

# **Clearinghouse on Health Indexes**

**Cumulated Annotations  
1976**

U.S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE  
Public Health Service

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**1976**

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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service  
National Center for Health Statistics  
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## **INTRODUCTION**

Each year the Clearinghouse on Health Indexes disseminates four annotated bibliographies of recently acquired documents on the topic of developing composite measures of health status. The material in these bibliographies is categorized as to the source of the document, whether published or research in progress. However, to assure that this information is disseminated on a timely basis, these bibliographies are issued without either a subject or an author index. Also to assure timeliness, these compilations are prepared in an informal format.

Current plans are to cumulate these informal issues into a formal volume for annual distribution. The purpose of this cumulative volume is to provide health status researchers with a reference guide to the literature, both published and unpublished, which appeared during the preceding year. To enhance its use as a reference tool, articles have been classified according to their major emphasis and an author index has been added. This is the third cumulation of the Clearinghouse bibliographies and includes material identified in 1976.

### **Health Index Defined**

In providing information to assist in the development of composite health measures, the Clearinghouse on Health Indexes has adopted the following definition:

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.

### **Subjects Covered**

Implicit in the above definition is the measurement of health as opposed to disease. Much less is known about the positive aspects of well-being; and, what is known is generally more easily expressed qualitatively rather than quantitatively. According to the current state of the art, statistical methodologies coupled with measurement techniques of other disciplines within the social sciences will yield valid and reliable quantitative definitions of health.

Thus, this cumulated bibliography is, for the most part, comprised of literature which addresses the technical questions related to the

concepts and definitions of health status. Within this, the documents deal with specific topics such as defining the parameters for the state of health; deriving appropriate transitional probabilities for moving from one state to another; determining whether or not individuals have preference for a given health condition; and, if so, assigning an appropriate value to the preference.

As the methodologies become more clearly understood, the number of available health status measures with known validity and reliability will increase. This will be reflected in an increase in the number of applications appearing in the literature, both published and unpublished. Composite health status measures can be used to describe the health status of a given group; to compare the health status of two or more groups and to evaluate the outcomes of a health care delivery system.

Two other topics of interest to persons developing a composite health status measure are health policy and the state of the art. The latter is probably more informative to the researcher about to develop a health status measure. However, policy statements within the health field are likely to be of general interest. This bibliography also includes reference to a few measures which the authors have termed health index but which fall outside the Clearinghouse definition as stated above.

## **Classification**

The categories used in the informal issues have been maintained. However, within the two major headings, Recent Publications and Current Research, the annotations have been organized according to the document's major focus. The following four category headings are used: Development—Conceptual; Development—Empirical; Applications; and, Policy Review. Each term, as well as its use in this cumulative, annotated bibliography is described below.

Articles are referenced under the subheading "Development—Conceptual" if they discuss the theory of measuring health. These documents are expository in nature and contain little, if any, numerical information.

The second category, "Development—Empirical" consists of material which purports to evaluate a health model in terms of its validity, reliability or other measurement properties. Also included in this category are documents which deal with methodological considerations such as the construction of data collection tools specific to the measurement of health status. These articles generally report the findings of the pilot projects.

The "Applications" category references documents which are composite measures for assessing health status of a given group. The index may be used for the purpose of evaluation or allocation of resources.

Lastly, the "Policy Review" category covers articles which review the state of the art of health index construction or which discuss policy areas of concern to health index developers.

## **Scope of Document Collection**

Documents cited in the Clearinghouse bibliographies focus on the conceptual and methodological aspects of developing and/or applying composite measures of health status. Sources of information include the following types of published and unpublished literature: articles from regularly published journals, books, conference proceedings; government publications and other documents with limited circulation; speeches and unpublished reports of recent developments; and, reports on grants and contracts for current research. The Clearinghouse systematically searches current literature and indexes of literature to maintain an up-to-date file of documents.

## **Format**

Bibliographic citations will be given in the standard form: author, title, and source. In the case of multiple authors, as many as five authors will be listed; the sixth and additional authors will be identified by et al.

Printed immediately following the abstract are the number of references used in the preparation of the document and the source of the annotation. There are four sources: 1) the author abstract (designated by AA); 2) the author summary (AS); 3) the author abstract (or summary) modified by the Clearinghouse (AA-M or AS-M); 4) the Clearinghouse prepared abstract (Ch- with the initial following the dash indicating the individual responsible for the abstract).

The number following the abstractors designation is the abstract number. This number indicates the position of this abstract within the cumulated bibliography and appears opposite the author's name in the Author Index.

# **SOURCES of INFORMATION**

*(January-December 1976)*

## **Current Contents:Social and Behavior Sciences**

Volume 8 numbers 1-52 total issues

## **Index Medicus Subject Headings**

Costs and Cost analysis  
Disability Evaluation  
Health  
Health and Welfare Planning  
Health Surveys  
Mental Health  
Models, Theoretical  
Morbidity  
Mortality  
Psychiatric Status Rating Scales  
Psychometrics  
Sociometric Technics

*The sources of information for the Clearinghouse bibliographies include the journal titles listed below as well as all of those which are cited in Current Contents.*

American Economic Review  
American Journal of Economics and Sociology  
American Journal of Epidemiology  
American Journal of Public Health  
American Journal of Sociology  
American Psychologist  
American Sociological Review  
American Sociologist  
Annals of the American Academy  
Annals of Economic and Social Measurement  
ABS (American Behavioral Scientist)  
Behavioral Science  
British Journal of Preventive and Social Medicine  
British Journal of Sociology

Canadian Journal of Public Health  
Community Health  
Community Mental Health Journal  
Computers and Biomedical Research  
Contemporary Psychology  
Evaluation  
Hastings Center Report  
Health Care Management Review  
Health Services Research  
Inquiry(Chicago)  
Interfaces  
International Journal of Epidemiology  
International Journal of Health Education  
International Journal of Health Services  
Journal of Chronic Diseases  
Journal of Community Health  
Journal of Gerontology  
Journal of Health and Social Behavior  
Journal of School Health  
Journal of Social Issues  
Journal of Social Policy  
Management Science  
Medical Care  
Medical Care Review  
Milbank Memorial Fund Quarterly  
New England Journal of Medicine  
Operations Research  
Perspectives in Biology and Medicine  
Policy Sciences  
Population Studies(London)  
Preventive Medicine  
Public Health Reports  
Public Health Review  
Public Opinion Quarterly  
Review of Economics and Statistics  
Social Biology  
Social Forces  
Social Indicators Research  
Social Policy  
Social Problems  
Social Science Research  
Social Science and Medicine  
Social Security Bulletin  
Social Service Review  
Socio-Economic Planning Sciences  
Sociological Quarterly  
Sociometry  
Technology Review  
Theoretical Population Biology  
Topics in Health Care Financing



## RECENT PUBLICATIONS—ENGLISH

### Development—Conceptual

**Ackoff, Russell L.**

*Does Quality of Life Have to be Quantified?*

OPERATIONAL RESEARCH QUARTERLY 27(2:1):289-303, 1976

It is argued that quality of life is primarily a matter of aesthetics and that aesthetics has been ignored in the process we call "development". Measurement of progress towards ideals and of stylistic satisfaction, though helpful, is not essential to development planning. It is argued that participative planning that begins with design of an ideal-state can provide those involved with an opportunity to incorporate both their ideals and their stylistic preferences into designs of the future and development of ways of bringing it about. (7 references) AA-M CHI-1(1976)

**Acton, Jan P.**

*Measuring the Monetary Value of Lifesaving Programs*

SANTA MONICA, CALIFORNIA:RAND CORPORATION, 1976

Three approaches for measuring the benefit of safety enhancing programs are discussed in detail. These are: 1) the livelihood approach which, while easy to apply, has a number of drawbacks; 2) an approach based on individual preferences, i.e. people's willingness to pay, which overcomes the drawbacks of the livelihood approach and is conceptually most satisfactory; and, 3) the political precedent, an approach which has not been used but one which is potentially valuable.

(59 references) CH-P CHI-2(1976)

**Avery, Allyson Davies; Lelah, Tova; Solomon, Nancy E.; Harris, L. Jeff; Brook, Robert H.; et al.**

*Quality of Medical Care Assessment using Outcome Measures: Eight Disease-Specific Applications*

SANTA MONICA, CALIFORNIA:RAND CORPORATION, 1976

This second of three volumes presents the results of a study designed to develop outcome criteria and standards for use in assessing quality of care associated with one of eight conditions or surgical procedures. For each of these, epidemiological information, operational definitions, and estimates of sample size for identifying patients with a given condition are presented. This report is aimed at clinicians, health services researchers and policy makers as an example of what is yet to be done in the field of quality of care assessment.

(515 references) CH-P CHI-3(1976)

### **Barlow, Robin**

#### *Applications of a Health Planning Model in Morocco*

INTERNATIONAL JOURNAL OF HEALTH SERVICES 6(1):103-122, 1976

It is argued in this paper that public health planning should be guided by the principle of output maximization. The objectives of the health sector should be specified, and measurable forms of output should be derived from these statements of purpose. Knowledge of the contributions which given combinations of inputs make toward output thus defined allow, in principle, calculation of the particular deployment of the available inputs which will maximize output. There is a discussion of the objectives or forms of output in a public health system, both humanitarian and economic. A verbal model of such a system for an underdeveloped country is constructed which identifies the relationships which must be known if spending decisions are to succeed in maximizing output.

(16 references) AA-M CHI-4(1976)

### **Bergner, Marilyn; Bobbitt, Ruth A.; Kressel, Shirley; Pollard, William E.; Gilson, Betty S.; et al.**

#### *The Sickness Impact Profile: Conceptual Formulation and Methodology for the Development of a Health Status Measure*

INTERNATIONAL JOURNAL OF HEALTH SERVICES 6(3):393-415, 1976

Development of the Sickness Impact Profile (SIP) is directed toward providing an outcome measure which can be used in the allocation of resources and one which will provide a sensitive measure even when used with a diverse population. This article emphasizes the issues surrounding the conceptual problems in the development of an outcome measure and their methodological resolutions. The administrative facility of this tool is only tangentially considered.

(33 references) CH-P CHI-5(1976)

### **Berg, Robert L.; Hallauer, Dean S.; Berk, Stephen N.**

#### *Neglected Aspects of the Quality of Life*

HEALTH SERVICES RESEARCH 11(4):391-395, 1976

Recent health status measures have focussed on measuring physical health to the exclusion of important modalities and domains of human experience. The authors approach these issues by focussing on the differential value of different conditions of life with the emphasis on how relatively important is full function in each of several modalities. 220 health workers responded to a set of 50 items; the results indicated that cognitive, emotional and social functions were consistently rated as most important by this group. This approach focusses on a healthy life rather than on the direct creation of a health status index.

