods of preference measurement: 1) the method of eliciting certainty equivalents to gambles; and 2) the dominance method. Test-retest consistency and linearity of tradeoffs were among the 5 attributes used for method comparison. The study also investigated the associations between method reliability and several behavioural and experimental factors. Includes 10 references. (AA-M)*

"Epidemiological Considerations Underlying the Allocation of Health and Disease Care Resources"

Winkelstein, Jr., Warren
Pub. in International Journal of Epidemiology, Vol. 1 No. 1, p69-74, 1972.

Examples of disease trends have been analysed to support the hypothesis that the environment is the primary determinant of the health status of the population rather than the quality and quantity of available medical care. Even though certain medical care measures can prevent specific diseases, more attention and resources should be directed to identify the specific components of the environment which promote health. If diagnosis, treatment, and rehabilitation of the sick were properly called disease care, perhaps there would be greater emphasis and funding for those measures which truly influence the health of the population and which are properly called health care. (AA)*

Evaluation of the G Index

Berg, Lawrence E.; London, Virginia L.
Indian Health Service, Tucson, Arizona, Office of Research and Development, October 1975, 29p.

The G-index designed by Martin K. Chen was field tested with the Papago population in Arizona under an inter-agency agreement between NCHSR and the Indian Health Service. Results of field test show that the G-index is applicable in health resource allocation and health services planning situations where disease-specific mortality and morbidity data are available. In this test, it was found that Papago Indians are considerably worse than the United States population in terms of intestinal infections, but are slightly better in hypertensive conditions. In view of the comparative small Papago population, it was not possible to validate the G-index as planned. The National Center for Health Services Research has entered into a new agreement with the Indian Health Service to test a revised and improved version of the G-index with the larger native populations of Alaska. The new test is scheduled to be completed in the Fall of 1976. (NTIS)

PB-253 079/8WW PC$4.00/MF$2.25[1]

"Facing the Data Problem in Evaluation of Health Care Systems"

Davies, Dean F.
In Advanced Medical System, Flagle, Charles (Editor), Stratton Intercontinental Books, New York, New York.

An assessment of individual health status, developed at the University of Tennessee is described. Five components of health are evaluated in a health status profile. The components are well-being, symptoms, physical health, mental and emotional health, and functional capacity. One way in which this profile approach uses the computer is to assess prognosis using the health hazard appraisal approach. (CH-P)*

Family Health Indicators: Annotated Bibliography

May, Jean T.
Evaluation, Survey, and Health Research Corp., Nashville, Tenn., 1974, 222p.

Health indices research oriented toward the family, not the individual, is contained in this annotated bibliography compiled by the Evaluation, Survey, and Health Research Corporation of Nashville, Tennessee, in conjunction with the National Institute

of Mental Health. A multi-source, multi-disciplinary approach was used, and selections represent entries from 211 journals, monographs, government publications, papers, and books. The 344 abstracts are presented in alphabetical order, by author, and are classified according to: (1) perspective or approach; or (2) type of exposition of the subject to explain ideas, observations, and findings. Perspectives used in this bibliography are: Sociology, Social Work, Anthropology, Human Genetics, Psychology, Psychotherapy, Mental Health Epidemiology; Preventive medicine/community health, Economics, and Statistics and methodology. Types of exposition may be defined as theoretical/discussion, review/symposium, survey/sample, population census, and case history/clinical observation. A list of 680 additional references is included. (NHPIC)

PC2.85^5

Further Tests and Revision of the Sickness Impact Profile 1974-1975

Gilson, Betty S.; Bergner, Marilyn; Bobbitt, Ruth A.; Pollard, William E.; Martin, Diane
University of Washington, School of Public Health and Community Medicine, Seattle, 1975. (Unpublished)

Validity, self-administration and analysis of the short form of the Sickness Impact Profile (SIP), a behaviorally based measure of health status, are discussed. The process for revising the SIP and for developing and pretesting new forms of the instrument is also presented. Utilization and weighted utilization along with clinical measures are considered as validating criteria. Results and methodologies are reported; reference is made to directions for future study. Includes 66 references. (CH-P)*

75-2605[2]

"Health and Self-Perception: A Systems Theoretical Approach"

Tornstam, Lars
Pub. in Gerontologist, Vol. 15 No. 3, p264-270, 1975.

This paper examines the relationship between health and attitudes or self perceptions. Four types of variables are considered: 1) objective health status; 2) subjective health status; 3) health aspiration levels; and, 4) self perceptions. These variables have been measured in a random sample of 469 persons aged 45-75 years, living independently in a Swedish town. Path analysis is used to analyze the data; results are presented. Includes 11 references.

Health, Hours and Wages

Grossman, Michael; Benham, Lee
National Bureau of Economic Research, Inc., New York, 1973. (Unpublished)

This paper obtains structural health parameters and examines the effects of health on the labor market when health is endogenous. A composite index of health has been constructed through principal components analysis of 4 variables: 1) number of symptoms selected from a checklist of 20 and 2-4) individual's self-evaluation of general health. A NORC sample provides the data for measures of health status and the empirical results which are presented. Includes 37 references. (CH-P)*

74-0926[2]

"Health State Preferences: A Comparative Study of Three Measurement Techniques"

Torrance, George W.
Presented at the Joint National Meeting of the Operations Research Society of America and The Institute of Management Sciences San Juan, Puerto Rico, October 16-18, 1974.

Three measurement techniques were applied to measure individuals' preferences for a number of specific health states (N=318). The standard gamble technique is considered the accepted standard for this type of measurement; reliability was acceptable but not outstanding. The time trade-off technique had high criterion validity when compared to the standard gamble and the reliabilities were almost identical. The category scaling was found to have favorable validity; its reliability was not tested. This latter has administrative advantages over the other two techniques. Includes 12 references. (AA-M)*

75-1934[2]

"Health Status Index Model: A Unified Mathematical View"

Torrance, George W.
Pub. in Management Sciences, Vol. 22 No. 9, p990-1001, 1976

A general mathematical formulation of the health status index model is developed. Equations are given for three types of population health indexes and for the determination of the amount

of health improvement created by a health care program. Fourteen of the major health status index models from the literature are analyzed, and it is shown that each can be viewed as a special case of the general formulation. It is hoped that the paper will help to unify the health status index concept, will serve to standardize terminology and notation, and will facilitate comparisons of the various models. Includes 15 references. (AA)*

Health Status Indexes

Berg, Robert L.

Hospital Research and Educational Trust, Chicago, Illnois, 1973, 271p HRET T-35

A conference on health status indexes is reported that was considered to be an extension of functions of the Health Services Research Journal in that it brought together a group of investigators working on health status indexes to define problems, exchange insights, and weigh the values of various approaches to the evaluation of health status. Eleven disciplines were represented at the conference: computer technology, education, economics, health care administration, industrial engineering, management science, medicine, operations research, psychometrics, sociology, and statistics. Conference papers addressed the following specific topics: conceptualization of health and social well-being, method for constructing proxy measures of health status, the G index for program priority, measuring the health status of populations, function limitation scale for measuring health outcomes, debility index for long-term care patients, and evaluating health status for utilization review. Other topics concerned: the social impact index for evaluation of regional resource allocation, establishing the values of various conditions of life for a health status index, health state preferences and social choice, a utility maximization model for program evaluation, health status index in cost-effectiveness, quantifying patient preferences, techniques for the assessment of worth, and guidelines for selecting a health status index. (NHPIC)

(Available from the American Hospital Association, 840 North Lake Shore Drive, Chicago, Illnois 60611 Price $10.00)

"Health Status Indicators"

Veney, James E.
Pub. in Inquiry, Vol. 10 No. 4, p3-4, 1973.

The author encourages the development of health measures, especially composite measures. However, he stresses that we should not be too quick to abandon some of the more traditional measures of health nor to automatically assume that such measures have exhausted their usefulness. Includes 3 references. (CH-P)*

"Health Status Indicators"

Vaisrub, Naomi; Balfe, Bruce E.
In Socioeconomic Issues of Health American Medical Association, Chicago, Illinois, 1973.

This article summarizes recent thoughts on health indexes. Included are a list of possible uses; a list of characteristics of an index and a brief discussion of the "state of the art." (CH-P)*

Health Status Indicators: A Review of the Literature

Nocks, Barry
1973. (Unpublished Paper)

This paper is an attempt to critically review the health index literature to focus directions for further investigation. The author divides the discussion of current literature into 4 areas: vital statistics/morbidity data manipulation; functional capacity measures; health program evaluation measures; and, economic measures of health. Includes 61 references. (CH-P)*

73-0280 145[2]

"Health Status Indicators: From Here to Where?"

Chen, Martin K.
Presented at the Data Use and Analysis Laboratory, NCHS: CHSS Workshop, Orlando, Florida, April 28-29, 1975.

This paper discusses the problems involved in measuring health status. The following topics are reviewed: difficulties of defining health; use of the health continuum concept; selection of

preference values or weights; and, validity and reliability of the developed measure. Includes 8 references.(CH-P)*

75-2601[2]

"Health Status Indices and Health Services Planning"

Chen, Martin K.
Presented at the Institute on Health Indicators,University of Wisconsin, Madison, August 18-22, 1975.

The author discusses some assumptions underlying the use of health status indices for planning purposes. Several attributes of a good health status index, including reliability, validity, sensitivity, are also discussed. After a brief review of some of the available composite measures, the author assesses the health measurement tools currently available to planners. Includes 6 references.(CH-P)*

75-4005[2]

High Priority Populations for Mental Health and Related Human Services in Northern Lower Michigan

Ludy, Ernest G.
North Central Michigan Comprehensive Health Planning Council, Inc. Petoskey, Michigan, 1975.

The general objective is to identify high priority populations for mental health and related human services within an 18 county region. Small area analysis is used to generate population profiles based on 50 indicators derived from the Demographic Profile System developed by the National Institute of Mental Health. Through a ranking and summing process, a mental health need index (MHNI) is computed for various geographical units. An MHNI score of at least 1 standard deviation above the mean is indication of a high need population. Includes 8 references.(CH-P)*

(Available from the Author, Price $3.50)

"The History of the Measurement of Ill Health"

Cochrane, A.L.
Pub. in International Journal of Epidemiology, Vol. 1 No. 2, p89-92, 1972.

The evolution of ideas about, and techniques for, the measurement of ill health in South Wales is summarized under 3 arbitrary headings: 1) the development of survey techniques; 2) the attempt to validate the survey findings and 3) the search for a dichotomy. Finally the suggestion is made that a better approach would be to determine the point(s) on the distribution curves of bio-chemical and hematological measurements at which treatment starts to do more good than harm. Includes 10 references. (AA)*

The Identification of High Priority Populations (High Risk Populations) for Mental Health and Related Human Services: A Project Proposal

Ludy, Ernest G.
North Central Michigan Comprehensive Health Planning Council, Inc., Petoskey, Michigan, 1974.
(Unpublished)

The technique of social area analysis is used to develop a health planning tool for 18 counties in Northern Lower Michigan. The proposed methodology, which uses data from the 1970 U.S. Census, builds on the Profile System developed by the National Institute of Mental Health. The result is a health status measure based on 50 equally weighted variables. This preliminary index can be used in the planning and management of human services. Includes 9 references. (CH-P)*

75-1926[2]

"The Implications of Health Indicators: A Comment"

Hetzel, Basil S.
Pub. in International Journal of Epidemiology, Vol. 1 No. 4, p315-318, 1972.

Consideration of the implications of health indicators clearly points to the close relation between health and physical and social environment. Improved health indicators rest mainly on control of the physical and social environment--rather than on the provision of therapeutic services. This applies to minority groups, to the developing world and to the Western developed world. (AA)

"Increase in Years of Life After Eliminating Causes of Death: Significance for Health Priorities"

Hemminki, Elina: Hemminki, Kari; Hakulinen, Timo; Hakama, Matti
Pub. in Scandinavian Journal of Social Medicine, Vol. 4 No. 1, p1-6, 1976.

The theory of competing risks of death has been applied in this study for the construction of two indices: 1) increases in the expectation of life as a function of age, and 2) increase in the average number of years to be lived by a newborn up to various ages, when selected causes of death are eliminated. The indices have been applied to the 1970 mortality in Finland. The magnitude of a health problem was found to be dependent on the index selected, which should be considered in health planning. Includes 15 references. (AA-M)*

Index for Designation of Health Service Scarcity Areas

Wisconsin University, Madison, Health Systems Engineering Group, November 29, 1974, 71p.

Research conducted by the University of Wisconsin on an index of medically underserved areas is described. In August 1973, a group at the University of Wisconsin was asked to develop criteria for determining areas in the U.S. which were medically underserved and which might benefit from the allocation of government funds for the establishment of health maintenance organizations (HMOs) and other programs designed to alleviate scarcity areas. A project was proposed in which a methodology could be developed for predicting measures of health service scarcity for any area in the U.S. This project was based on the following assumptions: (1) that experts from different disciplines and geographic areas tend to agree in their assessment of health service scarcity; (2) that relative 'common wisdom' assessments can be predicted by a statistical model using readily available data; and (3) that, in the absence of theories and evidence necessary to develop a direct measurement of health service scarcity, it is reasonable to utilize collective best estimates of health authorities as the basis of scarcity criteria development. The methodology used to evaluate 'common wisdom' assessments is described, and a model is validated for predicting and making scarcity assessments as well as for analyzing assessment variance. The process of designating areas as medically underserved is detailed in terms of defining a scarcity cutoff point. A description of alternative statistical models considered as indicators of health service scarcity is included. (NHPIC)

HRP-0004794/4WW PC$4.50/MF$2.25[1]

An Index of Health (Revised)

Tennessee Department of Health
Office of Comprehensive Health Planning and the Tennessee Department of Health.

This study uses available data, median family income, birth rate and death rate for example, to locate areas of the population with relatively poor health. Analysis consists of ranking geographic areas on each variable and then averaging the ranks to form an index. (CH-P)*

73-0288 140[2]

An Index of Health for Mississippi

Hightower, William L.
University of Mississippi, School of Pharmacy (Unpublished)

Factor analysis was utilized to calculate an index of health for each county in Mississippi and an overall state index for the year of 1970. Data on 55 health indicators were analysed using principal components and Varimax rotation; the following 8 factors were extracted: resource population; economic; geriatrics; social; preventive medicine; nutrition; mortality; and, disability. The index numbers were standardized for comparison across 82 counties. (AA-M)

75-1931[2]

An Index of Health: Mathematical Models

DHEW, PHS, HRA, National Center for Health Statistics, Vital and Health Statistics Series 2, No. 5, May 1965.

Mathematical models of the distribution of illness episodes, of illness duration, and of mortality in a population. An index of health reflecting both mortality and morbidity is proposed. (AA)[3]

Linear Models of Social Preferences for Constructing a Health Status Index

Bush, J.W.; Chen, Milton M.; Patrick, Donald L.; Blischke, Wallace R.
California University, San Diego, La Jolla, Dept. of Community Medicine, October 1973, 34p.

