

# **Clearinghouse on Health Indexes**

**Cumulated Annotations  
1978**

U.S. DEPARTMENT OF  
HEALTH AND HUMAN SERVICES  
Public Health Service

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**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**

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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 a subject index. Also to assure timeliness, these compilations are prepared in an informal format.

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cumulative volume is to provide health status researchers with a reference guide to the literature, both published and unpublished, which appeared during the preceding year.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. This is the fifth cumulation of the Clearinghouse bibliographies and includes material identified in 1978.

## 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.

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 use 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 the 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 abstractor's designation is the reference 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 1978)

## Current Contents: Social and Behavioral Sciences

Volume 10 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 following journals, in addition to Current Contents and Index Medicus, were searched for information on health indexes.*

American Behavioral Scientist  
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 American Academy of Political and Social Sciences  
Archives of Physical Medicine and Rehabilitation  
Behavioral Science  
British Journal of Sociology  
Canadian Journal of Public Health  
Community Health  
Computers and Biomedical Research

Contemporary Psychology  
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 Economic Literature  
Journal of Epidemiology and Community Health  
Journal of Gerontology  
Journal of Health Policy, Politics and Law  
Journal of Health and Social Behavior  
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 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  
Technology Review  
Theoretical Population Biology  
Topics in Health Care Financing



## RECENT PUBLICATIONS—ENGLISH

### Development—Conceptual

**Berg, Robert L.**

*Health Status Indexes as Evaluation Criteria*

IN, PRIORITIES FOR THE USE OF RESOURCES IN MEDICINE, BETHESDA, MARYLAND: NATIONAL INSTITUTES OF HEALTH, P.39-54, 1977

Outcomes of health care or social programs in terms of health status are important measures for allocating resources. Several models for assessing health status have been developed. The author describes the weighted life expectancy approach in which the weights are values placed on various conditions of life. Since health status indexes allow for comparison between different health programs, decision-makers need to become more familiar with such measures.

(12 references) CH-P REFERENCE NUMBER 1

**Boorse, Christopher**

*Health as a Theoretical Concept*

PHILOSOPHY OF SCIENCE 44(4):542-573, 1977

This paper argues that the medical conception of health as absence of disease is a value-free theoretical notion. Its main elements are biological function and statistical normality, in contrast to various other ideas prominent in the literature on health. Apart from universal environmental injuries, diseases are internal states that depress a functional ability below species-typical levels. Health as freedom from disease is then statistical normality of function, i.e., the ability to perform all typical physiological functions with at least typical efficiency. This conception of health is as value-free as statements of biological function. The view that health is essentially value-laden, held by most writers on the topic, seems to have one of two sources: an assumption that health judgments must be practical judgments about the treatment of patients, or a commitment to "positive" health beyond the absence of disease. I suggest that the assumption is mistaken, the commitment possibly misdescribed.

(40 references) AA REFERENCE NUMBER 2

**Breckenridge, Karen**

*Medical Rehabilitation Program Evaluation*

ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION 59(9): 419-423, 1978

This paper reviews the issues currently being raised by third party payers, Professional Standards Review Organizations (PSROs), government agencies, accrediting bodies, and consumers regarding accountability and program evaluation, and suggests tools which could be utilized when establishing mechanisms for systematic evaluation of medical rehabilitation programs. Program evaluation encompasses considerations relative to efficiency, quality assessment and effectiveness or outcome measurements. This paper suggests several systems which a rehabilitation facility may find helpful when considering the best combination of evaluative tools for its program. A functional status classification system which encompasses a combination of previously reported classification approaches and other measurement tools will be discussed.

(11 references) AA REFERENCE NUMBER 3

**Broome, John**

*Trying to Value a Life*

JOURNAL OF PUBLIC ECONOMICS 9(1):91-100, 1978

In this paper the author claims to have demonstrated that if an attempt is to be made to fix a monetary value on life, it is quite wrong to do it on the basis of people's evaluations of probabilities of death. Also, because the monetary compensation required for loss of life is infinite, cost benefit analysis will be inapplicable for judging any proposal involving deaths.

(1 reference) CH-P REFERENCE NUMBER 4

**Brown, Robert**

*Physical Illness and Mental Health*

PHILOSOPHY AND PUBLIC AFFAIRS 7(1):17-38, 1977

This article discusses concepts involved in defining and measuring physical and mental health. Among the issues addressed are the ability to distinguish between positive health and disease and the appropriateness of the physical health model for assessing mental health.

(6 references) CH-P REFERENCE NUMBER 5

**Bruhn, John G.; Cordova, F. David**

*A Developmental Approach to Learning Wellness Behavior Part II: Adolescence to Maturity*

HEALTH VALUES:ACHIEVING HIGH-LEVEL WELLNESS 2(1):16-21, 1978

This paper discusses how wellness behavior can be learned in the period of human development from adolescence to maturity. The author divides this broad interval into the stages of adolescence, early adulthood, middle adulthood and maturity; Erickson's stages of development are the model for this division. Learning wellness behavior is viewed as a continuing process.

(14 references) CH-P REFERENCE NUMBER 6

**Burton, Richard M.; Dellinger, David C.; Damon, William W.; Pfeiffer, Eric A.**

*A Role for Operational Research in Health Care Planning and Management Teams*

JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY 29(7):633-641, 1978

This paper describes a research team's effort in which a formal mathematical model played an integrating and coordinating role for a multidisciplinary team which included operational researchers, economists, nurses and social scientists. This model includes a Technology Matrix, or impact status; this is modeled as a matrix of transition probabilities in a Markov chain. Costs of producing services to the estimated impact of services on the target population are linked in the conceptual model. The paper is an interpretative history of the OARS (Older Americans Resources and Services) project, its development and results which emphasizes the role of the formal model in the conduct of the project.

(17 references) AA-M REFERENCE NUMBER 7

**Campbell, Angus**

*Poor Measurement of the Right Thing*

IN, PROCEEDINGS OF THE SOCIAL STATISTICS SECTION: 1977 PART I, GOLDFIELD, EDWIN D. (EDITOR) WASHINGTON, D.C.:AMERICAN STATISTICAL ASSOCIATION, PP. 120-122, 1978

A society as committed to the values of human rights and civil liberties as ours cannot hope to represent the quality of its national life adequately by counting the usual economic and sociological indicators. Rather, a common unit which will measure both objective products and subjective utilities must be found. In addition to those accounts which deal with the standard of living and the objective

circumstances of life, this unit will form the basis for a set of accounts designed to relate the subjective experience of life.

(0 references) CH-P REFERENCE NUMBER 8

**Card, W.I.; Mooney, G.H.**

*What Is the Monetary Value of a Human Life?*

BRITISH MEDICAL JOURNAL 2(6103):1627-1629, 1977

The resources available to the health service are limited and so the amount the National Health Service (NHS) can spend on saving human life is also limited. Rational allocation of resources requires a decision theory model which in turn demands some monetary valuation of human life. Each of three approaches discussed—basing value on productive capacity, the NHS's implied values, or individuals' values—rests on an underlying set of non-monetary values. Choice of the underlying value will determine the method to be used in placing a monetary value on life. As the Health Service implicitly places certain values on life already, a means of making this valuation more rational and explicit can only improve the quality and quantity of health care.

(18 references) AA REFERENCE NUMBER 9

**Chen, Martin K.**

*A General Index of Health: Some Problems and Desirable Characteristics*

IN, PROCEEDINGS OF THE SOCIAL STATISTICS SECTION: 1977 PART II, GOLDFIELD, EDWIN D. (EDITOR), WASHINGTON, D.C.:AMERICAN STATISTICAL ASSOCIATION, PP. 678-681, 1978

The author provides a brief review of the underlying concepts involved in developing a composite measure of health status. Topics discussed are the problems of defining health such that the definition is satisfactory to both the scientific community and the general population. Methodological difficulties of operationalizing the concept of positive health, as opposed to disease, are outlined. After noting the difficulties in quantifying health, the author points out desirable attributes which pertain to its feasibility of application, validity and reliability and its sensitivity to changes in the underlying health status.

(16 references) CH-P REFERENCE NUMBER 10

**Comaroff, J.**

*Medicine and Culture: Some Anthropological Perspectives*

SOCIAL SCIENCE AND MEDICINE 12B(4):247-254, 1978

Social anthropologists have emphasized that the distinction between bio-medicine and ethno-medicine is as salient in our culture as it is in any other. Thus, for example, Western "folk" classifications of illness do not necessarily conform to bio-medical models; as in other folk

systems, physical illness and psycho-social malaise are not clearly differentiated. In short, Western medical practice must be viewed as a problematic socio-cultural system whose form and substance, for both specialist and layman, cannot be taken for granted. Once this assumption is made, anthropological concepts yield significant insights into the symbolic dimension of therapeutic activities; they also may explain persisting logical discontinuities in these activities and the beliefs which inform them. Finally, such symbolic analyses illuminate a universal feature of the healing process: the provision of codes for 1) re-ordering disrupted relations between the patient's physical and social states; and 2) rendering sensible his apparently chaotic experience.

(54 references) AA REFERENCE NUMBER 11

**Cook, Philip J.**

*The Value of Human Life in the Demand for Safety: Comment*

AMERICAN ECONOMIC REVIEW 68(4):710-711, 1978

A 1976 article by Bryan Conley, published in American Journal of Economics 66(March):45-55, provided a theoretical justification for using labor earnings rather than "willingness-to-pay" as a measure of the value of life. The main purpose of this comment is to provide a relatively transparent derivation of Conley's major theoretical result which avoids the complexities of this multiperiod model.

(9 references) CH-P REFERENCE NUMBER 12

**Cropper, M.L.**

*Health, Investment in Health, and Occupational Choice*

JOURNAL OF POLITICAL ECONOMY 85(6):1273-1294, 1977

This paper presents two models of investment in health which explicitly recognize the random nature of illness and death. The first model examines life-cycle behavior of investment and health capital when the motive for investing in health is to decrease the probability of illness. In the second model the individual invests in health through his choice of occupation. This determines the extent of his exposure to a pollutant, such as asbestos, which increases the probability of death. The model examines how exposure to pollution should vary with age and predicts how workers should respond to information about occupational dangers.

(5 references) AA REFERENCE NUMBER 13

**Donabedian, Avedis**

*Needed Research in the Assessment and Monitoring of the Quality of Medical Care*

HYATTSVILLE, MARYLAND: NATIONAL CENTER FOR HEALTH SERVICES RESEARCH, (PUBLICATION NUMBER PHS 78-3219), 1978

There is much about the concept of quality that is elusive, undefined and unmeasured. It is the author's view that the effort to examine critically what is being done and to find new and better ways of doing it should not be relaxed. Towards this end, this report presents a general framework which explores the choice of research topics and their organization into a classification and indicates what subjects are excluded from classification. In addition, a catalogue of needed research that is sufficiently organized to avoid being a mere haphazard listing of things is given.

(150 references) CH-P REFERENCE NUMBER 14

**Donald, Cathy A.; Ware, John E., Jr.; Brook, Robert H.; Davies-Avery, Allyson**

*Conceptualization and Measurement of Health for Adults in the Health Insurance Study: Vol. IV, Social Health*

SANTA MONICA, CALIFORNIA:RAND CORPORATION, (REPORT NUMBER R-1987/4-HEW), 1978

Social health status is measured annually in the Health Insurance Study (HIS) to test hypotheses regarding the effects of differences in coinsurance and deductibles in a comprehensive health insurance benefits package and differences in use of medical care services on individual health status. This report presents a review of the literature performed to clarify the meaning of social health as it has been viewed by others and the utility of the construct in theory, and to identify major issues involved in developing and validating social health measures. It also describes the conceptualization and measurement of social health used in the HIS and presents plans for analyzing the variability, reliability, and validity of the scores they yield. Because the enrollment Medical History Questionnaire fielded in the first HIS site did not include measures explicitly constructed to assess social health, this report contains no data on social health from the HIS.

(69 references) AS-M REFERENCE NUMBER 15

**Farr, Robert M.**

*Heider, Harre and Herzlich on Health and Illness: Some Observations on the Structure of 'Representations Collectives'*

EUROPEAN JOURNAL OF SOCIAL PSYCHOLOGY 7(4):491-504, 1977

Heider's notions of attribution are presented as a theoretical underpinning for the empirical findings of Herzlich concerning health and illness. Her methodology is treated as a good example of the "new" methods advocated by Harre and Secord - the collection of naive unnegotiated accounts. It is suggested that the potential for attributional artifacts is present when an investigator invites laymen to discuss issues which have favourable as well as issues which have unfavourable outcomes and then accepts their "accounts" at face value. Favourable outcomes tend to be attributed to the self and unfavourable

ble to the environment. The self is seen as the source of health and the environment as the source of illness. Evidence, from other areas of research, supporting this interpretation is presented. In conclusion, it is argued that Herzlich's data more neatly exemplify the structure of Lewin's psychological life-space than they do that of Durkheim's "representations collectives".

(16 references) AA REFERENCE NUMBER 16

**Frost, C.E.B.**

*Clinical Decision-Making and the Utilization of Medical Resources*

SOCIAL SCIENCE AND MEDICINE 11(17-18):793-799, 1977

The theory of individual decision-making under uncertainty may be used as a basis for the development of utilization models. It is shown that decisions taken on one patient, and in particular the search for a diagnosis, may all be explained. A marginal patient is defined and certain reasons for changes in the identity of the marginal patient are considered. Finally, some implications for the evaluation of policy changes in the National Health Service are noted.

(12 references) AA-M REFERENCE NUMBER 17

**Greenfield, Sheldon; Solomon, Nancy E.; Brook, Robert H.; Davies-Avery, Allyson**

*Development of Outcome Criteria and Standards to Assess the Quality of Care for Patients With Osteoarthritis*

JOURNAL OF CHRONIC DISEASES 31(6/7):375-388, 1978

This paper presents results of the first step in assessment of quality of care for patients with osteoarthritis using short-term outcome measures, where "short-term" indicates within one year of the initial encounter for care. An expert panel used an extensive literature review and clinical judgment to select outcome criteria and develop standards. Short-term outcome criteria thought to be sensitive to variations in quality of care include: functional capacity, pain level, medication use, results of surgery, participation in usual social activities, drug dependence, outlook on life, depression, anxiety, sexual function, economic dependence, and satisfaction with marital relationship. Panel members also identified clinical and sociodemographic variables that must be controlled for when comparing outcomes of groups of patients. In addition, criteria for selecting patients for whom these outcome criteria and standards are applicable and the appropriate times for outcome assessment are discussed. The authors conclude that outcome measures should be evaluated in field trials to determine their usefulness in assessment of quality of care for patients with osteoarthritis.

(31 references) AA REFERENCE NUMBER 18

Holland, W.W.; Ipsen, J.; Kostrzewski, J. (editors)

*Measurement of Levels of Health*

COPENHAGEN, DENMARK:WORLD HEALTH ORGANIZATION, REGIONAL OFFICE FOR EUROPE, 1979

In recent years there has been growing concern about the evaluation of health services, programs and clinical procedures. Since it is of primary importance that proper measurements, which are both technically relevant and operationally feasible, should be available for use in evaluation, WHO and the International Epidemiological Association have prepared a publication on the measurement of levels of health. This publication is designed to be of use to all those concerned with decision-making in health matters.

(references unknown) AS-M REFERENCE NUMBER 19

Jones-Lee, M.W.

*The Value of Human Life in the Demand for Safety: Comment*

AMERICAN ECONOMIC REVIEW 68(4):712-716, 1978

This note comments on Bryan Conley's March 1976 paper in the American Journal of Economics 66 (March):45-55. Specifically, the author shows that while Conley has correctly identified a sufficient condition on individual preferences for the value of life to exceed wealth, his theoretical argument contains nothing to indicate that such a condition is typically met, and that Conley's model suffers from a number of limitations.

(12 references) CH-P REFERENCE NUMBER 20

Jones-Lee, M.W.

*The Value of Life: An Economic Analysis*

CHICAGO, ILLINOIS:THE UNIVERSITY OF CHICAGO PRESS, 1976

This book has two primary objectives. The first is to pose the question of the value of life and safety improvement in a form that makes it amenable to analysis using the conceptual apparatus of economic theory. The second major objective is to develop an analytic framework within which the question, having been appropriately formulated, can then be answered, first at a qualitative and then at a quantitative level. An attempt has been made to build up the technical complexity of the argument in a gradual manner. The essential ideas underlying the mathematical expressions should be accessible to the majority of well trained undergraduates.

(89 references) AS-M REFERENCE NUMBER 21



**Kennedy, Leslie W.; Northcott, Herbert C.; Kinzel, Clifford**

*Subjective Evaluation of Well-Being: Problems and Prospects*

SOCIAL INDICATORS RESEARCH 5(4):457-474, 1978

This paper discusses some of the substantive and methodological pitfalls that arise in the subjective evaluation of well-being. The discussion includes illustrative references to the empirical findings of the 1977 Edmonton Area Study. Issues discussed include (1) specific, domain, and global measures; (2) objective states and subjective perceptions; (3) micro and macro units of analysis; and (4) the problem of cultural relativism. It is concluded that it is not yet possible to delineate a simple set of social indicators for use by policy-makers and social planners. Accurate assessment of social well-being currently requires the study of demographic and objective states together with cognitive and evaluational responses and also requires assessment not only at the global "general satisfaction" level but also at more specific levels of analysis.

