



# Clearinghouse on Health Indexes

National Center for Health Statistics

Number 4, 1986

## Bibliography on Health Indexes

### 2 ACKNOWLEDGMENTS

### 3 ANNOTATIONS

- 3 Anderson, John P.; Bush, James W.; Berry, Charles C.: Error Causes in Function Assessment for Quality of Life and Health Outcome Measures: Performance Versus Capacity and Other Sources: Unpublished, San Diego, California: University of California, Department of Community Medicine, 1986
- 3 Anderson, John P.; Bush, James W.; Berry, Charles C.: Internal Consistency Analysis: A Method for Studying the Accuracy of Function Assessment for Health Outcome and Quality of Life Evaluation: Unpublished, San Diego, California: University of California, Department of Community Medicine, 1986
- 4 Anderson, John P.; Kaplan, Robert M.; Berry, Charles C.; Bush, O James W.; Rumbaut, Ruben G.: Interday Reliability of Function Assessment for a Health Status Measure: The Quality of Well-being Scale Instrument: Unpublished, San Diego, California: University of California, Department of Community Medicine, 1986
- 4 Anderson, John P.; Ganiats, Theodore G.; Kazemi, Mustafa M.: Screening and Treatment for Colorectal Cancer: A Benefit-Cost/Utility Comparison of Flexible Sigmoidoscopy and Fecal Occult Blood Methods using the General Health Policy Model: Unpublished, San Diego, California: University of California, Department of Community Medicine, 1986
- 4 Balaban, Donald J.; Sagi, Philip C.; Goldfarb, Neil I.; Nettler, Steven: Weights for Scoring the Quality of Well-being Instrument among Rheumatoid Arthritics: *Medical Care* 24(11):973-980, 1986
- 5 Blake, Robert L. Jr.; Vandiver, Trish A.: The Reliability and Validity of a Ten Item Measure of Functional Status: *Journal of Family Practice* 23(5):455-459, 1986
- 5 Bombardier, Claire; Ware, James; Russell, I. Jon; Larson, Martin; Chalmers, Andrew; et al.: Auranofin Therapy and Quality of Life in Patients with Rheumatoid Arthritis: *American Journal of Medicine* 81(4):565-578, 1986
- 6 Cadman, David; Boyle, Michael H.; Offord, David R.; Szatmari, Peter; Rae-Grant, Naomi I.; et al.: Chronic Illness and Functional Limitation in Ontario Children: Findings of the Ontario Child Health Study: *Canadian Medical Association Journal* 135:761-767, 1986
- 6 Cebul, Randall D.; Poses, Roy M.: The Comparative Cost-effectiveness of Statistical Decision Rules and Experienced Physicians in Pharyngitis Management: *Journal of the American Medical Association* 256(24):3353-3357, 1986

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## ACKNOWLEDGMENTS

Overall responsibilities for planning and coordinating the content of this issue rested with the Clearinghouse on Health Indexes, which is located in the Health Status Measurement Branch, Division of Epidemiology and Health Promotion, Office of Analysis and Epidemiology Program. The bibliography is compiled and edited by Pennifer Erickson with the assistance of Luz Chapman. Sharon Saylor and Linda Bean of Data Processing and Services Program, Publications Branch, were responsible for formatting the final publication.

Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through September 30, 1988.

This issue contains annotated citations of literature on composite measures of health status and quality of life, both published and unpublished, that became available in October, November, or December 1986. Materials searched in the preparation of this issue are given in the section entitled Sources of Information which follows the annotations. Bibliographic citations are given in the standard form: author, title, and source of the article, designated by Au., Ti., and So., respectively. As many as five authors are listed; the sixth and additional authors are identified by et al. Abbreviations are avoided whenever possible.

Following the abstract, the number of references used in the preparation of the document and source of the annotation are given. There are four sources: (1) the author abstract designated by AA; (2) the author summary AS; (3) the author abstract or summary modified by Clearinghouse personnel AA-M or AS-M; and, (4) the Clearinghouse abstract CH-P where the initial following the "-" indicates the individual responsible for the abstract.

Copies of items cited in the Clearinghouse bibliographies should be requested directly from the authors. The address for reprints is given after the abstract. When the request is to be sent to an author other than the first listed, the appropriate name is given along with the address.

#### REFERENCE NUMBER 1

Au: Anderson, John P.; Bush, James W.; Berry, Charles C.

Ti: **Error Causes in Function Assessment for Quality of Life and Health Outcome Measures: Performance Versus Capacity and Other Sources**

So: Unpublished, San Diego, California: University of California, Department of Community Medicine, 1986

Common methods of asking questions about function status, especially with self administered questionnaires, may miss a large fraction of the nonfatal morbidity and dysfunction that is actually present in a target population. Such questions, frequently part of "quality of life" measures in health outcome studies, can also cause serious underestimates of treatment or program effects. This article explores these sources of bias through evidence developed in three field experiments using different modes of questionnaire administration and question patterns, and seeks to quantify the size and direction of their effects. Survey and health services researchers seem generally unaware of these nonsampling sources of error. (8 references) AS

Address for reprint requests: Health Policy Project M022, Department of Community and Family Medicine, University of California at San Diego, LaJolla, California 92093

#### REFERENCE NUMBER 2

Au: Anderson, John P.; Bush, James W.; Berry, Charles C.

Ti: **Internal Consistency Analysis: A Method for Studying the Accuracy of Function Assessment for Health Outcome and Quality of Life Evaluation**

So: Unpublished, San Diego, California: University of California, Department of Community Medicine, 1986

Social, mental and physical function are major components of health outcomes and health related life quality, but the accuracy of function measurement has proved difficult to study rigorously. Internal Consistency Analysis (ICA), a noncorrelational method of validation using convergent evidence from multiple sources, was developed and used to study function classification for the Quality of Well Being scale (QWB). Following an initial survey with self and interviewer modes of function classification and the use of ICA, changes were made which (1) increased sensitivity (.45 to .66) and predictive value (.60 to .73) of the instrument mode most frequently in error (the self mode), (2) increased agreement in the classification of individual dysfunction (35 to 51) by the two modes, and (3) improved instrument

performance at the sites of apparently correctable errors. ICA is a useful method for exploring the accuracy of data gathering methods used in quality of life measurement. (37 references) AS

Address for reprint requests: Health Policy Project M-022, Department of Community and Family Medicine, University of California at San Diego, LaJolla, California 92093

### REFERENCE NUMBER 3

Au: Anderson, John P.; Kaplan, Robert M.; Berry, Charles C.; Bush, James W.; Rumbaut, Ruben G.