Relative social preference for various health states is used in arriving at a health status index. Each social preference value is equated to a level of well-being that society associates with a given function level. Five factors (mobility, physical activity, social activity, age, and symptom/problem complex) and steps within each factor, were used to form case descriptions of function levels. Case descriptions were then assigned preference values by a group of evaluators, values were averaged for each case, and average values were scaled by three methods using linear analysis. All linear models showed excellent potential for predicting health status of a large group from observed functional levels of a few hundred cases. Relative importance of each factor is assessed, and possible simplification and refinement of factors to be used in future experiments is discussed. (NTIS)

PB-236 155/8ST PC$3.75/MF$2.25[1]

A Manual for Health Related Urban Indicators

Fleming, Karl H; Crowe, Jay M.; Champagne, Cynthia L.; Judd, Eleanor P.
Denver Urban Observatory, Colo., June 1974, 69p.

The manual is designed to describe practical steps in the development of health related indicators. It presents a feasible and direct way to develop an increasingly complete set of data which, together with appropriate theoretical and statistical guidelines, will provide a holistic set of 'health related indicators'. The manual provides data about those factors which, either directly or indirectly, have a bearing on the health of all individuals in a given population. It also provides a summary of conceptual guidelines and relevant bibliographic references, as well as a description of how standard computer hardware and software can carry out the necessary statistical operations. (NTIS)

PB-235 584/0 PC$4.25/MF$2.25[1]

Maternal and Infant Health Indicators for Puerto Rico Final Report

Beldin, R.A.
December 1971, 38p.

The project (1970-71) to examine the feasibility and probable value of developing a set of social indicators in maternal and infant health care in Puerto Rico resulted in a topical listing of possible indicators under the following categories: (1) structure of health service system, (2) services provided, (3) availability

of services, (4), utilization of services, and (5) demand for unavailable services. The investigation followed a four-step approach by which researchers analyzed types of information necessary for effective indicators, decided on the format suitable for their presentation, identified the institutional adaptions required, and presented a possible strategy for implementation. Data was collected through interviews with officials of the Department of Health, School of Medicine, and voluntary health agencies in the field. (NTIS)

PB-216 076/0 PC$3.00/MF$0.95[1]

"Mathematical Models for Health Survey Data and Associated Measures of Health Status"

Hanumara, R.C.; Branson, M.H.; Shao, D.; Chen, J.C.; Thornberry, O.
Presented at the Annual Meeting of the American Statistical Association, St. Louis, Missouri, August 26-29, 1974.

Approximately 9,000 persons, selected by stratified cluster sampling, were interviewed. The purpose of the survey was to study the health problems of the people of Rhode Island. This paper is concerned with validating the mathematical model proposed by C.L. Chiang and with computing indexes of health using the survey data. Also, techniques of the anlaysis of multidimensional contingency tables to describe the relationships between variables are applied to the data. Includes 13 references. (CH-P)*

74-4034 122[2]

"A Meaningful Measure of Health for Epidemiology"

Fanshel, S.
Pub. in International Journal of Epidemiology, Vol. 1 No. 4, p319-337, 1972.

An operational definition of "health" is offered, useful to those concerned with the allocation of resources for health services. A health status index (HSI) is described, based on social value judgments. The HSI makes it possible to give a quantitative definition of the outcome of health services, program effectiveness and population health status. An application which illustrates the methodology is shown. Includes 24 references. (AA-M)*

"A Measure of Family Functioning and its Application"

Pless, I.B.; Satterwhite, B.
Pub. in Social Science and Medicine, Vol 7, p613-620, 1973.

This paper describes a measure of family functioning intended to assess the strength of relationships and life style as a whole. The emphasis on pediatrics is due to the family's primary role in child health. The index is the sum of scores (1, 2 or 3) to the 16 questions. A table shows the index scores according to the child's health. Responses were subjected to a factor analysis; 5 principal components emerged. The content of the index, its reliability and validity are described, and several applications are discussed. Includes 36 references.(AA-M)*

"The Measurement of Health"

Hennes, James D.
Pub. in Medical Care Review, Vol. 29 No. 11, p1268-1288, December 1972.

A wide variety of measures of health or health indices have been developed in recent years. These developments have been reported in a diverse array of journals and unpublished reports. The attempts have been motivated both by research interests and by planning interests. The following review of the literature on the measurement of health covers: (a) population and individual measures; (b) empirical and theoretical studies; and (c) psychosocial and physiologic approaches. The emphasis is on measures applied to individuals. (AA)

"The Measurement of Health--A Critical and Selective Overview"

Chen, Martin K.; Bryant, Bertha E.
Pub. in International Journal of Epidemiology, Vol. 4 No. 4, p257-264, 1975.

The need for global and individual health status indices in addition to traditional mortality and morbidity statistics is explained. A classification model for sorting various health status indices into homogeneous groups is presented to facilitate systematic review of selected health status indices. Problems for users and authors of health status indices are briefly discussed with a view to the development of more practical indices in the future. (AA)

Measurement of Health as a Value: Preliminary Findings Regarding Scale Reliability, Validity and Administration Procedures

Ware, John E.; Young, J.A.; Snyder, M.K.; Wright, W.R.
Southern Illinois University School of Medicine, Carbondale, Measuring Health Concepts Research Project, March 1974, 64p.

After pre-testing various methods of value measurement, health was added to the Rokeach Value Survey and the interrelationships among value rankings were studied in a sample of southern Illinois residents (N=433) and university students (N=345). Four value dimensions were identified and defined for measurement: self-preservation, psychological orientation, social harmony and enjoyment. The stability of score estimates for these dimensions was tested and estimates were correlated with numerous health-related outcomes and socio-demographic variables. Values reflecting a high degree of psychological orientation were the most important in relation to the health outcomes studied. The results underscore the necessity for a broad conceptualization of human values in health care research. (NTIS)

PB-239 616/WV PC$4.25/MF$2.25[1]

Measurement of Health Concepts

Ware, John E.; Snyder, Mary Kay; McClure, Robert E.; Jarett, Irwin M.
Southern Illinois University School of Medicine, Carbondale, Dept. of Health Care Planning, December 1972, 71p.

The goals and methods of the Measuring Health Concepts Research Project are summarized. The goals of this research include development and validation of new standardized scales in three conceptual areas: (1) patient satisfaction with health services including quality of care, (2) perceptions of health status, and (3) perceived value of health. A number of conceptual and methodological issues involved in the development and validation of scales in these areas are discussed, including: (a) domain and structure of scale measurements, (b) the specific methods to be employed and rationale for use of factor analysis and Likert-type scaling techniques, (c) preliminary findings regarding the factor structure of patient perceptions regarding physicians and health care services, and (d) methods to be used in the study of reliability and validity of new measures at various stages in the research. (NTIS)

PB-239 508/WV PC$4.25/MF$2.25[1]

"Measurement of Ill Health: A Comment"

Grogono, A.W.
Pub. in International Journal of Epidemiology, Vol. 21 No. 1, p-5-6, 1973.

Assumptions and scaling of 5 recently proposed health indexes are compared and contrasted. Also, points which are more, or less, acceptable to the clinician and patient clients are suggested. The existence of these different scores is evidence of the interest in this field. However, the role of any health index in the management of medical care and the satisfactory nature of any of the proposed schemes has yet to be shown. Includes 7 references. (CH-P)*

"Measurement of Outcome: A Proposed Scheme"

Starfield, Barbara
Pub. in Milbank Memorial Fund Quarterly, Vol. 52, p39-50, 1974.

The need to demonstrate that health care has an influence on health status is increasingly pressing. A scheme that is based upon the development of a "profile" rather than a single "index" for describing health status is proposed in the paper. The model is a conceptual framework whose usefulness will depend upon efforts of a large number of researchers from many disciplines to develop instruments which can be incorporated into it. Includes 30 references. (AA-M)*

"Measurement of Physical Health in a General Population Survey"

Belloc, Nedra B.; Breslow, Lester; Hochstim, Joseph R.
Pub. in American Journal of Epidemiology, Vol. 93, p328, March 1971.

This paper presents a new and more general approach to the measurement of health in a population. In a survey of a sample of the adult population of Alameda County, California, in 1965, respondents were asked a number of questions regarding disability, chronic conditions, symptoms and energy level. From their responses, they have been categorized along a physical health spectrum ranging from a minimum state defined by inability to work and/or care for personal needs, to an optimal state expressed by no complaints and a high level of energy. The summary measure, the mean ridit, utilizes the distribution along the entire spectrum, enables the comparison or subgroups within the population, and allows for adjustment of differences due to selected characteristics.

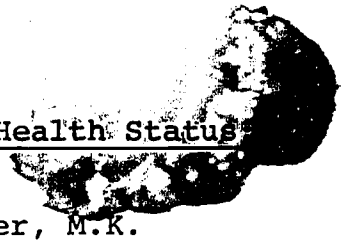
such as age and sex. The health of population subgroups was examined for selected demographic variables, including race, occupation, education, employment and marital status. There was a marked linear relationship with age, the mean ridit for the oldest group being nearly double that of the youngest group. Men were slightly more healthy than women, and those with inadequate family incomes were less healthy than those with marginal or adequate incomes. (AA)*

Measures of Health Status: for Counties and Regions in Iowa 1965-69

Johnson, Ken
Office of Comprehensive Health Planning, Des Moines, Iowa, 1970.

A relative health status index which used available data has been developed by the author. Twelve variables are summed for areas within the state of Iowa for the purpose of between area comparisons and for achieving higher levels of health. Weights are assigned to each variable; however, the author does not explain how the weighting values are assigned. A preliminary attempt at relating the health status index to the population physician ratio is also presented. Includes 12 references. (CH-P)*

73-0233 138[2]



Measures of Perceptions Regarding Health Status: Preliminary Findings

Ware, J.E. Jr., Wright, W.R.; Snyder, M.K.
July 1974, 96p.

A scale to measure perceptions regarding health status (current health, prior health, and resistance to illness) and response to health state (lack of health anxiety and acceptance of the patient role) was administered to a sample of adults living in Illinois. Factor analytic methods were used to study the interrelationships among scale items. Scale items that met factor analytic criteria were used to compute score estimates for five health concepts, reliability of these estimates was studied using internal consistency and test-retest methods. Relationships among the five concepts were studied using score estimates derived from both simple and complex methods. A higher-order factor analytic study of two hypothesized common dimensions was conducted. The validity of the five measures was studied in relation to selected health outcomes and sociodemographic variables of interest. Scale revisions designed to improve the reliability and validity of index

scores were summarized. (NTIS)

PB 242 726/8ST PC$4.75/MF$2.25[1]

"Measuring Health (A) A General Review"

Grogono, A.W.
Royal Society of Health Congress, Brighton, April 22-26 1974.

This review article is primarily concerned with indexes which are intended to measure both the health of a community and of any individual whether well or suffering from one or more diseases. The author favors the multi-dimensional index. Includes 24 references. (CH-P)*

75-1929[2]

"Measuring the Effectiveness of Health Care Systems"

Williams, Alan
Presented at the International Economics Association Meeting on the Economics of Health and Medical Care in Developed Countries, Tokyo, Japan, April 1973.

After presenting certain essential characteristics which any outcome measure should fulfill, the author outlines an approach for devising a weighted health status index. The elements are: 1) categories which describe pain-free social functioning; 2) an evaluation process that converts these states into index points; 3) an absolute valuation of points in money terms. The elements are discussed; plans for a pilot study on 500 elderly persons are presented. The purpose of this longitudinal survey is to determine categories of social functioning. Includes 25 references. (CH-P)*

74-4118 111[2]

"Methods for Measuring Levels of Well-Being for a Health Status Index"

Patrick, Donald L.; Bush, J.W.; Chen, Milton M.
Pub. in Health Services Research, Vol. 8 No. 3, p228-245, 1973.

Category rating, magnitude estimation and equivalence were used to measure the levels of well-being that student and health leader judges associate with 50 case descriptions of function status representing the continuum from complete well-being to death. No

significant differences were detected for order of method of presentation, interview situation, scaling method, student vs. leader judges, or most interactions among these factors. The results indicate the feasibility of measuring the social values of large numbers of cases in household interview surveys. Includes 22 references. (AA-M)*

A Microanalytic Approach to the Formulation of a Health Accounts System

Densen, Paul.; Martin, Suzanne G.; Clay, Cynthia K.
Harvard University, Center for Community Health and Medical Care, Boston, Mass., 1975. (Unpublished Contract Progress Report)

The microanalytic approach to a formulation of a system of health accounts involves assembling a significant portion of the available data relating comsumption of health care services and health status of one age group, children 0-4 years. Data requirements for health status measures and utilization of specific services as well as possible means of relating health inputs and outputs are some of the issues addressed in developing this system of health accounts. Includes 50 references. (CH-P)*

75-4099[2]

A Model for Estimating Mental Health Needs Using 1970 Census Socioeconomic Data. Report Series on Mental Health Statistics, Series C (Methodology Reports) No. 9

Rosen, Beatrice M.
National Institute of Mental Health, Office of Program Planning and Evaluation, Rockville, Md., 1974, 79p.

The NIMH Mental Health Demographic Profile System was used in conjunction with mental health utilization data to locate high risk groups in a community to determine the extent of available services and to estimate the level of unmet needs. Data amassed for each catchment area include socioeconomic status, ethnic composition, household composition and family structure, style of life, condition of housing and community instability. No estimates of the level of mental illness in the community are necessary since it is assumed that certain groups (e.g., elderly persons living alone) are more likely than others to need some form of mental health service. Also, no information on the number of persons being treated by private psychiatrists is available. The Mental Health Demographic Profile System is designed so that reaggregation of catchment areas as well as Census data updates will be possible. The system has a long range applicability for local planning and

can be adapted for use in describing the demographic characteristics of any geographic area in the U.S. Figures, maps and detailed tables show all the data collected for the two Montgomery County, Maryland catchment areas used. (NHPIC)

DHEW/ADM-74-63, DHEW/ADM-75-167 PC$1.25[5]

"Non-White Disease Patterns in Georgia: A Prospective Analysis"

Dever, G.E. Alan
Presented at the Annual Meeting of the American Public Health Association, New Orleans, La.,October 23, 1974.

Ten specific disease categories are demonstrated to have a substantial impact on the health status of this population group. Two methods were used to synthesize the selected disease patterns into a health status measure: 1) an unweighted z-score additive model; 2) factor analysis. A prospective analysis is attempted using computer graphics. This approach may be used as a basis for allocating resources, if the methodology is standardized. Includes 17 references. (CH-P)*

74-5143 115[2]

"Patterns of Disease in Papua New Guinea"

Maddocks, Ian
Pub. in Medical Journal of Australia, Vol. 1, p442-446, March 23, 1974.

This article is indication that developing nations are also struggling with monitoring health for planning purposes. The author discusses population characteristics, policy considerations, data collection and one localized attempt at establishing an ongoing health status measure. Includes 10 references. (CH-P)*

"Problems in the Development of Indicators of Health Status: Some Demographic Considerations"

Presented at the Annual Meeting of the Population Association of America, New Orleans, April 25-28, 1973.

Trends and related problems in the construction of health status indexes are discussed. Consideration is given to some of the

problems that often arise in the use of such measures. A model which highlights some of the demographic prerequisites which should be acknowledged or implemented for health indexes is developed. Using the same data, the author applies 2 life table approaches to show the variation in the indexes and to point out that health status measures might be more sensitive if demographic variables were considered. Includes 19 references. (CH-P)*

74-3043 104^2

"Progress Toward the Assessment of Health Status"

Davies, Dean F.
Pub. in Preventive Medicine, Vol. 4 No. 4, p282-295, 1975.