(15 references) AA REFERENCE NUMBER 22

**Kent, Saul**

*Measuring Human Health and Aging*

GERIATRICS 33(6):108-111, 1978

The ability to quantify the health of an individual in numerical terms and measure precisely the extent of the aging process would enable physicians to realistically assess the efficacy of a given therapy. The author discusses one measure which is based on the patient's weight loss within a controlled environment.

(7 references) AA-M REFERENCE NUMBER 23

**Kleinman, Arthur**

*Concepts and a Model for the Comparison of Medical Systems as Cultural Systems*

SOCIAL SCIENCE AND MEDICINE 12:85-93, 1978

The major structural and functional aspects of the health care system model are briefly sketched. Clinical realities, explanatory model transactions in health care relationships, a distinction between disease/illness, cultural healthing and cultural iatrogenesis, and the core adaptive tasks of health care systems are concepts based on this model which have practical clinical and public health, as well as research, implications. The model, concepts and hypotheses attempt to exploit medical anthropology's fundamental tension between medical and anthropological interests; and thereby to contribute to the development of theory that is original to this discipline.

(56 references) AA-M REFERENCE NUMBER 24

**Krischer, Jeffrey P.**

*Measuring Trauma Severity: The ESP Index*

HEALTH SERVICES RESEARCH 13(1):61-65, 1978

Some characteristics with respect to reliability, validity and data requirements for the ESP (Estimated Survival Probability) index described by Levy and his colleagues, Clearinghouse Bibliography No. 1, 1978, are discussed. The author points out several limitations which should be considered in deciding to use this index.

(7 references) CH-P REFERENCE NUMBER 25

**Levine, Sol; Kozloff, Martin A.**

*The Sick Role: Assessment and Overview*

ANNUAL REVIEW OF SOCIOLOGY 4:317-344, 1978

Working with Parsons' sick role concept over the years has revealed several conceptual and methodological problems: 1) writers often differ in their fundamental assumptions regarding the nature and existence of illness and how we may know about it; 2) there are at least two levels of analysis, through the eyes of the actor and of the observer; and 3) the nature of the data is thought to be uneven and highly variable. In all, over 100 articles and books are reviewed in this article. Parsons' sick role model has been useful, but the authors believe that it is time to expand, to learn more about the social behavior of the sick person.

(133 references) CH-P REFERENCE NUMBER 26

**Levy, Emile**

*The Search for Health Indicators*

INTERNATIONAL SOCIAL SCIENCE JOURNAL 29(3):433-463, 1977

The developed countries are now concerned about having a profile of social indicators which can assess national welfare. Health indicators, which are generally based on a specific system and have long been used, are often considered to be the best social indicators. The author suggests that this assessment of health status measures may be overly optimistic. Concepts involved in measuring health, including the validity of traditional indicators such as mortality, are discussed in terms of experience with the French health care system.

(16 references) CH-P REFERENCE NUMBER 27

**Lind, Gifford; Wiseman, Colin**

*Setting Health Priorities: A Review of Concepts and Approaches*

JOURNAL OF SOCIAL POLICY 7(4):411-440, 1978

The setting of health priorities is primarily concerned with the equitable distribution of resources and is now more than ever an important part of strategic planning within the National Health Service (NHS). The basic information which can be used to assist in such decision-making and the process by which different agencies become involved are important aspects of priority-setting; this article is based on a major review of the research literature on these aspects and provides a discussion and an analysis of experience within health and other fields. From the limited review of health index literature, the authors propose that research on indexes may be useful in stimulating discussion about the nature of ill health, the impact of different service interventions and also the relevance of this sort of information to priority setting.

(64 references) AA-M REFERENCE NUMBER 28

**McAuliffe, William E.**

*Studies of Process-Outcome Correlations in Medical Care Evaluations: A Critique*

MEDICAL CARE 16(11):907-930, 1978

The validity of process evaluations of medical care has been challenged by a number of studies which purport to show that process and outcome measures are unrelated. However, each of the studies had numerous methodological flaws which biased their results against finding a relationship: either their outcome measures had questionable validity, their research designs were inappropriate, or the statistical analyses were poorly conceived. Better studies have found significant, although modest, correlations between process and outcome measures. Since the validity of outcome measures has never been determined, there is little reason at present for believing that outcome measures are more valid than process measures.

(39 references) AA REFERENCE NUMBER 29

**McCormick, Richard A.**

*The Quality of Life, The Sanctity of Life*

HASTINGS CENTER REPORT 8(1):30-36, 1978

This article reviews seven philosophical viewpoints on the formulation of basic principles and criteria of life preservation in clinical settings, with special focus on the terminology of ordinary/extraordinary. The author argues that those cases when life has not been viewed as a value in and of itself ought to be identified in order to make decisions about when and when not to use life sustaining technologies. If this is possible, quality of life judgments can be made in a way that both expresses and reinforces our concern for the sanctity of life.

(17 references) CH-P REFERENCE NUMBER 30

**Means, Robert; Akridge, Robert L.**

*Psychological and Behavioral Adjustment: A Model of Healthy Personing*

JOURNAL OF REHABILITATION 44(1):24-29, 1978

A model which specifies three major dimensions of the content of healthy personing is proposed. Beliefs are the major organizing concepts which imply certain values, and values imply certain skills. The beliefs, values and skills which constitute a critical sample of the contents of personal adjustment, as well as training modules related to this model, are presented. The purpose of this model is to assist in the organization of rehabilitation adjustment services.

(2 references) CH-P REFERENCE NUMBER 31

**Moberg, David O.; Brusek, Patricia M.**

*Spiritual Well-Being: A Neglected Subject in Quality of Life Research*

SOCIAL INDICATORS RESEARCH 5(3):303-320, 1978

The social indicators and quality of life (QOL) movements have given scant attention to religiosity, in spite of theoretical and empirical evidence that it is related to personal and social well-being. Reasons for this include the constitutional provisions pertinent to religion, problems of funding, the lack of measuring instruments, conceptual and theoretical difficulties, biases of researchers, and the lack of consensus regarding the definition of QOL. A partial solution to this neglect is to engage in conceptual, theoretical, qualitative, and empirical research on spiritual well-being (SWB). The authors indicate its potential and some initial steps toward bringing SWB into the QOL movement.

(64 references) AA REFERENCE NUMBER 32

**Monge, Carlos**

*Ecology and Health*

BULLETIN OF THE PAN AMERICAN HEALTH ORGANIZATION 12(1): 7-10, 1978

Health in any society should be defined in terms of prevailing ecological conditions—that is, in terms of the cultural and environmental variables affecting the population. This implies that instead of setting universal health standards we should ask how to define a satisfactory health level for a given set of conditions—and then look into ways to achieve that level.

(2 references) AA REFERENCE NUMBER 33

**Mooney, Gavin H.**

*The Valuation of Human Life*

LONDON, ENGLAND:MACMILLAN PRESS LIMITED, 1977

This book comprises our attempt to examine how we might set about answering the question: how much is society prepared to pay to reduce mortality; or more brutally, what is the value of human life? The justification for attempting to answer such questions lies in the desirability of injecting increased explicitness and rationality into decisionmaking in those areas of the public sector which are concerned with life saving. At the present time, at least by implication, values are being placed by decisionmakers on the saving of life. This book is written at such a level as not to be insulting to economists, whereas at the same time it should not be too daunting to health care administrators.

(96 references) CH-P REFERENCE NUMBER 34

**Muiznieks, Vilnis E.**

*A Review of the Canada Health Survey*

CANADIAN JOURNAL OF PUBLIC HEALTH 69(3):204-207, 1978

The Canadian Health Survey is designed to fulfill the need for better data on the health status of the population and to provide information on the antecedents and consequences of that health status. This article discusses the type of information to be collected, the data collection components which comprise both questionnaires and physical measures as well as the sampling design and sample size. Outputs of the survey are expected to benefit individual health professionals, health agencies and organizations, as well as provincial and federal governments.

(8 references) CH-P REFERENCE NUMBER 35

**Mushkin, Selma J.; Dunlop, David W. (editors)**

*Health: What Is It Worth? Measures of Health Benefits*

NEW YORK, NEW YORK:PERGAMON PRESS, 1979

This book is the result of speeches presented at a 1977 workshop which addressed the quality of life aspects of biomedical research. Those speeches which are relevant to health indexes have been published in the 1977 volume of the Clearinghouse annotated bibliography series, Cumulated Annotations, 1977.

(248 references) CH-P REFERENCE NUMBER 36

**Mushkin, Selma J.**

*Health Indexes for Health Assessments*

IN, HEALTH: WHAT IS IT WORTH? MEASURES OF HEALTH BENEFITS, MUSHKIN, SELMA J.; DUNLOP, DAVID W. (EDITORS), NEW YORK, NEW YORK:PERGAMON PRESS, PP. 315-338, 1979

The author addresses three questions about the measurement of health outcomes as it relates to health policy and especially to biome-

dical research. First, gradations in levels of health and well-being are discussed. Criteria for a desirable index are given along with the function levels of a measure developed by the author for evaluating lung disease. Secondly, the willingness-to-pay valuation method is recommended over the human capital approach for assessing the value society places on various health outcomes. Thirdly, the author discusses both function levels and social valuation in terms of their role in resource allocation.

(32 references) CH-P REFERENCE NUMBER 37

**Natsoulas, Thomas**

*Residual Subjectivity*

AMERICAN PSYCHOLOGIST 33(3):269-283, 1978

Any effort psychology may make to encompass the fact of subjectivity will oblige it to accept neither (a) a metaphysical subject of experience nor (b) a field of experience which belongs to no man. But even physicalism in regard to the relation of mind to body must recognize the existence of a certain residual subjectivity. All knowledge about the world (including experience) is a knowledge of its structural properties. It follows that a thoroughly objective psychology need not omit any mental event process or state. It is argued specifically that perceptual theory requires reference to the qualitative aspect of immediate experience as representing an essential function in perceptual awareness of the physical environment.

(58 references) AA-M REFERENCE NUMBER 38

**Nuyens, Y.**

*Health Indicators: Paper 18 of the National Health Survey Systems in the European Community Conference*

LUXEMBOURG:COMMISSION OF THE EUROPEAN COMMUNITIES, 1977

This paper discusses the concept and uses of indicators; and the various conceptualizations of health. It goes on to define what is meant by the term health indicator, and discusses in detail the different indicators of distinct aspects of health which should be developed. It concludes by describing a research project, currently in progress in Belgium, which has been designed to provide data from which such indicators can be constructed.

(9 references) AS REFERENCE NUMBER 39

**Pflanz, Manfred; Keupp, Heinrich**

*A Sociological Perspective on Concepts of Disease*

INTERNATIONAL SOCIAL SCIENCE JOURNAL 29(3):386-396, 1977

Concepts of disease express views on different issues. In most cultures five features can be distinguished: (a) the general delineation of

disease as distinct from other events (including its definition and interpretations); (b) manifestations of disease—the organization of signs and symptoms into distinct disease patterns; (c) general and specific classifications of disease; (d) causes of disease; (e) moral and other value implications of diseases. Disease is always considered as good or bad, disruptive or integrative, holy or devilish. Its moral implications are of concern to the individual as to society; they relate to the causes, manifestations, meaning, and consequences of disease.

(12 references) CH-P REFERENCE NUMBER 40

**Rosser, Rachel; Watts, Vincent**

*The Measurement of Illness*

JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY 29(6):529-540,  
1978

An operational objective for services which contribute to the health of a community is defined and its value estimated from available data. It is shown that data on states of illness add little information to mortality statistics at the community level. This contrasts with evidence from earlier work of the value of data on states of illness for measurement of hospital output.

(22 references) AA REFERENCE NUMBER 41

**Sawyer, Darwin O.**

*Review Essay: Social Roles and Economic Firms: The Sociology of Human Capital*

AMERICAN JOURNAL OF SOCIOLOGY 83(5):1259-1270, 1978

The author reviews the development of current economic and sociological theory, especially with regard to human capital economics and human behavior. These two fields share substantial subject matter in common, which is cause for encouraging greater cooperation. Moreover, many conceptual features of the two models appear to be complementary, providing hope that combining resources would more than compensate each for the costs of furthering mutual understanding.

(18 references) CH-P REFERENCE NUMBER 42

**Shin, D.C.; Johnson, D.M.**

*Avowed Happiness as an Overall Assessment of the Quality of Life*

SOCIAL INDICATORS RESEARCH 5(4):475-492, 1978

The concept of happiness has been mistakenly identified with feelings of pleasure in recent studies of quality of life. This paper clarifies the meaning of the concept "happiness" and establishes grounds for its proper use in scholarly research. In addition, an empirical test of four major accounts of happiness derived from a careful review of philo-

sophical and empirical literature is undertaken to propose a theory of happiness. The theory suggests that happiness is primarily a product of the positive assessments of life situations and favorable comparisons of these life situations with those of others and in the past. The various personal characteristics of an individual and the resources in his command, such as sex, age and income, influence happiness mostly through their effects upon the two psychological processes of assessment and comparison.

(39 references) AA REFERENCE NUMBER 43

**Smith, Becky J.**

*An Analytical Study of Selected Writings and Their Relationship to Health*

JOURNAL OF SCHOOL HEALTH 48(6):366-370, 1978

An identification of the central characteristics and concepts of health has evolved over years of study by individuals and groups within the field of health education. These philosophical discussions about health have been expressed in the investigations and writings of such people and groups as: Jesse F. Williams, Anne Whitney, C.E. Turner, Mable S. Rugen, Delbert Oberteuffer, Howard Hoyman and the Commission on Philosophy for School Health Education, 1962. This study was designed to build upon the understanding of these fundamental characteristics of health as they are reflected in the writings of philosophical thinkers from a variety of other fields of study.

(19 references) CH-P REFERENCE NUMBER 44

**Stark, Evan**

*The Epidemic as a Social Event*

INTERNATIONAL JOURNAL OF HEALTH SERVICES 7(4):681-705, 1977

The concept of disease causation has changed twice, first from natural to social determining factors and, second, from determination by social conditions to determination by stressful social relations. These changes roughly parallel the emergence of industrial capital and its change from a highly individualistic and competitive process to a "social" process. In this article, "epidemics" are treated as social events that occur amidst these changes in disease and the economic organization of society. Despite the mystification of social etiology by medicine, the identity of the disease process with more general means of social reproduction indicates that illness is now "endopolic," the product not of nature but of historically specific political and economic decisions and processes.

(84 references) AA-M REFERENCE NUMBER 45



Stewart, Anita L.; Ware, John E., Jr.; Brook, Robert H.; Davies-Avery, Allyson

*Conceptualization and Measurement of Health for Adults in the Health Insurance Study: Vol. II, Physical Health in Terms of Functioning*

SANTA MONICA, CALIFORNIA:RAND CORPORATION, (REPORT NUMBER R-1987/2-HEW), 1978

This volume contains an investigation into the conceptualization and measurement of health in terms of functioning. It includes: 1) a review of the literature done to identify issues involved in measuring physical health in terms of functioning that needed to be addressed during development of Health Insurance Study (HIS) measures and to provide a framework for discussion of HIS measures; 2) a description of the conceptualization and measurement of physical health in terms of functioning adopted in the HIS and results of the administration of these measures in the first HIS site (Dayton, Ohio); and 3) recommendations about how these measures could be used in other studies and what further methodologic work is needed to improve these measures.

(56 references) AS-M REFERENCE NUMBER 46

Ware, John E., Jr.; Davies-Avery, Allyson; Donald, Cathy A.

*Conceptualization and Measurement of Health for Adults in the Health Insurance Study: Vol. V, General Health Perceptions*

SANTA MONICA, CALIFORNIA:RAND CORPORATION (PUBLICATION NUMBER R-1987/5-HEW), 1978

Self-ratings of general health are obtained annually in the Health Insurance Study (HIS) to test hypotheses regarding the effects of differences in coinsurance and deductibles in a comprehensive health insurance benefits package, and of differences in use of medical care services on individual health status. This volume discusses the conceptualization and measurement of general health perceptions, including: (1) a review of the literature on general health rating measures developed before the Health Perceptions Questionnaire (HPQ) which was selected for use in the HIS; (2) results of psychometric studies of the HPQ in general populations other than that enrolled in the HIS; and (3) plans for evaluating the measurement of general health perceptions in the HIS and for testing experimental hypotheses. Because scales explicitly constructed to measure general health perceptions were not included in the enrollment Medical History Questionnaire in the first HIS site, this volume contains no data on general health perceptions from the HIS.

(63 references) AS-M REFERENCE NUMBER 47

Weitzman, Murray S.