(8 references) CH-P CHI-6(1976)

**Bice, Thomas W.**

*Comments on Health Indicators: Methodological Perspectives*

INTERNATIONAL JOURNAL OF HEALTH SERVICES 6(3):509-520, 1976

The purpose of this paper is to examine some of the critical conceptual and methodological problems in the construction of one type of social indicator, namely, health indicators. Specifically, the author contrasts views about what social (or health) indicators should indicate and discusses some of the problems involved in constructing an indicator of health status that will provide information primarily to assist decision making.

(24 references) CH-P CHI-7(1976)

**Boorse, Christopher**

*On the Distinction between Disease and Illness*

PHILOSOPHY AND PUBLIC AFFAIRS 5(1):49-68, 1975

Clinicians and philosophers are agreed that health is an essentially evaluative notion. According to this consensus view, a value-free science of health is impossible. This thesis the author believes to be entirely mistaken. He argues that it rests on a confusion between the theoretical and practical senses of "health," or in other words, between disease and illness.

(21 references) CH-P CHI-8(1976)

**Brook, Robert H.; Avery, Allyson Davies; Greenfield, Sheldon; Harris, L. Jeff; Lelah, Tova; et al.**

*Quality of Medical Care Assessment Using Outcome Measures: An Overview of the Method*

SANTA MONICA, CALIFORNIA:RAND CORPORATION, 1976

This first volume reviews the current state of the art of assessing the quality of medical care using the outcome method, and describes in detail the approach taken during the year-long research project to

select outcome criteria and develop short-term, disease specific outcome standards against which the medical care delivered to patients with one of eight different disease conditions or surgical procedures can be evaluated. In its entirety, the material in this first volume serves as a conceptual framework for the technical chapters in the second volume that contains the outcome criteria and standards. (107 references) AS CHI-9(1976)

**Burmeister, Leon F.**

*Limitations of Statistical Methodology in Health Planning*

IN, PROCEEDINGS OF THE PUBLIC HEALTH CONFERENCE ON RECORDS AND STATISTICS NATIONAL CENTER FOR HEALTH STATISTICS ROCKVILLE, MARYLAND:HEALTH RESOURCES ADMINISTRATION P.145-152, 1977

The author introduces current concepts in health planning and the need to measure health status. Limitations of available data along with the practical and methodological considerations for sample surveys are discussed in relation to the National Center for Health Statistics's plans for overcoming these limitations.

(43 references) CH-P CHI-10(1976)

**Bynder, Herbert; New, Peter Kong-Ming**

*Time for a Change: From Micro- to Macro-Sociological Concepts in Disability Research*

JOURNAL OF HEALTH AND SOCIAL BEHAVIOR 17(1):45-52, 1976

This paper illustrates some of the shortcomings of current conceptual frameworks used in disability research, and indicates both the need for and the direction of the type of conceptual change that may result in more significant research in the sociology of disability and its practical applications. A more meaningful approach lies in the macrosociological structural analysis of institutions and how they impinge directly or indirectly on the disabled, their families and the professionals who work in the rehabilitation field.

(39 references) AA CHI-11(1976)

**Campbell, Angus**

*Subjective Measures of Well-Being*

AMERICAN PSYCHOLOGIST 31(2):117-124, 1976

Previously, psychologists have had relatively little to contribute to developing indicators of rational well-being. This period is ending. Psychologists have a prominent role to play in this interdisciplinary effort to evaluate the quality of American life. The aims of society are changing from basically economic to essentially psychological.

(18 references) CH-P CHI-12(1976)

**Carter, William B.; Bobbitt, Ruth A.; Bergner, Marilyn; Gilson, Betty S.**

*Validation of an Interval Scaling: The Sickness Impact Profile*

HEALTH SERVICES RESEARCH 11(4):516-528, 1976

This paper discusses some conceptual and methodological issues of scaling the Sickness Impact Profile (SIP); reasons for using the method of equal appearing intervals are given. Results based on 109 health care consumers' ratings of the 189 items on the current version of the SIP are presented. The purpose of this study was to validate the preliminary scaling of items on a broader population and to validate the scaling metric used by this consumer population.

(14 references) CH-P CHI-13(1976)

**Chen, Milton M.; Bush, James W.; Zaremba, Joseph**

*Effectiveness Measures*

IN, OPERATIONS RESEARCH IN HEALTH CARE: A CRITICAL ANALYSIS  
SHUMAN, LARRY J.; SPEAS, R. DIXON; YOUNG, JOHN P. (EDITORS)  
BALTIMORE, MARYLAND:JOHNS HOPKINS UNIVERSITY PRESS, P. 276-301, 1975

Crucial to the measurement of effectiveness in health services is the effect on the patient of the proposed changes. This chapter focusses on methods for assessing the impact of health care activities on the patient. Thus, operations research models which are not concerned with health status, for example, problems of capital budgeting dealing with facilities, manpower training and research, have been omitted from discussion.

(59 references) CH-P CHI-14(1976)

**Chen, Martin K.**

*Comment on "Measuring the Quality of Health Care: A Decision Oriented Typology"*

MEDICAL CARE 14(6):544-546, 1976

This note responds to a critique of the G-index included in an article by Costanzo and Vertinsky in Medical Care, May 1975

(2 references) CH-P CHI-15(1976)

**Chiang, Chin Long**

*Making Annual Indexes of Health*

HEALTH SERVICES RESEARCH 11(4):442-451, 1976

The concept that health is a continuum extending from some optimum state of well-being to death is the basis for the construction of

this health index. The continuum is divided into a set of ordered categories called states. Based on these concepts, the author develops a mathematical model for measuring health status.  
(27 references) CH-P CHI-16(1976)

**Chovil, Alan**

*Permanent Disability Evaluation in Terms of Dynamic Function*

JOURNAL OF OCCUPATIONAL MEDICINE 17(9):586-588, 1975

This article reviews the concepts of impairment and disability. It is argued that traditional methods of disability assessment based on passive function do not adequately reflect actual loss of function and that it is possible to arrive at a much fairer assessment of residual abilities. The techniques suggested are derived from those already established in the rehabilitation field.  
(7 references) AA-M CHI-17(1976)

**Dever, G.E. Alan**

*An Epidemiological Model for Health Policy Analysis*

SOCIAL INDICATORS RESEARCH 2(4):453-466, 1976

Health programs needing health and other related data have failed in their solutions because they have lacked a rational framework for analysis. Before we are able either to prevent or to arrest current disease processes, we must dissect the health field into more manageable elements that reflect a creative area for epidemiological models. Such a model is introduced and illustrated. The conclusion to be drawn from this study is that, based on current procedures for reducing mortality and morbidity, little or no change in our present disease patterns will be accomplished unless we dramatically shift our health policy.  
(18 references) AA-M CHI-18(1976)

**Dormaar, N.G.**

*A Measure of Health*

CANADIAN MEDICAL ASSOCIATION JOURNAL 115(7):274-275, 1976

According to the author, health is a process rather than a state. Since current indexes are designed to measure changes in state from one level to another rather than monitor this dynamic character, the real questions about health are not being asked. Thus, with the current state of the art, health is not being measured.  
(3 references) CH-P CHI-19(1976)

**Elinson, Jack**

*An Introduction to Sociomedical Health Indicators*

The specific focus of this issue of the International Journal of Health Services is on measures which are primarily social, from those that are primarily physiological. The goal is to emphasize societal concerns with the effects of deviation from physiological states deemed desirable from a medical point of view; and, to develop measures which reflect these societal concerns. In the process of introducing the articles on "sociomedical health indicators", the author comments critically on the state of the art of measuring health. (22 references) CH-P CHI-20(1976)

**Evang, Karl**

*Health and Disease Concepts*

SCANDINAVIAN JOURNAL OF SOCIAL MEDICINE 4(3):109-114, 1976

The author cites background information, both medical and political, to the formulation of the World Health Organization's definition of health. This forms a basis for his outline of the concept of health and disease which is now gaining a foothold everywhere. Thus, this concept represents an expansion or a supplement to the narrow and disease-oriented philosophy which has dominated medicine. (7 references) CH-P CHI-21(1976)

**Fagnani, F.; Dumenil, G.**

*Health Indicators or Health System Analysis? Extracts From a French Survey*

SOCIAL INDICATORS RESEARCH 3(1):37-74, 1976

The conclusions of a French study devoted to health indicators are exposed and summarized. After a review of statistical data available in France in the fields of health and medicine, the theoretical problems linked with the concepts of "need," "morbidity" and "state of health" are examined. A system analysis is proposed and considered as a formal framework necessary for interpretation of data. (21 references) AA-M CHI-22(1976)

**Hall, M.R.P.**

*The Assessment of Disability in the Geriatric Patient*

RHEUMATOLOGY AND REHABILITATION 15(2):59-64, 1976

The need for well-defined concepts of disability in the elderly, physical, mental and social assessment of the total person, is discussed. In searching for a means of assessing these concepts in the clinical setting, the author notes problems of assessment schemes which are either too complex for routine procedures or too insensi-

tive to detect small changes in behavior. In researching these problems, the author is using Barthel's Index and Roth/Hopkins Mental Test Score.

(11 references) CH-P CHI-23(1976)

**Jazairi, N.T.**

*Approaches to the Development of Health Indicators*

PARIS, FRANCE:OECD SOCIAL INDICATOR DEVELOPMENT PROGRAMME  
No. 2, 1976

This report contains a review of some approaches and measurements related to health in general, followed by a discussion of life expectancy at various ages as a social indicator of the length of life. After consideration of the concepts and measurement of disabilities and of the quality of health care, the delivery of health care and the social integration of the disabled in society are explored and discussed in broad terms.

(107 references) CH-P CHI-24(1976)

**Katz, Sidney; Akpom, C. Amechi**

*A Measure of Primary Socio-Biologic Functions*

INTERNATIONAL JOURNAL OF HEALTH SERVICES 6(3):493-507, 1976

The Index of Independence in Activities of Daily Living is a scale whose grades reflect profiles of behavioral levels of 6 socio-biologic functions, namely, bathing, dressing, toileting, transfer, continence, and feeding. Its hierarchical nature makes it possible to rank the overall functional status of people in an ordered manner, to make comparisons among them as individuals or groups, and to detect changes over time. The index has been used to produce predictive information about chronic conditions and to evaluate the benefits of long-term services. It has been used in profiled measures of severity of illness. As a screening measure and survey measure, it has contributed information about health needs and outcomes which is useful for management, planning, policy-making research, and teaching.