The distinction between medical care and health care is sharpened by a description of 5 features of current health status. Prognostic assessment based on known risk factors provides a second dimension of health. Together these features make up a health status profile. The Preventive Medicine Center of the University of Tennessee has been evolving computer-assisted health status profiles that are problem-oriented, urgency-oriented, disease-clustered and interpretation programmed. Includes 10 references. (AA-M)*

"Proposal for Assessing Health Status and Development of Health Indexes"

Moore, John K.
(Unpublished)

This research proposal outlines hypotheses to be tested regarding health status, socio-economic status, and preventive medical care. A health index based on the absence of certain physical conditions and disabilities will be developed. Basic health data will be available in a structured format with the same parameters for all children involved through the child health and disability prevention program. The analysis can provide information as to allocation of resources and identification of high risk groups. (CH-P)*

75-4021^2

"A Quantitative Approach to the World Health Organization Definition of Health: Physical, Mental and Social Well-Being"

Breslow, Lester
Pub. in International Journal of Epidemiology, Vol. 1 No. 4, p347-355, 1972.

The Human Population Laboratory has been trying to apply the W.H.O. definition in the measurement of health and in ascertaining how to improve health. This paper discusses the various aspects of and approaches to this subject and describes a trial of their method of measurement and the preparations for another survey. It appears possible to measure health status through questions that only individuals can answer about themselves and through testing by physical means the extent of functional reserves; medicine would use these measures to improve health. Includes 29 references. (AA-M)*

"Recent Studies Using a Global Approach to Measuring Illness"

Rosser, Rachel M.
Pub. in Medical Care, Vol. 14 No.5 Supplement, p138-147, 1976.

Global measures of illness are designed to measure the performance of a health service as a whole and the contribution of its various components. Such measures convert data about the outcome of medical care into information for use in planning at all administrative levels including the highest levels of government. This is achieved by means of a classification of states of illness applicable to all patients, whatever their diagnosis and symptoms, and of a scale which places valuations as perceived by society on the defined states. Examples are presented of the application of one global measure to a group of medical specialists and to population data for the United Kingdom. Includes 17 references. (AA-M)*

"A Reevaluation of Health Status Indicators"

Goldsmith, Seth B.
Pub. in Health Services Reports, Vol. 88 No. 10, p937-941, 1973.

This paper updates and enlarges a previous paper, "The Status of Health Status Indicators." According to this review article, health services research is moving toward more sensitive and workable indicators of health status. Includes 25 references. (CH-P)*

"The Relationship Between Kisch's Health Status Proxy and Three Direct Measurements of Health Status"

O'Leary, J.B.; Zaki, H.A.; Alexander, J.F.
Pub. in Minnesota Medicine, Vol. 56 Supplement No. 2, p82-86, 1973.

This paper reports the health status of a stratified random subsample (142 persons) of a rural population. Health status was measured directly by determining the extent of oral debris, peridontal disease and physical fitness. There was no significant correlation between these three direct health status measurements and a proxy measure of health status (Kisch et.al.). The reasons for this apparent lack of correlation were discussed. Includes 21 references (AS-M)*

Research and Development of a Relative Community Health Index

Donabedian, Martin
Los Angeles County Department of Health Services, Los Angeles, California, 1973. (Unpublished)

A health index is computed for communities within Los Angeles County, California. This measure is based on eleven readily available indications of health. From these single measures a standard z score was computed by study area; the z score became in effect, the health index. Deviation from the county mean (z=0) indicates the level of community health. (CH-P)*

74-4107 137[2]

"Rethinking an Ecologic-System Model of Man's Health, Disease, Aging, Death"

Hoyman, H.S.
Pub. in Journal of School Health, Vol. 45 No. 9, p509-518, 1975.

The basic dimensions of health are physical fitness, mental health, social well-being and spiritual health. Heredity, environment, experience and self are the interacting determinants of health and disease. These concepts are identified and discussed in terms of the model. Includes 25 references.(CH-P)*

"Review of the Research on General Health Status Indexes"

Balinsky, Warren; Berger, Renee
State University of New York at Buffalo, School of Management
Pub. in Medical Care, Vol. 13 No. 4, p282-293, April 1975.

In a comprehensive review of the literature on general health status indexes, a fundamental schema for classifying index systems is developed, common objectives and constraints of various systems are identified, and the expanding role of general health indexes in the future is discussed. The schema categorizes the systems as follows: (1) mortality, the traditional method of developing measurable data bases; (2) morbidity, a newer method; and (3) unified mortality/morbidity, the most recent and optimal method of formulating data bases. The mortality method utilizes data on age/sex - adjusted life expectancies. Input variables are easily elicited and well defined. The morbidity method involves input variables which are diverse and not easily defined or elicited. Recent studies utilize disability, activity, and function ability frameworks. The unified systems derive input variables from a combination of mortality and morbidity descriptors. These study methods attempt to consolidate demographic data with disability framework. These schema capsulizes measurement methodology, reliability, validity, sensitivity, and applicability characteristics of each type of system. Major general health status index studies within each category are surveyed. It is concluded that techniques which explore the issues of mortality/morbidity indexes for health measurement and apply the results to analyze health care have a potentially significant role in the designs for quality - adjusted health care. Establishment of a clearinghouse to file information on health indexes at the National Center for Health Statistics is cited as an indication of the interest in applications of a general health status index. A bibliography is included. (NHPIC)

"Role Inconsistency and Health Status"

Beck, James D.; Cassel, John C.
Pub. in Social Science and Medicine, Vol. 6, p737-751, 1972.

The concept of role inconsistency was developed and measured both as inconsistency inferred by the investigator and as inconsistency perceived by the subject himself. It was found that the perceived measure of role inconsistency exhibited a much stronger association with general health status, as measured by the Cornell Medical Index, than the inferred measure. Futhermore, the association was unaffected by any of the other variables in the study. (AA)*

"A Simple Method of Obtaining a Health Hazard Index and Its Application in Micro-Regional Health Planning"

Mukherjee, Bishwa Nath
Pub. in Regional Studies, Vol. 10 No. 1, p105-122, 1976.

A simple procedure has been described here to solve the problem of identifying settlements within a block or even a large agglomeration which run the risk of health hazard and thus in need of adequate health facilities. Following a simple weighting technique, a health hazard index has been obtained by weighted sum of variables after transforming each one to decile scores. The advantages of this technique are that it uses readily available data, does not require the use of a computer, and provides a simple method of assessing the relative level of health hazard for different settlements. Different mathematical properties of the proposed index have also been delineated. Includes 17 references. (AA-M)*

"A Social Indicator Based on Time Allocation"

Hobson, Richard; Mann, Stuart H.
Pub. in Social Indicators Research, Vol. 1 No. 4, p439-457, 1975.

The authors have developed a social indicator called Lambda, that has as its base the manner in which individuals allocate their time among various life activities. Lambda is a weighted sum indicator with both subjective and objective aspects. The properties of this measure are discussed in detail. Results of a pilot study, N=1012, show a high correlation between Lambda and another social indicator. This methodology may provide a framework for measuring health status. Includes 33 references. (AA-M)*

"Social Indicators: A Statistician's View"

D'Agostino, Ralph B.
Pub. in Social Indicators Research, Vol. 1 No. 4, p459-484, 1975.

The problem areas of social indicator research of concern to the statistician and in which he can prove helpful are considered. Also, the author discusses why in social indicator research the secular trends, cyclical movements, seasonal variations and irregular fluctuations must be taken into account. Techniques are discussed for relating lead indicators in one time period to coincident indicators in another period. A select bibliography in canonical correlation, forecasting, indicators and index numbers and other tools useful for index data is presented. Includes 84 references. (AA-M)*

"Social Indicators for Health Planning and Policy Analysis"

Chen, Milton M.; Bush, J.W.; Patrick, Donald L.
Pub. in Policy Sciences, Vol. 6, p71-89, 1975.

The concept of health involves two dimensions: The level of function at a point in time and the probability of transition to other levels at future times. By applying measured social values to the distribution of the population among a set of levels, a Function Status Index aptly summarizes the Level-of-Well-Being of a population at a point in time. By incorporating empirically determined transition probabilities into a simple stochastic model, a Quality-Adjusted Life Expectancy can be computed that approximates a comprehensive social indicator for health. The indicators possess the statistical properties required for time series and interpopulation comparisons, for studying outcomes and quality of medical care, and for health system optimization in planning and policy analysis. (AA)

Social Indicators, 1973

Office of Management and Budget: Statistical Policy Div.
U.S. Department of Commerce, Washington, D.C., 1973.

This collection of statistics is selected and organized to describe social conditions and trends in the U.S. Eight major social areas, including health, are examined. Indicators which measure individual and family well-being and which measure output from social systems are presented. In health, three major social concerns are: long life as measured by life expectancy at birth; life free of disability as measured by average number of days of disability per person per year; and access to medical care as measured by perceived access and rate of insurance coverage. Includes 6 references. (CH-P)*

"Socio-Medical Measures of Health in Primary Care"

Martini, Carlos J.M.; McDowell, Ian W.
University of Nottingham, Nottingham, England, Department of Community Health, 1975. (Unpublished)

An health index for primary care is being developed and validated. Results of a pilot study, N=121, indicate that 1) the interview schedule was acceptable to both the respondents and doctors involved; 2) the method summarizes the respondent's well-being and 3) the method shows contrasts between the sick and health respondents. Further investigation is underway to refine the interview schedule, and to assess its validity and reliability. Includes 1 reference. (CH-P)*

Specific Proposals for Social Indicators in the "Health" Primary Goal Area

OECD Working Party on Social Indicators
Paris, France, 1973. (Unpublished)

This document provides information to enable the "working party" to reach agreement on a select number of indicators in the health area. Each of the proposed 21 indicators is discussed in terms of current availability of data, meaning and implications for "positive health." Use of function states and more complex measures of health status is viewed as a long range objective. Includes 30 references. (CH-P)*

73-0282 105[2]

"Statistics: What Does the Health Planner Want"

Gellman, D.D.
Presented at the Annual Meeting of the Canadian Public Health Association, St. John's, Newfoundland, June 20, 1974.

This paper communicates health planners' data needs to statisticians. The author discusses the need for reliability and validity and the importance of order of presentation. The types of statistics the Canadian planner has and needs are reviewed; the benefits of a health status survey which could provide a continuing measure of health or sickness of the population are discussed. (CH-P)*

74-4028 143[2]

"The Status of Health Status Indicators"

Goldsmith, Seth B.
Pub. in Health Services Reports, Vol. 87 No. 3, p213-220, March 1972.

The state of the art (as of 1972) of health status indicators is presented, based on both a review of the literature and discussions with researchers. The concept of health and the purposes for which the indicators are intended are discussed as the major conceptual constraints to the development of acceptable health status indexes. Four problems encountered in available indicators are their validity (the relation of measure to clinical and social variables), their reliability (the accuracy and consistency of the measuring instrument), and the sources and cost of requisite data (the more the data are refined for validity and reliability, the greater the cost). The efficacy of mortality, morbidity, and activity

(utilization) indicators is evaluated, and criteria for the development of new indices are delineated. Research in progress is reviewed and the recommendation is made to administrators to await the outcome of this research before choosing among existing alternatives. References accompany the text. (NHPIC)

Subjective and Objective Concepts of Health: A Background Statement for Research

Maklan,Claire; Cannell, Charles F.; French, John R.P.
Institute for Social Research, Survey Research Center, Ann Arbor, Michigan, 1974. (Unpublished)

This conceptual statement presents the view that both "subjective" and "objective" views of health and health care are important and useful. This paper focuses on variables relevant to development of subjective measures of health and quality of available health care resources. The proposed measures are considered important to indicate and predict health behavior and satisfactions. Health is viewed as one component in an individual's perception of his overall quality of life. Includes 64 references. (AA-M)*

74-4050 103^2

"Successive Intervals Analysis of Preference Measures in a Health Status Index"

Blischke, W.R.; Bush, J.W.; Kaplan, R.M.
Pub. in Health Services Research, Vol. 10 No. 2, p181-198, Summer 1975.

The method of successive intervals, a procedure for obtaining equal intervals from category data, is applied to social preference data for a health status index. Several innovations are employed including an approximate analysis of variance test for determining whether the intervals are of equal width, a regression model for estimating the width of the end intervals in finite scales, and a transformation to equalize interval widths and estimate item locations on the new scale. A computer program has been developed to process large data sets with a larger number of categories than previous programs. (AA)

Survey of Health in Lower-Income Areas of Nashville: Part II: Health Status, Health Action, and Psycho-Social Indicators

May, Jean T.
Evaluation Survey and Health Research Corp., Nashville, Tenn., 1973, 251p.

The report on the development and testing of the utility of new social and health indicators and analyses of correlated variables, uses as a data base a 1968 household interview survey of lower income areas of Nashville, Tennessee. Explained variances are presented, each with its own set of predictors, and explanatory power. The new predictors were tested in a variety of combinations to find the best fit for each major dependent variable. In order to measure the health of any defined population, either in a cross-sectional or longitudinal research design, the necessity for constructing a series of indicators to serve as dependent variables in the analysis of various dimensions of health status and health behavior is demonstrated. (NTIS)

PB-226 247/5 PC$8.50/MF$2.25[1]

"A Systems Approach to Health and Health Policy"

Purola, Tapani
Pub. in Medical Care, Vol. 10 No. 5, p373-379, September-October 1972.

In medical science,ill health is traditionally considered as a naturalistic phenomenon, but it is a psychologic and social phenomenon, too, and a clear conceptual distinction is required between these three related phenomena. The concept of morbidity refers to a human population not only as an aggregate of individuals but also as an organized society. Morbidity in a human population must be dealt with as a social and not as a medical problem. Organized medical care and the national health policy employ medical knowledge and medical techniques, but they are social institutions aiming at social goals, the welfare of citizens and society. The problems of health and ill health, therefore, range from the micro processes of the human organism to the macro processes of the national, even the international health policy. These processes all have a common denominator in that they all take place in some elements or some combinations of elements, which can be analyzed as organized systems. An attempt is made to analyze medical and sociologic concepts of illness, morbidity, medical care, and health policy, as well as their relationship as integrated components of the same macro system. (AA)

"Testing for Variation in Social Group Preference for Function Levels of a Health Index"

Berry, C.C.; Bush, J.W.; Kaplan, R.M.
Presented at the Annual Meeting of the American Statistical Association, Atlanta, Georgia, August 25-28, 1975.

Social preference for levels of function represent the value dimension of health status. If differences in preferences exist between social groups, they may pose aggregation problems in creating a general health status index. 806 respondents in a household interview survey each rated the relative desireability of a set of case descriptions on a scale from 0 to 10. The major canonical analyses revealed no significant differences among social groups for the values associated with health states. Includes 22 references. (AA-M)*

75-4002[2]

"Toward Operational Definitions of Health"

Dolfman, Michael L.
Pub. in Journal of School Health, Vol. 44 No. 4, p206-209, 1974.

The author discusses some of the confusion associated with the meaning of the term "health." He states that a single definition is "an impossibility." Thus, a model of health based on function capacity and adaption to stress is developed. The model serves as a format by which operational definitions can be generated. Includes 16 references. (CH-P)*

"Toward Sociomedical Health Indicators"

Elinson, Jack
Pub. in Social Indicators Research, Vol. 1 No. 1, p59-71, 1974.