*The Developing Program on Social Indicators at the U.S. Bureau of the Census*

SOCIAL INDICATORS RESEARCH 6(2):239-249, 1979

The Bureau of the Census is beginning a modest but coordinated effort in the field of social indicators and associated activities. The Bureau intends to: 1) consolidate and extend the development of the concepts and principles advanced previously relating to social indicators; 2) continue and expand the efforts and communication network established in connection with the preparation of the Social Indicators 1973 and 1976 reports; 3) engage in the systematic identification and assembly of various information sources which can contribute to social indicator and social accounting development; 4) establish the basic analytic framework of detailed interrelated social accounts that can be aggregated or disaggregated to appropriate levels of abstraction; and 5) prepare research and analytic studies and make available information generated from the social indicator and social accounting efforts at the Bureau.

(0 references) AA-M REFERENCE NUMBER 48

**Whitbeck, Caroline**

*Causation in Medicine: The Disease Entity Model*

PHILOSOPHY OF SCIENCE 44(4):619-637, 1977

This paper examines the way in which causal relations are understood in the dominant model in contemporary medicine. It argues that the causal relation is not definable in terms of the condition relation, but that in general for conditions of an occurrence to be among its causes they must answer instrumental interests in a certain way, and there are further criteria for distinguishing "the" cause of a disease (i.e., its etiological agent) from other causal factors, which are based upon instrumental interests peculiar to medicine. It also argues that diseases are complex processes of which both clinical and underlying patho-physiological manifestations are proper parts (as contrasted with effects).

(19 references) AA REFERENCE NUMBER 49

**Williams, R.G.A.**

*Disability Scales*

JOURNAL OF THE ROYAL SOCIETY OF MEDICINE 71(1):56-57, 1978

Guttman scaling is discussed as a way of eliciting the sequential ordered structure which the author posits is a basic premise of disability, namely, that patients will be subject to social pressure to conform to a definite sequence of behavior in deterioration or recovery, a sequence which is uniform for patients of a given social category, as recognized by their own social group. An example is given which illustrates the order in the data which is both cumulative and unidimensional. According to the author, the scales are not only of theoretical importance, but they also offer a simple and objective measurement of a handicap.

(1 reference) CH-P REFERENCE NUMBER 50

Woodbury, Max A.; Clive, Jonathan; Garson, Arthur, Jr.

*Mathematical Typology: A Grade of Membership Technique for Obtaining Disease Definition*

COMPUTERS AND BIOMEDICAL RESEARCH 11(3):277-298, 1978

This paper describes a model based on fuzzy set-theoretic concepts for quantitatively identifying and characterizing subpatterns of illness within a broad disease class, based on the analysis of discrete clinical variables. Methodological and background matters are discussed, followed by derivation of maximum likelihood estimates of the model components. A numerical example from a study of patients with a type of congenital heart disease is presented.

(36 references) AA REFERENCE NUMBER 51

## Development—Empirical

Achterberg, Jeanne; Lawlis, G. Frank; Simonton, O. Carl; Matthews-Simonton, Stephanie

*Psychological Factors and Blood Chemistries as Disease Outcome Predictors for Cancer Patients*

MULTIVARIATE EXPERIMENTAL CLINICAL RESEARCH 3(3):107-122, 1977

The relationship between blood chemistries and psychological variables was studied in a population of cancer patients, the majority of whom had been diagnosed with incurable disease. The results of the analysis yield at least three basic conclusions: (1) blood chemistries tend to reflect ongoing or concurrent disease state; (2) there is a statistical relationship between psychological variables and blood chemistries; and (3) psychological factors are predictive of subsequent disease status. However, these relationships are multidimensional and too complex to be considered either causative or reactive at this time. The results are impressive in that blood chemistries offer information only about the current state of the disease, whereas the psychological variables offer future insights.

(14 references) AA-M REFERENCE NUMBER 52

Albrecht, Gary L.; Harasymiw, Stefan J.

*Evaluating Rehabilitation Outcome by Cost Function Indicators*

JOURNAL OF CHRONIC DISEASES 32(7):525-533, 1979

This paper presents a general cost/function indicator method for evaluating the treatment effectiveness and costs of comprehensive medical rehabilitation. A multidimensional outcome indicator is developed which is applicable over time to patients who have received rehabilitation services. This indicator is a composite measure of functional gain per dollar cost of services and does not assume that an individual is or will be income productive. The indicator is applied to

a national sample of 230 severely disabled spinal cord and focal cerebral patients treated at ten leading comprehensive rehabilitation centers located across the continental United States. Analysis of the sample indicates that treatment and management, not demographic, variables influenced rehabilitation success; comprehensive medical rehabilitation centers have very different levels of cost/effectiveness; cost/effectiveness differed by homogeneous groups treated; and the indicator developed in this paper has wider applicability and utility than other traditional measures of rehabilitation outcome.

(31 references) AA REFERENCE NUMBER 53

**Andersen, Ronald**

*Health Status Indices and Access to Medical Care*

AMERICAN JOURNAL OF PUBLIC HEALTH 68(5):458-463, 1978

This paper examines the uses of some health status indexes in measuring equity of access to medical care. Empirical examples are provided using data from national surveys of the U.S. population conducted from 1964 through 1976. A simple indicator, mean number of physician visits, suggests that between 1963 and 1976 the poor improved their position relative to the rest of the population and, indeed, currently enjoy the highest level of access. However, a second measure, the use-disability ratio, indicates that the poor may still receive less care relative to their need. A third measure, the symptoms-response ratio, suggests how norms of appropriate behavior might be incorporated into an access measure.

(13 references) AA REFERENCE NUMBER 54

**Anderson, Thomas P.; McClure, Walter J.; Athelstan, Gary; Anderson, Eleanor; Crewe, Nancy; Arndts, Louvain; et al**

*Stroke Rehabilitation: Evaluation of Its Quality by Assessing Patient Outcomes*

ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION 59(4): 170-175, 1978

A modified version of an outcomes-oriented quality-assurance system, the Function Limitation Scale, was used to assess the care received by patients, aged 21 to 60 years, with completed stroke who had participated for at least three weeks in a rehabilitation program. Outcomes for the 110 patients evaluated were better than estimated, standards having indicated that 29 percent of patients should be capable of self-care, while actually 43 percent were. When 50 of the 110 outcomes were individually investigated, only 5 percent of the total study population were probably not functioning at an optimal level, and 3 percent more might reach optimal functioning if existing follow-up procedures were extended and made more routine. Since only an estimated three to six cases per year would be affected, the cost of instituting such care would not be justified. Participants concluded

that assessment of outcomes justified continuation of the existing processes for stroke rehabilitation.

(21 references) AA-M REFERENCE NUMBER 55

**Barofsky, Ivan; Sugarbaker, P.H.**

*Health Status Indexes: Disease Specific Versus General Population Measures*

IN, PROCEEDINGS OF THE PUBLIC HEALTH CONFERENCE ON RECORDS AND STATISTICS: THE PEOPLE'S HEALTH: FACTS, FIGURES, AND THE FUTURE, NATIONAL CENTER FOR HEALTH STATISTICS (SPONSOR), HYATTSVILLE, MARYLAND (PUBLICATION NUMBER PHS 79-1214), PP. 263-269, 1979

Several behaviorally based measures, including the Sickness Impact Profile, have been used to measure outcome in 22 patients cooperating in a National Cancer Institute clinical trial. This assessment battery, the NIHQOLA, has been used to monitor the process of caring for the patient. Components of NIHQOLA which reflected the patient's perspective revealed an adverse psychosocial consequence of one of the two treatments being compared. Based on this experience, the author recommends increased cooperation between the developers of health indexes and the designers of clinical trials.

(10 references) CH-P REFERENCE NUMBER 56

**Buckingham, Robert W. III; Foley, Susan H.**

*A Guide to Evaluation Research in Terminal Care Programs*

DEATH EDUCATION 2(1-2):127-144, 1978

Pressure for greater accountability is being exerted on programs for care of the terminally ill and increasing the demand for evaluation research. This article discusses the components, implications and limitations of rigorous evaluation systems and addresses their application in the terminal care setting. Using a clinical trial design, N=70, the quality of outcome is assessed using various measures including the Hopkins Symptom Checklist and the Social Adjustment Self Report Questionnaire. The Buckingham evaluation of a hospice's home care service is cited as the first attempt at measurement of the overall quality and effectiveness of a hospice program and as a model for future evaluation of similar hospice programs.

(23 references) AA-M REFERENCE NUMBER 57

**Burt, R.S.; Wiley, James A.; Minor, Michael J.; Murray, James R.**

*Structure of Well-Being: Form, Content and Stability Over Time*

SOCIOLOGICAL METHODS AND RESEARCH 6(3):365-407, 1978

A third aspect of individual well-being within a society is analyzed in terms of twelve sequential national probability surveys of individual

well-being in the United States from April 1973 through May 1974. This third aspect, in contrast to (1) absolute levels of well-being and (2) feelings of power over individual well-being (i.e., anomie, alienation, and so on), concerns the cultural framework of interrelated dimensions, here discussed as the "structure of well-being," in terms of which individuals evaluate well-being within a society. Alternative structures of well-being for the United States are drawn from existing research and examined for adequacy in describing covariation among twelve indicators of satisfaction with various aspects of life activities. A structure composed of four dimensions: positive affect, negative affect, satisfaction with domains, and general satisfaction, is found to be most adequate of the alternatives. The expected relative stability of the structure of well-being over the twelve sequential national surveys is demonstrated. Implications of the analysis for the study of individual well-being are discussed.

(42 references) AA REFERENCE NUMBER 58

**Card, W.I.; Rusinkiewicz, M.; Phillips, C.I.**

*Utility Estimation of a Set of States of Health*

METHODS OF INFORMATION IN MEDICINE 16(3):168-175, 1977

A decision-maker was presented with three states of health, such that an imaginary patient was in the middle state while the two other states could be described as more preferred and less preferred. The decision-maker was then asked to choose the minimal odds at which he would advise an operation which would result in success, the patient moving into the more preferred state, or failure, the patient moving into the less preferred state. Eight decision-makers were tested in this way, and each made 24 such wagers on a set of three states chosen from a total set of eight. The utility function for each decision-maker was constructed and was found to be linear against the logarithm of the visual acuity. From this it follows that if all decision-makers, e.g., ophthalmic surgeons, show such linearity, they will all choose the same odds before deciding whether to operate, and these odds are independent of the utilities which the individual decision-maker attaches to the different states of health.

(15 references) AA-M REFERENCE NUMBER 59

**Chen, Martin K.**

*The Gross National Health Product: A Proposed Population Health Index*

PUBLIC HEALTH REPORTS 94(2):119-123, 1979

A population health status index designed as the Gross National Health Product (GNHP) is proposed as a general measure of the health of nations or population groups. The GNHP integrates mortality and disability data into a single number in units of disability-free life years lived per 100,000 population. It is based primarily on mortality ratios and life expectancies of component age groups of the population, modified by their respective disability experiences. A computa-

tional example with data currently available on U.S. geographic regions from publications of the National Center for Health Statistics is given.

(10 references) AA-M REFERENCE NUMBER 60

**Chen, Martin K.**

*A Norm-Referenced Population Health Status Index Based on Life Expectancy and Disability*

SOCIAL INDICATORS RESEARCH 5(2):245-253, 1978

This paper describes a population health status index for health services research and planning purposes. The H-index uses data on average life expectancy at birth and percent of the population free from disability, however defined. It is useful in comparing the health status of health services areas relative to that of the more healthy areas selected to serve as the norm. The statistical procedure used in deriving the H-index is centour analysis, by means of which the Euclidean distances of the service areas in the study sample in two-dimensional space to the centroid of the normative are reflected in the H values computed. The farther away from the centroid, the less resemblance the service area has to the norm and the lower its health status. A computational example with seven normative states and 10 states in the study sample is given.

(7 references) AA REFERENCE NUMBER 61

**Coburn, David**

*Work and General Psychological and Physical Well-Being*

INTERNATIONAL JOURNAL OF HEALTH SERVICES 8(3):415-435, 1978

The article describes a study of the influence of job factors on job attitudes (satisfaction, alienation, stress), as well as the joint influence of job factors and attitudes on general psychological and physical well-being among 780 Canadian men. Supporting data from a second sample of 670 men are also discussed. Physical well-being was measured by combining self-assessed health and disability days. Psychological well-being was measured by a 10-item index measuring the number of psychological symptoms. The overall well-being index used in this study combined the above two indexes giving equal weight to both. Implications of the findings are: 1) that work must be viewed in a wider context than simply as a form of economic activity if the well-being of the population is to be improved and 2) that a focus on individual "lifestyles" as causes of lowered well-being leads to neglect of the underlying social structural bases of dis-ease.

(23 references) AA-M REFERENCE NUMBER 62

Convery, F. Richard; Minter, Martha A.; Amiel, David; Connett, Karen L.

*Polyarticular Disability: A Functional Assessment*

ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION 58(11): 494-499, 1977

The purpose of this study was to design and evaluate a system for the functional evaluation of patients with polyarticular disease. A single assessment, comprised of activities of daily living and limitation of mobility items, can be done in approximately 15 minutes. The evaluation is reproducible and the numerical characterization agrees well with a physician's overall assessment of functional impairment. The subscores can be used independently of the total score to focus on specific areas of disability. Use of the evaluation in other institutions has produced a high degree of reliability.

(12 references) AA-M REFERENCE NUMBER 63

Edwards, Daniel W.; Yarvis, Richard M.; Mueller, Daniel P. Zingale, Holly C.; Wagman, William J.

*Test-Taking and the Stability of Adjustment Scales: Can We Assess Patient Deterioration?*

EVALUATION QUARTERLY 2(2):275-292, 1978

This article reports on the use of the Davis version of the General Well-Being (GWB) scale and four other adjustment scales on a group of 92 community residents examined at three points in time, two weeks apart. Forty-seven persons were assigned to the control group and 45 to the experimental group. Internal consistency coefficients and test-retest stability coefficients indicate that the five scales have utility for assessing patient groups. Further research is needed to clarify present results, to determine the clinical significance of various magnitude changes on the scales and to develop more specific measures of adjustment and symptomatology.

(25 references) AA-M REFERENCE NUMBER 64

Fabrega, Horacio

*Perceived Illness and its Treatment: A Naturalistic Study in Social Medicine*

BRITISH JOURNAL OF PREVENTIVE AND SOCIAL MEDICINE 31(4): 213-219, 1977

This is the initial report of a longitudinal study conducted in a developing, culturally heterogeneous society. The study compares figures of frequency and length of perceived illness, subjective reports of biological and behavioural symptoms, and use of medical facilities in response to episodes of illness by female heads of households from two highly distinctive social-ethnic groups. Despite differences in socioeconomic status and cultural beliefs about disease and treatment,



both groups showed roughly comparable rates of perceived illness, but certain differences were noted. The significance of these results is discussed with respect to the multiplicity of factors which influence health status and judgments of perceived illness.

(9 references) AA-M REFERENCE NUMBER 65

**Flanagan, John C.**

*A Research Approach to Improving Our Quality of Life*

AMERICAN PSYCHOLOGIST (2):138-147, 1978

This progress report on developing and applying a research approach to improve our quality of life includes several steps: a) the empirical definition of the quality of life of adults, b) surveys of three age groups (30, 50, and 70-year-olds) showing their ratings of importance and assessments of needs met for the 15 factors defining quality of life, c) a study of the specific factors tending to make 85 percent of American adults report their quality of life as good or better, d) illustrations showing the advantages of using in-depth studies of individuals to identify the determiners of quality of life, and e) plans for developing a simulation model to evaluate proposals for improving the quality of life.

(0 references) AA REFERENCE NUMBER 66

**Freij, Lennart; Wall, Stig**

*Exploring Child Health and Its Ecology: The Kirkos Study in Addis Ababa: An Evaluation of Procedures in the Measurement of Acute Morbidity and a Search for Causal Structure*

ACTA PAEDIATRICA SCANDINAVICA SUPPLEMENT 267:1-180, 1977

The aims of this investigation have been to evaluate a measure of acute childhood morbidity and to analyze the associations of this measure to health related and socio-environmental as well as individual factors. This has been attempted with the intention of exploring the causal structure behind child health and thus also to identify possible ways of promoting child health. The design of the morbidity survey as well as the measures used and the causal interpretations are discussed.

(150 references) CH-P REFERENCE NUMBER 67

**Garrity, Thomas F.; Somes, Grant W.; Marx, Martin B.**

*Factors Influencing Self-Assessment of Health*

SOCIAL SCIENCE AND MEDICINE 12(2A):77-81, 1978

Perception of one's own health status has proven a useful proxy measure for clinically-measured health status. Perceived health has also shown considerable promise as a predictor of several types of behavioral and physical outcomes after illness. The present study,

based on data from 314 college students at two points in time, replicates the work of others in finding several correlates of this potentially important variable. Two conceptual models derived from the literature on recent life experience and health are presented as being possibly useful for situating perceived health in a framework of causal relationships.

(27 references) AA-M REFERENCE NUMBER 68

**Ginsberg, Gary; Marks, Isaac**

*Costs and Benefits of Behavioural Psychotherapy: A Pilot Study of Neurotics Treated by Nurse-therapists*

PSYCHOLOGICAL MEDICINE 7:685-700, 1977

A pilot study is reported of costs and benefits from behavioural psychotherapy by nurse-therapists for selected neurotic problems. Figures are based on the treatment of 42 neurotics who completed treatment with nurse-therapists in a mean of nine sessions (16 hours). The year before and after treatment was studied, with treatment gains being classified as tangible, such as use of health services, patient expenses, and intangible, such as psychopathology and leisure activity. Tangible gains were assigned monetary values and used in the cost-benefit analysis. Further research with the intangible benefits should lead to a dysfunction profile which might lead to a valuation scheme.