Ti: **Interday Reliability of Function Assessment for a Health Status Measure: The Quality of Well-being Scale Instrument**

So: Unpublished, San Diego, California: University of California, Department of Community Medicine, 1986

The Quality of Well-being (QWB) scale is a component of a General Health Policy Model that is used to calibrate utility weight function at a defined point in time. This paper reports the interday reliability of the QWB function assessment instrument from 5 studies involving more than 1,500 respondents. Data were obtained in several languages in addition to English. Reliability was estimated using two accepted methods: (1) Pearson correlations among QWB scores in adjacent days, and (2) Calculation of an Agreement Percent among reports of dysfunction in adjacent days. Pearson correlations between adjacent days were regularly above .9, similar to or higher than findings with other health measures. The Agreement Percents were on average above .8, and frequently above .9, figures far higher than reported for other measures. The place of these findings in terms of other methodological studies involving the QWB is reviewed, and some possible implications of these findings are explored. (29 references) AA

Address for reprint requests: Health Policy Project M-022, Department of Community and Family Medicine, University of California at San Diego, La Jolla, California 92093

### REFERENCE NUMBER 4

Au: Anderson, John P.; Ganiats, Theodore G.; Kazemi, Mustafa M.

Ti: **Screening and Treatment for Colorectal Cancer: A Benefit-Cost/Utility Comparison of Flexible Sigmoidoscopy and Fecal Occult Blood Methods using the General Health Policy Model**

So: Unpublished, San Diego, California: University of California, Department of Community Medicine, 1986

The General Health Policy Model and Quality of Well-being Scale are used to describe a "benefit-cost/utility" (BCU) evaluation comparing fecal occult blood and sigmoidoscopy screening for colorectal polyps and cancer. Using figures from the literature, the BCU figures for each type of screening are calculated. Under most reasonable assumptions, the BCU ratio for occult blood was shown to be over \$100,000/well year, while sigmoidoscopy produced a well year for less than \$6,000. Some reasons for this result are explored; it is concluded that sigmoidoscopy should be the primary means of screening for these diseases, with occult blood used to screen for cancer and polyps higher in the colon when the sigmoidoscopic examination is negative. (43 references) AA

Address for reprint requests: Health Policy Project M-022, Department of Community and Family Medicine, University of California at San Diego, LaJolla, California 92093

### REFERENCE NUMBER 5

Au: Balaban, Donald J.; Sagi, Philip C.; Goldfarb, Neil I.; Nettler, Steven

Ti: **Weights for Scoring the Quality of Well-being Instrument among Rheumatoid Arthritis**

So: *Medical Care* 24(11):973-980, 1986

The importance of measuring health outcomes such as functional status and quality of life has increased with the greater emphasis on efficiency and on judgments of clinical effectiveness of therapies for patients

with chronic disease. One measure of health status, the Quality of Well-being (QWB), has received significant attention as a health policy model because it quantifies health on a scale ranging from 'zero' (death) to 'one' (optimal health). The scale is based on weights (values) that were derived by having several thousand individuals in the general population rate scenarios in which a patient is described in terms of mobility, physical activity, social activity, and major symptom or problem. The present study was undertaken to determine if a disease-specific population composed of patients with moderate and moderately severe rheumatoid arthritis who were participating in a national multicenter trial of a new oral therapeutic agent, would rank scenarios similarly to the general population sample. In this study, close agreement was found between the weights obtained from the general population sample and the weights obtained from the sample of rheumatoid arthritic patients ( $R = 0.937$ ). The investigators believe that the study supports the use of the original general population weights and suggest that the index may be used for populations with a specific condition as well as for general populations. (18 references) AA

Address for reprint requests: Department of Family Medicine, Thomas Jefferson University, 1015 Walnut Street, Philadelphia, Pennsylvania 19107

#### REFERENCE NUMBER 6

Au: Blake, Robert L. Jr.; Vandiver, Trish A.

Ti: **The Reliability and Validity of a Ten Item Measure of Functional Status**

So: *Journal of Family Practice* 23(5):455-459, 1986

The accurate assessment of functional status is an important clinical activity in family practice. Many of the measures of function developed for research purposes, however, have questionable applicability to primary care practices. The Duke-UNC Health Profile (DUHP) is a 63 item instrument that assesses four dimensions of function: symptom experiences, physical function, social function, and emotional function. The reliability and validity of a ten item subset (the mini-DUHP) of the DUHP was examined for 71 white adults with a profile of high stressful life changes and weak social supports. These subjects completed the DUHP on two occasions and provided personal morbidity data by monthly mailed questionnaire for an intervening six month period. On both administrations of the instrument, mini-DUHP scores were strongly correlated with the composite DUHP scores and moderately correlated with each of the four functional dimension scores. The mini-DUHP demonstrated good temporal stability. Mini-DUHP scores, determined both before and after the six month period, were correlated with cumulative self reported hospital days, bed disability days, restricted activity days, and physician utilization. Responses to the mini-DUHP strongly predicted bed disability, restricted activity, and physician visits after controlling for the effects of sociodemographic characteristics by multivariate analysis. This tenitem scale may be useful and practical in the assessment and monitoring of function in a primary care setting. (12 references) AA

Address for reprint requests: M222 Health Sciences Building, Department of Family and Community Medicine, University of Missouri Columbia, Columbia, Missouri 65212

#### REFERENCE NUMBER 7

Au: Bombardier, Claire; Ware, James; Russell, I. Jon; Larson, Martin; Chalmers, Andrew; et al.

Ti: **Auranofin Therapy and Quality of Life in Patients with Rheumatoid Arthritis**

So: *American Journal of Medicine* 81(4):565-578, 1986

In a six month, randomized, double blind study at 14 centers, auranofin (3 mg twice daily) was compared with placebo in the treatment of patients with classic or definite rheumatoid arthritis. Efficacy was analyzed in 154 patients who received auranofin and 149 who received placebo. To reflect an expanded view of outcome assessment, the measures used included some 20 nontraditional measures of functional performance, pain, global impression, and utility (worth or value) in addition to five standard clinical measures of rheumatoid synovitis (e.g., number of tender joints). Results confirm the hypothesis that the favorable

effect of auranofin on clinical synovitis is accompanied by improvements across a range of outcomes relevant to the patient's quality of life. (62 references) AAM

Address for reprint requests: Rheumatic Disease Unit, Wellesley Hospital, 160 Wellesley Street East, Toronto, Ontario Canada M4Y 1J3

#### REFERENCE NUMBER 8

Au: Cadman, David; Boyle, Michael H.; Offord, David R.; Szatmari, Peter; Rae-Grant, Naomi I.; et al.

Ti: **Chronic Illness and Functional Limitation in Ontario Children: Findings of the Ontario Child Health Study**

So: *Canadian Medical Association Journal* 135:761-767, 1986

The Ontario Child Health Study was (OCHS) based on interviews of 1,869 Ontario families who were selected by means of a stratified, multistaged sampling method from the 1981 census of Canada. Its primary purpose was to determine the prevalence and distribution of mental health problems in Ontario children aged 4 to 16 years and their families, but it also allowed an estimate of other significant medical conditions and provided an overview of these children's use of health care, education and social services. The results are based on questionnaire responses concerning 3,294 children. Limitation of function without a chronic illness or medical condition was reported in 1.9, the converse in 14.0, and a chronic illness or medical condition with limitation of function in 3.7. When the three groups are considered together, 19.6 of Ontario children has a chronic health problem. Children of lower socioeconomic status were much more likely to have chronic health problems. Overall, children with chronic health problems were more likely to use physician, special education, and social mental health services. These findings have implications for those who provide services for children, plan community programs or train professionals in caring for children. (27 references) AA

Address for reprint requests: 3H5-Health Sciences Center, McMaster University, 1200 Main Street West, Hamilton, Ontario L8N 3Z5 Canada

#### REFERENCE NUMBER 9

Au: Cebul, Randall D.; Poses, Roy M.