(32 references) AA-M CHI-25(1976)

**Kelman, Sander**

*The Social Nature of the Definition Problem in Health*

INTERNATIONAL JOURNAL OF HEALTH SERVICES 5(4):625-642, 1975

In this article it is argued that through the adoption of the appropriate theoretical approach and the derivation of suitable analytical categories, the definition problem in health can be seen as operational, nontrivial, and highly problematic to the determination of health care policy. Specifically, an attempt is made to isolate the so-



cial basis of the definition of health. Part one develops the theoretical approach to the problem. Part two applies the new definition by reinterpreting parts of the history of public health and medicine, and concludes with a discussion of how this definition is highly problematic to the major structural reforms currently under way in the American health care system.  
(42 references) AA-M CHI-26(1976)

**Leach, Edmund**

*Society's Expectations of Health*

JOURNAL OF MEDICAL ETHICS 1:85-89, 1975

The author argues that doctors in the modern world, fortified by the traditional concept that the life of the sick person must be preserved at all costs are to some extent guilty of the false antitheses current today between youth and age. Moreover, youth means health, age illness and senility. Until this imbalance is corrected society will be in danger of a kind of civil war between the generations. Society must be taught that mortality cannot be avoided or conquered by medical science, and at the same time that "health" is not enshrined in the young alone.

(3 references) AA-M CHI-27(1976)

**Linder, Forrest E.**

*Recent Trends in Health Statistics*

WHO CHRONICLE 30:58-63, 1976

Recent years have seen a considerable extension of the uses to which health statistics are put. Consequently, many advances have been made in methods of collecting and processing health data. This article outlines general trends in this field.

(9 references) AA CHI-28(1976)

**Marinker, Marshall**

*Why Make People Patients?*

JOURNAL OF MEDICAL ETHICS 1:81-84, 1975

People confront their doctors with three modes of unhealth-disease, illness, and sickness. Each is discussed, and the question is asked and answered as to why in this situation people wish to become patients.

(6 references) AA CHI-29(1976)

**McDowell, Ian; Martini, Carlos J.M.**

*Problems and New Directions in the Evaluation of Primary Care*

The nature of many contacts between patients and general practitioners is such that the traditional morbidity and mortality indexes of outcome are inadequate for evaluating the care provided. Preliminary results of a study developing a more appropriate index of the outcome of primary care, expressed in terms of the patient's functional abilities, are discussed. Beyond its use in evaluating the social and psychological components of care, the method may be applicable in population health surveys and in estimating the need for care.  
(19 references) AA-M CHI-30(1976)

**Neuhauser, Duncan**

*The Really Effective Health Service Delivery System*

HEALTH CARE MANAGEMENT REVIEW 1(1):25-32, 1976

The author indicates that present health care management systems do not perform in a way consistent with our desires. The present non-system approach to health care delivery is not conducive to maximizing the quality and length of life.  
(5 references) CH-P CHI-31(1976)

**Olesen, Virginia L.**

*Convergences and Divergences: Anthropology and Sociology in Health Care*

SOCIAL SCIENCE AND MEDICINE 9:421-425, 1975

Historical and social influences have shaped medical sociology and medical anthropology in similar ways, yet have produced different emphases within these disciplines. Medical sociology, in particular, bears the imprint of sociology departments where most of its practitioners, scholars, and teachers have been trained. Eight major substantive problems are noted as areas where the disciplines could profitably work together.  
(40 references) AA CHI-32(1976)

**Patrick, Donald L.**

*Constructing Social Metrics for Health Status Indexes*

INTERNATIONAL JOURNAL OF HEALTH SERVICES 6(3):443-453, 1976

Health status indexes used to make collective decisions satisfying the principles of equality and social minimum must incorporate a social metric for health. Any index or indicator applied to populations for determining health status or to health programs for evaluating outcome must confront the question of who prefers which states of health under which circumstances? Utility models, psychometric scal-

ing, and empirical social decision valuation have been used to measure preferences for states of health. Efforts should be directed toward constructing social metrics of health that are prospective, context-independent, relevant, community-wide, ratio scaled, sensitive, empirically validated, and applicable to program evaluation. These efforts represent the application of normative social theory to research, an important advance in uncovering the mysteries of social action and its consequences.

(54 references) AA CHI-33(1976)

**Raynes, Norma V.**

*Issues in the Assessment of the Health Status, Needs, and Treatment of the Mentally and Physically Handicapped*

MEDICAL CARE 14(5:SUPPLEMENT):53-59, 1976

The importance of information for evaluating the health status, needs and progress of the mentally and physically handicapped has been consistently argued. However, the varied nature of handicapping conditions and the multiple uses and users of data pose difficult problems for uniform data collection. The article identifies components for a minimum basic data set for handicapped populations.

(33 references) AA-M CHI-34(1976)

**Segall, Alexander**

*The Sick Role Concept: Understanding Illness Behavior*

JOURNAL OF HEALTH AND SOCIAL BEHAVIOR 17:162-169, 1976

The primary objective of this paper is to review the past twenty years of research activity stimulated by Parsons' original formulation of the sick role concept. The paper also includes an assessment of the present status of this conceptual model and some implications for future research. An attempt is made to develop a paradigm intended to facilitate the integration of existing research evidence pertaining to sources of variance in the sick role and to provide a guide to a more comprehensive, systematic approach to the study of the sick role.

(28 references) AA-M CHI-35(1976)

**Siegmann, Athilia E.**

*A Classification of Sociomedical Health Indicators: Perspectives for Health Administrators and Health Planners*

INTERNATIONAL JOURNAL OF HEALTH SERVICES 6(3):521-532, 1976

The conceptualization and operationalization of measures of health status are considered. Health indicators are conceived as a subset of social indicators, and therefore, they are viewed as derivative from social issues. The interrelationship of different frames of reference for

defining and measuring health that have accompanied three distinct health problem patterns in the United States are viewed from a developmental perspective. The deficiencies of mortality and morbidity as indicators serve as background for a classification schema for sociomedical health status indicators that relates health definition frames of reference, measures of health status and health problems. The role of sociomedical health indicators in the current formulation of health status measures is assessed.  
(73 references) AA-M CHI-36(1976)

**Simpson, M.G.**

*Health*

OPERATIONS RESEARCH QUARTERLY 27(1:II):209-219, 1976

A survey is given of measures of effectiveness and balance of care. Data problems and medical implications in overall health care, hospitals and community care are reviewed.  
(11 references) AA CHI-37(1976)

**Tilquin, Charles**

*Modeling Health Services Systems*

MEDICAL CARE 14(3):223-240, 1976

A conceptual model for the analysis of personal and collective health services system is proposed. By placing existing formal models in the framework of this conceptual model, the qualities and shortcomings are emphasized. The normative and descriptive approach to formal modeling is discussed. The close conceptual parallel between personal and collective health services systems is emphasized.  
(21 references) AA CHI-38(1976)

**Torrance, George W.**

*Health Status Index Models: A Unified Mathematical View*

MANAGEMENT SCIENCE 22(9):990-1001, 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.  
(15 references) AA CHI-39(1976)

**Torrance, George W.**

*Toward a Utility Theory Foundation for Health Status Index Models*

HEALTH SERVICES RESEARCH 11(4):349-369, 1976

The paper investigates the extent to which formal utility theory can be applied to the area of health planning and can be used to provide a theoretical foundation for health status index models. Conventional utility theory axioms are restated in a health context and additional assumptions are developed as required to build the theory. A complete theory is developed for the case of individual utilities. Measurement procedures are described in detail for determining the individual utility functions. Health status index models are analysed in relationship to this theory and areas for further research are identified.

(17 references) AA-M CHI-40(1976)

**Whitmore, G.A.**

*The Mortality Component of Health Status Indices*

HEALTH SERVICES RESEARCH 11(4):370-390, 1976

The mortality factor is pervasive and important in health program evaluation and yet it is poorly understood by health researchers. Focussing on survival experience in particular, the paper explores survival probability and preference assessment. It is noted that a great deal of conceptual and theoretical development is needed in the areas of subjective assessment methods for survival probabilities and models of survival preferences. Once an adequate theoretical framework has been created, serious empirical work can begin.

(40 references) CH-P CHI-41(1976)

**Williams, Alan**

*Description Versus Valuation in Long-Term Care Data*

MEDICAL CARE 14(5:SUPPLEMENT):148-153, 1976

This article discusses problems in using basic data sets as a source of material when analyzing the cost effectiveness and cost benefit of long-term health care. It is argued that data relevant to patient functioning, coping resources, environmental stress, and service inputs should be purged, insofar as practicable, of all valuation elements. Valuation must be addressed at the policy level and depends upon who makes the decision, at what time, and in what context. The role of the basic data set is to provide a ready point of entry for such valuations.

(7 references) AA CHI-42(1976)

# Development—Empirical

**Andrews, Frank M.; Crandall, Rick**

*The Validity of Measures of Self-reported Well-being*

SOCIAL INDICATORS RESEARCH 3(1):1-19, 1976

Using a new analytic approach, construct validity estimates are developed for proposed social indicators of self-reported well-being. Two separate investigations are reported: the first involves data on six aspects of well-being each assessed by six methods from 222 adults in one geographic area; the second, a partial replication and extension, involves a more limited set of indicators measured on a sample of 1297 adults. The results provide evidence that perceptions of well-being can be measured by single questionnaire items using any of four formats. Methodologically, the feasibility and utility of deriving parameter estimates of structural equation models of multimethod-multitrait data are illustrated.

(32 references) AA-M CHI-43(1976)

**Barrows, Richard L.; Shafer, Ron E.**

*Indicators of Development in Wisconsin Counties: 1970*

SOCIAL INDICATORS RESEARCH 2(3):333-360, 1975

Existing theories of economic and social change were used to select important indicators of development. For each indicator, principal components analysis was used to collapse several related variables into a single index. The indexes were labeled economic base, economic growth, personal economic opportunity, health inputs, health status, educational inputs, and educational attainment. In each case, selection of variables and indexes were constrained by two factors: 1) the data had to be available from secondary sources; 2) the selection of the indicators, and the procedure, had to be easily understood and cheaply and quickly repeatable by state or local agency personnel. The results have been judged "reasonable" measures of development by groups which have utilized the indexes.