(16 references) AA-M REFERENCE NUMBER 69

**Grabois, Martin; Strax, Thomas**

*Functional Status Evaluation Form: Development and Implications*

SOUTHERN MEDICAL JOURNAL 71(3):293-295, 1978

A mandatory functional status form was devised for incorporation into the patients' charts in a rehabilitation hospital. This form included past, present and future goals in a problem-oriented design. Review of charts after six months of use showed that the form led to improved rates of functional status reporting, with all functional areas now documented in over 90 percent of charts. It is hoped that a comprehensive program including use of the functional status form will be successful in improving patient care and physician education, and in facilitating a comprehensive medical audit.

(12 references) AA-M REFERENCE NUMBER 70

**Grinina, O.V.**

*Complex Social and Health Investigations Concerning the Needs of the Family for Medical and Social Care*

SANTE PUBLIQUE REVUE INTERNATIONALE (BUCURESTI) 20(3): 267-274, 1977

The author describes the methodology of the family's state of health assessment by means of indices regarding its structure and functions. The medical and social care requirements of the family, as well as their practical meeting in the U.S.S.R. are analyzed.

(7 references) AA REFERENCE NUMBER 71

**Hsu, David H.S.; Milsum, John H.**

*Implementation of Health Hazard Appraisal and its Impediments*

CANADIAN JOURNAL OF PUBLIC HEALTH 69(3):227-232, 1978

Health Hazard Appraisal (HHA) helps individuals to place their health status in broad perspective. The individual's risks associated with many common lifestyle factors are assessed, and some significant ways of reducing these risks are offered in a comprehensive computer print-out. Since the objective of HHA is to improve the quality and to avoid the foreshortening of individual lives through its stimulation of behavioural change, a general model for studying and evaluating the implementation of HHA would be helpful. The model developed in this paper is based on the two-step sequence of the patient's exposure and decision. This model helps clarify issues and strategies for altering society's attitudes toward preventive medicine and for stimulating the assumption of individual responsibility for health and well-being.

(23 references) AA-M REFERENCE NUMBER 72

**Israel, Morton; Roosma, Hubert**

*Determining the Critical Health Problem Areas of New York City*

STATISTICS AND HEALTH REVIEW 2(3):27-35, 1976

The objective of this study was to use existing data to develop an index of need for primary care physicians in small geographic areas of New York City. Such an index was developed using factor analysis. Although this measure could be used to direct physicians to areas where health problems appear to be greatest, further refinements are needed.

(4 references) CH-P REFERENCE NUMBER 73

**Jette, Alan M.; Deniston, O. Lynn**

*Inter-Observer Reliability of a Functional Status Assessment Instrument*

JOURNAL OF CHRONIC DISEASES 31(9/10):573-580, 1978

The Pilot Geriatric Arthritis Project (PGAP) was developed to test the hypothesis that a multidisciplinary health team could improve the quality of life of older adults with arthritis. The PGAP has been modeled after the work by Katz on developing measures of activities of daily living. In total, 55 assessments from 19 persons were completed. Using both a concordance and intra-class correlation coefficient approach to assessing inter-observer reliability, the PGAP functional

assessment form demonstrates a respectable degree of reliability. From this analysis, the instrument is less reliable when used to score clients with greater degrees of dependence, difficulty and pain. Further work on training and standardizing interviewers is indicated for future studies using this assessment instrument.

(7 references) AA-M REFERENCE NUMBER 74

**Kardashenko, V.N.; Kondakova-Varlamova, L.P.; Prokhorova, M.V.; Stromskaya, E.P.**

*Physical Development and State of Health of School-Children During the Last Decade*

SANTE PUBLIQUE, REVUE INTERNATIONALE (BUCURESTI) 20(2): 175-179, 1977

The results of research regarding the dynamics of physical development in a group of schoolchildren for a ten-year observation period are recorded. Tables for the determination of the biologic age in relation to the chronologic age are set up and a complex characterization of physical development is suggested.

(5 references) AA-M REFERENCE NUMBER 75

**Kisch, Arnold I.; Harris, L. Jeff; Keeler, Emmett; Drew, David E.; Michnich, Marie E.; Sola, Susana F. de**

*A New Planning Methodology to Assess the Impact of the Health Care System on Health Status*

MEDICAL CARE 16(12):1027-1035, 1978

This article summarizes a new methodology which permits health planners to assess the impact of the local health care system on the health status of the population. The methodology, in algorithm form, should assist health planners in developing objectives and actions related to the occurrence of selected health status indicators and should be amenable to health care interventions. Emphasis has been placed on developing a simplified, approximate analysis that health planners will find both feasible and effective. No detailed mathematic analyses are called for. The data required are, in most instances, readily available. The goal of these algorithms is to assist the Health Systems Agencies to obtain valid and sufficiently detailed data that will provide a basis for monitoring breakdowns in the health care system and to improve planning decisions aimed at preventing such breakdowns.

(7 references) AA-M REFERENCE NUMBER 76

**Lawton, M. Powell; Brody, Elaine M.; Turner-Massey, Patricia**

*The Relationships of Environmental Factors to Changes in Well-Being*

GERONTOLOGIST 18(2):133-137, 1978

Change in measures of well-being of all 82 subjects of the Community Housing Study as a function of change in environment was assessed over a 6-month period. Favorable changes in housing satisfaction were associated with improvements in dwelling-unit ambience; housing satisfaction and functional ability improved with change to a smaller unit, each of these changes occurring independently of a variety of other measures. It was concluded that environment was a significant element in generalized well-being, but that good environmental quality should be thought of as an intrinsic goal in its own right, regardless of whether other measures of psychological and social functioning improve.

(4 references) AA REFERENCE NUMBER 77

**Levy, Paul S.; Mullner, Ross; Goldberg, Jack; Gelfand, Henry**

*The Estimated Survival Probability Index of Trauma Severity*

HEALTH SERVICES RESEARCH 13(1):28-35, 1978

An index of survival rates associated with ICDA injury codes was constructed with data from the 1973 Hospital Discharge Survey (HDS). Discharge records from three regions covered by the HDS allowed estimation of survival rates among patients suffering single injuries coded under 92 ICDA integers. These estimated rates were then applied to records from the fourth HDS region, including those for patients suffering multiple injuries. Estimated survival probability index values were generated as the product of the single-condition survival rates for each patient's various injuries. The index is intended for retrospective analysis of discharge records as a possible approach to care evaluation.

(4 references) AA-M REFERENCE NUMBER 78

**Maddox, George L.; Dellinger, David C.**

*Assessment of Functional Status in a Program Evaluation and Resource Allocation Model*

ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCES 438:59-70; 1978

Concern about the efficiency and effectiveness of increasingly costly health and welfare services for older persons stimulates interest in systematic evaluation of alternative programs. While a single, optimal system for program evaluation and resource allocation does not exist, a strategy developed at Duke University is promising. This strategy, which meets the conditions of a quasi-experiment, has three elements: 1) a reliable, valid procedure for assessing five dimensions of individual functioning; 2) a procedure for disaggregating complex service programs into standard generic units; and 3) a matrix which relates changes in functioning over time to exposure to identified aggregates of generic services. Partial and complete applications of the strategy in two communities are illustrated.

(15 references) AA REFERENCE NUMBER 79

**McInerny, Thomas; Chamberlin, Robert W.**

*Is It Feasible to Identify Infants Who Are at Risk for Later Behavioral Problems? The Carey-Temperament Questionnaire as a Prognostic Tool*

CLINICAL PEDIATRICS (PHILADELPHIA) 17(3):233-238, 1978

Infants identified by their mothers as having a difficult temperament at age six months were described as more difficult to rear at age two years than infants in general and infants with easy temperaments in particular. A questionnaire and scoring system designed by a primary care pediatrician were used to classify the infants. The 70-item questionnaire is completed by the mother and scored by the physician. There are two "behavioral questionnaires," one for the 6-month olds and another for the 2-year olds. Data at both six month and two year levels were obtained on 118 infants; 41 infants who entered the study after six months of age were used as controls. Validity and reliability as well as the results from the study are discussed. The authors suggest that treatment of difficult children, as identified by these instruments, might lead to a more positive child-rearing experience.

(14 references) CH-P REFERENCE NUMBER 80

**McKinnell, Aubrey C.**

*Cognition and Affect in Perceptions of Well-Being*

SOCIAL INDICATORS RESEARCH 5(4):389-426, 1978

The general characteristics and some possible implications of the distinction between cognition and affect in the perception of well-being are reviewed. It is posited that currently-used rating-scale indicators of perceived well-being differ only marginally in the extent to which they are compounds of both factors, and consequently variables that move differently and possibly strongly on the underlying factors will have only muted relationships with the indicators. Two kinds of secondary analyses of data from recent American surveys are presented which support and amplify this hypothesis, along with some British data. The first kind focuses on the area of non-overlap between happiness and life satisfaction ratings. Differential trends with age and education emerge strongly, along with further interesting differences for other outside variables, notably enjoyment-of-life, affect balance, income and personal competence. The second kind of analysis draws on data sets which include Bradburn's affect balance scales along with a range of global ratings of subjective well-being. The considerable variance in the global ratings is attributed to cognition. Starting points are then explored for analysing the role of cognition and affect more exactly by means of path models which include the cognitive factor as an unobserved variable.

(31 references) AA-M REFERENCE NUMBER 81

**Mechanic, David**

*Effects of Psychological Distress on Perceptions of Physical Health and Use of Medical and Psychiatric Facilities*

JOURNAL OF HUMAN STRESS 4(4):26-32, 1978

Psychological distress not only contributes to bodily symptoms but also affects the way people perceive their physical health status and their use of medical care. Reporting on a program of research, this paper reviews evidence that psychological distress is an important component of illness behavior and response and must be taken into account in the appropriate organization of medical services.

(20 references) AA REFERENCE NUMBER 82

**Moss, Milton**

*Lifetime Indicators of Wellbeing*

PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN STATISTICAL ASSOCIATION IN SAN DIEGO, CALIFORNIA, AUGUST 14-17, 1978

In many instances, persons perceive their wellbeing, not necessarily in terms of the present or of a given year, but in terms of their future or of certain stages of life or of the lifespan as a whole. Using the domains of work and income, three features of the lifetime perspective are presented: 1) the prevalence of average patterns of work and income over the life cycle and their difference among various groups; 2) changes over time in these patterns; and 3) their bearing on wellbeing and their implications for monitoring the broader macrochanges in well-being. Following these illustrations based on economic domains, the concluding section of the paper discusses possibilities for a general application of the lifetime framework to other domains of life.

(6 references) CH-P REFERENCE NUMBER 83

**Munoz, P.E.; Vazquez, J.L.; Pastrana, E.; Rodriguez, F.; Oneca, C.**

*Study of the Validity of Goldberg's 60-Item G.H.Q. in its Spanish Version*

SOCIAL PSYCHIATRY 13(2):99-104, 1978

A study has been conducted to establish the validity of a Spanish version of the General Health Questionnaire (GHQ) in its 60-item final form. This screening instrument was tested on a sample of 200 patients who attended four general outpatient clinics. One Hundred nine patients were interviewed by various psychiatrists using the Standardized Psychiatric Interview. The specificity of the questionnaire was found to be 88 percent and its sensitivity 81 percent. These results confirm the validity of the GHQ in its Spanish version and open the door to future comparative studies among English and Spanish speaking populations.

(4 references) AA-M REFERENCE NUMBER 84

**Mushlin, Alvin I.; Appel, Francis A.; Barr, Daniel M.**

*Quality Assurance in Primary Care: A Strategy Based on Outcome Assessment*

JOURNAL OF COMMUNITY HEALTH 3(4):292-305, 1978

We describe an outcome-based approach to quality assurance in primary care and present data from an initial study made to explore its usefulness. A questionnaire, which asked patients to report on the status of their problem in terms of the amount of symptoms, activity limitation, and anxiety it caused, was mailed to adults who had been seen a month previously for one of three conditions. Outcome standards developed for these conditions indicated that patients should report no symptoms, activity limitation or anxiety. Of the 127 patients who responded, 17 percent failed to meet these standards. An approach to quality assurance that is based on measuring outcome and then determining the reasons for poor outcome is useful for uncovering correctable errors in the delivery of primary care. In order for the approach to be effective in improving care, the outcome measures used must be sensitive to the role of primary care in assisting patients to resolve health problems.

(17 references) AA-M REFERENCE NUMBER 85

**National Center for Health Services Research**

*Criterion Measures of Nursing Care Quality*

HYATTSVILLE, MARYLAND:PUBLIC HEALTH SERVICE, (PUBLICATION NUMBER PHS 78-3187), 1978

The work of the project staff has yielded an instrument for measuring patients' health status along a number of dimensions under the influence of nursing care. The measures focus on the patient as the primary source of data and thus require skills in physical observation and interviewing techniques. This instrument as designed is most appropriate for research on alternative models for the delivery of nursing care services. Subsections of the instrument may be used to assess the relative efficacy of alternative nursing care interventions for particular patient problems. Selected items could be used in quality assurance programs at the discretion of the users. For any of these applications, a manual accompanies the instrument in order that others may use each of the measures reliably and effectively.

(15 references) AS-M REFERENCE NUMBER 86

**Rosser, Rachel; Kind, Paul**

*A Scale of Valuations of States of Illness: Is There a Social Consensus?*

INTERNATIONAL JOURNAL OF EPIDEMIOLOGY 7(4):347-358, 1978

A difficult task in designing indices of health and measures of health output is deriving a scale of valuations of a set of defined states of health or illness. A scale derived by structured interview of 70 sub-



jects and tested on a further 50 subjects is described. The method aims for a ratio scale and the extent to which this has actually been achieved is discussed. Scale values appear to be independent of the sex, age, socioeconomic group, religious belief and past medical history of the subject, but have some association with current experience of illness. There is agreement between scale values obtained from medical nurses and patients and agreement between the different values obtained from psychiatric nurses and patients.

(21 references) AA REFERENCE NUMBER 87

**Sackett, David L.; Torrance, George W.**

*The Utility of Different Health States as Perceived by the General Public*

JOURNAL OF CHRONIC DISEASES 31(6):697-704, 1978

A series of "scenarios" describing the physical, social and emotional characteristics, limitations and duration of different health states have been successfully applied to a random sample of the general public (N=275) in order to determine their social utility. The resulting mean daily health state utilities differ among disorders and vary with age, the duration of the disorder, the "label" used to describe the disorder and the health status of the respondent. These health state utilities have considerable potential application in the planning and financing of health services.

(16 references) AA REFERENCE NUMBER 88

**Thomas, Richard K.**

*A Study of Health Status and Health Behavior in Memphis, Tennessee*

MEMPHIS, TENNESSEE:MEMPHIS REGIONAL MEDICAL PROGRAM, 1976

The findings of this study are based on questionnaires administered to adult members of 1100 households in Memphis, Tennessee. Weighted questions were combined and indexes computed for the measurement of socioeconomic standing, morbidity, attitudes toward the health-care delivery system and access to information. The Morbidity Index was based on 19 symptoms with more weight given to health problems for which no medical attention had been received. This Index was applied to respondents rather than households and used for comparison between age, race and income groups.

(0 references) CH-P REFERENCE NUMBER 89

**Thorne, Frederick C.**

*Methodological Advances in the Validation of Inventory Items, Scales, Profiles and Interpretations*

JOURNAL OF CLINICAL PSYCHOLOGY 34(2):283-301, 1978

Factor analytic research is still in its infancy—theoretically, methodologically and interpretively. Definitive research has not yet been

done on problems such as a) item design and selection of items suitable for factor analysis; b) how to interpret scales with factorially mixed item compositions; c) clinical judgment decisions in evaluating and interpreting scale meanings; and d) the comparison of the results of analyzing data by different scaling methods. This study makes a start toward clarifying these methodological issues by analyzing the results of applying different methods of scale construction that utilized 146,000 item responses made by 730 subjects on the Personal Health Survey, a 200-item inventory designed to measure organ system functioning that contributes to physical and mental health.

(15 references) AA-M REFERENCE NUMBER 90

**Thorne, Frederick C.**

*The Personal Health Survey*

JOURNAL OF CLINICAL PSYCHOLOGY 34(2):262-268, 1978

The Personal Health Survey (PHS) is a 200-item inventory that consists of 12 scales of empirically constructed items that relate to symptomatology from the principal psychophysiological supporting systems. The PHS was administered to 730 subjects in five clinical groups. The test results were factor analyzed with a principal component method combined with Varimax rotation. The factors were orthogonal. Five main factors were extracted from the overall population and from each of five subgroups and compared as to item composition. Administration, scoring, interpretation and validation of the empirical and factored scales are discussed.