Ti: **The Comparative Cost-effectiveness of Statistical Decision Rules and Experienced Physicians in Pharyngitis Management**

So: *Journal of the American Medical Association* 256(24):3353-3357, 1986

This analysis examined whether probability-based decisions for streptococcal pharyngitis, using probabilities derived from predictive models along with Tompkins' decision rules, could be more cost-effective than the actual decision of ten physicians. The probability of a positive throat culture ("disease") for each of 310 patients was calculated retrospectively using four different models based on discriminant analysis, (1) a branching algorithm, (2) and logistic regression (3 and 4). "Projected decisions" were based on the probabilities and Tompkins' rules. Direct medical and indirect costs per correct action taken (diseased patient-treated or nondiseased patient-not treated) were also calculated. Two models' projected decisions were more cost-effective than the physicians' Model 1 primarily would have reduced treatment costs (leaving no diseased patient untreated); model 4 primarily would have reduced throat culture costs (with 15 projected under treatment). While using statistical decision rules may be cost-effective in this setting, their adoption should be consistent with physician and patient priorities. (28 references) AA

Address for reprint requests: 315R Nursing Education Building, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania 19104

**REFERENCE NUMBER 10**

Au: Cereseto, Shirley; Waitzkin, Howard

Ti: **Capitalism, Socialism, and the Physical Quality of Life**

So: *International Journal of Health Services* 16(4):643-658, 1986

This study compared capitalist and socialist countries in measures of the physical quality of life (PQL), taking into account the level of economic development. The World Bank was the principal source of statistical data, which pertained to 123 countries and approximately 97 percent of the world's population. PQL variables included (1) indicators of health, health services, demographic conditions, and nutrition (infant mortality rate, child death rate, life expectancy, crude death rate, crude birth rate, population per physician, population per nursing person, and daily per capita calorie supply); (2) measures of education (adult literacy rate, enrollment in secondary education, and enrollment in higher education); and (3) a composite PQL index. All PQL measures improved as economic development increased. In 30 of 36 comparisons between countries at similar levels of economic development, socialist countries showed more favorable PQL outcomes ( $p < .05$  by two-tailed t-test). This work with the World Bank's raw data included cross-tabulations, analysis of variance, and regression techniques, which all confirmed the same conclusion. The data indicated that the socialist countries generally have achieved better PQL outcomes than the capitalist countries at equivalent levels of economic development. (23 references) AA

Address for reprint requests: University of California, Irvine, North Orange County Community Clinic, 300 West Romneya Drive, Anaheim, California 92801

**REFERENCE NUMBER 11**

Au: Cohen, Marc A.; Tell, Eileen J.; Wallack, Stanley S.

Ti: **The Lifetime Risks and Costs of Nursing Home Use Among the Elderly**

So: *Medical Care* 24(12):1161-1172, 1986

In this paper, the authors estimate the risk of an individual of entering a nursing home throughout the aging process and estimate the expected lifetime costs of nursing home use both for an individual and for society as a whole. The model is based on double-decrement life-table analysis. Data are taken from a 1977 survey of 4,400 Medicare beneficiaries. At age 65, the upper bound for the lifetime risk of entering a nursing home is 43.1%. The risk of entering a nursing home increases with age until around age 80. At about age 85, the risk begins to decline significantly. At almost all ages, the lifetime risk of entry for females is twice that of males. The expected lifetime costs of nursing home care across all ages are between \$10,500 and \$13,600. These costs are distributed very unequally. Only 13% of the elderly account for 90% of all nursing home expenditures. Given current life expectancy, the expected annual cost per person over age 65 is between \$532 and \$760. In the year 2000, the expected annual average costs of nursing home care per elderly person will range from \$450 to \$650. The decline in the average annual cost per person reflects shifts in the age structure and increased life expectancy. These figures need not represent an unmanageable burden on society's resources. Figures presented here help establish the feasibility and desirability of long-term care risk-sharing arrangements among the elderly, like long-term care insurance, life care communities, and other models. (27 references) AA

Address for reprint requests: Health Policy Center, Heller Graduate School Brandeis University, 415 South Street, Waltham Massachusetts, 02254

**REFERENCE NUMBER 12**

Au: Curtis, Kathleen A.; McClanahan, Sheila; Hall, Karyl M.; Dillon, Deborah; Brown, Karen Flottorp  
 Ti: **Health, Vocational, and Functional Status in Spinal Cord Injured Athletes and Nonathletes**  
 So: *Archives of Physical Medicine and Rehabilitation* 67(12):862-865, 1986

The relationship of sports involvement to medical complications, functional independence, and vocational status was studied in 67 individuals from 2 to 24 years after spinal cord injury (SCI). Sports participation ranged from none to 30 hours per week. No significant correlation was found between time spent in sports participation and number of medical complications, rehospitalizations, functional status as measured by a modified version of the Barthel Index, or employment. Subsequently, subgroups of SCI wheelchair basketball players and SCI nonathletes were compared in medical, functional, and vocational status. The athlete group showed significantly more average time per week of sports participation, as expected. Fewer physician visits occurred in the athlete group. Trends toward fewer medical complications and fewer rehospitalizations were seen in the athletic group, but this did not reach statistical significance. Sports participation was not associated with increased risk of medical complications and did not limit available time for vocational pursuits. The positive benefits of sports involvement on the community reintegration-process and the acquisition of functional skills for the newly disabled warrant further study. The longterm impact of sports involvement on prevention of cardiovascular disease, obesity, and other associated risks of a sedentary existence demands attention in our aging SCI population. (13 references) AA

Address for reprint requests: P.O. Box 491116, Los Angeles, California 90049

**REFERENCE NUMBER 13**

Au: Deyo, Richard A.; Centor, Robert M.  
 Ti: **Assessing the Responsiveness of Functional Scales to Clinical Change: An Analogy to Diagnostic Test Performance**  
 So: *Journal of Chronic Diseases* 39(11):897-906, 1986

One characteristic of newer health or functional status scales which has received little attention is their responsiveness over time to clinical change. In part, this is because methods for assessing this characteristic are crude and not well standardized. We suggest that scales be viewed as "diagnostic tests" for discrimination between improved and unimproved patients. With this perspective, one may construct receiver operating characteristic (ROC) curves describing a scale's ability to detect improvement (or failure to improve) using some external criterion. This method is illustrated using data from a study of acute low back pain, comparing the Sickness Impact Profile, its major subscales, and a shorter, more disease-specific scale. The results demonstrate an advantage of the ROC approach over simple pre- and post-treatment score comparisons in assessing scale responsiveness. They also suggest some advantage for a brief disease-specific scale over the lengthier "generic" SIP. (21 references) AA

Address for reprint request: Health Systems Research and Development, Seattle Veteran Administration Medical Center, 1660 South Columbian Way, Seattle, Washington 98108