(14 references) AA-M CHI-44(1976)

**Bergner, Marilyn; Bobbitt, Ruth A.; Pollard, William E.; Martin, Diane P.; Gilson, Betty S.**

*The Sickness Impact Profile: Validation of a Health Status Measure*

MEDICAL CARE 14(1):57-67, 1976

The Sickness Impact Profile (SIP) is being developed as an outcome measure of health care. A preliminary study of the validity of the SIP was conducted on a sample of 278 subjects who were grouped into four subsamples differing in kind and severity of sickness. Self-assessment of health status, clinician assessment of

health status, and other measures of dysfunction were used as criteria. Differences among the correlations obtained for each criterion measure with SIP score are discussed in terms of the need for the development of criterion measures that can be expected to differentially relate to the constructs inherent in the SIP.  
(6 references) AA-M CHI-45(1976)

**Brenner, Berthold**

*Quality of Affect and Self-Evaluated Happiness*

SOCIAL INDICATORS RESEARCH 2(3):315-331, 1975

The concept of quality of affect is used to develop variables descriptive of how a person is feeling. The extent of marked positive affect, the extent of marked negative affect and the modal hedonic level or modal quality of affect are presented as three components of a quality of affect measure. Findings based on interviews with a sample of Washington County, Maryland adults are presented.

(14 references) AA-M CHI-46(1976)

**Brook, Robert H.; Avery, Allyson Davies**

*Quality of Medical Care Assessment Using Outcome Measures: Executive Summary*

SANTA MONICA, CALIFORNIA:RAND CORPORATION, 1976

This volume gives a brief summary of the conceptual discussion included in the first volume, along with a description of the specific method used and an illustration of the types of outcome and standards developed.

(0 references) CH-P CHI-47(1976)

**Brunswick, Ann**

*Indicators of Health Status in Adolescence*

INTERNATIONAL JOURNAL OF HEALTH SERVICES 6(3):475-492, 1976

Based on data from a representative cross-section sample 671 urban black youths 12-17 years old, this research has been addressed to certain conceptual and methodological issues in measuring health status. The focus has been on self reported, "ontological", health and subjective indicators. A multiple indicator composed of the average standard score of four different health status indicators identified by component analysis was used to determine the seriousness of self reported health problems.

(20 references) CH-P CHI-48(1976)

**Carter, Dale E.; Newman, Frederick L.**

*A Client-Oriented System of Mental Health Service Delivery and Program Management: A Workbook and Guide*

ROCKVILLE, MARYLAND:ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION, SERIES C NO. 12, (PUBLICATION NUMBER ADM 76-307), 1976

This workbook is designed to permit the reader to assess an agency's or program's capability to accomplish several tasks required to implement a client-based system of service delivery and management. Data on which clinical, agency and program decisions are based include measurements of client outcomes and service costs. (55 references) CH-P CHI-49(1976)

**Chambers, L.W.; Sackett, D.L.; Goldsmith, C.H.; MacPherson, A.S.; McAuley, R.G.**

*Development and Application of an Index of Social Function*

HEALTH SERVICES RESEARCH 11(4):430-441, 1976

Brief indexes of social function were constructed in a project to develop a health index questionnaire designed to measure the social, emotional and physical function of free-living populations. The social function items have been found to be generally applicable; their validity against concurrent assessments of a health professional has been demonstrated. These social function indexes have been successfully applied in two randomized trials of innovative primary care services.

(32 references) AA-M CHI-50(1976)

**Chen, Martin K.**

*A Comprehensive Population Health Index Based on Mortality and Disability Data*

SOCIAL INDICATORS RESEARCH 3(2):257-271, 1976

Two versions of a new population health index based on the mortality and disability experiences of nations or communities are proposed for comparing their overall health status. One version is the ratio of the mean mortality rate of selected population groups to the mean disability free rate of survivors. The other version is a composite of these variables, transformed to stabilize their variance, that are so weighted as to maximize the probability of correctly differentiating "healthy" and "unhealthy" nations. Problems with application of the index are briefly discussed.

(7 references) AA CHI-51(1976)



**Chen, Martin K.**

*The K Index: A Proxy Measure of Health Care Quality*

HEALTH SERVICES RESEARCH 11(4):452-463, 1976

A single index, the K index, is proposed as a proxy measure of the quality of health care and as an index of "negative health." Based on the concept of preventable disability and mortality, the index ranges in value from zero for the best health condition to unity for the worst health condition. This closed range is achieved by the application of centour analysis. The rationale of the K index, along with computational examples, is given.

(15 references) AA-M CHI-52(1976)

**Fazio, Anthony F.**

*A Concurrent Validation Study of the NCHS General Well-Being Schedule*

HYATTSVILLE, MARYLAND:NATIONAL CENTER FOR HEALTH STATISTICS,  
(PUBLICATION NUMBER HRA 78-1347), 1977

This report presents some findings and evaluations about the General Well-Being Schedule (GWB) compared to several other self-report scales in terms of their concurrent validity against interviewer ratings of current depression and the intercorrelations among these several scales. These findings are derived from a study of a sample of 195 college students who participated in a major investigation into ways of assessing depression among college students.

(22 references) CH-P CHI-53(1976)

**Gonnella, Joseph S.; Louis, Daniel Z.; McCord, John J.**

*The Staging Concept—An Approach to the Assessment of Outcome of Ambulatory Care*

MEDICAL CARE 14(1):13-21, 1976

The paper describes a method to evaluate patient care. The technique is based on the staging concept. Its basic premise is that the seriousness of a patient's condition at some point in the treatment process is a good indicator of the outcome of the previous parts of the process. Data were collected for 5,000 patients who had been admitted to a sample of hospitals in two California cities. The results indicate that the staging technique can be used to distinguish between the outcomes of ambulatory care received by different populations.

(9 references) AA-M CHI-54(1976)

**Hall, Paul; Axelsson, Gunnar; Sebag, Jerry**

*Relationship Between Work Environment and Anamnestic Health Status. Use of Predictors, Indicators and Indices for the Evaluation of Medical and Environmental Factors*

SCANDINAVIAN JOURNAL ON WORK ENVIRONMENT AND HEALTH  
1(4):233-242, 1975

Experience with computerized medical record systems has led to the development of a new approach to the evaluation of medical data. This paper describes the methodology and presents the results obtained when the technique was applied to the anamnestic data of the medical history and environmental data about the conditions in the work environment. Over 4,000 individuals who underwent multiphasic health screening were used as a data base for this study. Anamnestic and environmental indices were calculated for 77 test individuals to correlate the association and dependence of the two indices.

(11 references) AA-M CHI-55(1976)

**Johnston, Shawn A.; Ware, John E.**

*Income Group Differences in Relationships Among Survey Measures of Physical and Mental Health*

HEALTH SERVICES RESEARCH 11(4):416-429, 1976

A health hierarchy hypothesis derived from Maslow's need hierarchy was developed to predict income group differences in relationships among variables used to define mental and physical health status. For the current study, analyses were based on 823 enrollees in the Health Insurance Study being conducted by the Rand Corporation. The study results which tend to support the hypotheses, are discussed in terms of policy implications.

(24 references) CH-P CHI-56(1976)

**Kaplan, Robert M.; Bush, J.W.; Berry, Charles C.**

*Health Status: Types of Validity for an Index of Well-being*

HEALTH SERVICES RESEARCH 11(4):478-507, 1976

This paper clarifies the meaning of validity for health status indexes, in general, and assesses the validity of the proposed Index of Well-Being (IWB). The construction of the IWB is explained in greater detail as the different forms of validity, criterion related, content and construct, are explained. The data in this report are from a two year panel survey comprising a probability sample of 867 respondents, a supplementary sample of 370 children and 89 persons identified as dysfunctional.

(45 references) CH-P CHI-57(1976)

**Katz, Sidney; Akpom, C. Amechi**

*Index of ADL*

MEDICAL CARE 14(5:SUPPLEMENT):116-118, 1976

The Index of Activities of Daily Living (ADL) encompasses six basic human functions, bathing, dressing, toileting, transfer, continence, and feeding. It provides an objective method of classifying heterogeneous groups of people with chronic illnesses, disabilities and impairments, and of describing their health needs and outcomes. (15 references) AA CHI-58(1976)

**Levy, Shlomit; Guttman, Louis**

*On the Multivariate Structure of Wellbeing*

SOCIAL INDICATORS RESEARCH 2(3):361-388, 1975

A mapping sentence is provided for defining the universe of observations of well-being. According to this, assessment of wellbeing is attitudinal. Data from several studies verify that the First Law of Attitude holds for well-being. These data also show the structure of the interrelationships among the variables to be that of intermeshing cylindrexes, in a four dimensional space. Areas of life play the role of polarizing facets, while self-versus-community and situation-versus-treatment serve as axial facets. Modulation facets include primary-to-secondary interaction and generality-to-specific. (22 references) AA-M CHI-59(1976)

**Linn, Margaret W.; Linn, Bernard S.; Stein, Shayna**

*Ratings of Impairment and Functional Status in Prediction of Mortality*

PSYCHOLOGICAL REPORTS 37:998, 1975

Most medical research has relied on measurement of functional status (since these ratings are based on more objective observation) rather than on estimates of degree of impairment to organ systems. Yet, there seems to be justification for both types of assessment. The purpose of this study was to determine the relationship between these two areas in the prediction of mortality. The data suggest that combining selected functional status ratings with estimates of impairment led to better classification of clinical condition and predictors of outcome. (2 references) AA-M CHI-60(1976)

**Linn, Margaret W.**

*Studies in Rating the Physical, Mental and Social Dysfunction of the Chronically Ill Aged*

MEDICAL CARE 14(5:SUPPLEMENT):119-125, 1976

It is difficult to separate what might be considered the normal from the dysfunctional aspects of aging in the physical, mental, and social areas, and wide variation occurs in the way persons age, with and without chronic illness. Any assessment of the total functioning of an individual must take into account the subject's own perception of his health or function status which, in addition to the cultural influences and feedback from the environment, interact to produce total adjustment. There is some indication that self-assessments of health may be a reliable predictor of more detailed functional assessments.  
(46 references) AA-M CHI-61(1976)

**Martini, Carlos J.M.; Allan, G.J. Boris; Davison, Jan; Backett, E. Maurice**

*Health Indices Sensitive to Medical Care Variation*

UNPUBLISHED, NOTTINGHAM, ENGLAND:UNIVERSITY OF NOTTINGHAM,  
DEPARTMENT OF COMMUNITY HEALTH, 1975

Data from the fifteen Hospital Regions of England and Wales were used to determine the utility of health outcome indices, derived from existing health statistics, for monitoring the quality and effectiveness of health services. Outcome measures reflect not only the impact of the system of care but also the socio-demographic characteristics of the population. In general, most indices appear to be more sensitive to variations in these characteristics. However, those outcome measures related to provision of care in hospital appear to be relatively more sensitive to variation in medical care than those which are community based. This suggests that, at least for monitoring the effectiveness of medical care in the community, it may be necessary to move towards measures that take into consideration the different patterns of care and the social and behavioural aspects of health.  
(2 references) AA-M CHI-62(1976)

**Martini, Carlos J.M.; McDowell, I.W.**

*Health Status: Patient and Physician Judgments*

HEALTH SERVICES RESEARCH 11(4):508-515, 1976

This paper reports on work in progress on the development of an outcome measurement for the evaluation of primary medical care. The aim and methods of this study have been based on the Sickness Impact Profile (SIP). Results of an 82 item, behavior based measure of health status given to 758 persons are presented.  
(15 references) CH-P CHI-63(1976)

**Mukherjee, Bishwa Nath**

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

REGIONAL STUDIES 10(1):105-122, 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 are 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.