(3 references) AA-M REFERENCE NUMBER 91

**Warr, Peter**

*A Study of Psychological Well-Being*

BRITISH JOURNAL OF PSYCHOLOGY 69(1):111-121, 1978

The concept of psychological well-being is introduced, and scales to measure three of its different facets are described and applied to 1655 British respondents. Results from measures of positive and negative affect are compared with North American findings, and hypotheses are broadly confirmed. Two clusters of specific anxiety items are identified, to do with financial and family anxiety and with health anxiety. The third measure (ratings of present life in general) yields a major cluster of happiness items but suggests additional dimensions for more detailed investigation. Interrelationships between the several measures and with employment position, motivation to work, job characteristics and age are examined. The study of everyday life as "normal psychology" is advocated.

(19 references) AA REFERENCE NUMBER 92

**Williamson, John W.**

*Outcome-Based Quality Assurance Gets a Scorecard*

JOURNAL OF THE AMERICAN GROUP PRACTICE ASSOCIATION 27(3):  
16-20, 1978

Results from a nationwide study designed to assess the feasibility of implementing Health Accounting are highlighted. The health status scale which has been used for over 10 years has been improved in terms of precision and coverage. This function limitation index measures self-care, disability from major life activity, as well as social, physical and emotional symptoms. The index was tested on a random sample of 222 hospital patients for reliability, validity and practicality for quality assurance.

(1 reference) CH-P REFERENCE NUMBER 93

**Worsley, A.; Gribbin, C.C.**

*A Factor Analytic Study of the Twelve Item General Health Questionnaire*

AUSTRALIAN AND NEW ZEALAND JOURNAL OF PSYCHIATRY 11(4):  
269-272, 1977

The aim of the present study was to factor analyze the 12 item General Health Questionnaire (GHQ) and to examine whether or not any emergent factors were related to those derived from the 60 item version. The 12 item GHQ was completed by a random sample of 603 Australian householders. Results show that this short version of the GHQ is factorally complex, three orthogonal factors having been detected. In addition, there is evidence that these three factors may be stable across samples and between different versions of the GHQ.

(8 references) CH-P REFERENCE NUMBER 94

## **Applications**

**Andrews, Gavin; Tennant, Christopher; Hewson, Daphne; Schonell, Malcolm**

*The Relation of Social Factors to Physical and Psychiatric Illness*

AMERICAN JOURNAL OF EPIDEMIOLOGY 108(1):27-35, 1978

This paper is directed to an examination of the relative importance of various types of social stress in a community setting. A study of social factors associated with illness status was conducted in an Australian suburban community. Physical and mental health as well as life events were measured on a sample of 863 adults. The scale developed by the Human Population Laboratory's staff and the General Health Questionnaire were used to measure the health components. Results

relating physical and mental health to the presence of social factors are discussed.

(29 references) CH-P REFERENCE NUMBER 95

**Berg, Lawrence**

*Use of Medical Record Audit System as a Quality Assurance Mechanism*

PRESENTED AT THE PUBLIC HEALTH CONFERENCE ON RECORDS AND STATISTICS IN WASHINGTON, D.C., JUNE 6, 1978

A systems analysis approach to assessing treatment outcomes among Papago Indian women in a maternal health care program was described. This was a prospective design aimed at a high risk population. Outcomes were reported in terms of various health indicators. Also, problems of implementation were discussed.

(references unknown) CH-P REFERENCE NUMBER 96

**Branch, Laurence G.**

*Understanding the Health and Social Service Needs of People Over Age 65*

AMHERST, MASSACHUSETTS: CENTER FOR SURVEY RESEARCH, UNIVERSITY OF MASSACHUSETTS, AND THE JOINT CENTER FOR URBAN STUDIES OF M.I.T. AND HARVARD UNIVERSITY, 1977

This monograph reports on a needs assessment study conducted among a probability sample of institutionalized and non-institutionalized elderly persons (over 65 years) in Massachusetts. The study was designed to provide insight into the complex issues involved with providing appropriate health care and social services to this target population. Results are based on personal interviews at two points in time with over 1600 elderly respondents. In addition to information on activities of daily living, the health status of respondents was measured by the Rosow Functional Health Scale. The author discusses the planning implications of the findings presented in this report.

(12 references) CH-PREFERENCE NUMBER 97

**Burke, Ronald J.; Weir, Tamara**

*Maternal Employment Status, Social Support and Adolescents' Well-Being*

PSYCHOLOGICAL REPORTS 42(3 PART 2):1159-1170, 1978

The present investigation examined the effects of maternal employment on the well-being of 93 male and 181 female high school students. Mental and physical well-being was assessed by a 17-item scale; responses were recorded on a 5-point Likert-type scale. Affective states were measured according to measures developed by Bachman and his colleagues. The results indicated that maternal employment had a greater effect on females than on males; females reported great-

er life stress, less social support from their mothers, and poorer well-being.

(16 references) AA-M REFERENCE NUMBER 98

**Burke, Ronald J.; Weir, Tamara**

*Sex Differences in Adolescent Life Stress, Social Support and Well-Being*

JOURNAL OF PSYCHOLOGY 98(2ND HALF):277-288, 1978

The present study compared 93 male and 181 female adolescents in terms of life stress, social support and emotional and physical well-being. Data on mental and physical well-being were collected using a 17-item scale reported on by Gurin et al. Responses were recorded on 5-point Likert-type scales which were then combined to form an index measure of mental and physical well-being. Other measures of well-being used in this study were an index of satisfaction of life and 11 measures of affective state. These, too, used the 5-point Likert-type scale. Results of the study are presented and implications of the findings discussed.

(15 references) AA-M REFERENCE NUMBER 99

**Carey, Raymond G.; Posavac, Emil J.**

*Program Evaluation of a Physical Medicine and Rehabilitation Unit: A New Approach*

ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION 59(7): 330-337, 1978

The purpose of this research was to develop an approach to program evaluation that would serve the accreditation needs and would be relatively inexpensive to implement. Sixty-nine consecutive admissions for cerebral vascular accidents (CVA) were assessed on activities of daily living (ADL) and cognition using a behaviorally defined procedure called the "Level of Rehabilitation Scale" that was developed for program evaluation purposes. Nurses and spouses of patients were interviewed to obtain the observations that were rated. Further ratings on ADL and cognition were made at discharge. Experience with the instrument showed that ratings of function can be made in a reliable and valid fashion. The research provides the beginning of the accumulation of improvement norms for CVA inpatients. Hospitals and rehabilitation units can utilize these norms and this method of program evaluation economically using nonclinically trained staff.

(14 references) AA-M REFERENCE NUMBER 100

**Center for the Study of Aging and Human Development**

*Multidimensional Functional Assessment: The OARS Methodology, A Manual*

DURHAM, NORTH CAROLINA:DUKE UNIVERSITY MEDICAL CENTER, 1978

This manual outlines a model designed to facilitate program evaluation and decisions regarding resource allocation. This model has three critical elements: (1) a procedure for measuring the functional status of individuals and a related scheme for classifying individuals with similar status; (2) the disaggregation of services into their generic elements in a way which permits comparison and costing across the particular service packages; and (3) a matrix which permits an analysis of the projected or actual impact of alternative service programs on any identified array of individuals classified in terms of equivalent functional statuses. In addition to describing the underlying concepts of the methodology and questionnaire, the manual discusses several applications of this model.

(59 references) CH-P REFERENCE NUMBER 101

**Chambers, Larry W.; West, Ann E.**

*The St. John's Randomized Trial of the Family Practice Nurse: Health Outcomes of Patients*

INTERNATIONAL JOURNAL OF EPIDEMIOLOGY 7(2):153-161, 1978

From June 1975 to May 1976, in a large family practice in St. John's, Newfoundland, a randomized controlled trial was conducted to assess the effectiveness of a family practice nurse. Effectiveness was assessed using standardized health outcome measures of physical, emotional, and social function which could be applied easily and objectively by non-clinicians to the two groups of patients under study: patients receiving conventional care and patients receiving care from the family practice nurse. After establishing the comparability of these two groups of patients at the beginning of the study, these measurements showed similar levels of physical, emotional, and social function in the two groups after one year of receiving either family practice nurse or conventional care. These results agree with previous controlled trials of family practice nurses which have indicated that family practice nurses are effective and safe.

(16 references) AA REFERENCE NUMBER 102

**Chen, Martin K.; Evans, William**

*A Study of the Health Status of the Black Population in Alameda County, California*

MEDICAL CARE 16(7):598-603, 1978

This paper compares the overall health status of blacks and whites in Alameda County, California for data collected by the Human Population Laboratory. The G' index, which is based on the mortality and disability experiences of the two population groups, is used. It is demonstrated that this index, which requires disease-specific mortality and disability data, can be easily adapted to make use of existing data files containing data on mortality and any indicator of morbidity or disability. It was found that the blacks lost approximately 10,000 productive years unnecessarily through higher mortality and disability

rates than those of the white population in the year 1974. The implications of the findings are discussed.

(15 references) AA-M REFERENCE NUMBER 103

**Feigenson, Joel S.; McDowell, Fletcher H.; Meese, Philip; McCarthy, Mary Lou; Greenberg, Susan D.**

*Factors Influencing Outcome and Length of Stay in a Stroke Rehabilitation Unit: Part 1. Analysis of 248 Unscreened Patients—Medical and Functional Prognostic Indicators*

STROKE 8(6):651-656, 1977

This investigation was designed to define medical and functional prognostic indicators in stroke rehabilitation and to gather information relating length of stay to each of these indicators. Outcome was defined in terms of discharge disposition (home or elsewhere) and functional status on discharge as measured by ability to perform activities of daily living (ADL), ability to walk and length of stay. A retrospective analysis of 248 patients admitted to a stroke rehabilitation unit over a sixteen month period showed that 80 percent of these patients were able to return home after an average length of stay of 43 days.

(22 references) AA-M REFERENCE NUMBER 104

**Granger, Carl V.; Sherwood, Clarence C.; Greer, David S.**

*Functional Status Measures in a Comprehensive Stroke Care Program*

ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION 58(12): 555-561, 1977

Functional status of stroke patients was recorded on precoded data forms called long-range evaluation summaries (LRES). Assessment were made on admission and discharge at two hospital units and at approximately six months after discharge from the rehabilitation unit either at home in the community or in a long-term care facility. Self-care and mobility assessment items were scored according to adaptations of the Barthel index, and global assessments were made according to an adaptation of the PULSES profile. Over approximately two years, 269 patients were followed in this system which continues in operation. From statistical analyses "outcome expectancies" were developed to be used in comparing stroke populations over succeeding years in order to perform program evaluation and medical care audit.

(12 references) AA-M REFERENCE NUMBER 105

**Harkins, Elizabeth Bates**

*Effects of Empty Nest Transition on Self-Report of Psychological and Physical Well-Being*

JOURNAL OF MARRIAGE AND THE FAMILY 40(3):549-556, 1978

This study uses a modified version of the Cornell Medical Index (CMI) and the Affect Balance Scale (ABS) to measure physical and psychological well-being in the study of the empty nest. Data from the 318 women who participated in the study were analyzed by multiple regression techniques. Multiple classification analysis was also used to handle nominal and interval variables whose relationships to the dependent variables, CMI and ABS scores, departed from linearity. The results indicate that the empty nest is not a threat to psychological and physical well-being for most women.

(21 references) CH-P REFERENCE NUMBER 106

**Jones, Ellen W.; McNitt, Barbara J.; Densen, Paul M.**

*An Approach to the Assessment of Long Term Care*

IN, HEALTH: WHAT IS IT WORTH? MEASURES OF HEALTH BENEFITS, MUSHKIN, SELMA J.; DUNLOP, DAVID W. (EDITORS), NEW YORK, NEW YORK:PERGAMON PRESS, PP. 43-57, 1979

The development and use of a patient-assessment system has shown that the widespread use of the common language incorporated in the system is feasible and practical. Data showed that health status of chronically ill and aged individuals is measurable and that changes in status are also quantifiable. Specific examples were presented of how the data might be used to approach issues of quality of care. Also, analysis of change in patient status was shown to be a potent tool for comparing outcomes of patients in different treatment modalities.

(17 references) AS-M REFERENCE NUMBER 107

**Kegel, Bernice; Carpenter, Margaret L.; Burgess, Ernest M.**

*Functional Capabilities of Lower Extremity Amputees*

ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION 59:109-120, 1978

One hundred thirty-four lower extremity amputees were evaluated from six months to 12 years postamputation by means of retrospective questionnaires. Information was gathered on activities generally considered essential for daily living, vocation and recreation, living arrangements and adjustments therein, as well as feedback on the patients' beliefs concerning what rehabilitation personnel should be doing to improve amputees' lifestyles. The relationship of functional outcome to age, amputation level, and cause of amputation was also evaluated. Results showed that most amputees did not resume a completely normal lifestyle, and many modifications were made.

(19 references) AA-M REFERENCE NUMBER 108

**Kirgis, Carol A.; Woolsey, Donna B.; Sullivan, John J.**

*Predicting Infant Apgar Scores*

NURSING RESEARCH 26(6):439-442, 1977



This study identified psychological and sociologic phenomena that affect a woman during pregnancy which, when associated with physical factors, result in poor neonatal outcome for the infant, as measured by the Apgar score at five minutes after birth. The Utah Test Appraising Health (UTAH) was administered to 51 pregnant women during the second or third trimester of pregnancy. Data measuring maternal and infant outcomes were collected postdelivery. The data were consistent with the hypothesis that stress during pregnancy is an activator of physical illness processes in the mother, and, when combined with these variables, is related to neonatal outcome.

(25 references) AA-M REFERENCE NUMBER 109

**Lehmann, Justus F.; DeLisa, Joel A.; Warren, C. Gerald; Lateur, Barbara J. de; Bryant, Patricia L. Sand; Nicholson, Clyde G.**

*Cancer Rehabilitation: Assessment of Need, Development, and Evaluation of a Model of Care*

ARCHIVES OF PHYSICAL MEDICINE AND REHABILITATION 59(9): 410-419, 1978

A sample of 805 cancer patients, comparable to but not identical with a national study, was screened to identify: rehabilitation problems encountered at different cancer sites; the need for rehabilitation services; and gaps in the delivery of rehabilitation care. Significant numbers of rehabilitation problems were found that could be improved by rehabilitation care. Rehabilitation problems were identified by the organ system involved. Within each system, specific problems, such as amputation site and joints with contractures, were isolated. Problems were also viewed from functional perspectives such as pain problems, activities of daily living, ambulation, mobility and transfer. A model of rehabilitation care delivery was established and implemented, with the result being that gaps and barriers to rehabilitation service delivery disappeared rapidly.

(15 references) AA-M REFERENCE NUMBER 110

**Linn, Bernard S.; Linn, Margaret W.; Knopka, Felipe**

*The Very Old Patient in Ambulatory Care*

MEDICAL CARE 16(7):604-610, 1978

The aims were twofold: to determine differences between the very old and younger patients in ambulatory care and to examine their self-assessments of health and whether these related to subjective data such as symptoms and attitudes, objective data such as utilization of health services, and physician assessments of the patient's health. A total of 280 men, 196 below 70 and 84 over 70 years of age, were studied. Good health perceptions were associated with fewer symptoms, outpatient visits and hospitalizations in both groups. Physician assessments were only lowly correlated with patient assessments of health. Patient perceptions of health were highly stable over a two month followup. The subjective belief that one is healthy or ill may

be more important than actual medical condition in maintaining good emotional and behavioral functioning.

(12 references) AA-M REFERENCE NUMBER 111

**McCoy, John L.; Brown, David L.**

*Health Status Among Low-Income Elderly Persons: Rural-Urban Differences*

SOCIAL SECURITY BULLETIN 41(6):14-26, 1978

This research compares the health status of low-income elderly persons in rural and urban areas. Using data from the Social Security Administration's 1973 national survey of low-income aged and disabled, the study demonstrates that the prevalence of many chronic disorders and impairments is significantly greater among the rural aged than for their cohorts in more urban areas. Health status is treated as a normative, multidimensional concept. The measures included items relating to physical functioning capacity prevalence of chronic disease and impairments, self-assessment of health and the occurrence of multiple disorders. Physical functioning capacity was scored to form Haber's index of physical activity limitation.

(33 references) CH-P REFERENCE NUMBER 112

**Mitchell, Janet B.**

*Patient Outcomes in Alternative Long-Term Care Settings*

MEDICAL CARE 16(6):439-452, 1978

The purpose of this study was to compare health status outcomes in three alternative long-term care settings in the Veterans Administration: 1) home care; 2) community-based nursing home care; and 3) hospital-based nursing home care. Patients were measured on a behavioral index of health status, the Function Status Index, at two points in time: when transferred from the acute care hospital to one of the three treatment programs (pretest) and three months later (posttest). Patients placed in the home care program displayed the greatest mean improvement in functional health status, holding all other variables constant. This treatment effect was not uniform, however; patients showed differential rates of improvement across the three programs, based upon both initial health status and prognosis.