**REFERENCE NUMBER 14**

Au: Deyo, Richard A.; Diehl, Andrew K.; Rosenthal, Marc  
 Ti: **How Many Days of Bed Rest for Acute Low Back Pain?**  
 So: *New England Journal of Medicine* 315:1064-1070, 1986

Bed rest is usually recommended for acute low back pain. Although the optimal duration of bed rest is uncertain, a given prescription may directly affect the number of days lost from work or other activities. In a randomized trial, we compared the consequences of recommending two days of bed rest (Group I) with those of recommending seven days (Group II). The subjects were 203 walk-in patients with mechanical low back pain; 78 percent had acute pain (<30 days,) and none had marked neurologic deficits. Follow-up data

were obtained at three weeks (93 percent) and three months (88 percent). Although compliance with the recommendation of bed rest was variable, patients randomly assigned to Group I missed 45 percent fewer days of work than those assigned to Group II (3.1 vs. 5.6 days,  $P = 0.01$ ), and no differences were observed in other functional, physiologic, or perceived outcomes; the Sickness Impact Profile was used as a comprehensive measure of health outcome. For many patients without neuromotor deficits, clinicians may be able to recommend two days of bed rest rather than longer periods, without any perceptible difference in clinical outcome. If widely applied, this policy might substantially reduce absenteeism from work and the resulting indirect costs of low back pain for both patients and employers. (22 references) AA

Address for reprint requests: Health Systems Research and Development, Seattle Veterans Administration Medical Center, 1660 South Columbian Way, Seattle, Washington 98108

#### REFERENCE NUMBER 15

Au: Ewer, Michael S.; Ali, M.K.; Atta, Mohamed S.; Morice, Rodolfo C.; Balakrishnan, P.V.

Ti: **Outcome of Lung Cancer Patients Requiring Mechanical Ventilation for Pulmonary Failure**

So: *Journal of the American Medical Association* 256(24):3364-3366, 1986

The prognosis of lung cancer patients who are not candidates for surgery is usually poor. The unfavorable natural history of respiratory failure in this group of patients has been suggested as a causative factor. We analyzed the outcome of 46 consecutive patients with primary lung cancer on whom mechanical ventilators were utilized. Although seven patients were ultimately weaned and survived for at least 24 hours, three of them subsequently died prior to discharge from the hospital. The remaining 39 patients died while using the ventilator. Patient age, tumor cell type, and the etiology of respiratory failure were not significantly different between the weaned and unweaned populations. A difference was noted in the duration of mechanical ventilation for more than six days (range, two to six days.) Respiratory failure in the nonsurgical lung cancer patient carries a poor prognosis, and selection of patients for mechanical ventilation should be conservative. (13 references) AA

Address for reprint requests: Cardiopulmonary Section, University of Texas, MD Anderson Hospital, 6723 Bertner Avenue, Houston, Texas 77030

#### REFERENCE NUMBER 16

Au: Finkler, Kaja

Ti: **The Social Consequences of Wellness: A View of Healing Outcomes from Micro and Macro Perspectives**

So: *International Journal of Health Services* 16(4):627-642, 1986

Using field data from Mexican Spiritualist healing, this article focuses on the relationship between treatment outcomes at the individual and social levels. Two issues are explored 1) to what degree do persons treated by Spiritualist healing techniques fit into the wider society of which they are part, and 2) what effects does a given healing system exert on socioeconomic and political arrangements? The discussion brings into bold relief the contradictions embedded in Spiritualist healing techniques and rituals when studied from micro and macro perspectives. Using physiological and social analysis, the author addresses the reasons why individuals participate in Spiritualist healing and rituals, despite the resultant reproduction of socioeconomic and political forms that are contrary to the participants' concerns and interests and that may also be illness producing. By way of conclusion, it is suggested that, on a macro level, healing systems of the Spiritualist kind tend to perpetuate the socioeconomic and political systems. (48 references) AA

Address for reprint requests: Department of Anthropology, University of North Carolina, Chapel Hill, Alumni Building, Chapel Hill, North Carolina 27514

**REFERENCE NUMBER 17**

Au: Hawthorne, Victor M.; Julius, Mara; Deniston, Lynn; Carpentier-Alting, Patricia; Kneisley, Jill; et al.

Ti: **Predictors of Independence in Activities of Daily Living for End-Stage Renal Disease (ESRD) Patients in Michigan**

So: Presented at the Annual Meeting of the American Public Health Association, in Las Vegas, Nevada, September 29, 1986

The impact of multiple factors affecting independence in activities of daily living was tested in a stratified probability sample of endstage renal disease(ESRD) patients in Michigan (253 males and 223 females). The predictor variables were (1) primary cause of ESRD; (2) four treatment modalities; and (3) selected demographic variables. A modified Katz activities of daily living (ADL) index was used as the dependent variable. Among the findings of this analysis was that the strongest predictors of independence in ADL are age and primary cause of kidney failure. (references unknown) AS-M

Address for reprint requests: School of Public Health, University of Michigan, Ann Arbor, Michigan 48109

**REFERENCE NUMBER 18**

Au: Higgins, C. Wayne

Ti: **Evaluating Wellness Programs**

So: *Health Values* 10(6):44-51, 1986

This paper argues that evaluation of wellness and prevention programs is critical for two reasons: (1) to demonstrate the cost effectiveness of the program, a possible prerequisite for its survival; and (2) to ensure the most efficient mix of services. Four levels of program evaluation are discussed: preliminary, process, impact, and outcome. Objectives of outcome evaluation are to measure changes in health status due to a program, to assess changes in costs and health care utilization, and to determine the effect of a program on work related behaviors, e.g., absenteeism. Procedures for conducting and issues for interpreting the results of a cost-benefit analysis are discussed. (38 references) CH-P

Address for reprint requests: Department of Health and Safety, Western Kentucky University, Bowling Green, Kentucky, 42010

**REFERENCE NUMBER 19**

Au: Istvan, Joseph.; Weidner, Gerdi

Ti: **Obesity and Psychological Well-Being**

So: Presented at the Annual Meeting of the American Public Health Association in Las Vegas, Nevada, September 29, 1986

This paper reports some of the relationships between measures of depression, general wellbeing, and body mass that were obtained for respondents aged 25-74 years in the first cycle of the U.S. National Health and Nutrition Examination Survey (NHANES I). Depression was measured using the Center for Epidemiologic Studies scale (CES-D); 3,059 persons were assessed. Well-being was assessed on 6,913 adults using the General Well-being Schedule. The height and weight of respondents was used to calculate a body-mass index. These analyses show a consistent and gender-specific relationship between body mass and psychological well-being. Among women, greater weight seems to be associated with increases in self-reported depression and decreases in general well-being. For men, corresponding analyses did not generally show a relationship between body mass and psychological distress, although among the slenderest males, reports of depression were higher than for men of either moderate weight or those slightly overweight. (references unknown) AS-M

Address for reprint requests: Department of Medical Psychology, Oregon Health Sciences University, 3181 S.W. San Jackson Park Road, Portland, Oregon 97201

**REFERENCE NUMBER 20**

Au: Jennings, David

Ti: **The Confusion between Disease and Illness in Clinical Medicine**

So: *Canadian Medical Association Journal* 135(8):865-870, 1986

This article distinguishes between illness and disease and discusses the some of the difficulties present in identifying diseases for medical treatment. Three conditions, chronic brucellosis, obesity and hysteria, are analyzed in detail. These are treated as lying on the continuum between health and illness and as being a function of personality and behavior as well as of pathology; implications for treatment are addressed. (43 references) AA

Address for reprint requests: 508-90 Sparks Street, Ottawa, Ontario K1P 5B4, Canada

**REFERENCE NUMBER 21**

Au: Kaplan, Robert M.