(17 references) AA-M CHI-64(1976)

**Muller, Charlotte; Jaffe, Frederick S.; Kovar, Mary Grace**

*Reproductive Efficiency as a Social Indicator*

INTERNATIONAL JOURNAL OF HEALTH SERVICES 6(3):455-473, 1976

This article discusses conceptual and measurement aspects of an index of reproductive efficiency (RE). Measurement problems include: whether aggregation is justified, prospective and retrospective tracking of outcomes, record limitations, duplication of adversities in a single pregnancy, and selection of optimal rates for comparison. A measurement of RE for the entire United States based on the National Natality Survey of 1964-1966 is presented, showing 74.5 percent of pregnancies resulting in healthy liveborn infants.

(26 references) AA-M CHI-65(1976)

**Pliskin, Joseph S.; Beck, Clyde H.**

*A Health Index for Patient Selection: A Value Function Approach with Application to Chronic Renal Failure Patients*

MANAGEMENT SCIENCE 22(9):1009-1021, 1976

Concrete criteria are needed for patient selection for scarce medical treatments and ranking of patient urgency for, or salvageability by, a given form of treatment. The mathematical theory of multi-attribute value functions is employed to rank order chronic renal failure patients with regard to therapeutic expectations. Order-2 mutual preferential independence was observed, thus an additive value function was justified. The paper demonstrates two different procedures for assessing a value function over a discrete attribute. The proposed approach yields a rank ordering (health status index) consistent with the physician's preferences and judgment. It can be employed for any medical decision process, even when only weaker preferential independence properties apply.

(12 references) AA-M CHI-66(1976)

**Pollard, William E.; Bobbitt, Ruth A.; Bergner, Marilyn; Martin, Diane P.; Gilson, Betty S.**

*The Sickness Impact Profile: Reliability of a Health Status Measure*

MEDICAL CARE 14(2):146-155, 1976

This report describes the results of research conducted on the reliability of the Sickness Impact Profile (SIP). The SIP is a questionnaire instrument designed to measure sickness-related behavioral dysfunction and is being developed for use as an outcome measure in the evaluation of health care. The test-retest reliability was investigated using different interviewers, forms, administration procedures, and a variety of subjects who differed in terms of type and severity of dysfunction. The results provided evidence for the feasibility of collecting reliable data using the SIP under these various conditions. In addition, subject variability in relation to reliability is discussed.

(6 references) AA CHI-67(1976)

**Reagles, Kenneth W.; Butler, Alfred J.**

*The Human Service Scale: A New Measure for Evaluation*

JOURNAL OF REHABILITATION 42(3):34-38, 1976

The need for a new measurement tool which must be capable of measuring the qualitative impact of rehabilitative services, i.e. the nature and degree of client change is discussed. With Maslow's hierarchy of basic human needs as the theoretical rationale, the Human Service Scale was developed. Although still in the development stage, it is hypothesized that client needs for services and need satisfaction attributable to rehabilitation services may be measured. In addition, other potential uses are discussed.

(5 references) AS-M CHI-68(1976)

**Rutstein, David D.; Berenberg, William; Chalmers, Thomas C.; Child, Charles G.; Fishman, Alfred P.; et al.**

*Measuring the Quality of Medical Care*

NEW ENGLAND JOURNAL OF MEDICINE 294:582-588, 1976

The implementation of a new method of measuring the quality of medical care that counts cases of unnecessary disease and disability and unnecessary untimely deaths is outlined. Broad categories of illness are noted in which redefinition and intensive study might reveal characteristics that could serve as indexes of health. How these indexes of outcome can be used to determine the level of health of the general population and the effects of economic, political and other environmental factors upon it, and to evaluate the quality of medical care provided both within and without the hospital to maintain health and to prevent and treat disease is described.

(7 references) AA-M CHI-69(1976)

**Sackett, David L.; Chambers, Larry W.; MacPherson, Alexander S.;  
Goldsmith, Charles H.; McAuley, Ronald G.**

*The Development and Application of Indexes of Health: I. General  
Methods and a Summary of Results*

AMERICAN JOURNAL OF PUBLIC HEALTH 67(5):423-428, 1977

A multidisciplinary group has developed a health index questionnaire designed to measure the social, emotional and physical function of free-living populations. The strategy has been found to be generally applicable, capable of application by lay interviewers, acceptable to interviewees and amenable to index construction. Furthermore, initial evaluations of the resulting health indexes suggest that they have been successfully applied in a randomized trial of primary care services. The conceptualization of individual sections of the health index questionnaire for each of these three functional areas, the generation of the instrument and the evaluation of questionnaire responses for their biologic and clinical validity are summarized here.  
(14 references) AA-M CHI-70(1976)

**Shoesmith, Edward**

*Rating Abilities and Handicaps: An Examination of the SPI and SSL  
Scales for Mental Handicap*

COMMUNITY HEALTH 7:101-107, 1975

Two measurement scales designed to assess handicaps and behavior characteristics are examined. The scales are part of guidelines for planning. Charts are presented which translate objective decision making into a form more readily understood by the potential user.  
(5 references) CH-P CHI-71(1976)

**Stewart, Anita; Ware, John E.; Brook, Robert H.**

*The Meaning of Health: Understanding Functional Limitations*

MEDICAL CARE 15(11):939-952, 1977

Results of psychometric studies of 14 questionnaire items commonly used to define chronic functional limitations due to poor health are reported. Self-administered questionnaires were used to gather data from 1,209 persons 14 years of age and older. Data were used to study: scalability of items; test-retest reliability of alternate forms of scales; validity of scales in relation to 13 health status variables and age; and precision of scales in detecting differences in health. The implications of these findings are discussed.  
(34 references) AA-M CHI-72(1976)

**Tallant, Paul B.**

*Measurement of the Influence of Health Care Environments on Patient Populations*

IN, PROCEEDINGS OF THE PUBLIC HEALTH CONFERENCE ON RECORDS AND STATISTICS NATIONAL CENTER FOR HEALTH STATISTICS ROCKVILLE, MARYLAND:HEALTH RESOURCES ADMINISTRATION P.168-173, 1977

A methodology for measuring outcomes of health care is presented. The method consists of a system of levels and transition rates between levels making it possible to calculate the population of these levels as a function of time. The calculation of the expected equilibrium distribution provides information needed to determine if the observed patient distribution is stable. Information of this kind is very useful for the planning and administration of health care facilities.

(0 references) CH-P CHI-73(1976)

**Torrance, George W.**

*Social Preferences for Health States: An Empirical Evaluation of Three Measurement Techniques*

SOCIO-ECONOMIC PLANNING SCIENCES 10:129-136, 1976

Health state preferences measured on the general public provide useful information in their own right as well as being necessary data for the application of many health status index models. But, how should the preferences be measured? This paper reports the results of an empirical investigation in which three measurement techniques are applied to several samples of the general public to measure the social preferences for ten different health states. The standard gamble technique by von Neumann-Morgenstern, a time trade-off technique by the author, and a category scaling method are analyzed with respect to their feasibility, reliability, validity and comparability.

(18 references) AA CHI-74(1976)

**Ware, John E.**

*Scales for Measuring General Health Perceptions*

HEALTH SERVICES RESEARCH 11(4):396-415, 1976

The goals of this research were to develop and validate survey measures of "perceived health." Perceptions of health were operationalized as personal assessments of general health as opposed to specific aspects of health such as physical or mental and as opposed to directly observable phenomena such as days in bed due to poor health. Results are based on data from over 2300 respondents.

(48 references) CH-P CHI-75(1976)



**Williams, R.G.A.; Johnston, M.; Willis, L.A.; Bennett, A.E.**

*Disability: A Model and Measurement Technique*

BRITISH JOURNAL OF PREVENTIVE AND SOCIAL MEDICINE 30:71-78,  
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 post-surgical 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.

(17 references) AA CHI-76(1976)

## **Applications**

**Brody, Stanley J.; Balaban, Donald J.; Pickar, Gabriel; Vermeiren, Jan C.**

*A Diagnostic and Treatment Center for the Aging: A Program of Pre-Placement Intervention*

GERONTOLOGIST 16(1 PART 1):47-51, 1976

205 patients aged 55 to 85 admitted to a general hospital with acute medical and surgical problems were treated in a special care and treatment unit. The multi-disciplinary team provides continued medical treatment for chronically ill patients, assesses and improves the individual's functional health status, and coordinates family and social support resources. Application of the concept and program to ascertain its general use is continuing.