(22 references) AA-M REFERENCE NUMBER 113

**Mueller, Daniel P.; Edwards, Daniel W.; Yarvis, Richard M.**

*Stressful Life Events and Community Mental Health Center Patients*

JOURNAL OF NERVOUS AND MENTAL DISEASE 166(1):16-24, 1978

This paper reports on the occurrence of stressful life events prior to treatment and at a follow-up timepoint in a general sample of 187 community mental health center patients. Life events scores from the

patients, at both timepoints, are compared with scores from a sample of 321 nonpatients which was drawn from the community. Psychological well-being was assessed by a modified version of the General Well-Being Schedule (GWB). Implications of the study's results for the direction-of-effect issue with respect to the stress-psychological disorder relationship are discussed.

(15 references) AA-M REFERENCE NUMBER 114

**Nackel, John G.; Goldman, Jay; Fairman, William L.**

*A Group Decision Process for Resource Allocation in the Health Setting*  
MANAGEMENT SCIENCE 24(12):1259-1267, 1978

A group decision process is developed that allocates an available budget to health programs based on program effectiveness. The program effectiveness is measured by comparing alternative programs, at various funding levels, with respect to the weighted objectives of the health care organization. The organizational objectives are weighted by a constant-sum paired comparisons scaling technique. An integer programming formulation allows the decisionmakers to maximize program effectiveness within the given budgetary, resource, regulatory and program structure constraints. The Effectiveness Evaluation-Resource Allocation Process (ERAP) is validated by actual decisionmaking teams testing four processes for resource allocation. An example from the validation experiment is presented to demonstrate the process.

(22 references) AA REFERENCE NUMBER 115

**Norton, James C.; Powell, Barbara J.; Penick, Elizabeth C.; Sauer, Carol A.**

*Screening Alcoholics for Medical Problems with the Cornell Medical Index*

JOURNAL OF STUDIES ON ALCOHOL 38(11):2193-2196, 1977

This study, which is part of a larger investigation, assessed the utility of the Cornell Medical Index (CMI) in helping nonmedical personnel identify alcoholic patients who require medical attention; 81 men agreed to participate. Scores on the CMI were not useful in distinguishing alcoholic patients who required medical attention from those who did not.

(7 references) AA-M REFERENCE NUMBER 116

**Ross, Helen E.; Kedward, Henry B.**

*Social Functioning and Self-Care in Hospitalized Psychogeriatric Patients*

JOURNAL OF NERVOUS AND MENTAL DISEASE 166(1):25-33, 1978

Evaluations of social disability have been found useful in determining factors of diagnostic, therapeutic and prognostic significance in the

management of psychogeriatric patients. A random sample of 100 patients aged 65 or over admitted to three Toronto hospitals were studied prospectively. Standardized clinical and social interview schedules were used to assess patients' mental state, self-care capacity, social isolation, burden on the family and household contribution before admission. These assessments were carried out to determine their significance with respect to diagnosis and outcome. Self-care capacity, as measured by the Activities of Daily Living Performance Test or by informant report, was related to diagnosis and outcome measures in this sample. The implications for management are considered in the light of the findings which are presented in this report. (12 references) AA-M REFERENCE NUMBER 117

**Tessler, Richard; Mechanic, David**

*Psychological Distress and Perceived Health Status*

JOURNAL OF HEALTH AND SOCIAL BEHAVIOR 19(3):254-262, 1978

This paper examines the association between psychological distress and persons' perceptions of their physical wellbeing. Four diverse data sets are used. In one of the surveys, the Karnofsky scale, which provides an overall objective assessment of health with an emphasis on functional capacity, was used. The results indicate that, despite variation in the characteristics of the population under study, the mode of data collection employed, and the specific questions used to measure psychological distress, distress remains a statistically significant correlate of perceived health status.

(18 references) AA-M REFERENCE NUMBER 118

**Wilkening, E.A.; McGranahan, David**

*Correlates of Subjective Well-Being in Northern Wisconsin*

SOCIAL INDICATORS RESEARCH 5(2):211-234, 1978

This paper presents the results of an attempt to relate socioeconomic status, family status, social participation and personal disruptions of statuses and roles to an index of life satisfaction in rural sectors of Northern Wisconsin. While income, education and occupational status and level of living explain very little of life satisfaction, social participation variables explain somewhat more, and disruptions of marital ties, job, physical well-being and residence explain most. The analysis supports the notion that life satisfaction results from the discrepancy between the aspirations and expectations of the individual and his ability to satisfy them within his environment. Education is negatively associated with subjective well-being when other variables are controlled. The influence of social involvement upon life satisfaction suggests the need for a modification of the aspiration-attainment model to include the integrative-expressive as well as the adaptive-instrumental processes of the individual.

(31 references) AA-M REFERENCE NUMBER 119

**Wood, Paul M.**

*A Methodology for Evaluating Health Status*

ALBANY, NEW YORK:NEW YORK STATE DEPARTMENT OF HEALTH,  
MONOGRAPH NUMBER 14, 1977

Measures of output of the health services system are needed in order to relate the efficiency and effectiveness of resource allocation to effects on the New York State population's health status. The methodology of this study focussed on preventable deaths in the perinatal and infant age population. Health status of this population was quantified in terms of the number of all deaths in component age groups comprising that population.

(15 references) AS-M REFERENCE NUMBER 120

**Woolley, F. Ross; Kane, Robert L.; Hughes, Charles C.; Wright, Diana D.**

*The Effects of Doctor-Patient Communication on Satisfaction and Outcome of Care*

SOCIAL SCIENCE AND MEDICINE 12(2A):123-128, 1978

From data on a series of 1761 episodes of acute primary care, the chain of relationships between patient expectation, doctor-patient communication, compliance, outcomes of care and satisfaction was examined. Overall, few meaningful correlations were found. There was a strong positive correlation between patient satisfaction and functional outcome; function status information was coded according to a previously tested 7-level scale modified from Berdit and Williamson. Nonetheless, 65 percent of those patients who failed to regain their usual functional status professed satisfaction with the outcome of their care. Using discriminate analysis, we could predict satisfaction with outcome best by the actual outcome and satisfaction with care. Patient satisfaction with care was in turn best predicted from four variables: satisfaction with outcome, the continuity of care, patient expectation and doctor-patient communication. Implications of both positive and negative findings are discussed.

(18 references) AA-M REFERENCE NUMBER 121

## **Policy Review**

**Albert, Daniel A.**

*Decision Theory in Medicine: A Review and Critique*

MILBANK MEMORIAL FUND QUARTERLY 56(3):362-401, 1978

In most medical problems the choice of actions, the range of outcomes, and some estimation of the probabilities are available. Thus, medical decision problems are usually in the class of decision prob-

lems under risk. The author reviews decision theory from the clinical perspective and comments on its role in the practice of medicine. (113 references) CH-P REFERENCE NUMBER 122

**Boruch, Robert F.**

*Reactions to Four Papers on Health Status Indicators*

IN, PROCEEDINGS OF THE PUBLIC HEALTH CONFERENCE ON RECORDS AND STATISTICS: THE PEOPLE'S HEALTH: FACTS, FIGURES, AND THE FUTURE, NATIONAL CENTER FOR HEALTH STATISTICS (SPONSOR), HYATTSVILLE, MARYLAND (PUBLICATION NUMBER PHS 79-1214), PP. 271-274, 1979

Experiences with the applications of health status measures by Barofsky, Berg, Chen and Kisch which were presented at the June meeting of the Public Health Conference on Records and Statistics are discussed from a statistical, methodological perspective. Points are raised concerning the level of significance and the power of the statistical test in testing hypotheses, the use of ad hoc measures which have yet to be linked to underlying theory, and the results from field trials which may or may not represent the experiences of larger population groups. Abstracts of these presentations appear elsewhere in this Bibliography.

(16 references) CH-P REFERENCE NUMBER 123

**Carrillo, Helen M.**

*A Summary and Evaluation of Selected Health Status Indexes*

UNPUBLISHED, HYATTSVILLE, MARYLAND: NATIONAL CENTER FOR HEALTH SERVICES RESEARCH, 1978

This is a compendium of short summaries describing eight health index research projects supported by the National Center for Health Services Research (NCHSR). The summaries are presented in a synoptic pattern under selected dimensions (attributes) of health. Also included is a classification model (in terms of the dimensions) for selecting and evaluating health status indexes.

(references unknown) AA REFERENCE NUMBER 124

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

*Health Status Measures, Policy, and Biomedical Research*

IN, HEALTH: WHAT IS IT WORTH? MEASURES OF HEALTH BENEFITS, MUSHKIN, SELMA J.; DUNLOP, DAVID W. (EDITORS), NEW YORK, NEW YORK: PERGAMON PRESS, PP. 15-41, 1979

Measurement of health status has come to be described in terms of several important related tasks: (a) defining a set of health states that describe the array of conditions prevalent in the population, (b) incorporating prognosis and its duration into the overall construct, (c)

developing a set of weights to reflect the relative scale of health states, and (d) integrating mortality and other indicators into a health status indicator, a composite index, or indexes. This paper presents various health status measures, analyzing them for their completeness in addressing these tasks, as well as for their public policy uses. (54 references) AS-M REFERENCE NUMBER 125

**Dever, G.E. Alan**

*The Pursuit of Health*

SOCIAL INDICATORS RESEARCH 4:475-497, 1977

This paper delineates health legislation through a review of the literature as it relates to the cost of medical care; it also demonstrates a death-coding system that would be compatible with the cause of death and not the disease. Three tables and ten figures depict the leading causes of death by number and rate for Georgia and the U.S., 1900-1973; infectious and chronic disease death rates, U.S., 1900-1970; cycles of infectious and chronic disease patterns; health expenditures U.S., 1930-1975, per capita and percent of GNP; and epidemiological model for health policy analysis; and sample certificates of death. (8 references) AA REFERENCE NUMBER 126

**Dorfman, Nancy S.**

*The Social Value of Saving a Life*

IN, HEALTH: WHAT IS IT WORTH? MEASURES OF HEALTH BENEFITS, MUSHKIN, SELMA J.; DUNLOP, DAVID W. (EDITORS), NEW YORK, NEW YORK:PERGAMON PRESS, PP. 61-68, 1979

The author discusses life-saving efforts in a societal framework, i.e., as the life of an unspecified victim that will be lost if the government fails to act. Several measures, including human capital valuation, compensation valuation and political valuation, have been developed to estimate the social value of saving a life. These measures are examined to determine how well they approximate the desired measure.

(2 references) CH-P REFERENCE NUMBER 127

**Etzioni, Amitai**

*Individual Will and Social Conditions: Toward an Effective Health Maintenance Policy*

ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE 437:62-73, 1978

Many prominent health experts now assert that major improvements in the health of the American people must come from individual efforts to alter unhealthy personal habits and lifestyles rather than through medical services and technology. But it does not necessarily follow that a more ethical and feasible national health policy would

focus primarily on exhorting Americans to mobilize their individual willpower to change to more healthful personal habits. In essence, we suggest that a health policy that promotes curbing unhealthy habits and encourages healthy ones through societal action is more ethical and feasible than one focusing on "health as individual responsibility."

(26 references) AA-M REFERENCE NUMBER 128

### **Freedman, Benjamin**

*Efficient Allocation: Mystique and Myth*

HEALTH VALUES:ACHIEVING HIGH-LEVEL WELLNESS 2(1):7-15, 1978

There is a paradoxical quality to the current American health care system. Agreement that the American public is not achieving the level of health that it ought to given the vast sums of money spent towards this end, is nearly universal. Nevertheless, the monies flow, as has been their wont. The theoretical agreement on the wastefulness of our system is, with rare exceptions, not translated into practice. The lag between theory and practice may simply be a reflection of habit and the propensity of major institutions to maintain the status quo. However, there may be rational reasons for the lag as well. This article proposes to examine the form those rational explanations in favor of the status quo take.

(6 references) CH-P REFERENCE NUMBER 129

### **Larson, Reed**

*Thirty Years of Research on the Subjective Well-Being of Older Americans*

JOURNAL OF GERONTOLOGY 33(1):109-125, 1978

This review of research on life satisfaction, morale, and related constructs has yielded a consistent body of findings. Parallel results for measures of these constructs and high intercorrelations justifies considering them in terms of a single summary construct, subjective well-being. As this research has relied almost exclusively on survey measures, interpretations are limited to the social-psychological level of people's day-to-day behavior. This research shows reported well-being to be most strongly related to health, followed by socioeconomic factors and degree of social interaction, for the general population of Americans over 60 years of age.

(70 references) AA-M REFERENCE NUMBER 130

### **Lipscomb, Joseph**

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

POLICY SCIENCES 9:19-43, 1978



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 maximizes expected improvement in population health status. Reflected in such prescriptions are the expected efficacy of alternative treatments and population preferences among program outcomes. 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.

(43 references) AA REFERENCE NUMBER 131

**Lipscomb, Joseph**

*Health Status and Health Programs*

HEALTH SERVICES RESEARCH 13(1):71-77, 1978

This article summarizes the health index research which was presented at the 1977 meeting of the American Public Health Association. In general, much less attention than usual was devoted to such methodological issues as preference assessment and aggregation, the validity and reliability of surveys, epidemiological inference and health status optimization strategies. Clinicians, planners and other social scientists interested in health behavior are analyzing whatever health indicators are available even though a sizeable set of theoretical issues remains under debate. In this review, the presentations are discussed within the following categories: the Problem of Inference, Resource Allocation and Methodology.

(0 references) CH-P REFERENCE NUMBER 132

**Moscovice, Ira; Armstrong, Patricia; Shortell, Stephen; Bennett, Roger**

*Health Services Research for Decision-Makers: The Use of the Delphi Technique to Determine Health Priorities*

JOURNAL OF HEALTH POLITICS, POLICY AND LAW 2(3):388-410, 1977

In an effort to make health manpower training programs and health services research and policy analysis activities more responsive to health care needs in Washington State, a Delphi process was used to obtain perceptions of critical health problems from knowledgeable persons in the health services field. The technique revealed a reasonable agreement among respondents. Of the ten most important problems facing the citizens of Washington State, inadequate measures of health outcomes were ranked tenth.

(11 references) AA-M REFERENCE NUMBER 133

**Neufville, Judith Innes de**

*Validating Policy Indicators*

POLICY SCIENCES 10(2/3):171-188, 1978-1979

Although validity of an indicator, that is, whether it means what it purports to, is critical to its legitimate use in policy, there are few systematic approaches to validation. The reason lies largely in the traditions of positivist social science which require the separation of fact and theory and allow no place for meaning and valuation. The paper proposes approaches to test the validity of both indicators, and the conceptual frameworks on which they are based. The most powerful forms of validation require the application of a priori concepts and models. Validation is partly judgmental and never simply mechanical. The validity of a measure is dependent on the context of its use. Social and political processes are an important part of validation, particularly in determining the appropriateness of the assumptions. If an indicator is to be valid, it should be chosen or designed iteratively with the policies it will help to shape.

(30 references) AA REFERENCE NUMBER 134

**Parker, Barnett R.**

*Quantitative Decision Techniques for the Health/Public Sector Policy-Maker: An Analysis and Classification of Resources*

JOURNAL OF HEALTH POLITICS, POLICY AND LAW 3(3):389-417, 1978

Policy problems in the health and public sectors are quickly assuming a new level of complexity. Thus, the health/public sector analyst is being confronted with the task of identifying, formulating, evaluating and making choices among larger and more complicated sets of decision alternatives. Given the context of such decisions, less-than-effective choices could adversely affect the health and social wellbeing of whole sections of a population. What seems to be needed, therefore, is an approach that would provide system and objectivity to the policymaking process. The use of quantitative techniques, so long applied to problems in the private and industrial sectors, would be the mainstay of such an approach. It is the goal of this article, therefore, to identify, classify, and briefly describe elements of the emerging set of materials (texts, edited readings, and monographs) which offer discussions of these techniques as they apply to problems in the health and public sectors. It is hoped that such a presentation will hasten the application of available analytic decision tools to the policy/decision problems of the public sector.

(83 references) AA REFERENCE NUMBER 135

**Rice, Dorothy P.; Hodgson, Thomas A.**

*Social and Economic Implications of Cancer in the United States*

WORLD HEALTH STATISTICS QUARTERLY 33(1):56-100, 1980

This paper focuses on the direct and indirect economic costs resulting from the prevalence of neoplasms in 1975 in the U.S. These costs include expenditures for hospital care, physicians' services, and other health care used in prevention and diagnosis, and also include the value of output lost due to morbidity and premature mortality. The authors point out the need for measures which provide better assessment of the social costs of chronic diseases such as cancer.

(58 references) CH-P REFERENCE NUMBER 136

**Taeuber, Conrad (editor)**

*America in the Seventies: Some Social Indicators*

ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCES 435, 1978

The data presented in Social Indicators 1976 have a significance that goes beyond the description of trends and patterns which is given by the tables and charts in that report. The health chapter discusses current trends in health and health care that were identified in SI 1976, including the recent and, in some cases, dramatic declines in mortality, increases in health expenditures, increases in health resources, and changes in health habits. These trends are compared with strikingly similar trends identified almost a half a century ago by The Research Committee on Social Trends established by President Hoover. The significance of the current data and some of their possible causes and implications for the future are addressed, as well as some of the potential pitfalls in interpreting the data.