Ti: **Health-related Quality of Life in Cardiovascular Disease**

So: Unpublished, La Jolla, California: University of California, Department of Community and Family Medicine, San Diego, 1986

Early mortality and reduced quality of life in years prior to death are the most important health outcomes associated with cardiovascular disease. Other measures of cardiovascular status, including blood pressure, ejection fraction, and ECG abnormalities are only of interest because of their known associations with poor health outcomes. The direct measurement of quality of life has gained increasing attention as a measure of outcome in studies of cardiovascular disease. This paper reviews several current approaches to the assessment of health outcomes. A General Health Policy Model is offered as a method of comparing program options in cardiovascular disease that may have very different specific objectives. Examples taken from the evaluations of coronary artery bypass surgery, hypertension screening and treatment, heart transplantation programs, and primary prevention of health disease are offered. Methods for measuring cost utility of alternative procedures are also discussed. (52 references) AA

Address for reprint requests: Health Policy Project M-022, Department of Community and Family Medicine, University of California at San Diego, LaJolla, California 92093

**REFERENCE NUMBER 22**

Au: Kaplan, Robert M.

Ti: **Quantification of Health Outcomes for Policy Studies in Behavioral Epidemiology**

So: *in Behavioral Epidemiology and Disease Prevention*, Kaplan, R.M. and Criqui, M.H. (editors), New York: Plenum Press, pp 31-54, 1985

This chapter describes the development of a health status measure based on the Quality of Well-being (QWB) scale. The QWB is used to calculate well years using a weighted life expectancy model; well years can be used in cost-utility analyses for assessing program effectiveness and for allocating resources. Examples of evaluation of pneumococcal vaccine, coronary artery bypass surgery and antihypertensive therapy are presented. (46 references) CH-P

Address for reprint requests: Health Policy Project M-022, Department of Community and Family Medicine, University of California at San Diego, LaJolla, California 92093

**REFERENCE NUMBER 23**

Au: Kaplan, Robert M.; Anderson, John P.

Ti: **Translating Health Effects into Work Capacity: The General Health Policy Model**

So: Unpublished, La Jolla, California: University of California, Department of Community and Family Medicine, 1986

This paper provides an overview of a general health policy model and associated measures of health status. The model was developed by a team of investigators with diverse academic backgrounds, including medicine, statistics, engineering, economics, sociology, and psychology. In addition to discussing the model in the context of screening and prevention programs, the paper presents some of the issues in health measurement. The final section presents a discussion of benefit-cost-utility studies in policy analysis. (50 references) AS-M

Address for reprint requests: Health Policy Project M-022, Department of Community and Family Medicine, University of California, San Diego, La Jolla, California 92093

**REFERENCE NUMBER 24**

Au: Kaplan, Robert M.; Bush, James W.; Blischke, Wallace R.

Ti: **Additive Utility Independence in a Multidimensional Quality of Life Scale for the General Health Policy Model**

So: Unpublished, La Jolla, California: University of California, Department of Community and Family Medicine, 1986

A general health policy model that uses a standardized unit of analysis, well-years, has been developed to maximize health status in health program evaluation, policy analysis, and technology assessment. The value component of health status can be isolated and represented as social preferences for states of well-being on a scale anchored at 0.0 for death and 1.0 for completely well. A simple linear model predicts the expected scores for any case in the well-state domain with a high degree for accuracy. A comprehensive set of function levels and symptom-problem complexes defines and bounds the well-state domain. Eight hundred subjects in a large metropolitan/rural area household interview survey rated approximately 400 case description arranged in a fractional factorial design. Extensive tests were made for interaction terms in the preference model. In 30 tests for interactions between age groups, function-level scales, and symptom-problem complexes, none were significant at the .05 level. This result suggests that the well-state attributes can be represented as additive and utility independent. In addition, the data suggest that the response variable measures preferences on a scale whose intervals represent subjectively equivalent units. (39 references) AA

Address for reprint requests: Health Policy Project M-022, Department of Community and Family Medicine, University of California at San Diego, LaJolla, California 92093

**REFERENCE NUMBER 25**

Au: Le Gall, J.R.

Ti: **The Intensive Care Unit: Definitions and Managerial Differences A French Multicentric Study on 38 Units**

So: *in The ICU: A Cost benefit Analysis*. Miranda, D. Reis and Langrehr, D. (editors), Amsterdam, The Netherlands: Excerpta Medica, 1986, pp. 39-54

Due to the need to reduce medical expenditures, a definition and an evaluation of the processes involved in, and the results of, intensive care has become increasingly important. This paper discusses which parameters to use in describing an ICU, as well as the relationship between parameters and their use in evaluation of intensive care units. Experience from a French collaborative study is used as the basis for discussion. (15 references) CH-P

Address for reprint requests: French Society of Intensive Care, United d'Etudes Statistique et Epidemiologiques, INSERM 169, Hopital St. Louis, Paris, France

**REFERENCE NUMBER 26**

Au: Lingeman, James E.; Saywell, Robert M.; Woods, John R.; Newman, Daniel M.

Ti: **Cost Analysis of Extracorporeal Shock Wave Lithotripsy Relative to Other Surgical and Nonsurgical Treatment Alternatives for Urolithiasis**

So: *Medical Care* 24(12):1151-1160, 1986

The impact and associated costs of new urolithiasis treatment methods, including extracorporeal shock wave lithotripsy (ESWL), were examined in a series of 1,781 patients treated between March 1, 1983, and February 28, 1985. An accounting cost methodology was used to derive estimates of direct and indirect hospital costs, as distinct from charges billed to the patient. The average hospital cost per case for ESWL was lower by 27% and significantly different ( $P < 0.05$ ) than the average cost for surgically treated patients. The difference in cost between ESWL and percutaneous lithotripsy was not statistically significant. The invasiveness of the treatments studied was directly related to length of hospital stay and cost. Projecting the findings to the entire urolithiasis population of the United States, the authors estimate that the usage of ESWL, if applied only to patients who would otherwise receive surgery, could result in an annual hospital cost savings of \$124,436,520. (16 references) AA

Address for reprint requests: Methodist Hospital Institute for Kidney Stone Disease, Suite 690, 1801 North Senate Boulevard, Indianapolis, Indiana 46202

**REFERENCE NUMBER 27**

Au: McGilchrist, C.A.; Hills, L. J.

Ti: **Estimation of Cumulative Illness Using Cross-sectional Data**

So: *Journal of Chronic Diseases* 39(11):929-931, 1986

Using cross-sectional data, a general method is given for assessing cumulative illness due to a particular disease. An application is given to estimating cumulative illness due to otitis media in Australian aborigines and contrasting these results to the non-aboriginal population. (2 references) AA

Address for reprint requests: Department of Statistics, University of New South Wales, Kensington N.S.W. 2033 Australia

**REFERENCE NUMBER 28**

Au: Meyers, Allan R.; Lederman, Ruth I.