(17 references) AA-M CHI-77(1976)

**Coles, J.M.; Davison, A.J.; Neal, D.M.; Wickings, H.I.**

*A Comparison of Three Health Status Indicators*

INTERNATIONAL JOURNAL OF EPIDEMIOLOGY 5(3):237-246, 1976

A longitudinal study relating resource usage to recovery curves had been intended but there were difficulties in finding suitable indexes. First, two published indexes relying on patient interviews were tested for consistency. These were the measures developed by Grogono and Rosser. Poor correlations were found among those scorers unfamiliar with the patients and it seems unlikely that these indicators could be used in a routine system. Those parts of the indexes which had produced significant correlations were retained in subsequent work

and were supplemented by further measures designed to overcome the earlier difficulties. A new trial of this indicator was undertaken where staff familiar with the patients scored data recorded by the Problem Oriented Medical Record system. This produced improved correlations but some problems remain.  
(15 references) AA-M CHI-78(1976)

**Dudley, Donald L.**

*The Cornell Medical Index as an Adjunct to Paraprofessional Evaluation of Alcohol Addiction*

JOURNAL OF STUDIES ON ALCOHOL 37(1):97-99, 1976

The Cornell Medical Index (CMI) may prove a significant aid to paraprofessional personnel in recognizing alcoholics in need of medical attention. This finding is based on a study of 30 alcoholics who responded to both the CMI and the Mañson AICADD test.  
(4 references) AA-M CHI-79(1976)

**Figa-Talamanca, Irene**

*The Health Status and the Health Care Problems of the Aged in an Italian Community*

INTERNATIONAL JOURNAL OF AGING AND HUMAN DEVELOPMENT 7(1):39-48, 1976

This study was designed to identify the health needs of the elderly population in a small, urban Italian community. Data were collected by interviewing a stratified random sample of 1291 persons over 60 years of age. Results on self perceived health status, mobility and self care capacity and mental well-being are used for planning sociomedical services.  
(10 references) AA-M CHI-80(1976)

**Gersten, Joanne C.; Friis, Robert; Langner, Thomas S.**

*Life Dissatisfactions, Job Dissatisfaction and Illness of Married Men over Time*

AMERICAN JOURNAL OF EPIDEMIOLOGY 103(3):333-341, 1976

This study examines the degree to which job and marital satisfaction and participation in leisure activities could predict concurrent and future health status relative to ethnicity, class and occupational factors, and mental health. Data were obtained from a longitudinal study of a random sample of 1034 Manhattan families with at least one child 6 to 18 years of age. This preliminary investigation indicated that certain life satisfactions were important predictors for either concurrent or future health status which operated across class, ethnic, occupational and mental health factors. These findings tend to

support models which postulate stressful psychosocial conditions as potential etiologic agents in the development of illness.  
(12 references) AA-M CHI-81(1976)

**Granger, Carl V.; Greer, David S.**

*Functional Status Measurement and Medical Rehabilitation Outcomes*

ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION 57(3): 103-109, 1976

An on-stream method for describing patient's functional abilities is used to develop analyses of medical rehabilitation outcomes. During 1973, descriptions were accumulated on over 500 patients. Outcomes are the changes in status between admission, discharge and follow-up. Standardized observation and reporting make it possible to compare one date with another, one case with another or one agency or facility with another to determine program characteristics, effectiveness, and efficiency.

(17 references) AA-M CHI-82(1976)

**Harkey, John; Miles, David L.; Rushing, William A.**

*The Relation between Social Class and Functional Status: A New Look at the Drift Hypothesis*

JOURNAL OF HEALTH AND SOCIAL BEHAVIOR 17:194-204, 1976

The relationship between income status and illness-induced social and behavioral dysfunctions is investigated for 16,569 individuals in two Southern Appalachian counties. The Function Status Index (FSI) which measures the individual's ability to function in society was used to measure health status. Results consistently are more supportive of the hypothesis that dysfunctions are causal of income status rather than the reverse and that the primary effect of dysfunctions is to retard upward mobility rather than to contribute to downward mobility. Moreover, the point in the age cycle where the ("drift") effect is most apt to occur is young adulthood, when the individual first enters the labor market.

(11 references) AA-M CHI-83(1976)

**Hemminki, Elina; Hemminki, Kari; Hakulinen, Timo; Hakama, Matti**

*Increase in Years of Life after Eliminating Causes of Death: Significance for Health Priorities*

SCANDINAVIAN JOURNAL OF SOCIAL MEDICINE 4(1):1-6, 1976

The theory of competing risks of death has been applied in this study for the construction of two indices: 1) increase 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.

(15 references) AA-M CHI-84(1976)

**Kane, Robert L.; Woolley, F. Ross; Gardner, Henry J.; Snell, George F.; Leigh, Elbert H.; et al.**

*Measuring Outcomes of Care in an Ambulatory Primary Care Population*

JOURNAL OF COMMUNITY HEALTH 1(4):233-240, 1976

This study developed a practical method for determining the functional outcome status of patients in an ambulatory setting. Health status of 1840 primary care patients was compared at three points in time: patient's usual status, status at the initial visit, and status at time of telephone follow-up. Follow-up status was also compared with the physician's expectation, which was estimated at the time of the initial visit. Results are presented and discussed.

(10 references) AA-M CHI-85(1976)

**McCrae, Robert R.; Bartone, Paul T.; Costa, Paul T.**

*Age, Anxiety, and Self-Reported Health*

INTERNATIONAL JOURNAL OF AGING AND HUMAN DEVELOPMENT 7(1):49-58, 1976

A sample of 472 normal males ranging in age from twenty-five to eighty-two was divided into anxious and adjusted groups on the basis of a cluster analysis of the Cattell 16PF test, and compared for scores on a self-report measure of health, the Cornell Medical Index. Although anxiety was found to be unrelated to health as evaluated by physicians' examinations, the anxious men reported more health problems in eight major areas of health concern than was warranted by their actual physical health status. This relation did not hold in the old group.

(19 references) AA-M CHI-86(1976)

**Olsen, Donna M.; Kane, Robert L.; Proctor, Paul H.**

*A Controlled Trial of Multiphasic Screening*

NEW ENGLAND JOURNAL OF MEDICINE 294(17):925-930, 1976

A clinical controlled trial was designed to determine the impact of Automated Multiphasic Health Testing on morbidity and attitudes. Three strata comprising 574 families were interviewed to obtain information on utilization, morbidity, health status, and attitudes. Sixty per cent of adults in each stratum were then screened. All families

were interviewed again one year later. The only significant difference found between screened and non-screened subjects was an increase in nights hospitalized for screened subjects.  
(12 references) AA-M CHI-87(1976)

**Pesznecker, Betty L.; McNeil, Jo**

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

NURSING RESEARCH 24(6):442-447, 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 in Renton, Washington, of which 548 (57 percent) were returned. Relationships between the major variables, health habits, social assets, psychologic well-being, life change and 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 life change.  
(29 references) AA-M CHI-88(1976)

**Rosser, Rachel M.**

*Recent Studies Using a Global Approach to Measuring Illness*

MEDICAL CARE 14(5:SUPPLEMENT):138-147, 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.  
(17 references) AA-M CHI-89(1976)

**Schroeder, Steven A.; Donaldson, Molla S.**

*The Feasibility of an Outcome Approach to Quality Assurance: A Report from One HMO*

MEDICAL CARE 14(1):49-56, 1976

Recent federal legislation has contained the stipulation that participating health maintenance organizations (HMOs) include a quality assurance program which stresses health outcomes. One version of

the outcome method was employed for an 18-month period at an urban HMO caring for 2,000 Medicaid subscribers. The program involved comparing diagnostic accuracy and therapeutic outcomes for clinical conditions relevant to the study population with ideal standards established by the HMO. The results revealed widespread underdiagnosis (44-74 percent) in each condition. Further refinement of this approach to quality assessment must occur before its widespread use is feasible.

(17 references) AA-M CHI-90(1976)

**Sebag, J; Hall, P.**

*Decision-Making in Clinical Practice: Application of Predictors, Indicators and Indices to the Medical History Obtained by a Self-Administered Questionnaire*

INTERNATIONAL JOURNAL OF BIO-MEDICAL COMPUTING 6(3):167-179, 1975

The application of predictors, indicators and health indexes, including dynamic health indexes, to anamnestic data obtained by a self administered questionnaire is presented. Predictors and indicators showed a varying degree of decision making significance in the 122 questions examined. The health index distinguished between diagnosed individuals and those with no diagnosis(es). The dynamic health index was found to reflect changes in health status of an individual over time.

(13 references) AA-M CHI-91(1976)

**Segall, Alexander**

*Sociocultural Variation in Sick Role Behavioural Expectations*

SOCIAL SCIENCE AND MEDICINE 10:47-51, 1976

The general objectives of the present study were to determine: 1) how closely lay expectations regarding the rights and duties of the sick role correspond to the Parsonian conceptual model; and 2) whether systematic sociocultural differences exist in perception of and willingness to adopt the sick role. The study focused upon the sick role behavioral expectations held by 70 hospitalized Anglo Saxon Protestant and Jewish female patients. Results are reported.

(21 references) AA-M CHI-92(1976)

**Wan, Thomas T.H.**

*Predicting Self-Assessed Health Status: A Multivariate Approach*

HEALTH SERVICES RESEARCH 11(4):464-477, 1976

This paper examines factors affecting the personal perceptions of health status. First, sociodemographic variables are used as indepen-

dent variables in the automatic interaction detector (AID) analysis to partition the study group of 11,153 persons aged 58-63 years into mutually exclusive subgroups. These subgroups were further analysed using a binary multiple regression analysis. Evidence has been provided that sociomedical health indicators are better explanatory variables of self-assessed health status than socioeconomic and psychological indicators of well-being.  
(27 references) AA-M CHI-93(1976)

**Wolk, Stephen; Telleen, Sharon**

*Psychological and Social Correlates of Life Satisfaction as a Function of Residential Constraint*

JOURNAL OF GERONTOLOGY 13(1):89-98, 1976

Two questions were addressed in the present study: Do residential settings of varying levels of constraint influence life satisfaction? Do such settings involve different correlates of life satisfaction? A total of 129 male and female ambulatory residents were surveyed in settings of high and low constraint on the following measures: life satisfaction, developmental task resolution, self-acceptance, perceived autonomy, activity level, health and educational level. Results of step-wise regression, covariance and t-test analysis are presented.

(21 references) AA-M CHI-94(1976)

## **Policy Review**

**Blum, Henrik L.**

*From a Concept of Health to a National Health Policy*

AMERICAN JOURNAL OF HEALTH PLANNING 1(1):3-22, 1976

This article reviews the forces which contribute to or diminish population health levels. Also, three basic health problems are identified; the author suggests major changes in modes of financing and organizing the delivery of medical services, in the way we select and train medical manpower, and in the priorities set in health-related research. The interrelationships of each area are emphasized as is the importance of interconnected strategies to address the problems. A general system theory is presented in relation to health, the evidence of impact for specific forces is summarized, and a national health policy focused around multiple "Health Care Delivery Systems" and "Well-Being Centers" is outlined.