(7 health references) CH-P REFERENCE NUMBER 137

## CURRENT RESEARCH—ENGLISH

### Development—Conceptual

Albrecht, Gary L.

*Rehabilitation Cost Containment Through the Use of Cost/Function Indicators in Decision Making*

EVANSTON, ILLINOIS:NORTHWESTERN UNIVERSITY, 1978

This study is designed to develop methods that will help the medical care administrators manage the rehabilitation process over time. The two major objectives of the study are to: 1) further develop and test multidimensional cost/function indicators as aids in planning patient staging and in evaluating institutional relative cost/effectiveness with different patient populations and treatment strategies; 2) use these cost/function indicators to develop and test a model for making optimal admission and discharge decisions in rehabilitation programs. The model developed in this study will be generalizable beyond admission and discharge decisionmaking to determine the type, mix and timing of services to be delivered. This study will build upon previous work evaluating rehabilitation success.

(49 references) AA-M REFERENCE NUMBER 138

Baranowski, Tom

*Toward the Definition of Concepts of Health and Disease, Wellness and Illness*

UNPUBLISHED, CHARLESTON, WEST VIRGINIA:WEST VIRGINIA UNIVERSITY MEDICAL CENTER, DEPARTMENT OF COMMUNITY MEDICINE, 1978

Social values are necessarily included in concepts of health and disease. These values are expressed through the social roles a person is expected to fulfill. A "levels of social organization" framework incorporates social phenomena in the differentiation of concepts of disease and illness, health and wellness. Health is defined as the physical capacity of the body to fulfill personal expectations and perform social role tasks. Wellness is defined as the other capacities of the person to fulfill these same ends. Various types of wellness can be generated, corresponding to the major social roles played by an individual. Dis-

ease and illness define the other end of the "capacity to function" continua of health and wellness, respectively.

(58 references) AA REFERENCE NUMBER 139

**Juster, F. Thomas; Courant, P.; Mitchell, K.**

*Integrating Social Indicators Into Social Accounts*

PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN STATISTICAL ASSOCIATION IN SAN DIEGO, CALIFORNIA, AUGUST 14-17, 1978

The authors present a framework for a social indicator system which is a national social indicator model. The model consists of indexes of wellbeing, elements of wellbeing, household produced outputs, process benefits, time spent on household activities, and GNP-type services, durables and non-durables. At this time, the household time and GNP-type goods can be used to estimate the economic and social wellbeing. The indexes of wellbeing have yet to be developed.

(references unknown) CH-P REFERENCE NUMBER 140

**Lee, Philip R.; Franks, Patricia E.**

*Health and Disease in the Community*

UNPUBLISHED, OCTOBER 1978

In this first chapter of the book, the authors attempt to place health care and primary care in a larger context which is determined by definitions of health and disease, by patterns of health and disease, by factors related to health and disease, and by the diverse policies and programs that might be aimed toward improving the health of a population. This chapter profiles contrasting patterns of health and disease in the world community against the backdrop of major forces contributing to the creation of these patterns. Also, conceptual problems involved at arriving at a working definition of health as well as the need for a practical framework to depict alternative strategies for improving health are discussed.

(45 references) CH-P REFERENCE NUMBER 141

**Roos, Noralou P.**

*Health Service Use, Morbidity, and Mortality Among the Elderly*

OTTAWA, CANADA:HEALTH AND WELFARE CANADA, 1978

This research proposes to create a longitudinal data file pertaining to the population sixty years of age and over. Specifically, the data from the 1971 and 1976 Aging in Manitoba Needs Assessment Survey, which includes social, psychological, demographic, health, and environmental information for a total of 5873 randomly sampled elderly in Manitoba, will be merged with health services utilization for these same individuals and their spouses. The merging of these two different data bases will allow the identification of the characteristics of differ-

ential health care utilizers and the determination of nondiagnostic influences on the utilization of health care services as well as on morbidity patterns and mortality. Likewise, the availability of hard data on utilization will provide the first opportunity for a needs assessment instrument to be tested for predictive validity other than by patient recall or idiosyncratic clinical confirmation.

(63 references) AA-M REFERENCE NUMBER 142

## **Development—Empirical**

**Baranowski, Tom; Doria, James**

*A Capacity Year: Toward An Index of Health Status and Service Need*

PRESENTED AT THE THIRD ANNUAL NATIONAL CENTER FOR HEALTH STATISTICS DATA USE CONFERENCE IN PHOENIX, ARIZONA, NOVEMBER 13-17, 1978

The conceptual basis, a model, and a preliminary attempt at implementing a new approach to prioritizing health problems for a health needs assessment is proposed. Health and wellness are taken to be defined as the physical and other capacities necessary to perform social role tasks. Need is defined to be the relative lost capacity due to disease or illness in performing these tasks. A model for estimating the social need for attention to health problems is proposed which incorporates the impact of a health problem on a person's capacities, the duration of the impact, and the incidence of the health problem. The model is implemented in an exploratory fashion in Region III in West Virginia. The prioritization of health problems resulting from this approach places a relatively higher priority on low birth weight/infant mortality and diabetes than would have been the case using Potential Years of Life Lost, or the frequency of deaths. Issues in the computation of the model are identified as well as issues needing further attention in the operationalization of the model.

(15 references) AA REFERENCE NUMBER 143

**Chambers, Larry W.; Segovia, Jorge**

*Lay and Professional Perspectives of Physical, Social and Emotional Function Used as Indexes of Health*

PRESENTED AT THE MEETING OF THE LEARNED SOCIETY IN LONDON, ONTARIO, CANADA, MAY, 1978

Earlier studies by this research group identified questionnaire items which predict health assessments of a clinician. This study furthers these findings by comparing self-perceived health status with clinical assessment. Of the 296 adults in the sample, 274 were interviewed in their homes; the average interview duration was 40 minutes. The family physician completed a clinical assessment for each member of the study group. Multivariate analytic methods, including discriminant function analysis, were used to identify useful questionnaire items for

constructing physical, emotional and social function indexes from the clinician's and individual's perspectives.

(13 references) CH-P REFERENCE NUMBER 144

**Dupuy, Harold J.**

*Self-Representations of General Psychological Well-Being of American Adults*

UNPUBLISHED, HYATTSVILLE, MARYLAND:NATIONAL CENTER FOR HEALTH STATISTICS, 1978

Two broad issues are addressed in this paper. First, the concept "general psychological well-being" is elaborated. Second, some findings are presented from the National Health Examination Survey which employed a set of indicators used to ascertain the level of general psychological well-being of the American adult population, ages 25-74 years (N=6913).

(0 references) AS-M REFERENCE NUMBER 145

**Goldschmidt, Peter G.**

*A Model for Measuring Health Status: Application to the U.S. Population*

UNPUBLISHED, BALTIMORE, MARYLAND:POLICY RESEARCH INCORPORATED, 1978

This paper describes a general model for measuring health status and provides an illustrative application to the U.S. population. Measurement of health status is conceptualized as the result of integrating three dimensions: (1) measurement of health; (2) prognosis of health; and (3) the value of health. The result is a single measure, health status years (hsy). Using the model, a health scale constructed from available data, estimates of the lifetime prognosis for each health state of the scale, and illustrative weights for each health state, the health status of the U.S. population was found to be 62.5 hsy. The system of measurement used would result in 100 hsy, provided each member of a population spent an entire life-span of 100 years in the most desirable health state.

(19 references) AA-M REFERENCE NUMBER 146

**Harasymiw, Stefan J.; Albrecht, Gary L.**

*Admission and Discharge Indicators as Aids in Optimizing Comprehensive Rehabilitation Services*

FORTHCOMING IN SCANDINAVIAN JOURNAL OF REHABILITATION MEDICINE

This paper describes the development of a theoretical model through the use of admission and discharge indicators which can serve to optimize comprehensive rehabilitation services. To structure the three dimensional model and indicate the optimal input and output

parameters within a rehabilitation environment, three indicators were used: admission Barthel, Barthel Unit Cost (BUC) and the percentage of improvement in function from time of admission to discharge. The theoretical model was then tested by means of actual empirically derived data of a random sample of 97 spinal cord injured and 132 focal cerebral patients drawn from ten leading comprehensive rehabilitation centers located across the continental United States. The basic structure of the model tended to be supported by the empirical data, and discussion was made of the use of such models as aids in planning evaluation and development of future computer simulation models of rehabilitation effectiveness.

(15 references) AA REFERENCE NUMBER 147

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

*The Reliability, Stability, and Generalizability of a Health Status Index*

PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION IN LOS ANGELES, CALIFORNIA, OCTOBER 15-19, 1978

The present paper examines the concepts of reliability, stability, and generalizability and defines criteria for evaluating Levels of Well-being and Prognoses in health measurement. Data were obtained from a two-year panel survey of 867 San Diego households. Classification according to an Index of Well-being can be accomplished with a high degree of reliability and preferences for levels of functioning are stable over time and generalizable across social groups. Preference weights based on probability sample surveys do represent all social groups in the proportions they are present in the community. Small observed differences between social groups help explain systematic variation in the preference weights, but have little consequence for the applicability of a health index.

(15 references) AS-M REFERENCE NUMBER 148

**Land, Kenneth C.; McMillen, Marilyn M.**

*Social and Demographic Determinants of Morbidity and Disability Trends in the United States, 1958-76*

URBANA, ILLINOIS:UNIVERSITY OF ILLINOIS, PROGRAM IN APPLIED SOCIAL STATISTICS, WORKING PAPER NUMBER WP7811, 1978

This paper presents macrodynamic structural-equation models that show how annual changes in aggregate morbidity and disability indexes for the United States over the years 1958 to 1976 affect each other and are affected by other aggregate social and demographic changes. After reviewing the record of annual changes in these indexes based on data from the National Health Interview Survey, their patterns of temporal covariation are discussed and some tentative structural-equation models are constructed to account for their behavior. These models are based on hypotheses derived from findings reported in cross-sectional and replication studies of the relationships between



morbidity and disability indexes and other social and demographic variables. For the most part, our time series analyses corroborate the findings from earlier studies.

(39 references) AA-M REFERENCE NUMBER 149

**Mackiewicz, Maciej; Bodych, Grazyna; Dziadosz, Ryszard; Bylina, Jerzy; Kuzma, Krystyna**

*An Attempt at Adapting the Sickness Impact Profile for Examining a Rural Population in Poland*

PRESENTED AT THE SOCIOLOGICAL CONGRESS IN UPPSALA:INSTITUTE OF OCCUPATIONAL MEDICINE AND RURAL HYGIENE, LUBLIN, POLAND, 1978

This paper describes the revision of the Sickness Impact Profile (SIP) developed by Gilson, et al. Specifically, language adaptation, the choice of statements adequate for rural conditions, and the assignment of scale values to individual statements are discussed. The adapted instrument has 14 categories and 245 statements. While this is the same number of categories as the questionnaire supplied by the SIP research team, the adaptation has 100 more questions. Answers from 114 rural physicians were used to determine scale values; the results of the judges' ratings are discussed.

(5 references) CH-P REFERENCE NUMBER 150

**Ray, Dixie W.; Flynn, Beverly C.; Norton, James A.**

*Development of Indices of Health Status*

PRESENTED TO THE STATISTICS SECTION AT THE ANNUAL MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION IN LOS ANGELES, CALIFORNIA, OCTOBER 16, 1978

In order to develop indices of health status, a random sample of 116 patients of a rural family practice were interviewed. Two methods were used with the data to develop indices and their reliability. Factor analysis produced indices with more items and higher reliabilities than resulted from use of preconceived indices. Further development of the indices is needed before they can be used as definitive measures of health status.

(12 references) AS REFERENCE NUMBER 151

**Seifert, Anne; Harnly, Martha; Williams, George Z.**

*Measuring Health in a Healthy Population: Development of the Health Profile Program Questionnaire*

SAN FRANCISCO, CALIFORNIA:INSTITUTE OF HEALTH RESEARCH, FILED 1978

The Health Profile Program Questionnaire was developed to measure positive health concentrating on health-habit behaviors related to

optimal physical functioning. A panel of health professionals defined positive health by listing individual health attributes associated with seven components of health status. Questionnaire items were developed from this list resulting in a 117-item pre-coded and self-administered instrument. Data items obtain information on a subject's demographic characteristics, medical history, work environment, exercise activity, nutritional patterns, smoking and drinking habits, psychological well-being and life stress. Questionnaire items have been pretested and tested for reliability on sub-samples of a healthy population. This instrument may be valuable to programs designed to study positive health, health practices, health maintenance and health status.

(10 references) AA-M REFERENCE NUMBER 152

**Terleckyj, Nestor E.**

*Integrating Social, Economic and Demographic Data in a Unified Accounting System*

PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN STATISTICAL ASSOCIATION IN SAN DIEGO, CALIFORNIA, AUGUST 14-17, 1978

This presentation, in which an input/output model for measuring the quality of life is proposed, is an extension of the author's earlier work on developing a system of national accounts. Numerous indicators of wellbeing, including health, safety and housing variables, are conceptualized as measuring changes in outputs of the accounting system; life expectancy and a mental health index are the two health measures specifically identified. The model links goals accounting inputs to these outputs. Existing expenditure data have been used to test out some of the assumptions of this model.

(references unknown) CH-P REFERENCE NUMBER 153

**Wallis, Michael L.; Summers, Irvin; Amonker, R.G.**

*Toward Development of a Health Status Index*

UNPUBLISHED, SOUTHWEST MISSOURI HEALTH SYSTEMS AGENCY, FILED 1978

This paper discusses a health status index model which is based on the statistical procedure of factor analysis. This model is applied using available data from the State of Missouri. In all, 47 variables available for each of the 115 counties were used in the analysis.

(10 references) CH-P REFERENCE NUMBER 154

**Ware, John E.; Brook, Robert H.; Davies-Avery, Allyson**

*Associations Among Psychological Well-Being and Other Health Status Constructs*

PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION IN LOS ANGELES, CALIFORNIA, OCTOBER 15-19, 1978

Six scales were constructed from a 22-item adaptation of Dupuy's General Well-Being (GWB) questionnaire: Anxiety, Depression, Self-Control, Positive Well-Being, General Health, and Vitality. Reliability and validity were studied for 1209 enrollees (ages 14 to 75 years) in the Dayton, Ohio, site of the Health Insurance Study (HIS). Associations among the six HIS-GWB scales and 22 other health status and health-related variables (e.g., chronic functional limitations, chronic diseases, physical abilities, general health perceptions, work adjustment, life stress, health habits, patient satisfaction) were factor analyzed to test construct validity in relation to physical, mental, and social components of health. Four HIS-GWB scales (Anxiety, Depression, Positive Well-Being, Self-Control) were substantially explained by the mental health factor. General Health and Vitality scales were substantially explained by physical, mental, and social health factors. Thus, they are better interpreted as measures of general health status.

(17 references) AA-M REFERENCE NUMBER 155

## Applications

**Chen, Martin K.; Berg, Lawrence E.; London, Virginia**

*The Health of Native Americans in Alaska: An Exploratory Study*

UNPUBLISHED, HYATTSVILLE, MARYLAND: NATIONAL CENTER FOR HEALTH SERVICES RESEARCH, 1978

This study focuses attention on three selected health problems that are believed by Indian Health Service officials to be prevalent among Native Americans in Alaska: alcoholism heart disease and pneumonia/influenza. The G', index which is specifically designed for assessing the health status of disadvantaged minority populations, was used. This index compares the disease-specific mortality and hospital experiences of two populations, one of which serves as the reference population because of its known higher health status. It was found that the Native Americans fared better in heart disease but were worse off in alcoholism and pneumonia/influenza. Further, the rankings of the index values for the four ethnic groups in Alaska were negatively related to the subject evaluations of their relative health status by 13 health workers intimately involved in natives. providing care to the Alternative explanations for this phenomenon were offered.

(10 references) AA-M REFERENCE NUMBER 156

**Cooperative Health Information Center of Vermont, Inc.**

*Evaluating Health System Performance in Vermont Communities Using an Index of Avoidable Deaths and Diseases: Executive Summary*

UNPUBLISHED, SOUTH BURLINGTON, VERMONT: COOPERATIVE HEALTH INFORMATION CENTER OF VERMONT, INC., 1978

This paper reports on a project which assessed the usefulness of sentinel health events (SHE) for evaluating health system performance in New England communities. Under the hypothesis that some of the

categories proposed by Rutstein, et al. (see Clearinghouse on Health Indexes Cumulated Annotations 1976) would show relationships to health systems and socio-demographic indicators, concurrent efforts developed files of SHE from both vital records and hospital abstracts for the Vermont population and developed files of potentially explanatory variables for both the health services and the socio-demographic domain. The analysis identified a number of technical difficulties with the implementation of Rutstein's proposed methodology. However, it appears that information useful to health planners and regulators can result from analyses of the occurrence of some Rutstein conditions.