Ti: **Alcohol, Tobacco, and Cannabis Use by Independently-Living Adults with Major Disabling Conditions**

So: Presented at the annual meeting of the American Public Health Association, Las Vegas, Nevada, September 30, 1986

An 18-month prospective study was conducted to evaluate health behaviors of 205 adults with major disabling conditions, due mainly to spinal cord injuries and cerebral palsy. Information on 74 study variables was conducted by personal interview. The major independent and possible confounding variables included medical status, disability status, activities of daily living and instrumental activities of daily living. Results are presented and some of the limitations of the data are discussed. (8 references) AS-M

Address for reprint requests: School of Public Health Boston University School of Medicine 80 East Concord Street, Boston Massachusetts 02118

**REFERENCE NUMBER 29**

Au: Nordenfelt, Lennart

Ti: **Health and Disease: Two Philosophical Perspectives**

So: *Journal of Epidemiology and Community Health* 40(4):281-284, 1986

The author argues that health is connected to the concept of ability and disease to the concept of disability. Within this framework, ability is judged relative to goals. The disabled person is the one who cannot reach a certain set of goals. Different persons may indicate different sets of goals. For example, the physician may have one set, the insurance lawyer another, and the layman a third. (5 references) AS-M

Address for reprint requests: Department of Health and Society, University of Linköping, Linköping, Sweden

**REFERENCE NUMBER 30**

Au: Nossal, Natalie; Torrance, George W.

Ti: **Preference Values for States Worse than Death**

So: Presented at the Third International Conference on System Science in Health Care, in Munich, West Germany, July 16-20, 1984 (filed 1986)

Three groups of individuals were surveyed to identify preferences for health states. Preliminary analyses indicate that persons who filled out self-administered questionnaires and those who were personally interviewed had similar response patterns. Three methods were used to elicit preferences, the cascaded standard gamble, the standard gamble and the time tradeoff technique. Relationships between techniques differ markedly and appear to depend on whether the state has a positive or negative preference value. (references unknown) CH-P

Address for reprint requests: McMaster University, Hamilton, Ontario L8S 4M4 Canada

**REFERENCE NUMBER 31**

Au: O'Brien, Bernie

Ti: **Measuring the Benefits: The Case of Heart Transplants**

So: *in The ICU: A Cost-benefit Analysis*. Miranda, D. Reis and Langrehr, D. (editors), Amsterdam, The Netherlands: Excerpta Medica, 1986 pp. 153-169

This paper reviews the principles and practices of benefit measurement in the context of economic evaluation of health care activities. After discussing ways in which benefits have been and can be quantified and valued, the author briefly reviews the extent to which such outcome measures have been used in the evaluation of Intensive Care Units (ICUs) and programs. As a case study of outcome measurement, data are presented from a recent economic evaluation of heart transplantation in the United Kingdom. Using these data on heart transplant patient survival and quality of life, the practical problems in constructing unified measures of health outcomes, such as quality-adjusted life years are discussed. (42 references) AS-M

Address for reprint requests: Health Economics Research Group, Brunel University, Uxbridge, Middlesex, UB8 3PH, United Kingdom

**REFERENCE NUMBER 32**

Au: Patrick, Donald L.; Stein, Jane.; Porta, Miquel.; Porter, Carol Q.; Ricketts, Thomas C.

Ti: **Poverty, Use of Services, and Health Status in Rural America**

So: Presented at the Annual Meeting of the American Public Health Association in Las Vegas, Nevada, October 1, 1986

This paper proposes a model for studying the relationships between poverty, health outcomes and access to health care and describes an analysis of data using this model. The sample consisted of 7,823 adults who responded to a health survey that inquired about poverty, health care needs, and utilization and health outcomes. Items on health outcomes were based on those in the National Health Interview Survey. Based on the results of this study, the authors suggest the study of patient behavior and health outcomes as important areas for future research. (41 references) CH-P

Address for reprint requests: Health Services Research Center University of North Carolina at Chapel Hill, Chase Hall 032A Chapel Hill, North Carolina 27514

**REFERENCE NUMBER 33**

Au: Pinch, Winifred J.

Ti: **Quality of Life as a Philosophical Position**

So: *Health Values* 10(6):3-7, 1986

“What gives a physician the right to keep alive a patient who wants to die?” Donald C., burn patient. “I do not feel what I was having to undergo was worth what I could get in the end. If I were in the same situation today . . . I do not think I could undergo the pain. I’m glad of my life. I’m happy to be alive. That’s not to say I am glad I was forced to undergo what I was forced to undergo.” “In terms of how happy I am now, I have a very good quality of life . . . I have had some very, very good experiences and happy experiences that I of course would not have had if I had died. My contention is that I should have been the one to make that choice at that time.” (19 references) AA

Address for reprint requests: School of Nursing, Creighton University, California at 24th Street, Omaha, Nebraska 68178

**REFERENCE NUMBER 34**

Au: Rakowski, William

Ti: **Personal Health Practices, Health Status, and Expected Control over Future Health**

So: *Journal of Community Health* 11(3):189-203, 1986

Data from Wave 1 of the National Survey of Personal Health Practices and Consequences were used to examine the association between perceived control over future health and 13 health behavior indices. Analyses were conducted within three strata of health status, defined by a cross-tabulation of subjective and functional health ratings. Greater control expected over future health was associated with 11 of the 13 practices in the stratum of persons in best health, but with only 2 practices in the lowest and 3 practices in the middle health strata. Age, gender, education, and a regular source of health care were also important predictors. Overall, persons in the lowest health stratum had the fewest number and least consistent set of predictors of preventive practices. Although the rationales proposed for following preventive practices often rely upon individuals’ favorable outlooks on their futures, the present data suggest that background health status may mediate the relationship. Health status can be viewed as a personal resource, which provides an opportunity for predispositions such as perceived control over future health to be consistently expressed in behavior. Attempts to develop theoretical frameworks and intervention programs that are applicable to several behaviors appear to face a difficult challenge, since few of the predictors were consistently related to more than a small number of the 13 practices. Health promotion programs may need

to include health status as an additional characteristic around which to structure both the content of recruitment messages, and expectations for persons who will be relatively more easy or difficult to reach. (11 references) AA

Address for reprint requests: Department of Community Health Programs, School of Public Health, University of Michigan Ann Arbor, Michigan 48109

#### REFERENCE NUMBER 35

Au: Robine, Jean-Marie

Ti: **Les Indicateurs de Type Esperance de Vie Sans Incapacite**

So: *Conseil des Affaires Sociales et de la Famille/Rapport Scientifique*, 1986 (in French)

This monograph describes various measures of health status and quality of life, including the calculation of quality adjusted life years. (140 references) CH-P

Address for reprint requests: Institut National de la Sante et de la Recherche Medicale, 44, Chemin de Ronde B.P. 34, 78110 Le Vesinet, France

#### REFERENCE NUMBER 36

Au: Robinson, Bruce E.; Lund, Christine A.; Keller, Donald; Cuervo, Colleen A.