The various forms of mortality and morbidity data have become inadequate measures of level of health in economically developed countries. Measures of functional physical capacity have some advantages but do not reflect physical impairment. Current attempts to develop sociomedical health indicators include: measures of social disability; typologies of presenting symptoms; etc. Sociomedical indicators reflect both objective conditions and social values and are policy-oriented. Includes 46 references.(AA-M)*

"Utility of the National Center for Health Statistics's General Well-Being Schedule in the Assessment of Self Representations of Subjective Well-Being and Distress"

Dupuy, Harold J.
Presented at the National Conference on Evaluation in Alcohol, Drug Abuse, and Mental Health Programs, Washington, D.C., April 1-4, 1974.

Self-representations are assumed to be valid and relevant indicators for assessing the current mental health status of the individual. The author aims to combine these indicators into an overall evaluative index of level of well-being. Provisional analysis for 3,380 persons examined in the national Health and Nutrition Examination Survey (HANES), ages 25-74 years, is presented. Internal consistency and comparative validity are discussed. (CH-P)*

74-5144 116[2]

"The Validation of a Function Status Index"

Reynolds, W. Jeff; Rushing, William A.; Miles, David L.
Pub. in Journal of Health and Social Behavior, Vol. 15 No. 4, p271-288, 1974.

The Function Status Index, relevant to theoretical frameworks that view health in terms of its social and cultural variables, is used to measure health status. Activity, mobility and movement are measured objectively by an interview schedule administered to 2,629 persons in 2 Northern Alabama counties. Content, criterion and construct validity are assessed. The index can be used to test the hypothesis about social functioning and to evaluate the effectiveness of different health-care delivery systems. Includes 23 references. (AA-M)*

"Weighted Life Expectancy as a Health Status Index"

Berg, Robert L.
Pub. in Health Services Research, Vol. 8, p153-56, 1973.

The author suggests that weighted life expectancy offers advantages as an indicator of current health status and as a predictor of future status. That is, in addition to describing the health status of individuals or populations, it can also be used as a basis for estimating the social value of advances or gains made in health status due to medical or other interventions. (CH-P)*

"What Does the Public Want of Health Services: The Need for Some Health Indices"

Greenhill, Stanley
Alberta University, Edmonton, 1971
Pub. in Canadian Journal of Public Health, Vol. 63 No. 2, p108-112, March-April 1972.

Studies in Canada and elsewhere are cited which indicate that consumer satisfaction with health care services is generally high. The high satisfaction responses to consumer surveys were found in Canada and in the study areas of six other countries (United States, United Kingdom, Finland, Poland, Yugoslavia, and Argentina) collaborating in the World Health Organization International Study on Medical Care Utilization. It is suggested that, rather than responding to these findings with gratification or complacency, the medical profession instead might question current methods of studying the consumers of health services. It is further suggested that, in the health care field, health expenditures provide a more useful indicator than health costs, due to the inapplicability of the usual economic indices of costs, profits, and benefits in this area. The value of morbidity data when used to provide a built-in health care evaluation system is discussed. Changes in incidence of morbidity could reflect both the appropriateness of health care policies determined by the decision-makers and the efficacy of the care provided by health professionals. Although the public appears satisfied with available health services, lack of data leaves two questions unanswered: (1) whether existing health services are appropriate for the public's present and future health needs, and (2) whether present and projected expenditures on health services can be justified on economic and/or medical grounds. (NHPIC)

II

HEALTH STATUS

ASSESSMENT STUDIES

Advanced Health Planning System

Palmer, Boyd Z.; Sisson, Roger L.: Kyle, C.; Hebb, A. Government Studies and Systems, Inc., Philadelphia, Pa., New Jersey State Department of Health, Trenton, New Jersey State Comprehensive Health Planning Agency, Trenton, January 1972, 213p.

A goal-oriented method for planning health services is described in this report summarizing a study to develop procedures for comprehensive health planning. The approach is based on the assumptions that: goal-oriented planning is the best planning method, health services must be judged by their results, good planning is cost-effective, and a good planning system will improve the planning process. The monograph demonstrates that a workable goal-oriented planning system is applicable to CHP agencies. Ways of adapting the systems approach to goal-oriented planning system is applicable to CHP agencies. Ways of adapting the systems approach to goal-oriented planning are diagrammed, including adaptations of the present system. Planning procedures which might be developed for an areawide CHP agency include: (1) Determining baseline projections; (2) setting specific objectives; (3) soliciting proposals for new projects; and (4) selecting projects. Use of this procedure can aid in prediction of future needs, resources, and expenditures. The twenty-two indicators developed to measure outcomes can be used to determine health status and generate health profiles for a particular area. The design of a prediction model which calculates a year-end health condition distribution and can be used repetitively to create a five, ten, or 15-year prediction is presented. The model is illustrated by charts and diagrams. Portions of this document are not fully legible. (NHPIC)

HRP-0002630 PC$7.75[1]

Analysis of Family Planning Services and Needs in Eight Southwestern Indiana Counties with Priorities and Goals

Comprehensive Health Planning Council of Southwestern Indiana, Evansville, Community Health Services Committee, February 7, 1973, 34p.

The clinical patient services aspects of subsidized family planning programs were studied in an eight-county area in southwestern Indiana as the first step of a plan for family planning services. Data were collected through a search of reference documents for demographic and health-related data, and by interviewing individuals in charge of the family planning programs in the area. Social and economic characteristics of the area are presented in tabular format, together with information on the number and rate of live births, still-births, illegitimate births, and infant mortality. A map illustrates the relationship of percentage of low-income families

with the rate of infant mortality on a county-by-county basis, and indicates a tendency to equate low-income and high infant mortality. The need for service, calculated by the Dryfoos - Polgar - Varky formula, and current levels of service provided are shown in tables and maps. An inventory of existing services shows three agencies providing family planning services to six of the eight counties in the study. None of the three existing programs meet the policies for medical services established by the National Center for Family Planning Services. A comprehensive goal is stated of providing quality family planning services which are reasonably accessible at the lowest possible cost to all who need or desire these services. Continuing goals are listed in order of priority, and several methods of implementation are discussed but no specific recommendations are made. Appendices contain supporting data. (NHPIC)

HRP-0004520/3WW PC$4.00/MF$2.25[1]

Areawide Health Plan: Phase I

Linkous, C.T.; Phelan, L.P.; Moffett, T.; Cetrulo, M.F. Southeastern Ohio Health Planning Association, Cambridge, 1975, 74p.

Phase I of an areawide health plan for an 11-county area of southeastern Ohio is presented, including a socioeconomic profile of the region, a health profile, and sections on areawide needs, goals and objectives, hospital acute bed needs, and nursing home bed needs. The region is predominantly rural, and coal mining is an important industry in about two-thirds of the counties. Tables depict population and health status data. Findings from a limited sample survey to determine health attitudes of the area are presented. Approximately 400 questionnaires (copies included) were mailed throughout the region with a 38 percent response. Opinions were solicited from county health planning councils, county commissioners, educators, and health care providers. Among the problem areas determined were: lack of awareness of many residents concerning available services and entry points into the health care system; an apparent inequity in the distribution of health manpower; and a variance in emergency ambulance service throughout the area. Goals and objectives are stated. A synopsis of a framework for plan development is presented, as are details of the bed need studies. A bibliography is included. (NHPIC)

HRP-0003759/8ST PC$4.50/MF$2.25[1]

Assessment of Health in Genesee, Lapeer and Shiawassee Counties, 1975, Section I

GLS Comprehensive Health Planning Council, Inc., Flint, Mich., April 29, 1975, 82p.

The health status of three counties in Michigan is assessed in terms of nine goals formulated by the areawide health planning agency. Information was obtained from telephone survey questionnaires given to a random sample of area families. Demographic data and at risk characteristics (in tabular form) are drawn from the 1970 U.S. Census. Among the assessments were: that infant mortality is well below the State average, except in the City of Flint (in Genesee County); life expectancy in Lapeer and Shiawassee County is greater than that for the entire state: in Genesee County blacks have a significantly shorter life expectancy than whites; and the leading cause of death in all three counties is heart disease. Job-related injuries in Genesee are below State levels, but in Shiawassee they exceed State levels and in Lapeer are twice the State average. Lapeer and Shiawassee residents have less severe incidence of disease than Statewide figures, but Flint residents have more severe incidence. Over 90 percent of school children in the area receive immunizations before entering school. All data are supported by charts and tables. (NHPIC)

HRP-0002729 PC$4.75[1]

Assessment of Health Needs in the Bluegrass Region.

Deaton, Charles E.
Bluegrass Regional Health Planning, Inc., Lexington, Ky. May 1974, 135p.

This document assesses feelings of consumer residents of the 17 counties in the Bluegrass Region about their perceived health needs, the extent to which these needs are perceived as being met, and the critical areas of need for inclusion in the Regional Health Plan. A questionnaire was administered on a personal interview basis. Both sexes of all ages were interviewed at home and at work in rural and in urban locales. Regional results show that respondents recognized the importance of adequate health services and manpower, representing a shift in emphasis from the traditional viewpoint that facilities come first. A low percentage felt environmental health to be first or second most important. It appeared to be more difficult to relate to this area than it did to health services, which could more readily be seen as having an immediate bearing upon personal well-being. The overwhelming conclusion of the survey was that the general public has a lack of knowledge about the health care delivery system. They are not well informed of the health care system, and are concerned about the effect of the system on their everyday living patterns.

Appendices provide the survey instrument, a summary of regional results, and the results by county. (NHPIC)

HRP-0003424/9WW PC$6.00/MF$3.00[1]

Catawba Region Adolescent Health Care Study

Health Care Research Group, Pittsburgh, Pa., 1974, 109p.

The health status and health needs of adolescents (ages ten to 18) in the Catawba Region of north central South Carolina are reported. The study area incorporates four rural counties. Systematic data collection was performed through an analysis of existing data, the design and administration of four survey instruments, examination of hospital utilization records, and the identification of specific agencies' program case loads. Surveys of physicians, dentists, agencies, and schools were conducted; response rates were 48, 41.6, 46.1, and 87.7 percent respectively. Five major health care problems among adolescents were determined (in order of priority): dental problems, mental health and personal adjustment problems, drug abuse, illegitimate pregnancies, and alcohol abuse. Results of surveys, validation interviews, and hospitalization record studies complemented each other, lending validity to the study. A description of the study area (target population, health resources, educational system) is provided, followed by a detailed account of study findings relative to the problems listed above. Relevant vital statistics, health manpower and funding considerations, and health education are discussed. Recommendations center around better organization of existing resources and development of a reporting system to enable further planning activities by the Regional Planning Council. Survey instruments and a 14 page annotated bibliography are included. Sixty-eight tables are incorporated in the text and appendices. (NHPIC)

HRP-0004223/4WW PC$5.50/MF$2.25[1]

Census Use Study: Social and Health Indicators System, Atlanta, Part 1

Deshaies, John C.; Wallach, H.C.; Smith, C.C.
Bureau of the Census, Washington, D.C., Data User Services Office, April 1974, 65p.

Stage 1 of the survey of social and health indicators program in Atlanta, Georgia is described in this feasibility report of the social and economics statistics administration of the U.S. Department of Commerce. Background material and a description of the overall program is given, as well as a description of the

Atlanta Southside Comprehensive Health Center and the four census tracts enclosed within the boundaries of its closed system. The feasibility of advancing into Stage II is discussed, and recommendations made for including comparative data from eight or nine other census tracts. An inventory of available data sources includes sources for health indicators, welfare and education indicators, employment/unemployment indicators, housing and transportation resource indicators, and indicators for taxation, stress on the social system, recreation, and land use and access. Population estimates, and denominators for social and resource indicators are provided, and a study design for the implementation of Stage II is given, which includes recommendations for obtaining and processing data, creation of a summary data tape, and the design and construction of indicator matrices. Techniques for reporting operations and for developing evaluation procedures are noted. Appendices present an overview flow chart of the three stages of the study, and tables listing other supplementary data. (NHPIC)[4]

Census Use Study, Social and Health Indicators System, Atlanta, Part 2

Smith, Caby C.; Deshaies, John C.; Jones, Keith M.; Young, Sheila W.; Wallach, Harold C.
Bureau of the Census, Washington, D.C., Data User Services Office, October 1973, 226p.

Social and health indicators are characterized for two low-income areas within the city of Atlanta in this census study report prepared by the Office of Economic Opportunity and the U.S. Census Bureau. Part of the system to monitor health status in one primary and five secondary cities, the study will provide data useful in structuring new programs to fulfill unmet needs, and to reevaluate and revamp existing programs to better serve the area. Characteristics of the population including racial composition and sex, age, and marital status are presented in tabular format, together with family and income characteristics, educational factors, employment characteristics, housing occupancy, and financial data. Procedures and methodology of the study are given, as well as an analysis and interpretation of study findings, which are divided into health, welfare, and education factors, as well as transportation, taxation, employment, and crime statistics. The two study areas were divided into one with four census tracts, and for comparison a similar area of eight census tracts. In general, the results failed to show many significant differences between the two areas in such factors as health status, delivery of health and social services, employment and education, and level of crime. The four census tract area received services from a comprehensive health facility supported by the Office of Economic Opportunity. Findings are summarized in matrix form. (NHPIC) [4]

Community as an Epidemiologic Laboratory: A Casebook of Community Studies

Kessler, Irving I.; Levin, Morton L.
Johns Hopkins University, Baltimore, Md., School of Hygiene and Public Health, 1970, 330p.

Sixteen community studies are presented which exemplify approaches taken by numerous investigators in the field of community epidemiology. Three of the studies are concerned with a variety of medical conditions, four with cardiovascular disease, four with social factors in health, two with psychiatric symptoms, and three with the collection of comprehensive health-related data on a national basis. A wide spectrum of communities ranging from a rural area of 7,000 persons to the entire United States is encompassed, representing the United States, Puerto Rico, and Columbia, South America as well as the U.S. In some of the studies, entire communities were surveyed. In other studies, samples were selected and, in a few, both methods were employed. The study instruments included private censuses, personal interviews, interviewer observations from personal interviews, mailed questionnaires, physical examinations, screening examinations, and reviews of existing medical and vital records. Included in the compilation of community studies are the following: (1) discussions on comprehensive disease investigations in the total communities of Tecumseh, Michigan and Rochester, Minnesota; (2) epidemiological surveys of specific medical conditions in Washington County, Maryland; Framingham, Massachusetts; Evans County, Georgia; Charleston, South Carolina; and the State of North Carolina; (3) social surveys in Alameda County, California; Washington Heights, New York City; and the State of Rhode Island; (4) psychiatric surveys in Sterling County, Nova Scotia; New York City; and a New England hospital; and (5) national health surveys in the United States, Puerto Rico, and Columbia, South America. (NHPIC)

(Available from Johns Hopkins Press, Baltimore, Maryland 21218 PC$13.50)

Community Health Profile of West Liberty, West Virginia

McMillen, Marilyn
Kent State University, Ohio, Department of Sociology, Panhandle Health Planning, Inc., Wheeling, West Virginia, December 1972, 163p.