(121 references) AA-M CHI-95(1976)

## **Clearinghouse on Health Indexes**

*Special Subjects: Objectives and Organization of the Clearinghouse for Health Indexes in the National Center for Health Statistics, United States of America*

With the growing emphasis on sound principles of health programming and evaluation there is a renewed interest in statistical measures that would be of help in tracking the manifold and complicated problems inherent in this approach. The literature on statistical indicators and their application to the health sector is rapidly increasing and it is essential to follow the methodological research and its empirical application closely. It is for this reason that the Clearinghouse on Health Indexes has been established.  
(0 references) AA-M CHI-96(1976)

**Department of Health, Education, and Welfare**

*Health Statistics Plan*

WASHINGTON, D.C.:DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, 1975

The plan represents a statement of the Department's current health statistics activities with emphasis on aspects of these activities which require attention. It provides an overview of the need for health statistics, the inadequacies of existing data systems, and the present and planned efforts to ensure that health statistics activities are consistent with Departmental policies and priorities and represent the most efficient ways of collecting the needed data.  
(not applicable) CH-P CHI-97(1976)

**Krischer, Jeffrey P.**

*Indexes of Severity: Underlying Concepts*

HEALTH SERVICES RESEARCH 11(2):143-157, 1976

Six severity indexes proposed in the health services research literature are shown to be special cases of a class of ordinal ranking functions called additive value functions. Deficiencies manifest in each of the severity indexes are discussed in relation to the properties that additive value functions must satisfy. In that severity indexes are a subset of health status indexes, the properties that imply and are implied by additive value formulations are relevant to the larger class of indexes as well.  
(12 references) AA CHI-98(1976)

**Lapatra, J.W.**

*Health Care Delivery Systems Evaluation Criteria*

SPRINGFIELD, ILLINOIS:C.C. THOMAS, 1975

This book aims to show how systems concepts can be applied to the study of the United States health system. Specific chapters pro-



vide an exposition of the theory of social indicators along with useful strategies for forming health status indexes, a discussion of methodologies of identifying, measuring, and evaluating outcomes of a health care delivery system. Overall, the pieces of the health care delivery system and their interaction are examined separately and then reassembled for an overview.

(45 health status references) CH-P CHI-99(1976)

**Mahler, Halfdan**

*Social Perspectives in Health: A Fairer Sharing of Resources is Needed*

INTERNATIONAL JOURNAL OF HEALTH EDUCATION 19(2):74-76, 1976

This paper critically assesses the ability of public health to improve community health. The desire for health is so fundamental and the inability to distribute all existing forms of health technology to the total world population on an equitable basis is so manifest, the conditions appear to be ripe for a truly critical reevaluation in social terms for attaining health.

(0 references) CH-P CHI-100(1976)

**Phillips, Donald F.**

*Health Status Indexes: AAAS Symposium*

HEALTH SERVICES RESEARCH 11(1):86-89, 1976

This article critically reviews two presentations at the February 1976 American Association for the Advancement of Science symposium on health status indexes. Denis Johnston's discussion of measures for possible inclusions in future Social Indicators volumes are highlighted. Also, John Ware's presentation is examined for possible application in the allocation of resources.

(0 references) CH-P CHI-101(1976)

## CURRENT RESEARCH—ENGLISH

### Development—Conceptual

**Ardell, Donald B.**

*Wellness/Worseness Continuum*

UNPUBLISHED, SAN FRANCISCO, CALIFORNIA:ARTHUR YOUNG AND COMPANY, 1976

This Wellness/Worseness Continuum is an excerpt from a book entitled, High Level Wellness: An Alternative to Doctors, Drugs, and Disease. An inventory which is designed to help an individual assess his or her life style in terms of well-being is presented. This aims to point out to the respondent wellness values, habits and knowledge. (38 references) CH-P CHI-102(1976)

**Dunlop, David; Revo, Larry; Tychsen, Sandra**

*Impact of National Economic Conditions on Health Care of the Poor—Health Status*

NASHVILLE, TENNESSEE:MEHARRY MEDICAL COLLEGE, 1976

This study will be a comparative analysis of information on incidence of acute and chronic conditions and other health status related measures for periods of relative economic stability and for similar information recorded during more recent periods of economic instability. The study will take into account differences in population characteristics and the degree and the duration of poverty. The basic data will be derived from an unmet needs study. In addition, an available health interview survey will be analyzed to capture health status measures such as the limits of activity and limits of mobility. (34 references) AA-M CHI-103(1976)

**Guttmacher, Sally; Elinson, Jack; Viacava, Francisco**

*Development of a Population-Based Child Health Profile: A Working Paper*

PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION, MIAMI, FLORIDA, OCTOBER 20, 1976

Basic conceptual issues in developing the Child Health Profile (CHP) were presented. The CHP is designed to serve as a composite measure of all aspects of child health from the physical to the psychological and social. Thus, it is a general, overall normative measure based on broad normative categories. Since the CHP is population-based, it should not be thought of as a developmental screening instrument or as a diagnostic tool.

(0 references) CH-P CHI-104(1976)

**Lipscomb, Joseph**

*Health Resource Allocation and Quality of Care Measurement in a Social Policy Framework*

DURHAM, NORTH CAROLINA:DUKE UNIVERSITY, 1976

An activity analysis production function, linking the structure, process and outcome of medical care, is introduced. The model, based on a semi-Markovian conception of the disease process, is designed to determine that allocation of inputs among programs which maximize expected improvement in population health status. Based on the model, two system-oriented indexes of the quality of medical care are defined. This allocation methodology represents a particular application of a more general "social policy model," a potentially useful paradigm for the evaluation of public programs generally.

(41 references) AA-M CHI-105(1976)

**Mushkin, Selma; Chen, Milton**

*Assessing the Impact of Biomedical Research*

UNPUBLISHED, WASHINGTON, D.C.:GEORGETOWN UNIVERSITY, 1976

This presentation of research in progress described the approach being proposed to determine to what extent biomedical research, especially that being undertaken at the National Institutes of Health, affects the health status level on a national basis. To the extent possible, data from existing sources will be used.

(0 references) CH-P CHI-106(1976)

**Ware, John E.**

*The Conceptualization and Measurement of Health for Policy Relevant Research in Medical Care Delivery*

PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE IN BOSTON, MASSACHUSETTS, FEBRUARY 18-24, 1976

This paper discusses several issues regarding health status assessment for purposes of evaluation of medical care delivery. The issues

include: 1) reasons for health status measurement, 2) the nature and number of health concepts that can be measured, and 3) some of the implications of various measurement strategies. The Health Insurance Study which the Rand Corporation is conducting is offered as an example of a social experiment in which the measurement of health will aid in policy decisions about how medical care should be delivered. (38 references) AA-M CHI-107(1976)

**Williams, Alan**

*What Can Economists Do to Help Health Service Planning?*

UNPUBLISHED, YORK, ENGLAND:UNIVERSITY OF YORK, DEPARTMENT OF ECONOMICS, 1976

In writing this paper, the author aims to interest practising economists, professors and their students in the field of health. The paper is a critical review of the current state of the art with focus on unresolved issues of operational definitions of health, of health insurance, and of application of cost-benefit models. (185 references) CH-P CHI-108(1976)

## **Development—Empirical**

**Diamond, Kenneth J.**

*The Effects of Policy Decisions on Levels of Task Dysfunction*

UNPUBLISHED, LINCOLN, NEBRASKA:UNIVERSITY OF NEBRASKA DEPARTMENT OF SOCIOLOGY, 1976

Path analysis is used to construct a model for testing the efficiency of the health care delivery system. Parson's definition of Somatic Health is operationalized as the dependent variable. The model is tested using county level data for Nebraska. Census, Nebraska Health Project data as well as information from the Nebraska Health Interview Survey were used in the analysis. The results and policy implications for health planning are discussed. (209 references) CH-P CHI-109(1976)

**Goldsmith, Charles H.; Layhew, Greg S.**

*Generalized Measures of Sensitivity, Specificity and Predictive Value in  $k \times k$  Contingency Tables*

PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN STATISTICAL ASSOCIATION IN BOSTON, MASSACHUSETTS, AUGUST 27, 1976

The measure of sensitivity and predictive value has been extended for use in  $k$  by  $k$  contingency tables. The results have been used to determine good questions in an index of health study conducted at McMaster University. Only time will tell if these extensions are useful

in other clinical and epidemiological areas where more than two disease states are common.

(15 references) AA CHI-110(1976)

**Kiley, Marylou**

*Measurement of Health Change: A Model for Patients in an Adult Intensive Care Unit*

UNPUBLISHED, CLEVELAND, OHIO:CASE WESTERN RESERVE UNIVERSITY, DEPARTMENT OF OPERATIONS RESEARCH, 1976

The intensive care unit (ICU) Patient Assessment Profile is a vector of 12 discrete, easily observable parameters. Two sets of weights are determined on the basis of multiple regression and linear optimization; these weights are used as coefficients for the parameter scores. SEVILL is a combination of the weights and scores. Results are based on observations from 168 patients. After further validation, the index can be used as a decision tool regarding staffing, comparison of performance across units and admission and/or occupancy policy studies over time.

(70 references) CH-P CHI-111(1976)

**Lipscomb, Joseph; Berg, Lawrence E.; London, Virginia L.; Nutting, Paul A.**

*Health Status Maximization and Manpower Allocation*

UNPUBLISHED, DURHAM, NORTH CAROLINA:DUKE UNIVERSITY, INSTITUTE OF POLICY SCIENCES AND PUBLIC AFFAIRS, 1976

A production function for health services is introduced in which output is related explicitly to alternative allocations of real resources among competing disease programs. Operationally, the model determines that allocation of labor inputs which results in the greatest aggregate expected improvement in health status. The latter concept is defined in the sense of Bush, except that here the disease process is modeled in a semi-Markovian, non-steady-state framework. The authors have implemented the model for two infant diseases that are highly prevalent among Indians in Arizona.

(43 references) AA-M CHI-112(1976)

**Martini, Carlos J.M.; Davison, Jan; Garroway, Mary; Allan, G.J. Boris; Backett, E. Maurice**

*The Impact of Medical Care on Health Outcome Indices Volumes I and II*

UNPUBLISHED, NOTTINGHAM, ENGLAND:UNIVERSITY OF NOTTINGHAM, DEPARTMENT OF COMMUNITY HEALTH, 1976

The main objective of this study was to determine the utility of health indices derived from existing health statistics for monitoring the quality and effectiveness of the present medical care system. The health indices chosen were various measures of outcome based on mortality and morbidity data. As these outcome measures reflect not only the impact of the medical care system but also the socio-economic and environmental characteristics of the population, it is necessary to determine which outcomes are most sensitive to variation in medical care if one is to identify ways in which improvements in medical care can be assessed. The analysis suggests that for monitoring the effectiveness of medical care in the community, it may be necessary to move away from the more "traditional" health indices towards measures that take into consideration the different patterns of care, and the relatively more important social and behavioral aspects of health.