Ti: **Validation of the Functional Assessment Inventory Against a Multidisciplinary Home Care Team**

So: *Journal of the American Geriatrics Society* 34(12):851-854, 1986

Systematic multidimensional assessment techniques such as the Functional Assessment Inventory (FAI) are increasingly used with the elderly for outcome measurement, prediction of service needs and accurate description for comparative purposes. The FAI is a structured interview followed by a rating process which compares patient status against standard descriptive phrases. Patients are assessed in five areas: mental health, physical health, social resources, economic resources, and activities of daily living (ADL). The validity of the FAI was tested by comparing ratings of patients health obtained by a single investigator using only the instrument with ratings obtained by consensus from an interdisciplinary home care team providing long-term care for the patients studied. An excellent level of agreement (weighted kappas from .583 to .780) was found in all areas studied. A single significant difference in ADL rating with a high correlation coefficient ( $r = .85$ ) was interpreted as due to a difference between the single rater and the team in the definition of ADL. The ease of obtaining summary ratings from clinical personnel suggests that further exploration of this rapid quantification of patient health is warranted. (6 references) AA

Address for reprint requests: Division of Geriatric Medicine, Department of Internal Medicine, University of South Florida College of Medicine, 12901 North 30th Street Box 19, Tampa, Florida 33612

#### REFERENCE NUMBER 37

Au: Rocca, Walter A.; Fratiglioni, Laura; Bracco, Laura; Pedone, Daniela; Groppi, Cinzia; et al.

Ti: **The Use of Surrogate Respondents to Obtain Questionnaire Data in Case-Control Studies of Neurologic Diseases**

So: *Journal of Chronic Diseases* 39(11):907-912, 1986

In 1984-85, the authors assessed the reliability of surrogate respondents to provide interview data for the specific items of a case-control study of Alzheimer's disease conducted in Italy. For all questions of the interview, responses of 52 non-demented subjects were compared to responses of their next-of-kin. In 21-27% of the pairs the next-of-kin was unable to answer questions about general anesthesia, antacid drug use, and age of mother and father at index birth. However, the surrogate respondent was able to answer 45 of 57 tested items with agreement greater than 80%. Questions about use of hard liquor and behavior

pattern yielded agreement of 71-75%, while those about number of jobs, and number of cigarettes per day yielded 62-63% agreement. For those who provided information about antacid drug use agreement was poor. These findings are encouraging for the use of next-of-kin respondents in case-control studies of Alzheimer's disease or other neurologic conditions for which the subjects cannot provide historical information. (24 references) AA

Address for reprint requests: Neuroepidemiology Branch, National Institute of Neurological and Communicative Disorders and Stroke, National Institutes of Health, Room 804, Federal Building, 7550 Wisconsin Avenue, Bethesda, Maryland 20892

#### REFERENCE NUMBER 38

Au: Schoenborn, Charlotte A.

Ti: **Health Habits of U.S. Adults, 1985: the "Alameda 7" Revisited**

So: *Public Health Reports* 101(6):571-580, 1986

Seven health habits, commonly referred to as the "Alameda 7," were shown to be associated with physical health status and mortality in a pioneer longitudinal study initiated in 1965 in Alameda County, California. These habits are having never smoked, drinking less than five drinks at one sitting, sleeping 7-8 hours a night, exercising, maintaining desirable weight for height, avoiding snacks, and eating breakfast regularly. The Alameda study focused attention on the importance of everyday practices for the maintenance of good health and, ultimately, for longer life. This report presents selected findings on the prevalence of the seven Alameda practices (defined slightly differently in some cases) among the general U.S. population aged 18 years and older, by sex, according to age, education, income, and race. In general, men are more likely than women to smoke, drink, and exercise. Younger people are more likely than older people to skip breakfast, snack, and drink, and younger women are more likely than older women to smoke. Education, income, and racial differences were found for most health practices. Of all subgroups discussed, blacks, particularly black women, are the most likely to have lifestyles that would be considered unhealthy using the Alameda criteria. Overall, the data reported suggest that although large numbers of U.S. adults have healthy habits, many do not, particularly persons in socially and economically disadvantaged groups. (7 references) AA

Address for reprint requests: National Center for Health Statistics, 3700 East-West Highway, Room 2-24, Hyattsville, Maryland 20782

#### REFERENCE NUMBER 39

Au: Simes, R. J.

Ti: **Application of Statistical Decision Theory to Treatment Choices: Implications for the Design and Analysis of Clinical Trials**

So: *Statistics in Medicine* 5(5):411-420, 1986

This paper explores the application of statistical decision theory to treatment choices in cancer which involve difficult value judgments in weighing beneficial and deleterious outcomes of treatment. Strengths and weaknesses of using decision theory are illustrated by considering the problems of selecting chemotherapy in advanced ovarian cancer. The paper includes an assessment of individual preferences in 27 volunteers and a discussion of some problems in utility assessment. An alternative approach, using threshold analysis, is presented in which the results of the decision analysis are expressed as a function of utility parameters. By knowing what sets of utilities favor each treatment, the assessment of patient preferences can then be focused on important differences of treatment options. The implications of these results for the design and analysis of clinical trials are discussed. (12 references) AA

Address for reprint requests: Ludwig Institute for Cancer Research Blackburn Building, University of Sydney, Sydney N.S.W. 2006, Australia

**REFERENCE NUMBER 40**

Au: Simkin, Linda; Noval, Lorraine; Bubb, Susan; Medvesky, Michael; Brustman, Barbara  
 Ti: **Child and Adolescent Health Profile Project: Annotated Bibliography**  
 So: *Albany, New York: Welfare Research, Inc., 1986*

This bibliography is intended as a reference for professionals interested in compiling and summarizing key dimensions of children's health. Almost all of the cited materials have been published since 1980. Material is organized into four sections: background information on child health issues; child health indicators and health status measures; child health profiles; and health indexes. (70 references) AS-M

Address for reprint requests: 112 State Street, 10th Floor Albany, New York 12207

**REFERENCE NUMBER 41**

Au: Siu, Albert L.  
 Ti: **Measuring the Functional Status of Elderly Outpatients**  
 So: Unpublished, Santa Monica, California: Rand Corporation, 1986

This document describes design and methods for a study to be conducted among a sample of ambulatory persons. The author proposes using existing function status measures, such as the Barthel Index, the Index of ADL and the OARS. (references unknown) CH-P

Address for reprint requests: The Rand Corporation, 1700 Main Street, Santa Monica, California

**REFERENCE NUMBER 42**

Au: Strauss, Michael J.; Conrad, Douglas; LoGerfo, James P.; Hudson, Leonard D.; Bergner, Marilyn  
 Ti: **Cost and Outcome of Care for Patients with Chronic Obstructive Lung Disease**  
 So: *Medical Care* 24(10):915-924, 1986