The health and health care status and demographic characteristics of West Liberty, West Virginia, a community at the center of a three-county, predominantly rural area, are examined. The study represents a literature review and a 70-household survey conducted by a Kent State University student. The survey involved some 211 individuals, or approximately 50 percent of the community's

total population. Demographic characteristics, health status data, health attitudes and resource utilization patterns, and environmental characteristics are presented for the community, followed by a socio-economic class analysis. The significant number of residents who are not receiving care in any area -- from existing health problems and contagious diseases to dental and physical examinations and Pap tests -- is noted. Some 30 percent of the health problems among the residents were in some way related to the circulatory system. A number of individuals expressed attitudes and ideas about services available and not available to them. Eighty percent indicated that they felt a need for a physician in the community. The most important environmental aspect was the lack of a public sewage system, with 64 percent indicating that they perceived this lack as a definite environmental health problem. Rodent control was another problem area. It is concluded that the lack or non-accessibility of health services has had a definite adverse effect on the health status, utilization of existing facilities and services, and health attitudes of the residents of this community. A copy of the survey instrument is included, together with supporting tabulated data. (NHPIC)

HRP-0003948 PC$6.75/MF$3.00[1]

Community Health Survey: A Survey of Health Care Needs

Cowen, Joel, B.
1973, 277p.

A survey of physical, environmental, and mental health in the Rockford, Illinois, Metropolitan area of Winnebago and Boone Counties, conducted for Comprehensive Health Planning of Northwest Illinois, Inc., by the Office for Community Health Research of the Rockford School of Medicine, is reported. Survey methodology is described; a staged procedure using mail, telephone, and personal interviews was employed, results of the survey are based on the usable responses of 1,700 households for 5,500 individuals-about one out of every 50 households or persons in the area. Boone County residents responded at a better rate (77 percent) than Winnebago County residents (61 percent), reflecting the greater currency of health care as a public issue in Boone County, especially in relation to physician need. The sampling technique is described in detail. Following a presentation of background information on the population and organization of health care in the planning area, survey results and narrative analyses are presented relative to the following: availability of medical care; physician utilization; satisfaction with medical care; characteristics of last physician visit; hospitalization; health status, i.e., conditions and diseases, smoking and drinking, accidents and injuries, mobility and activity limitations, mental health; dental care; family planning and birth control; health care costs and insurance coverage; and environmental quality including environmental

health problems, neighborhood problems, satisfaction with public services, need for public services. Extensive tabular data, maps, and illustrations accompany the text. A copy of the survey instrument is included. Portions of this document are not fully legible. (NHPIC)

HRP-0004050/1ST PC$9.25/MF$2.25[1]

Conceptual Health Plan for the Model Cities Area

Health Planning Association of Northwest Ohio, Maumee Medical Care Unit, June 1974, 98p.

An analysis of the health needs of the residents of the Model Cities Area of Toledo, Ohio, and recommendations for a plan to facilitate delivery of health services are presented. Socioeconomic and demographic characteristics, health status, and health care resource data for the defined area are presented: several tables are included. Factors identified as influencing the level of health in the area include: median income level; percent of population below poverty level; percent older than 25, with more than four years of college; percent older than 25, with less than nine years of school; percent employed in management and professional positions; percent employed in labor or service positions; percent unemployed; household units where head lives alone or with unrelated persons; households with female as head; households with female as head and with dependent children; and percent of housing units overcrowded. The area studied is characterized by lower overall socioeconomic status and (with infant mortality as the indicator) lower health status than the surrounding area. Development of a health care advocacy agency for the area is recommended, as is greater commitment to primary and specialty health care services. Nutritional education and health, hygiene, sex, and drug education programs in the schools are given high priority. (NHPIC)

HRP-0002759 PC$4.75[1]

Contrasts in Health Status: Volume 3 Assessment of Medical Care for Children

Kessner, David M.; Snow, Carolyn Kalk; Singer, James National Academy of Sciences, Washington, D.C., Institute of Medicine, March 1974, 247p.

The health status of 2,700 children from all social class backgrounds in the District of Columbia is analyzed and related to their usual sources of medical care. The report

focuses on three medical problems, called tracers, as indicators of health status: 1) anemia, 2) vision problems, and 3) middle-ear infection and associated hearing loss. The kind and quality of care provided by different sources, such as individual physicians, prepaid group practices, hospital outpatient departments and public clinics, is assessed. (NTIS)

Paper copy available from National Academy of Sciences, 2101 Constitution Ave., N.W., Washington, D.C. 20418 PC$6.00

PB-237 188/8ST MF$2.25[1]

Demographic Analysis of Subareas

Comprehensive Health Planning Agency of Southeastern Wisconsin, Inc., Milwaukee, November 1974, 38p.

The people in each subarea of southeastern Wisconsin and the conditions under which they work and live are described. This analysis, fifth in a series of reports which comprise an areawide health facility plan, is intended to provide a basis for estimating the future health service needs of southeastern Wisconsin as related to facility based programs. The basic source of data is the U.S. Census; population projections for 1980, developed by the Southeastern Regional Planning Commission, serve as the basis for all projections. Maps and tables detail population distribution and density, components of population change, migration, age, sex distribution, fertility, family composition economic characteristics, and housing characteristics. Subarea projections are presented in tabular form for population density, age distribution, sex distribution, fertility, racial composition, education, labor force, and housing. Conclusions are that the population will increase more rapidly, urban development density will not reach former levels, low birth rates and a growing geriatric age group will characterize the region, females exceed males, and changing racial composition affects the nature of health care needs. Recommendations and a bibliography are included. Portions of this document are not fully legible. (NHPIC)

HRP-0004948/6WW PC$4.00/MF$2.25[1]

"Determination of Health Care Priorities and Expectations Among Rural Consumers"

Kane, Robert L.
Public Health Service, Rockville, Maryland
Pub. in Health Services Research, Vol. 4 No. 2, p142-151, 1969.

Findings of a survey of rural Kentucky residents taken to determine felt need for a new health facility to replace a recently closed local hospital are reported. With electric utility company records as the sampling frame, a probability sample of 171 households (approximately 15 percent of the families in the county studied) was selected, and interviewers talked with the head of each household during June and July 1968. Of the 171 households selected, 157 interviews were completed. When problems rather than solutions were stressed and semantic difficulties were avoided, respondents identified a set of needs agreeing with those recognized by professional planners, but with important discrepancies with regard to desired location for the new facility. Data from diverse sources such as market research and traffic flow studies validated the respondents' expressed locational preferences as congruent with community behavior patterns, emphasizing the need for early solicitation of consumer attitudes and establishment of fully reciprocal communication. Tabular data and description of study methodology are included. No sample of the survey instrument is provided. (NHPIC)

Family Health Indicators in the Bend of the Cumberland: Part III. A Survey of Health in Lower-Income Areas of Nashville

May, Jean T.; Sprague, Homer A.; Thomas, Luttrell
Evaluation, Survey and Health Research Corporation, Nashville, Tennessee, 1974. (Unpublished)

The sample consists of 594 family housekeeping units (FHU) containing 2,057 individuals. The U.S. Census Bureau's definition of FHU was adopted for this analysis. Originally the data was collected at the individual level and had to be aggregated for this family level analysis. Methods used for aggregation are discussed. Most analysis is done using the Multiple Classification Analysis. Includes 137 references. (CH-P)*

74-5156 128[2]

Feasibility Study to Determine the Forsyth Health Council Should Undertake a Questionnaire Survey to Determine Long-Term Health Care Needs

Forsyth Health Planning Council, Winston-Salem, North Carolina, August 8, 1975, 20p.

The feasibility of conducting a questionnaire survey to assess long-term health needs in a community is explored by the Forsyth Health Planning Council of North Carolina as an illustration of one possible activity of health planning. Before the question of feasibility is addressed, a general description of a questionnaire survey and its scope are discussed, which includes the population to be served and the health needs to be met. Surveys conducted in other communities -- their cost, funding, and results -- are summarized. Because the cost of a survey addressing all residents of a community and all their health needs is prohibitive, a previously developed questionnaire is valuable in determining the scope of long-term care needs in the community. To accurately identify needs, a survey must contain input from both consumers and providers; needs should not be defined by available services or the setting in which services are delivered. Technical assistance can be provided by the National Center for Health Statistics. However, such a survey cannot be conducted without additional funding; available funds and funding agencies are suggested. The result of a survey presented in a health plan when coupled with strong community support is formidable at the Health Service Agency level. But, the survey will have little effect unless the community wants the information the survey provides. A bibliography is included.(NHPIC)

HRP-0005502 PC$3.50[1]

Goals--Needs--Priorities

Central Indiana Comprehensive Health Planning Council, Indianapolis, Indiana Regional Medical Program, Indianapolis, 1972, 46p.

Activities related to the establishment of health care priorities are outlined for the eight-county area represented by the Central Indiana Comprehensive Health Planning Council. The analysis of needs and establishment of priorities is being undertaken as a joint venture involving the council and the Indiana Regional Medical Program. Selected health status and health care indices used in the process of measuring needs and priorities are presented in tables and graphs. A survey conducted of all members of regional and county planning councils in the central Indiana region is reported. From the 340 questionnaires mailed, 38 percent response was attained. From the survey data, health priority quartiles were determined for each county and for the region. Priorities are categorized as follows: available but need to be strengthened

or supplemented; and not available, but needed. A copy of the health priorities identification survey instrument is included. Population estimates for 1975 and 1980 are presented by county and for the entire region. Portions of this document are not fully legible. (NHPIC)

HRP-0003941 PC$4.00[1]

Greater St. Louis Comprehensive Health Plan: Technical Appendix II - Health Problem/Need Statements

Alliance for Regional Community Health, Inc., St. Louis, Mo., January 1975, 148p.

Problem/need statements and projections used in the first edition of the Greater St. Louis Comprehensive Health Plan are presented in a technical appendix. Each problem/need statement is introduced with three designates: (1) the problem/need code identifying the program area, system component, and number of problem/need statements in a component; (2) the goal identification, indicating which of the plan's 15 goals the problem/need statement addresses; and (3) references to documentation used to substantiate the existence of the problem/need. The categorized reference bibliography duplicates the second part of the bibliography in the body of the plan. The document also includes information showing what 6th tile priority rating, i.e., seriousness rating, each problem/need statement received. A cross-referencing index of plan concepts indexes plan goals and objectives to programs, problem/need statements, and references. Problem statements and projections are presented in the following areas: ambulatory care, lead poisoning control, housing, noise control, long-term care, mental health, manpower, emergency medical service, and acute care. Each statement includes a narrative description of the problem at the present (January 1975), and a projection of the situation in 1979. Portions of this document are not fully legible. (NHPIC)

HRP-0006088/9WW PC$6.00/MF$2.25[1]

Guide to Assessing Ambulatory Health Care Needs in Your Community

Jones, Deborah; Gold, Marsha; Camberg, Lois
Abt Associates, Inc., Cambridge, Mass., April 1974, 91p.

An inexpensive and short-term method to help communities estimate current needs for ambulatory health care services, determine the adequacy of existing resources and programs, and develop strategies for improving ambulatory care is described. Based on a demonstration study in Boston, Massachusetts, the proposed approach in-

volves determining the volume of ambulatory visits and the number and types of health service providers, and developing profiles of individual neighborhoods. This approach relies on visits as the common denominator; the actual use of ambulatory visits is compared with the use which would be expected based on national and prepaid plan utilization patterns. The study depends heavily on community involvement, including use of community personnel. A basic model is developed in which the study limitations and neighborhood boundaries are defined, sources of care are identified, and data are collected and analyzed. Preliminary reports should include the purpose of the study and its methodology, Neighborhood profiles, overall findings, and detailed tables. The final report should identify strategies and recommendations for improving ambulatory health services. Tables and diagrams support the information. Appendices contain a data needs summary chart, tables, and a sample neighborhood profile. (NHPIC)

HRP-0002622 PC$4.75[1]

Health and Health Care for the Urban Poor: A Study of Hartford's North End

Elling, Ray H.; Martin, Russell F.
Connecticut University Health Center, Farmington, 1974, 133.p.

A study of the dimensions of health status, health care, and socioeconomic characteristics in an inner-city area of Hartford, Connecticut is documented. Hartford's North End, a low income area in which the population is largely black and Puerto Rican, is the target area of the study, undertaken to provide base-line information for development of a comprehensive community - oriented health program for the North End. Socioeconomic characteristics of North End residents are examined, and indexes of sophistication and orientation toward care, as well as reported experience with illness and care, are described and discussed. Morbidity, disability, and mortality are compared for North End residents and the rest of Hartford, and for various age, race, and economic groups within the North End. Influence of certain socioeconomic characteristics and attitudinal variables on reported primary care utilization among North End residents is examined. Major disparities between levels of health and health services in the North End and in the rest of Hartford are documented. Certain particularly high-risk groups, such as poorly educated persons with children, are identified. It is made clear that an individual's outlook on health problems and what to do about them is highly related to class, race, recency of move into the area, and other social factors, as well as to the health problem at hand. It is observed that lower-class persons are generally less concerned about a medically serious symptom than about a mild symptom, such as toothache or head cold. Investigations

of patient satisfaction suggest that a personalized service is highly important. Based on study findings, recommendations for action are proposed. A description of the methodology used in interviewing community residents and a copy of the survey instrument are included. Supporting data are provided. (NHPIC)

(Available from the Connecticut Health Services Research Series, Box 504, New Haven, Connecticut 06473 PC$5.00)

Health Care Needs of the Elderly and Chronically Disabled in Massachusetts

Branch, Laurence G.; Fowler, Floyd J.
Harvard-MIT Joint Center for Urban Studies, Cambridge, Mass., March 1975, 133p.

Findings of a statewide survey of the health care needs of the elderly and chronically disabled in Massachusetts are presented in this report prepared for the Massachusetts Department of Public Health. A total of 1,625 interviews were conducted with non - institutionalized elderly respondents, comprising a response rate of 79 percent of the elderly population. Those 18 to 64 years of age were included in the sample as chronically disabled if they met any one of the following criteria: legally blind or deaf; having lost, or lost use of an arm or leg; being unable to go out of the house on their own; requiring assistance in personal care or getting around; and unable to work at a regular job because of health. A sub - sample was followed up by professional clinicians and the results of the clinical assessments are presented in text and tabular format. Assessments of met and unmet needs from self - report information concern such areas as social interaction, social contact, food shopping, food preparation, housing, personal care, transportation, and emergency assistance. A principle goal of the clinical follow-up was to provide an estimate of need for placement in various types of long-term facilities among non - institutionalized persons. Results of these assessments are presented, and measurements of health status, housing factors, personal economics, and social activity are provided. Characteristics of the sample and references are given. (NHPIC)

HRP-0005815/6WW PC$6.00/MF$2.25[1]

Health Indicators Report, 1968-1973.

Comprehensive Health Planning Council of Whatcom, Skagit Island, and San Juan Counties, Mount Vernon, Washington, August 1975, 112p.