(0 references) AS-M REFERENCE NUMBER 157

## RECENT PUBLICATIONS—NON-ENGLISH

**Alekseeva, O.G. et al.**

*Use of Multivariate Statistical Methods in Assessing the State of Reactivity of Ill and Essentially Healthy Persons*

GIGIENA I SANITARIIA (12):61-65, 1977 (ARTICLE IN RUSSIAN)

(2 references) REFERENCE NUMBER 158

**Belitskaia, E.I.A.**

*Medical Demography, Its Theoretical and Practical Aspects*

ZDRAVOOKHRANENIE ROSSITSKOI FEDERATSII (8):14-17, 1977 (ARTICLE IN RUSSIAN)

(references unknown) REFERENCE NUMBER 159

**Blanpain, J.E.**

*Health Services Research in Europe*

SOZIAL-UND PRAEVENTIVMEDIZIN 23(2):87-91, 1978 (ARTICLE IN FRENCH, SUMMARIES IN ENGLISH AND GERMAN)

Health services research is the systematic investigation and evaluation of the health services with respect to their availability, accessibility, coverage, effectiveness, efficiency, utilization and costs. Although some important developments like the introduction of national health insurance or the creation of a national health service led, in given European countries, to limited efforts in health services research, it has only been recently that the need for such research has become recognized. The cost explosion in health care and growing doubts about the effectiveness of given health care interventions provide leverage for a greater effort in health services research. The WHO European Advisory Committee for Medical Research and Health Services Research has identified five priority areas for research including the standardization of methods, measurements and terminology in biomedical and health services research. Addressing these problems will call at the national level for the development of a critical mass of capable health services researchers. It will also require substantial financial resources.

(6 references) AS-M REFERENCE NUMBER 160

**Bogralik, V.G.**

*Life Style and Health*

SOVETSKAIA MEDITSINA (10):124-127, 1977 (ARTICLE IN RUSSIAN)  
(references unknown) REFERENCE NUMBER 161

**Dorozhnova, K.P.**

*Evaluation of Physical Development as an Important Part of the Control of Growth Process and the Health Status of an Individual Child and the Collective Body*

GIGIENA I SANITARIJA (10):77-82, 1977 (ARTICLE IN RUSSIAN)  
(26 references) REFERENCE NUMBER 162

**Golveteey, Viktor V.; Demianova, V.A.; Cherniavskaia, T.A.; Muchnik, I.B.; Petrovskii, A.M.**

*Structuring of Generalized Indicators of the Level of Public Health Development by Means of Extremal Grouping of the Parameters*

SOVETSKOE ZDRAVOOKHRANENIE (6):6-13, 1978 (ARTICLE IN RUSSIAN)  
(6 references) REFERENCE NUMBER 163

**Gitton, Henri**

*Economic Science and the Problems of Health*

REVUE D ODONTO-STOMATOLOGIE (PARIS) 7(2):121-124, 1978 (ARTICLE IN FRENCH)  
(0 references) REFERENCE NUMBER 164

**Holcik, J.**

*Problems in the Comprehensive Assessment of the Populations Health Status*

CESKOSLOVENSKE ZDRAVOTNICTVI 25(11):456-463, 1977 (ARTICLE IN CZECH)

Attention is drawn to the need of methodological studies of the general health status of the population which should characterize the health status of the population, render possible comparison of different areas, periods and population sub-groups, evaluate the effectiveness of routine health services as a whole and of individual health programmes, and facilitate the selection of priorities when planning health care. A brief account is presented of the published literature on the

general assessment of the health status of the population and perspective trends for a solution of the problem outlined.

(17 references) AA REFERENCE NUMBER 165

**Horwitz, Ole**

*Calculation of the Prognosis for a Patient Group*

UGESKRIFT FOR LAEGER 140(9):489-492, 1978 (SUMMARY IN ENGLISH, ARTICLE IN DANISH)

The prognosis for a patient group is illustrated by a survival table and by a "health table." Whereas the survival table is based exclusively on information about death, the health table illustrates the prognosis by means of both death and state of health. Under practical conditions, these tables can only be established by a prospective analysis. An example is presented to demonstrate that the tables provide a much more differentiated evaluation of the course of disease.

(1 reference) AA-M REFERENCE NUMBER 166

**Houtaud, Alphonse d'**

*Research in Lorraine on Psychosocial Factors of Health*

PARIS, FRANCE:EDITIONS HONORE CHAMPION, 1977 (3 VOLUMES IN FRENCH)

(references unavailable) REFERENCE NUMBER 167

**Kanagawa, K.; Yoshida, T.; Amatsu, E.; Ono, T.**

*Nursing View on Health and Illness Behavior*

KANGO KENKYU. JAPANESE JOURNAL OF NURSING RESEARCH 11(2): 85-90, 1978 (ARTICLE IN JAPANESE)

(16 references) REFERENCE NUMBER 168

**Kanep, V.V. et al.**

*Tasks of Medical Demography in the Study of Health Status of the Population*

ZDRAVOOKHRANENIE ROSSITSKOI FEDERATSII (9):18-21, 1977 (ARTICLE IN RUSSIAN)

(references unknown) REFERENCE NUMBER 169

**Kaznacheev, V.P. et al.**

*Complex Approach to the Study of Health*

SOVETSKOE ZDRAVOOKHRANENIE (10):12-17, 1977 (ARTICLE IN RUSSIAN)

Principles underlying a complex approach to the study of man's health (as a population) are set forth and the concept of health, elaborated at the Sibirian branch of the AMS of the USSR, is given. Pointing out the influence exerted by socioeconomic factors on the health status of man, the authors suggest that the health itself be considered as a factor of the socioeconomic development (as a factor of labour productivity and criteria for efficient public production). On concrete examples the interrelation between health status and the mode of life is analyzed. Concrete examples illustrating an effective control over health, improving it without any additional outlays for public health services are cited. The authors conclude that the method of a systemic study of the health, viewed from the standpoint of the concept of the life-preservation system, elaborated by the authors, will enable a number of methodological and practical problems to be solved.

(7 references) AA REFERENCE NUMBER 170

**Krasnopevtsev, V.M; Timonov, M.A.; Yuchko, Ya.K.; Petrova, G.A.; Zherebilova, T.N.; et al**

*Comparative Evaluation of the Indices of the State of Health, Nutrition and Metabolism in Students Living in the Far North*

GIGIENA I SANITARIIA (3):44-49, 1978 (ARTICLE IN RUSSIAN)

The paper presents original data of complex investigations carried out by the authors for a period of many years on the state of health, diet and metabolism among students living under conditions of the Far North and Siberia (Norilsk, Surgut, etc.) and shows the hygienic effectiveness of a national diet for separate age groups.

(5 references) AA REFERENCE NUMBER 171

**Kucherin, N.A.; Iunkerov, V.I.**

*Social Hygiene Conditions That Affect the Level of Morbidity*

SOVETSKOE ZDRAVOOKHRANENIE (4):32-36, 1978 (ARTICLE IN RUSSIAN)

The application of the factor analysis helped ascertain that the improvement of the economic and social conditions at an industrial plant requires a continuously advanced technology, betterment of working and everyday life conditions of workers and forms of extending medical assistance to them. The use of the method in question will help in eliciting causes accounting for the rise of the sickness rate and further the work of medico-prophylactic establishments servicing industrial workers.

(2 references) AA REFERENCE NUMBER 172



**Kudrin, I.D.; Klintsevich, G.N.; Lukhov, V.A.**

*Methods of Determining the Effect of Military Working Conditions on the Functional State of the Body and the Work Capacity of Personnel*

VOENNO-MEDITSINSKII ZHURNAL (5):51-54, 1978 (ARTICLE IN RUSSIAN)

(0 references) REFERENCE NUMBER 173

**Leovski, J.**

*Tasks and Objectives of Assessment of Health Status in a Population*

CESKOSLOVENSKE ZDRAVOTNICTVI 26(5):210-218, 1978 (ARTICLE IN CZECHOSLOVAKIAN, ABSTRACTS IN ENGLISH AND RUSSIAN)

The author uses as a basis the definition and most frequently used indicators of health status. He deals with the reliability of direct (positive) and indirect (negative) indicators. He appreciates the contribution of physiologists who assess the level of the functional status of the organism and individual systems and organs under different work loads. He draws attention to the shortcomings of direct indicators of the health status and finds that despite this they are gaining increasingly larger numbers of followers, in particular in medical practice. The author pays greatest attention to indirect indicators of assessment of the health status. He classifies and evaluates them critically as regards their reliability in prognoses of the health status of the population. In addition to various mortality coefficients, he recommends the use of routine data as well as special research of the health status including surveys using questionnaires.

(4 references) AS REFERENCE NUMBER 174

**Lohmann, Von W.**

*Age Index and an Interpretation of Survivorship Curves*

ZFA; ZEITSCHRIFT FUER ALTERNFORSCHUNG (DRESDEN) 32(5): 461-466, 1977 (ARTICLE IN GERMAN, ABSTRACT IN ENGLISH)

Clinical investigations showed that the age dependences of physiological functions do not show, as generally assumed, a linear increase with age, but an exponential one. Considering this result, one can easily interpret the survivorship curve of a population (Gompertz plot). The only thing that is required is that the probability of death (death rate) is proportional to a function of aging. Considering survivorship curves resulting from annual death statistics and fitting them by suitable parameters, the resulting values are in agreement with clinical data.

(10 references) AA-M REFERENCE NUMBER 175

**Makovicky, E.**

*A Study of the Health Status of the Population in the Program of Scientific and Technical Cooperation of the Members of the Council of Mutual Economic Assistance (CMEA)*

ČESKOSLOVENSKE ZDRAVOTNICTVI 26(7):289-294, 1978 (ARTICLE IN CZECHOSLOVAKIAN, ABSTRACTS IN ENGLISH AND RUSSIAN)

The permanent health commission of the CMEA (Council of Mutual Economic Assistance) included methods of comprehensive investigation of the health status of the population into the programme of scientific and technical cooperation. In the solution of tasks and partial tasks of this very varied and comprehensive programme participate important scientific departments of member countries of the CMEA. Up to the end of 1980, i.e., in the first stage of investigations, they will concentrate their efforts on the definition and unification of basic statistical concepts and terms, indicators, working methods, sources of information, on their interpretation and on the creation of a uniform information system. In the second stage, i.e., after 1980, a project for statistical processing of information will be elaborated and a technical project for the dynamic assessment of the health status of the population. The elaborated method is tested experimentally in the member countries of the CMEA, and after its final revision it will be released for use.

(5 references) AS REFERENCE NUMBER 176

**Marchand, H. et al.**

*State of Health Self-Rating Scale Differences in Smoking and Non-Smoking Patients with Lung Diseases*

ZEITSCHRIFT FÜR ERKRANKUNGEN DER ATMUNGSORGANE 148(1): 44-53, 1977 (ARTICLE IN GERMAN)

One thousand patients of a chest hospital, 447 non-smokers and 553 smokers, were interviewed with a self-rating questionnaire about their physical and psychical state of health, without knowing that their answers might be evaluated under the view of smoking and non-smoking behaviour. Non-smokers reported physical complaints more frequently and intensively and felt more psychic impairments than smokers. The possible influence of the predominantly medical oriented health education upon this unexpected result is discussed. It is proposed to lay more attention upon the social conditions side by side with the medico-scientific information, until now still insufficiently influencing the smoking behaviour of the population. Only some facts of the original material are reported. Therefore, this is only a report in a preliminary phase.

(references unknown) AA-M REFERENCE NUMBER 177

**Menchaca, Francisco J.**

*Toward a Renewed Definition of Health*

ANALES ESPANOLAS DE PEDIATRIA 11(1):23-30, 1978 (ABSTRACT IN ENGLISH, ARTICLE IN SPANISH)

The need for a renewed definition of health is founded on several arguments and testimonies. The following project is offered to the discussion: Health could be conceived as the model of a capacity of vital normatization which allows the person to enjoy his psychophysic harmony in dynamic equilibrium with his natural and social circumstances. The author thinks that at present, an humanistic definition like this could not be easily understood and applied because of power structures and materialistic forces which act on the man of today. Notwithstanding this objection, moral exigencies and a personal feeling of sympathy toward the health matters, push the author to offer this project to the discussion.

(64 references) AA-M REFERENCE NUMBER 178

**Paul, H.A.**

*Trends in Modern International Gerontological Research: Epidemiological Aspects*

AKTUELLE GERONTOLOGIE 8(1):27-36, 1978 (ARTICLE IN GERMAN, ABSTRACT IN ENGLISH)

Using the methods of comparing statistical data from the population in different countries, one should have in mind that the age distribution could differ very much according to the biological and social structure. As example serves the system of social indicators applied by several supranational bodies in order to develop an instrument for measure the "quality of life." Life expectancy and disability rates in different age groups are among those methods. National statistics do not use only mortality rates and to some extent also morbidity rates but also scaled values about the amount of activities in daily living. Sociomedical figures like the number of restricted activity, bed disability, school loss, and work loss days per person per year seem to give more appropriate data for this purpose than the biomedical counts of the past. One would recognize, at least in the Angloamerican countries, that there is a newer trend to find indicators for epidemiological studies and statistics applicable by non-medical personnel as disability components for an index of health in age.

(31 references) AA REFERENCE NUMBER 179

**Pertsov, A.I.**

*Effectiveness of Workers Staying in Rest Homes and Boarding Houses According to Temporary Work Incapacity Indices*

VOPROSY KURORTOLOGII, FIZIOTERAPII I LECHEBNOI FIZICHESKOI KUL'TURY (2):62-66, 1978 (ARTICLE IN RUSSIAN)

(18 references) REFERENCE NUMBER 180

**Sergeev, E.P.**

*Methodological Bases for Improving the Approaches to Studying the Effect of the Factor of Water on the State of Health of the Population*

GIGIENA I SANITARIIA (3):3-8, 1978 (ABSTRACT IN ENGLISH, ARTICLE IN RUSSIAN)

Development of complicated and laborious hygienic investigations with assessment of the state of health of the population, including the morbidity rate, depending on the water factor determines the ways of further improvement of a system of methodical means of assessing the water quality and the water bodies, and considering the peculiar features of a preliminary experiment on animals, provides a choice of a series of informative tests and means for examining the population. The author demonstrates principles governing the systematic choice of the category of population to be examined with due regard to the multifactorial character of active environmental elements. Further accumulation of experience in field investigations is required.

(3 references) AA-M REFERENCE NUMBER 181

**Stalnova, R.S.**

*Complex Evaluation of the Health Status of Adolescents*

SOVETSKOE ZDRAVOOKHRANENIE (10):31-36, 1977 (ARTICLE IN RUSSIAN)

Approaches to a complex evaluation of the adolescents' health status are considered, due account being taken of the sickness rate among them (according to health categories) and their physical development for which purpose a pertinent scheme has been compiled by the author. The materials derived from these investigations carried out in seven cities of the country were analyzed separately for the adolescents belonging to the groups of workers and students. The author comes to the conclusion that in the cities of Irkutsk, Kemerovo, Tselinograd and Ivanovo the state of health among the gainfully employed adolescents is better than that among students of the same age. In the cities of Krasnodar and Frunze the health status in both groups is practically the same, while in the city of Mogilev it is better among students.

(references unknown) AA REFERENCE NUMBER 182

**Steudtner, G. Von**

*Wellbeing and Health*

ZEITSCHRIFT FUR DIE GESAMTE HYGIENE UND IHRE GRENZGEBIETE  
23(11):871-874, 1977 (ARTICLE IN GERMAN, ABSTRACTS IN ENGLISH  
AND RUSSIAN)

Health in the sense of absence of any major disease is not always identical with well-being. Being free from any serious disease lasting over a prolonged period, which is a condition of well-being, i.e., health in the sense of the desired state of health as defined by the WHO, is connected to a great extent with a feeling of physical and cardiopulmonary endurance and with a properly functioning body temperature regulating system. There are also manifest connections between a good appetite, patience and the ability to cope with irritating situations on the one hand and health and well-being on the other. A total of 676 persons without and 655 persons with diseases lasting over prolonged periods were interviewed in the course of the survey. (8 references) AS REFERENCE NUMBER 183

**Thom, Achim; Weise, Klaus**

*Discrepancies in the Theoretical Concept of Disease in Our Medicine,  
Their Nature, Cause and Consequences*

ZEITSCHRIFT FUR AERZTLICHE FORTBILDUNG (JENA) 71(20):983-989,  
1977 (ARTICLE IN GERMAN)

(68 references) REFERENCE NUMBER 184

**Vlasenko, V.G. et al.**

*Statistical Evaluation of the Significance of Differences in the Number of  
Days of Temporary Disability*

SOVETSKOE ZDRAVOOKHRANENIE (8):37-41, 1977 (ARTICLE IN RUS-  
SIAN)

A probability approach to estimating the statistical index of temporary disability in terms of days is set forth. Theoretical basis for calculating its mean error is given. Methods for determining the mean error, the confidence interval of the index in relative and absolute figures, are considered. Formulas for determining the significance of differences in the index of temporary disability in terms of days with an equal and different duration of observation over comparable collective bodies are offered.

(references unknown) AA REFERENCE NUMBER 185

**Waler, Hans T.; Hjort, Peter F.**

*Lost Years of Life: The Significance of Single Causes of Death*

TIDSSKRIFT FOR DEN NORSKE LAEGEFORENING 98(14):720-725, 1978  
(ARTICLE IN NORWEGIAN)

(6 references) REFERENCE NUMBER 186

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