(45 references) CH-P CHI-113(1976)

**Reynolds, W. Jeff; Miles, David L.; Rushing, William A.**

*Transition Among Function States: Preliminary Assessment*

PRESENTED AT THE NATIONAL CENTER FOR HEALTH SERVICES  
RESEARCH CONFERENCE ON HEALTH STATUS INDEX IN PHOENIX,  
ARIZONA, OCTOBER, 1976

Properly, health status reflects two analytically separable yet inter-related dimensions: "function status" and "prognosis." Function status refers to an individual's (or group's) level of behavioral functioning free of health-related limitations. Prognosis refers to the probability of movement to other function states. This paper demonstrates that the same factors which are differentially related to dysfunctionality are also differentially related to the probability of transition to other function states. Results are based on approximately 2,000 adults surveyed four times over a four year period.

(8 references) AA-M CHI-114(1976)

## **Applications**

**Dever, G.E. Alan; Barton, W. Scott; Caldwell, Anne A.; Carbone, Pam N.; Hopkins, Geneva; et al.**

*Infant Health Status: A Quality of Life Analysis*

ATLANTA, GEORGIA:HEALTH SERVICES RESEARCH AND STATISTICS SECTION, DIVISION OF PHYSICAL HEALTH SERIES 2, VOLUME 2, 1976

A health status index for infants, which has been used in Georgia, is described. A backward stepwise regression selects four of ten variables which impact on, or measure the quality of infant health care. The four are combined using 2 scores. These scores are plotted for each county in Georgia.

(9 references) CH-P CHI-115(1976)

**Diehr, Paula**

*Project Impact on Health Indices*

UNPUBLISHED, SEATTLE, WASHINGTON:UNIVERSITY OF WASHINGTON,  
1976

Six health status variables in three types of analysis are used to assess the outcome of health care consumers. Over 3,500 subjects were enrolled at various times in a prepaid group program. Of these, 1,500 were followed for three years, the remainder for shorter time periods. This design allows for comparison of initial health status with changes over time.

(7 references) CH-P CHI-116(1976)

**Miles, David**

*Innovations in Delivering Primary Care: The Lawrence County Health Care Project*

UNPUBLISHED, MOULTON, ALABAMA:1975

The major objective of the program was to achieve health status within one county in Alabama. The population was observed for three years; in spite of the resources implemented by this project, the health status of the county residents deteriorated. There is a growing view that only a modification of personal health behavior patterns will result in improved health status.

(14 references) CH-P CHI-117(1976)

**Surles, Kathryn B.; Johnson, Paul W.C.; Overby, Robert C.**

*An Empirical Study of Alternative Health Indexes*

UNPUBLISHED, RALEIGH, NORTH CAROLINA:DEPARTMENT OF HUMAN  
RESOURCES, DIVISION OF HEALTH SERVICES, 1976

The authors have attempted to evaluate four reported indexes by applying each of the methodologies to data representing a functional area called "conditions surrounding birth." Derived from a total of thirteen variables applicable to North Carolina's 100 counties, the four indexes cover a broad range of conceptual and computational complexity: the method of principal components, complete factor analysis, summed z scores and summed ranks. Results are presented in the form of mapped indexes, correlations between each index and each of the input variables, and correlations among the indexes.

(7 references) AA CHI-118(1976)

## RECENT PUBLICATIONS—NON-ENGLISH

**Averbukh, L.A.**

*Some Problematic Problems of Prospective Research into the Morbidity of the Population of Rural Districts*

SOVETSKOE ZDRAVOOKHRANENIE (12):10-14, 1975

A study of morbidity of the population is considered as the most labor consuming and expensive scientific investigation. Therefore, in their organization it is necessary to provide the maximal scientific effectiveness of such types of investigations during the estimation of methods and programs. It is expedient to obtain data not only testifying to the level and structures of morbidity but also substantiating the measures directed at the improvement of organizational forms of the medical service.

(0 references) AA-M CHI-119(1976)

**Beckers, R.F.**

*Health Status Indicators*

ARCHIVES BELGAS DE MEDECINE SOCIALE, HYGIENE, MEDECINE DU TRAVAIL ET MEDECINE LEGALE (BRUXELLES) 32(9-10): 553-569, 1974

(article in French) CHI-120(1976)

**Chapalain, Marie-Therese**

*La Construction d'indicateurs Nouveaux de Sante*

CAHIERS DE SOCIOLOGIE ET DE DEMOGRAPHIE MEDICALES 15(2):69-72, 1975

(article in French) CHI-121(1976)

**Dubinskaja, I.O.**

*Experiences With the Complex Study of Health Status in Preschool Children*

ZEITSCHRIFT FUR DIE GESAMTE HYGIENE UND IHRE GRENZGEBIETE (BERLIN) 20(12):867, 1974



For many years the phrase "a child is not an adult in miniature" has been a universally accepted truth. The study of the state of health during pre-school age is of eminent importance as positive and negative environmental influences will affect the child and its future development accordingly. The assessment of the state of health serves as a criterion of effectiveness and an indicator as to the sanitary measures to be adopted.

(references unavailable) AA CHI-122(1976)

**Ewert, G.; Steudtemann, D.**

*Empirical Research in Methodology for Estimating Health Conditions*

ZEITSCHRIFT FUR AERZTLICHE FORTBILDUNG (JENA) 69(19):1042-1047,  
1975

(article in German) CHI-123(1976)

**Il'in, B.N.**

*Method of Study and Evaluation of the Physical Development of Children*

SOVETSKOE ZDRAVOOKHRANENIE (MOSKVA) (8):52-57, 1975

Some methods used in the working out of standards of physical development and in the evaluation according to them of the children's health are discussed in the article. Shortcomings of these methods are demonstrated, in order to eliminate them the author gives some practical recommendations.

(references unavailable) AA CHI-124(1976)

**Kokosov, A.N.**

*Differentiation of the Terms "Health" and "Disease" by Studying the Pre-Morbid Condition*

KLINICHESKAIA MEDITSINA (MOSKVA) 52(3):143-146, 1974

(article in Russian) CHI-125(1976)

**Koshkina, E.A.**

*Dynamics of the State of Health in Children During the Seven Years of Life*

ZDRAVOOKHRANENIE ROSSIISKOI FEDERATSII (MOSKVA) (4):12-16,  
1975

(article in Russian) CHI-126(1976)

**Krasnik, Allan**

*Health Status in Population Groups: Indicators for Health and Disease*

UGESKRIFT FOR LAEGER 138(23):1417-1425, 1976

This article critically reviews various health status measures from the health planning and evaluation perspective. In pointing out the limitations of current measures (indexes), the author stresses that better indicators are required; specifically, methods which agree with the health needs and problems of Denmark should be developed. (21 references) AA-M CHI-127(1976)

**Kutsenko, G.I.; Timonov, M.A.; Krokhin, I.A.**

*State of Health and Physical Development of Adolescents of Surgut in the Tiumen Region*

SOVETSKOE ZDRAVOOKHRANENIE (MOSKVA) (8):50-52, 1975

The article presents summarized results obtained in studying the health status and physical development of adolescents in Surgut of the Tiumen region. A total of 1164 boys and girls, aged 15 to 18 years, have been followed up. The routine methods, which are usually employed in medical practice, have been used, the materials being treated statistically. Local standards for the physical development of individuals of both sexes in the 15 to 18 year age grouping have been elaborated for the first time according to the regression scale. Health measures directed at the improvement of medical service rendered to adolescents have been also worked out. (references unavailable) AA-M CHI-128(1976)

**Meira, Alfonso Renato; Marlet, Jose M.**

*Increase of the Discriminatory Ability of Health Indicator*

REVISTA DE SAUDE PUBLICA (SAO PAULO) 9(2):107-113, 1975

A study was made to demonstrate the increase of the discriminative power of two sanitary rates which are most easily calculated in all areas of the world: the general mortality rate and the infantile mortality rate. The manner to obtain this increase of discriminatory power consists in calculating the difference between the infantile mortality rate and the general mortality rate. Statistically analyzed and taking into consideration data from developed countries and those undergoing development during the same period, as well as throughout different periods, this difference was more discriminatory than any of the two separately and when used together with one or both, the power of discrimination is increased significantly. (8 references) AA CHI-129(1976)

**Menslova, M.; Miksl, R.; Kucherova, I.; Tsoufalova, G.**

*Use of a Questionnaire Method for Studying the State of Health of the Population*

GIGIENA I SANITARIJA (MOSKVA) (5):80-83, 1975

(article in Russian) CHI-130(1976)

**Notkin, E.L.**

*Method of Evaluation of the State of the Health of Small Industrial Collections*

GIGIENA I SANITARIJA (MOSKVA) (5):68-71, 1976

(article in Russian) CHI-131(1976)

**Serdjukovskaja, G.N.**

*Principles for the Evaluation of Health Status of Children and Adolescents in Serial Examinations*

ZEITSCHRIFT FUR DIE GESAMTE HYGIENE UND IHRE GRENZGEBIETE (BERLIN) 20(12):858-859, 1974

This article contains suggestions of value in assessing the state of health. The author proposes a possible method of grouping the children to be examined according to the degree of anomaly in the state of health.

(references unavailable) AA CHI-132(1976)

**Winter, K.; et al.**

*Basic Principles of Planning and Management in Health Services*

ZEITSCHRIFT FUR DIE GESAMTE HYGIENE UND IHRE GRENZGEBIETE (BERLIN) 20(10):709-714, 1974

Planning and management are based on the findings of Marxism-Leninism. Its general principles apply to all spheres of socialist society. Specific findings, in the present case those of medicine, are indispensable. These include the knowledge obtained from a continuous morbidity analysis. The significance of morbidity analysis, in planning and management is demonstrated by a few results obtained from an analysis of in-patient morbidity. To supplement this, the "patient's record" was developed to facilitate standardisation and unification, and for recording out-patient morbidity. Its principal features as well as the merits of this patient's record are described.

(references unavailable) AA CHI-133(1976)

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