Data for 45 health indicators for four counties in Washington Between 1968 and 1973 are presented to aid professional and non-professional decision-makers and interested citizens in determining the relative health of this region as compared to other areas. The indicators were reviewed against several criteria: the existence of a meaningful relationship between the indicators and health status or health risk, availability of data for the indicator, and relative accuracy and completeness of available data. Data were provided by Federal, State, and local agencies, and obtained from a number of source documents which are listed. The tabular format presents the data according to six categories: the first year of life; health of children and youth; enrollment in special programs; injuries, illnesses, and use of health services; societal health indicators; and mortality. At the bottom of each table is a listing of areas by rank from 'best' to 'worst,' permitting easy comparisons. Each table also contains remarks about significant interregional trends and/or regional standing and remarks about short-term trends. Graphs plot rates over time for the region, State and nation, and provide a description of data sources and data limitations. (NHPIC)

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HRP-0005605 PC$5.50/MF$3.00

Health Indices: Methodology for Assessing Health Status. Selected Bibliography

Health Services and Mental Health Administration Library, Rockville, Maryland, July 16, 1973, 9p.

Materials concerning health indices and methodology for assessing health status are listed under the following categories: ethnic, foreign language, general, methodology, and socio-medical. The bibliography includes 74 journal articles, reports, and studies, dating from 1966 through April 1973. A list of sources used in compiling the bibliography and a list of the nine journals most frequently cited are included. (NHPIC)

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HRP-0005949/3WW

Health Interview Survey Procedure 1957-1974

DHEW, PHS, HRA, National Center for Health Statistics, Vital and Health Statistics Series 1, No. 11, April 1975, 158p.

Changes that have led to the improvement in data collection in the household survey since its inception in 1957 are outlined in this report which also examines the expansion of the survey to provide supplemental information on health-related topics. Background information, history, and concepts used in the Health Interview Survey are covered. Technical aspects of the survey, including its statistical design, estimating procedures, reliability of estimates, and errors due to sampling variability are presented, as well as information on the questionnaire development, the history of its format and how it has changed through the years. The basic questionnaire is described, together with questionnaire supplements, and samples are given. The format used during the first 10 years provided for reporting of all kinds of morbidity conditions through direct questions, but no attempt was made to determine if some action was taken by the person because of the condition. During the succeeding years, the methodology was changed somewhat to provide a greater variety of information. Rotating supplements during fiscal years 1960, 1963, and 1968, and calendar years 1968, 1970, 1972, and 1974 surveyed the following topics: health insurance coverage, hearing ability, loss of income, nursing staff and/or special aids, personal health expenses, prescribed and nonprescribed medicines, smoking habits, vision impairment and use of corrective lenses, and x-ray visits. Other one-time or single supplements are appended, as are definition of terms and checklists for selected chronic conditions. (NHPIC)[3]

Health Needs and Problem Profile Study for Spokane County, Washington, Phase II-March 1975

Comprehensive Health Planning Council of Spokane County, Inc., Wash., March 1975, 120p.

The health needs of Spokane County, Washington, are identified for use by various public and private elements of the Spokane County health delivery system. The methodology of assessing health needs is described; needs were determined by interaction between panels knowledgeable in health care and a task force knowledgeable about the Spokane area and its health system. Flow charts demonstrate the processes used in identifying the health needs of the area. The identified health needs are categorized into: physical, mental, environmental health, developmental disabilities, and general health. Objectives are developed for each need and specific goals are created for each objective. Sample action plans, suggested for

each need and goal, are designed to facilitate planning. The concept of comprehensive health planning as utilized by the local planning agency is explored. The appendix contains a roster of the project team, a registry of needs and prioritization of need in tabular form. (NHPIC)

HRP-0002771 PC$5.25[1]

Health Services Data System: The Family Health Survey

Eichhorn, Robert L.; Kulley, Andrew M.; Purdue University, Lafayette, Ind., Health Services Research and Training Program, June 1972, 146p.

The family health survey manual outlines procedures for conducting a short health interview survey that attempts to measure the community's need for and use of medical services. This manual includes the survey rationale, an outline of planning issues, and a basic interview questionnaire, as well as several standards supplements. Instructions on how to administer the survey and analyze the data are also provided. (NTIS)

PB-238 736/WV PC$5.75/MF$2.25[1]

Health Services Data System. 1. Reliability and Validity of Survey Measures of Health Related Variables (A Research Bibliography) Rept. for Jun 71-Jun 73

Kulley, Andrew M.; Burns-Doyle, Wilma
Purdue University, Lafayette, Ind., Health Services Research and Training Program, Bureau of Health Services Research, Rockville, Md., March 1974, 85p.

The 765-item bibliography of methodological issues related to health surveys, was prepared as a resource document to assist the health care manager or researcher to preparing and conduct a community health survey. The document covers the literature from 1926 through 1973. A variety of works dealing with the general topic of survey measurement of health related variables is cited in this bibliography. Preference was given to works reporting empirical research on need-related variables, especially studies concerned with the reliability and validity of the survey measurement process. References cover such topics as the validity and reliability of mailed questionnaires and telephone surveys; methods for measuring disability days; techniques for surveying different population groups, Health Index and scale construction, the effects of interviewer bias on Health Interviews, etc. (NTIS)
Paper copy also available in set of 9 reports as PB-238 732-SET, PC$36.00.
PB-238 733/OST PC$4.75/MF$2.25[1]

Health Services Utilization Survey, Jacksonville, Florida

Jacksonville Experimental Health Delivery System, Inc., Fla., 1973, 55p.

A health services utilization survey, in which information on health care habits and needs was gathered from 1,489 households in Duval County (Jacksonville), Florida, is reported. The major findings from the survey are compared with national findings and those from eight other experimental health delivery system sites. The data are presented in graphic form. Sampling methodology is detailed; a one percent probability sample of housing units was selected. No copy of the survey instrument is included, nor are the data analyzed. Data are presented pertaining to physician contacts, hospitalizations, bed days, chronic illness, usual source of care, dental information, wanted but unreceived care, bariers to care, and effects of age and income. A three-page thumbnail summary of the data is included. Cities used for comparison were Memphis, Tennessee; Binghamton, New York; Monessen, Pennsylvania; Morehead, Kentucky; Dover, Delaware; Boise, Idaho; Lubbock, Texas and Rapid City, South Dakota. (NHPIC)

HRP-0003756/4WW PC$4.50/MF$2.25[1]

"Health Status Assessment in the Health Insurance Study"

Kisch, Arnold L.; Torrens, Paul R.
Pub. in Inquiry, Vol. 11 No. 1, p40-52, 1974.

The approach for assessing health status in the Rand Health Insurance Study is presented in detail. The need to assess health status is described, as is the difficulty in attempting such an assessment. An outline of procedures for gauging health status has also been presented. The proposed methodology is a compromise necessitated by the crude state of the art of health status measurement. Includes 44 references. (CH-P)*

"A Health Status Assessment System for a Rural Navajo Population"

Giacalone, Joseph J.; Hudson, James I.
Pub. in Medical Care, Vol. 13 No. 9, p722-735, 1975.

This paper presents a format for assessing the health status of rural Navajo population as a method for determining community health needs. Ambulatory patients are classified according to discrete health status categories which are defined in terms of specific clinical criteria. Patients are monitored on a quarterly basis. Data review allows for continuous reassessment of community needs

and provides a technique for monitoring the effectiveness of the health care delivery system in meeting these needs. An analysis of the first year's operation is presented. Includes 7 references. (AA-M)*

"Health Status of Older People"

Shanus, Ethel
Pub. in American Journal of Public Health, Vol. 64 No. 3, p261-264, 1974.

Self-reports of physical capacity among persons 65 years of age and over are presented for 6 countries: Britain, Denmark, Israel, Poland, United States and Yugoslavia. Data is based on nationwide probability samples of the non-institutionalized elderly. Scores based on 6 questions relating to self care form the basis for cross-national comparison. The author uses the findings to draw implications for public health and the provision of services. Includes 29 references. (CH-P)*

Household Health Survey: Report Number One

Health Systems Management, Inc., Memphis, Tenn., March 19, 1973, 56p.

An initial analysis of a survey of households in three counties centering in Memphis, Tennessee, is reported by Health Systems Management, Inc. Study methodology is summarized; the survey involved a one percent random sample of households. The survey was conducted between October 16, 1972, and January 6, 1973; 87 percent of those families selected were successfully interviewed, approximately one-half by telephone and one-half in person. Survey results, presented in tabular format, include: population characteristics, including age, sex and income; frequency distribution of bed days, restricted activity days, physician contacts, and hospitalizations; a variety of cross tabulations, such as chronic illness by physician contact within last year by income, persons who wanted, but did not receive care in past year by age and income, physician contacts within one year per 100 bed days in one year by age and income, etc; cross tabulation matrices showing bed days and physician contacts in last year by age and bed days and physician contacts in last year by income; and histograms showing how certain health statistics in the study area compare with national statistics and how various statistics for the study area are affected by income levels and by age. Suggestions for subsequent analysis of the data are offered. Although the survey instrument

is not included, a list of basic questions asked is provided. A total of 33 tables is presented. (NHPIC)

HRP-0004919/7WW PC$4.50/MF$2.25[1]

How To . . . A Guidebook for Studies of Regional Health Needs and Resources

Holton, Wilfred E.
Louisiana State University, Dept. of Sociology, Baton Rouge, November 1972, 45p.

A step-by-step presentation of elements in meaningful studies of health needs and resources is provided, together with procedures for mobilizing study efforts with the help of students and volunteers and suggestions for implementing findings when studies are completed. Examples used in explaining the techniques are taken from a 10-parish area including the cities of Baton Rouge and Hammond, Louisiana. It is suggested that three teams of two or three persons each should work on health needs assessments. Another three small teams can survey the health institutions in an average region. Patient origin studies require somewhat more effort; teams of two can handle data collection in small hospitals, while larger teams are needed for large samples. The various tasks should be structured carefully so that every person has a clear picture of his or her role. A professional staff member should provide a central focus for the efforts of the study segments. Key census books which each region should obtain for use in needs assessments are cited, and their use is discussed in detail. The conduct of interviews is discussed. Approaches to surveys of health care agencies and of private physicians are suggested; a sample survey instrument for use in interviewing health facility administrators is included. A sample form for patient origin and hospital utilization data collection is provided, together with a sample case abstract form for similar studies. The process of data compilation, drawing conclusions, and writing reports is outlined briefly. Portions of this document are not fully legible. (NHPIC)

HRP-0003840/6WW PC$4.00/MF$2.25[1]

"Interrelationships Among Mobility, Health and Attitudinal Variables in an Urban Elderly Population"

Fine, Margaret.
Pub. in Human Relations, Vol. 28 No. 5, p451-455, 1975.

This paper is based on interview responses from 169 persons aged 65 years and over living in the Bronx, New York. The questionnaire consised of items measuring self-assessed health and functional ability. Intercorrelations and factor analysis were used. Includes 22 references. (CH-P)*

Inventory and Assessment of Health Agency Planning and Evaluation Studies

Orkand Corp., Silver Spring, Md., November 14, 1975, 31p.

The methodology and end products of an investigation of health agency planning and evaluation studies performed by selected Comprehensive Health Planning a and b agencies, Regional Medical Programs, and Experimental Health Service Delivery System agencies are summarized. Planning and evaluation studies were submitted in seven subject areas: health care finance and community funds flow, ambulatory care, long-term care, hospital care and utilization, emergency medical services, consumer health status and need, and medical specialty needs. From some 200 items submitted by 27 agencies, 51 studies were chosen and site visits were made to the agencies that had performed the studies. On-site visiting teams gathered data on the agency process, the study product and the study product impact. From summaries of these data, consultants developed study methodological ratings in the areas of formulation of study problem, study design, data collection, and data analysis. The end products of the project are: a six-volume Planning and Evaluation Manual, consisting of an introduction and a series of a model study summaries for each of six study subject areas; an Evaluation of Community Funds Flow, which examines the implementation and utilization of the community funds flow technique; and an Analytic Report, (which is not available through the National Health Planning Information Center) detailing relationships detected between aspects of the process involved in a study's completion and its methodologic quality and subsequent impact. Each of the projects end products is summarized and reasons for the absence of studies on emergency medical services in the Planning and Evaluation Manual are given. An index to the six-volume manual is provided. (NHPIC)

HRP-0006481/6WW PC$4.00/MF$2.25[1]

Iowa County Citizens Speak Out on Health: Results of the Iowa County Health Attitudes Survey

Health Planning Council, Inc., Madison, Wis., June 1973, 25p.

Results of a survey conducted by the Iowa County Health Resource Committee to determine the health attitudes of Iowa County, Wisconsin citizens are reported. A questionnaire was mailed to 340 providers and consumers; 225 citizens responded (66 percent). The questionnaire contained 57 statements to which respondents were asked to respond as strongly agreeing, agreeing, disagreeing, strongly disagreeing, or no opinion. According to 65 percent of the respondents, there is no difficulty in obtaining physician

care in Iowa County; 69 percent indicated no difficulty in getting needed hospital services. Nearly all agreed that ambulance service is available 24 hours a day. A majority of participants (59 percent) would be willing to live in a community with few medical services if they could obtain care within 30 minutes. All but one respondent felt citizens should have a voice in how they receive care; 63 percent felt it important to see the same physician at each clinic visit, and 72 percent felt some services could be provided by allied personnel. Most participants (89 percent) believed that all citizens have a right to medical care, regardless of income, but there was no consensus on how to finance care. A copy of the survey instrument is included. (NHPIC)

HRP-0002744 PC$3.25[1]

"Measurement and Projection of the Demand for Health Care: The Chilean Experience"

Hall, Thomas L.; Reinke, William A.; Lawrence, David
North Carolina University, Chapel Hill, Dept. of Health Administration
Pub. in Medical Care, Vol. 13 No. 6, p511-522, June 1975.

Methods used in a health manpower study conducted in Chile to project long-term use of services are described. The primary source of information for the projections was a household survey which was added to a regular survey by the Chilean Census and Statistics Bureau. Independent variables related to health care were age, sex, income, residence, and eligibility for medical care; dependent variables included disability days, use of services, expenditures, and desired but incomplete medical visits. Using multisort analyses a model was constructed which identified variable relationships and projected services. The most significant relationships identified were that general age and medical status are important in the utilization of services and the amount paid for them. Education had little effect on utilization, but expenditures for services were higher among educated persons. Baseline projections call for expenditures to increase more rapidly than services or population. While utilization levels are similar for low and high income groups, the affluent tend to call for more sophisticated and expensive services. The baseline projection postulates that all levels of the Chilean population will want the same degree of health care in the target year as the base year. Alternative projections assumed faster growth rates for preventive and ambulatory services and a slower rate for short-stay hospital care. (NHPIC)

Monitoring the Care of the Elderly

Williams, Alan; Wright, K.G.
University of York, York, England. (Unpublished)

An attempt to measure the health and well-being of the elderly is outlined. A central interest in eliciting what background factors explain transition from any initial dependency state to one observed subsequently. Thus, the study design is longitudinal, not service-specific and aims at broad coverage. The interview schedule was pilot tested in May 1973; response to the questionnaire is discussed. Includes 20 references. (CH-P)*

74-5246 112[2]

Mon Valley Household Health Survey: General Population Characteristics and Health Information About Mon Valley Residents

Mon Valley Health and Welfare Council, Inc. Monessen, Pa., July 1974, 33p.

A survey was conducted of residents of the Mon Valley Region of Pennsylvania to acquire data on health needs and health care utilization rates. Of the 854 households in the sample, 95 percent participated in the interviews, representing a total of 2,666 individuals. Population characteristics of the residents (age, sex, race) are given. Tables and graphs are used to display health status data (sick bed days, restricted activity days, chronic health conditions) and health care utilization information (Physician and Dentist contacts, hospitilizations, amount of care and medical care sources outside the region). Data are analyzed with regard to physician contacts and hospitalization rates, income and physician or dentist utilization, reasons for not seeing physician, and age groups not seeing physician. The Valley's population is experiencing a growth in the 45-and-older age group. This indicates a possible need for more long-term care beds in the area, together with a systematized ambulatory care operation emphasizing care for chronic health problems. Valley residents have significantly fewer physician contacts than does the average American, and yet report more sick bed days and restricted activity days, indicating a need for greater availability of primary medical care. The survey also indicates that area residents use primary medical and dental services on an emergency basis rather than for health maintenance. A copy of a portion of the survey instrument is included. (NHPIC)

HRP-0003783 PC$4.00/MF$2.25[1]

"Older Adults: A Community Survey of Health Needs"

Managan, Dorothy T.; Heinichen, Chlao; Wood, Jean;
Hoffman, Marian K.; Hess, Gertrude
Dupage County Health Department, Wheaton, Ill.
Pub. in Nursing Research, Vol. 23 No. 5, p426-432,
September-October 1974.

Findings of a 1972 survey of health needs of noninstitutionalized persons aged 65 years and older, conducted by the Nursing Division of the DuPage County, Illinois, Health Department are reported. DuPage County lies immediately west of Chicago and is characterized by rapid growth and a primarily white, middle - class population. The study sought to describe the elderly population in terms of five parameters; health condition, physical functioning, accessibility of medical care, social isolation, and service needs. A five percent stratified random sample (1,466) of older adults were interviewed in their homes. Functional impairment, lack of a family physician, and social isolation were found to present major problems. Persons who lived with others, it was found, had more health problems and were more socially isolated than those living alone. The Nursing Division served 4.2 percent of older adults in the county in 1971; the study findings indicated that 15 percent required service. The findings imply a need for intensive case - finding and well - adult conferences staffed by family nurse practitioners and friendly visitors. The study findings provided base-line data for evaluation and planning for future services. Study methodology, including questionnaire design and data collection and analysis, is described in detail. While tabular data are included, a copy of the survey instrument is not. (NHPIC)

Perceived Health Needs and Concerns in Oregon District No. 8. A Survey of Residents and Health Agencies in Jackson and Josephine Counties

Meinke, Cindy
Jackson-Josephine Comprehensive Health Planning Council, Inc., Medford, Oregon, Western Interstate Commission for Higher Education, Boulder, Colorado, Resources Development Internship Program, 1974, 64p.

A survey of residents and health agencies in Jackson and Josephine Counties (Oregon) to determine perceived health needs and concerns is reported. The survey was conducted by a Western Interstate Commission for Higher Education intern. Of 361 questionnaires mailed to citizens, 234 (67 percent) were returned; representatives of 95 agencies were interviewed. Consumer perceptions are summarized in the areas of medical and dental health needs, financing health care, and environmental health needs. Agency perceptions of health needs are presented in the areas of health services, services for the developmentally disabled mental health services, environmental health, medical manpower, emergency

medical services, and dental services. A copy of the survey instrument and descriptions of survey procedures and random sampling techniques are included. Consumers and agency representatives identified two population groups that especially need health assistance: low-income persons and the elderly. Jackson County agency representatives specified availability of speech therapy and other rehabilitative services as a primary area of need; individual health care services and health supportive services were identified as priority items by Josephine County agency representatives. Tabulated data from the survey are included. Portions of this document are not fully legible. (NHPIC)

HRP-0003926 PC$4.50[1]

"Planning an Epidemiological Field Survey"

Copplestone, J.F.
Pub. in World Health Organization Chronicle, Vol 29, p219-223, 1975.

The success of an epidemiological field survey depends on the suitability of the questionnaire and on the way in which the data are collected. The questionnaire, the methods used, as well as the size and selection of survey and control groups, the verification of possible errors, and the influence of survey design on results are discussed in this article, which is based on a paper presented at the WHO Conference on Intoxication due to Alkylmercury Treated Seed, held in Baghdad from 9 to 13 November 1974. (AA)

"Predicators of a Dimension of Well-Being in the Relocated Healthy Aged"

Storandt, Martha; Wittels, Ilene; Botwincik, Jack
Pub. in Journal of Gerontology, Vol. 30 No. 1, p97-102, 1975.

122 subjects aged 61 to 88 years were tested around the time they moved to an apartment complex in which independent living and self-care was necessary. 2 measures of health status and 2 of health habits were included in the 24 assessment batteries. After living in their apartments circa 15 months, their well-being was independently rated by 2 psychologists; a 5-point clinical rating scale was used. The test scores were analyzed in relation to the clinical rating categories. Results are presented and discussed. Includes 21 references.(AA-M)*

Primary Health Care on the Eastern Shore: Assessment and Perception

Health Planning Council of the Eastern Shore, Inc., Cambridge, Md., 1975, 21p.

Factors related to the quality of primary health care in the nine-county, Eastern Shore area of Maryland are discussed, reflecting information gathered in a survey of 430 households and priorities and problems identified through use of the nominal group technique. The decision to seek medical care, waiting time, cost, distance transportaion, physicians, personal influence in seeking medical care, and problem groups are discussed as factors in the status of primary health care. It is noted that health habits and health care actions of people are influenced by many factors, and that a balance between encouraging and discouraging aspects will determine how, when, and where a person will seek medical attention. Waiting time - time spent in the physician's office or clinic and time necessary to get an appointment - is recognized as a problem area. Many persons interviewed complained of long waits in emergency rooms. The cost of health services is seen as a barrier which prevents some people from seeking medical care when they first feel they need it. About 30 percent of the persons interviewed said they pay for all medical bills without outside help. Many people listed high fees as the chief factor which discouraged them from seeking medical care. Although about 80 percent of the persons interviewed claimed to have a family physician, many of these people were not able to give the physician's name and address, indicating a lack of utilization of the physician's services. A serious need for more general practice physicians in the area is noted. More basic health education as a tool in preventive medicine and primary health care is discussed. The transportation problems of the elderly, the poor, and those living in rural areas are discussed; the special problems of migrants, vacationers, alcoholics, drug abusers, the mentally and physically handicapped, and other groups are recognized. No tabulated data, copy of the survey questionnaire, or details of the survey itself are provided. (NHPIC)

HRP-0004331/5WW PC$3.50/MF$2.25[1]

Report G: Planning and Evaluation Manual. Volume II: Long Term Care

Orkand Corp., Silver Spring, Md., August 25, 1975, 256p.

As part of a six-volume manual designed to serve as a guide for studies in various areas of health care delivery, this report presents information on methodologies which have been used by various areawide and State comprehensive health planning agencies in planning for long-term health care delivery. The first part is an introduction to long-term care planning designed to familiarize the planner with major issues, planning approaches, utility of these

approaches, and the manner in which the studies presented in the second part are related to the identified planning approaches. Included are discussions of the trend toward regionalization; growth of the aged population and of long-term care facilities; increasing interest in home health service; need for coordination in long-term care; legislative background and national impetus; data sources and related problems, including routinely collected data, specially collected information on health status, morbidity, and utilization, specially designed studies for planning purposes, and nationwide, regional, and local surveys; planning methodologies; and stages in the planning process. Eight planning studies are described involving level of institutional care need estimation and projection; home health services need estimation; and categorical disease care need estimates. Each study report includes methodology, findings and recommendations, impact of study, cost of study, and recommended procedure modifications. In some instances, supporting tabular data and copies of survey instruments are included. A ten-page bibliography is provided. Portions of this document are not fully legible. (NHPIC)

HRP-0005991/5WW PC$9.00/MF$2.25[1]

Report G: Planning and Evaluation Manual. Volume VI: Medical Speciality Needs

Orkand Corp., Silver Spring, Md., August 25, 1975, 319p.

Methodologies used by health planning agencies in planning for Medical Specialty Needs are presented in this report, which is the last of six volumes relating to various areas of health care planning. Prepared for the National Center for Health Services Research, each volume has two components; an introduction containing planning approaches, and summaries of individual studies selected for their topicality and quality of methodology. Survey instruments, sample output tables, and supplemental data are appended to each study. Studies in this volume include: A Survey of Stroke Care in the Washington/Alaska Region (Washington/Alaska Regional Medical Program); Report of High Risk Maternal and Newborn Study (San Diego Comprehensive Health Planning (CHP agency b); Special Hospital Services for Cardiovascular Pulmonary Disease Patients 1966 and 1968 (Ohio Valley Regional Medical Program, Lexington, Kentucky); Ad Hoc Laser Beam Committee Study on Need for and Location of Laser Beams in Maine and Opthamological Procedures; Kidney Disease Management in Maine, Prevention, Conservation, Management, Dialysis, and Transplantation; Burn Management in Maine (Maine CHP a); Technical Review of a Proposal for a Hemodialysis Facility at Los Robles Hospital (Channel Counties CHP b, Santa Barbara, California); An Analysis of the Current Use and Future Plans for Four Cardiac Services, (Areawide Health Planning Organization of Central Oklahoma). Portions of this document are not fully legible. (NHPIC)

HRP-0005995/6WW PC$9.75[1]

Report on Social, Health and Recreation Needs and Services in Greater Des Moines

Community Survey, Inc., Des Moines, Iowa, 1973, 115p.

The report was designed to evaluate social, health, and recreation conditions in Des Moines as they pertain to the needs outlined by the Health Planning Council of Central Iowa. The role of the council is discussed in relation to its role in defining and eliminating health problems. Other areas discussed are the present conditions of the community, including both environmental and social characteristics; the health needs to be met; priorities and method of financing; and most importantly, a description, evaluation, and recommendations are presented for health services such as inpatient hospital service, physicians and medical education, outpatient and emergency services, mental health - mental retardation services, prevention and early detection, and drug abuse and alcoholism services. (NHPIC)

HRP-0000510/8WW PC$5.50/MF$2.25[1]

Resource Materials for Community Mental Health Program Evaluation, Part II: Needs Assessment and Planning

Hargreaves, William A.; Attkisson, Clifford C.; McIntyre, Marguerite; Siegel, Larry M.; Sorensen, James E. Langley Porter Neuropsychiatric Inst., San Francisco, Calif., 1974, 162p.

Contents:
Mental health needs assessment--strategies and techniques;
Social area analysis--procedures and illustrative applications based upon the mental health demographic profile system.
Goal analysis (abstract):
A group process model for problem identification and program planning. (NTIS)

PB-249 044/9WW PC$6.75/MF$2.25[1]
Paper copy also available in set of 5 reports as PB-249 042-SET, PC$26.00

Seven Counties Regional Health Survey: A Survey of Health and Health Care Needs

Gallagher, Kathleen; Cowen, Joel, B.; Reidel, John E. 1973, 334p.

A survey of physical, environmental, and mental health in seven counties of northwest Illinois, conducted for Comprehensive Health

Planning of Northwest Illinois, Inc., (CHPNI), the Office for Community Health Research, Rockford School of Medicine, is reported. Survey methodology is described in detail; a staged procedure consisting of mail, telephone, and personal interviews was utilized. A usable response was received from 54 percent of the 2,200 households contacted. Sampling techniques are described; about one out of every 50 households or persons in the region was contacted. An area profile is presented for the seven counties, which comprise that part of the CHPNI planning area outside of the Rockford, Illinois, Metropolitan Area. The seven counties incorporate both urban and rural populations; a major shortage of physicians exist in these counties, particularly in rural areas, survey data are presented, together with narrative analyses, relative to the following: medical care i.e., availability of medical care; satisfaction with medical care; physician utilization; characteristics of last physician visit; hospitalization; health status including smoking and drinking; accidents and injuries; mobility and limitations; mental health; dental care; family planning and birth control; health care costs and insurance coverage; environmental quality (environmental health, satisfaction with and need for public services); and health care attitudes (household preference of medical organization). A copy of the 30-page survey instrument is included. Extensive tabular data and maps are incorporated in the text. Portions of this document are not fully legible. (NHPIC)

HRP-0004047/7ST PC$10.00/MF$2.25[1]

Social and Health Indicators System. Los Angeles

Deshaies, John C.; Schuerman, Leo; Wallach, Harold C.; Korper, Samuel P.
Bureau of the Census, Washington, D.C., 1973, 321p.

The application of the Office of Economic Opportunity (OEO) Social and Health Indicators Program in Los Angeles, California, is documented in detail. The overall purpose of the program is to develop and maintain a system of social, health, and resource indicators that has both spatial and temporal dimensions. The system will provide a mechanism for monitoring or tracking the health status and the social and economic well-being of populations residing in communities which contain OEO comprehensive health centers and/or health networks. Chapter I presents an overview of the major issues involved in designing and implementing such a system, including those issues relative to spatial and temporal dimensions and the need for population estimates for small areas, usage of locally generated data, generalization of the system, and evaluation. Chapter II provides census profiles of the service areas of Los angeles OEO health programs. Chapter III discusses procedures and methodology, including geographic considerations in selecting data sets and level of

analyses and interpretation of data; preparation and analysis of data on a grosser geographic level than desirable for studying community social factors; census tract data analyzed with parametrical statistical techniques; and procedures used by the Census Use Study to estimate population and subcomponents of the population for small areas for non-Census years. Chapter IV presents a detailed level 1 analysis of Los Angeles data relative to public health and welfare, education, and crime. These data are analyzed by using special-purpose geographic units employed by public agencies as a basis of comparison where census tract data were not available. Chapter V examines census tract data obtained and processed by the project. The report contains 95 tables and 39 maps and graphs. (NHPIC)

Typological Approach to Doing Social Area Analysis

Goldsmith, Harold F.; Unger, Elizabeth L.; Rosen, Beatrice M; Windle, Charles D.; Shambaugh, Philip J
National Institute of Mental Health, Rockville, land,. 1975, 78p.

A manual is presented to assist mental health and health planners at State and local levels to use the Mental Health Demographic Profile Syste (MHDPS) in the analysis of the residential areas for which the are responsible for providing services. The MHDPS was developed as a small-area data profile system by the National Institute of Mental Health to facilitate community planning. The 130 demographic data items (social indicators) and the age-sex pyramids from the 1970 Population Census were selected to delineate meaningful social areas (residential areas with common social rank, life style, ethnicity, and other related characteristics), and subsequently to make inferences about the health and related needs of the resident populations of those areas. The system contains indicators of the major components of the social rank dimension -- economic status, social status, and educational status. Components of the life style dimension are also indexed using indicators of family status, family life cycle state, residential life style, and familism. Also provided are indicators of ethnicity, community stability, area homogeneity, and populations with high risk of social problems. The manual includes self-teaching materials showing how to use the indicators to perform a social area analysis, applying mainly to homogenous areas; a guide to complex social area analysis; and two social area profiles used as illustrations. Portions of this document are not fully legible. (NHPIC)

HRP-0007087/0WW PC$5.00/MF$2.25

Willapa Harbor Medical Survey Findings: Health Levels and Alternatives.

Washington/Alaska Regional Medical Program, Seattle, 1970, 25p.

Results of a survey taken to identify health levels of residents of the Willapa Harbor area of Washington are reported by the Washington/Alaska Regional Medical Program and the Bureau of Community Development of the University of Washington. A group sampling procedure, rather than a selective random sampling technique, was used; a total of 6,521 people were contacted. Of these, 54.5 percent were classified (by the respondents themselves) as being in fair, poor, or bad health. The most frequently reported chronic health problem was arthritis or rheumatism, followed closely by allergies, hay fever, and chronic sinus trouble. About 44 percent of the respondents indicated that a family member worked on a job where serious accidents were always possible. A rather high proportion of respondents (89 percent) indicated medical or hospital insurance availability, with 68 percent reporting coverage for the whole family. Forty percent reported that they do not have a physician upon whom they can depend; this statistic is judged to represent a significant problem in the area. Approximately 45 percent indicated they were currently using medical services in the Willapa Harbor area. Further breakdowns of utilization patterns are presented and discussed. Twenty percent indicated that they use the hospital for routine calls in the same manner they would use a physician's office or clinic. Over 90 percent noted they would use local specialized medical services if they were available. Only 57 percent indicated they would be willing to patronize a medical facility where they did not see the same physician every time. Alternatives are suggested for alleviating the need for more physician expressed by survey respondents. A copy of the survey instrument and supporting data are included. Portions of this document are not fully legible. (NHPIC)

HRP-0004461/0WW PC$3.50/MF$2.25[1]

III

HEALTH STATUS AND THE EVALUATION OF HEALTH CARE SERVICES

"Aggregated Physiological Measures of Individual and Group Health Status"

Chen, Martin K.
Pub. in International Journal of Epidemiology, Vol. 4 No. 2, p87-92, 1975.

Two health status indices applicable to individuals and groups are presented for research and health programme evaluation purposes. Both indices are functions of distances from cultural or group norms of the healthy state on a number of physiological dimensions that are theoretically or empirically related to health. Ways of deriving group norms are briefly discussed. (AA)

Analysis of tne New York State PKU Screening Program Using a Health Status Index: Report No. 1, 1965-70.

Bush, J.W., Chen, M.M., Patrick, D.L.
June 1973, 50p.

At a total annual cost of $836,387, all births in New York state are tested for Phenylketonuria, a genetic biochemical defect that causes mental retardation. From 1965-1970 an average of 22 cases were detected annually. Using a health status index to convert the benefit of the treatment to quality adjusted years of life, one year's operation of the program was judged by a national panel of experts to produce 289 function years, that is, the equivalent of 189 years of completely well life. Despite rarity of the disease, that amount o. output gives a cost per function year of $2,896, which compares favorably with the costs and output of other widespread programs. (NTIS)

PB-243 585/7ST PC$3.75/MF$2.25[1]

An Approach to the Evaluation of Health Outcomes

Martini, Carlos J.M.; Garroway, Mary; Allan, Boris
University of Nottingham, England, 1974. (Unpublished)

This paper reports work on the development of sets of combined health outcome indices. The research objectives are to 1) extend current knowledge concerning outcomes of medical care and the effect of extraneous variables in determining these outcomes; and 2) develop a more comprehensive set of measurements. Preliminary results using available data are presented; the 15 regions of England and Wales are the units of analysis. Factor analytic and regression techniques are used. Includes 19 references. (CH-P)*

74-5155 126[2]

Comprehensive Health Plan for New Jersey, 1973-74. Volume Number One

New Jersey State Department of Health, Trenton, Comprehensive Health Planning Agency, Public Health Service, Rockville, Maryland, July 1973, 39p.

In Volume I of New Jersey's first Comprehensive Health Plan, Health status and health process goals are stated, and objectives are presented in terms of measurable health status and health system performance over time. Goals include reductions in infant mortality, rates of disability, and incidence and chronicity of drug addiction and alcoholism; child growth unimpaired by hazards in the physical environment (through lead poisoning screening program); and development of a health system linked and integrated with readily identifiable entry points and coordination of patient services. Alternative cources of action are presented. In its deliberations, the State Health Planning Council recommended implementation of all actions considered in a maximum impact plan, but decided against some actions included in a least cost plan and a preventive alternative plan. A cost effectiveness matrix summarizes the relationship of all programs to all indicators. The matrix lists all actions considered by the council, indicates the alternative plan in which the action first appeared, and notes the action's final adoption or rejection for recommendation by the council. Implementation strategy is outlined with regard to public support, needs assessments, technical assessments, and financial feasibility. Specific implementation recommendations are set forth in the areas of [illegible]-maternity and education services, nutrition, family planning services, regionalization of maternity and prenatal services, venereal disease control, occupational injuries and illness, civil commitment for drug abusers, screening and referral for drug treatment programs, attitudes toward alcoholism, and integration of the health system. Evaluation procedures are outlined, and a form for evaluating the planning document itself is included. (NHPIC)

HRP-0004082 PC$4.00/MF$3.00[1]

"Cost and Quality in Health Care"

Gellman, D.D.
Presented at the Annual Meeting of the Ontario Medical Association, Toronto, Ontario, May 18, 1973.

The purpose of this paper is to encourage evaluation of health care services in terms of outcome rather than process. The author recognizes the limitations of currently available measures of positive health; however, he urges the measurement of true costs and improved health so that cost effectiveness curves can be used for planning purposes. Two examples, based on theoretical data,

are given, one applies to individuals, the other, to communities. Includes 11 references. (CH-P)*

74-4029 144[2]

"Decision-Making in Clinical Practice and Medical Research: A Theoretical Analysis of Predictors, Indicators, and Health Index"

Hall, P; Sebag, J.
Pub. in International Journal of Bio-Medical Computing, Vol. 5 No. 4, p301-309, October 1974.

The trends of modern medical care delivery and the roles of health and sick-care are discussed as they relate to decision-making in medical research, education and patient-care. The requirements upon medical data and information, as they apply to decisions in medical research and patient-care, are described and a theoretical description of a new approach to the evaluation of medical data is presented. The approach employs predictors, indicators and health index in performing symptomatology-oriented (as opposed to diagnosis-oriented) evaluations. The application of this technique to patient-care decision-making in a multi-phasic screening environment will be described in a later paper. (AS)

Development and Application of the Sickness Impact Profile: A Pilot Study, 1972-1973

Gilson, Betty S.: Gilson, John S.: Bergner, Marilyn; Vesselago, Michael; Kressel, Shirley; et.al.
University of Washington, Seattle, 1973. (Unpublished)

The Sickness Impact Profile is an instrument designed for evaluation of complex health care programs and assumes that reduction of sickness is the ultimate product of these programs. The project focuses on a behavioral approach to sickness. This report discusses the methods used to develop the items and categories, and to construct, scale and score the instrument. Arrangements for a field trial to assess the feasibility of using the instrument in a comprehensive health care setting and to provide tentative estimates of reliability and validity are given. Includes 31 references. (CH-P)*

73-0317 99[2]

"Effectiveness of Child Health and Welfare Programs: A Simultaneous Equations Approach"

Hu, Teh-wei
Pub. in Socio-Economic Planning Sciences, Vol. 1, p705-721, 1973.

This report examines the effectiveness of 2 welfare programs on the health status of children. A simultaneous equation approach is used to evaluate and compare the programs. Endogenous variables include indices of quality of health care, physical health and educational benefits. Exogenous variables include socio-demographic and health-welfare program data. The indices serve as proxies or partial indicators of health status. Results based on a sample of 652 first-graders allow for program comparison and some policy implications. Includes 5 references. (CH-P)*

"Effects of Social and Cultural Processes on Health"

Anderson, James G.
Pub. in Socio-Economic Planning Sciences, Vol. 8. p9-22, 1974.

A structural model has been developed and analyzed using the causal modeling technique of path analysis, in which social, economic and demographic characteristics of New Mexico counties have been related to the infant mortality rate as an index of health. In general, the model building techniques and the algorithms presented here provide a valuable means of generating and testing hypotheses regarding the effects of social and cultural processes on health. Includes 76 references. (AA-M)*

Health Care Evaluation Project

Mills, David L.
Lawrence County Health Care Project, Moulton, Alabama. (Unpublished)

The health care project, an effort to expand and broaden the availability of health care to a rural population has developed and implemented promising methodology to evaluate the impact of the project on the health of the target population. This cross-sectional and longitudinal study of health measurement instruments and evaluation methodology will, in to providing health status data related to a specific delivery system, permit validation studies on, and comparison of, the indices proposed for health status measurement. Includes 35 references. (AA-M)*

74-3040 139[2]

Health Indices, Outcomes, and the Quality of Medical Care

Bush, J.W.; Blischke, W.R.; Berry, C.C.
California University, San Diego, La Jolla, Dept. of Community Medicine, 1975, 29p.

Assessing the quality of medical care by measuring outcomes is not generally possible because establishing casual relations to treatment variables requires complex experimental designs. A Function Status Index overcomes the major problems of a comprehensive outcome indicator so that, with prospective data on large series of cases within ongoing health system operations, regression analysis provides a practical statistical method for measuring significant differences, inferring casual correlations, and establishing standards for high quality treatment in defined episodes of medical care. Emergency medical system variables illustrate the model. (NTIS)

PB-246 907/0WW PC$4.00/MF$2.25[1]

"The Health Status Scale: An Output Measure for Productivity"

Torrance, George W.
Presented at the Conference on Productivity in the Health Professions, Pittsburg, Pa., October 3-4, 1973.

Productivity calculations require a measure of output. A new approach to measuring the output of health care programs and activities based on the concept of a health status scale is proposed. The scale and its use is described, instruments to measure the scale values are specified, applications are reported and unresolved problems are discussed. It is concluded that the new approach, although still experimental, holds considerable promise and that cautious and thoughtful applications should be encouraged. Includes 11 references. (AA)*

74-4071 108[2]

"The Impact of a Medical Demonstration Project on Health Status Outcomes"

Brody, Stanley J., 1975. (Unpublished)

A medical demonstration project for medically indigent population in 3 counties of northeastern Pennsylvania is currently being

evaluated for its impact on health status. The components of health status in this 3 year longitudinal study include functional ability, disease conditions, disability, mortality, symptomatology and social supports. Household surveys, designed to measure health status, will be administered annually. (AA-M)*

75-5290[2]

"The Impact of Medical Care on Health Outcome Indices"

Martini, C.J.M.; Allan, G.J.B.; Garroway, M.N.; Davidson, J., University of Nottingham, Nottingham, England, 1975. (Unpublished)

The study goal was to define which services are most clearly related to which aspects of health for the purpose of improving evaluation for health services planning. This report describes the statistical relationships between health, medical services and the environmental circumstances surrounding the individual, working with statistics already available. Methodology and results are included in this report. Includes 56 references. (CH-P)*

75-2620[2]

Outcome Conference I - II: Methodology of Identifying, Measuring and Evaluating Outcomes of Health Service Programs, Systems and Subsystems Held at Pacific Grove, California on 24-27 May 1969 and Universal City, California on 1-3 December 1969 (Report for 1 June 1968 - 31 May 1971.)

Hopkins, C.E.
December 1970, 270p.

The document contains discussions that took place at two conferences: each was designed to review the present state-of-the-art of measurement and evaluation of the effects, or outcomes, of health care services. The first conference is summarized in seven pages, and the bulk of the volume presents papers given at five sessions of the second conference. A wide range of outcomes are described and evaluated. These include conceptual models versus the real world of health service delivery; health improvement; Indices of Health; impact of health care services on the economy; and the neighborhood health center. (NTIS)

PB-196 001 PC$3.00/MF$0.95[1]

"Quality of Patient Care--A Measurement of Change: The Staging Concept"

Gonnella, Joseph S.; Goran, Michael J.
Pub. in Medical Care, Vol. 13 No. 6, p467-473, 1975.

A method that can be used to classify the severity of health problems and measure change in health status is described. The "staging" concept provides a system which classifies patients with similar medical conditions into clusters useful for patient care evaluation. The method defines different levels of severity. Examples of the method are given and the value of the approach is described for the evaluation of the hospitalized and ambulatory patient. Includes 10 references. (AA-M)*

"Relationship Among Health Habits, Social Assets, Psychologic Well-Being, Life Change, and Alterations in Health Status"

Pesznecker, Betty L.; McNeil, Jo
Pub. in Nursing Research, Vol. 24 No. 6, p442-447, November-December 1975.

To examine variables which may temper life change and enable individuals to withstand high degrees of life change without developing illness, a questionnaire was mailed to a systematically selected sample of the residents of Renton, Washington, of which 548 (57 percent) were returned. The major statistical analysis was linear correlation and multiple regression. When relationships between the major variables-health habits, social assets, psychologic well-being, and life change - and the dependent variable - alterations in health status - were examined, the single best predictor of subsequent alterations in health status for respondents in this study was found to be the magnitude of the life change. As the life changes increased, the risk of becoming ill also increased. The notion that health habits, psychologic well-being, and social assets might temper life change and make it possible to avoid a change in health status was not borne out strongly in the results of the analysis of data. These variables were weakly associated, however, with maintenance of health status. (AA)

"The Sickness Impact Profile: Development of an Outcome Measure of Health Care"

Gilson, Betty S.; Gilson, John S.; Bergner, Marilyn; Kressel, Shirley; Bobbitt, Ruth et. al.
Presented at the Annual Meeting of the American Public Health Association, New Orleans, La., October 20-24, 1974.

The Sickness Impact Profile (SIP), a behaviorally based measure of sickness-related dysfunction, is being developed to provide an appropriate and sensitive measure of the effects of health care services. Rationale for the behavioral approach is discussed. Methodology of SIP instrument construction is reviewed; selection of items for the interview and approaches to scaling are briefly explained. Includes 10 references. (AS-M)*

74-5146 98[2]

Strategy for Evaluating Health Services

Kessner, David M.; Kalk, Carolyn E.
National Academy of Sciences, Washington, D.C.
Inst. of Medicine, July 1973, 233p.

To evaluate the quality of ambulatory care this volume proposes the use of a set of specific health problems, or tracers, through which the strengths and weaknesses of medical facilities can be identified. The set of tracers described includes middle ear infection, visual disorders, iron-deficiency anemia, hypertension, urinary tract infection, and cervical cancer. The book outlines the criteria used for selecting the tracers and describes the epidemiology and medical management criteria for each tracer presented. It then illustrates their use for evaluating ambulatory medical facilities to determine the effectiveness of case findings activities, screening and laboratory procedures, diagnosis, treatment, follow-up, management of referrals, and general medical management. (NTIS)

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"Surveillance and Monitoring"

Doll, Richard
Pub. in International Journal of Epidemiology, Vol. 3 No. 4, p305-314, 1974.

Methods of evaluating the medical efficacy, social acceptability, and economic efficiency of health care practices are summarized, and the failure of research to yield adequate indexes is concluded. Relative usefullness of such data as mortality, morbidity, and sickness absence statistics are analysed within the context of outcome evaluation. Sources of data for evaluating both social acceptability and equality, and economic efficiency of outcomes are criticized on the basis of validity, reliability, and cost. References and tabular material accompany the text. (NHPIC)

"The Use of Outcome Measures in Health Service Planning"

Pole, J.D.
Pub. in International Journal of Epidemiology, Vol. 2 No. 1, p23-30, 1973.

The application of health indices for planning purposes depends on the availability of information about the costs and effectiveness of the activities to which the indices relate. The author, an economist, discusses the technical and operational aspects of health measurement. The Department of Health and Social Security, England, is experimenting with broad grouping of activities based on medical speciality, but more detailed analysis of activities presents conceptual and practical difficulties. Includes 17 references. (AA-M)*

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