The effect of physician specialization and board certification on costs and outcome of health care for a group of 213 patients with chronic lung disease followed prospectively for a year was studied. Linear, semilogarithmic, and logistic regressions were used to control for differences in pulmonary function, functional ability, and sociodemographic characteristics. The cost of health services during the year was estimated from the total charges incurred. Patients' pulmonary function, functional ability as measured by the Sickness Impact Profile, number of medical conditions, and insurance status were significant predictors of total cost. Combinations of these variables were important determinants of institutional days, outcome health status, and survival. Physician specialization and board certification were not significant descriptors of total costs of outcomes, although large variances limited the power of these findings. We conclude the differences in characteristics of primary care physicians do not appear to affect significantly the total cost of outcome of care for patients with moderate to severe chronic lung disease. (24 references) AA

Address for reprint requests: James LoGerfo, Clinical Scholars Program, University of Washington HQ-18, Seattle, Washington 98105

**REFERENCE NUMBER 43**

Au: Torrance, George W.  
 Ti: **Health Status Measurement for Economic Appraisal**  
 So: Presented at the Health Economists' Study Group Meeting in Aberdeen, Scotland, July 3-4, 1984 (filed 1986)

This paper provides a review of health status measurement for use in economic appraisal, with particular emphasis on the use of utility measurements. Cost utility analysis is one approach for incorporating health

state utilities into the economic evaluation of health care programs. Sensitivity analysis is suggested as a way of handling imprecision in the utility measures. (69 references) CH-P

Address for reprint request: Management Science, and Clinical Epidemiology and Biostatistics, McMaster University Hamilton, Ontario L8S 4M4 Canada

#### REFERENCE NUMBER 44

Au: Torrance, George W.

Ti: **Utility Approach to Measuring Health-Related Quality of Life**

So: Unpublished, Hamilton, Ontario, Canada: McMaster University, 1986

Quality of life is a broad concept that incorporates all aspects of an individual's existence. Health-related quality of life is a subset relating only to the health domain of that existence. The utility approach can be used to measure a single cardinal value, usually between 0 and 1, that reflects the health-related quality of life of the individual at a particular point in time. The utility approach is founded in modern utility theory; a normative rational model of decision-making under uncertainty. The measurement techniques that have been used include standard gamble, time trade-off, and rating scales. The techniques are described in the paper and compared in terms of their acceptability to subjects, reliability, precision, validity, and ease of use. It is concluded that the utility approach is beyond the experimental stage, and is now a viable alternative for investigators to use in measuring health-related quality of life. (38 references) AA

Address for reprint requests: McMaster University Hamilton, Ontario Canada L8S 4M4

#### REFERENCE NUMBER 45

Au: Wagner, Douglas P.; Draper, Elizabeth A.

Ti: **Potential Resource Savings in Intensive Care in Tertiary Care Hospitals**

So: *in ICU: A Cost benefit Analysis*. Miranda, D. Reis and Langrehr, D. (editors) Amsterdam, The Netherlands: Excerpta Medica, 1986 pp. 101-120

This paper addresses concerns about the use of ICUs by asking questions such as "which groups of patients now admitted to ICUs do not need or benefit from the intensive care they receive?" Using data from a 12-hospital, 3,849-patient nationwide prospective study of ICUs, this paper provides hard estimates of possible cost savings. A simplified and validated severity of illness classification system, APACHE-II is used as a measure of health benefit. Policy implications of the analysis are discussed. (43 references) CH-P

Address for reprint requests: ICU Research Unit, The George Washington University Medical Center, Washington, D.C.

#### REFERENCE NUMBER 46

Au: Weinberger, Morris; Hiner, Sharon L.; Tierney, William

Ti: **Improving Functional Status in Arthritis: The Effect of Social Support**

So: *Social Science and Medicine* 23(9):899-904, 1986

This paper presents data from a longitudinal study of patients with symptomaticosteo arthritis (OA) of the knee and/or hip. One component of this study involved interviewers telephoning patients bi-weekly for 6 months to inquire about stressors which they have experienced and to obtain self-assessment of their health. It was hypothesized that telephone interviewers (TI) may provide OA patients with social support, and thus improve their functional status. Patients' functional status (physical disability, psychological disability, and pain improved significantly after 6 month of receiving bi-weekly telephone calls. Since our outcome variables have been shown to be reliable measures of disability over time, and because OA is a progressively degenerative process, one would expect deterioration rather than improvement. Futhermore, since patients reported more social support at 6 months than at baseline, the authors attributed the improvement in health status to the TIs being viewed as a source of social support to elderly persons who

may have support deficits. The authors suggest that future studies redefine TIs' roles from an unbiased data collector to a provider of social support. TIs should follow their own panel of patients so that continuity can be established. Furthermore, TIs should undergo training about OA, its treatment, common medications and their side effects, and other pertinent information. In this manner, social support may be further enhanced and provide the greatest potential improve patients. (36 references) AA

Address for reprint requests: Regenstrief Institute for Health Care, 1001 West Tenth Street, Indianapolis, In 46202

#### REFERENCE NUMBER 47

Au: Wells, Kenneth B.; Manning, Willard Jr.; Benjamin, Bernadette

Ti: **A Comparison of the Effects of Sociodemographic Factors and Health Status on Use of Outpatient Mental Health Services in HMO and Fee-for-services Plans**

So: *Medical Care* 24(10):949-960, 1986

The authors compared the effects of age, sex, socioeconomic status, and mental and physical health status on the use of outpatient mental health services in one well-established health maintenance organization (HMO) and in fee-for-services plans. In the Seattle site of the Rand Health Insurance Study (HIS), families were randomly assigned to HMO or fee-for-services coverage. Adults incur much greater expense for outpatient mental health services than children in both an HMO and a fee-for-service plan with identical coverage (i.e., free care). However, the difference in use between adults and children is significantly greater for the fee-for-services plan than the HMO ( $P < 0.01$ ). Similarly, education has significantly greater effects on use for the fee-for-service than the HMO plan. Increased income has a significant negative effect on use in both the HMO and fee-for-service plans. Mental and physical health status have similar large effects on use in both fee-for-services and HMO plans. (28 references) AA

Address for reprint requests: The Rand Corporation, 1700 Main Street, Santa Monica, California 90406

#### REFERENCE NUMBER 48

Au: Whittemore, Alice S.

Ti: **Epidemiology in Risk Assessment for Regulatory Policy**

So: *Journal of Chronic Diseases* 39(12):1157-1168, 1986

The author reviews the history of epidemiology in risk assessment for regulatory policy and gives reason why epidemiology will continue to have a significant role in decision making. Positive and negative effects of this enhanced visibility for the epidemiologist are discussed. In the last section of the paper, the author suggests ways for preventing negative side effects and increasing the usefulness of epidemiologic data for regulatory risk assessment. (40 references) AS-M

Address for reprint requests: Department of Family, Community and Preventive Medicine, Stanford University School of Medicine, Stanford, California 94205

#### REFERENCE NUMBER 49

Au: Williams Alan

Ti: **The Cost-Benefit Approach to the Evaluation of Intensive Care Units**

So: *in ICU: A Costbenefit Analysis*. Miranda, D. Reis and Langrehr, D. (editors) Amsterdam, The Netherlands: Excerpta Medica, 1986 pp. 131-140

The purpose of this article is to present a brief introduction to the economic evaluation of intensive care units. The author briefly discusses cost-benefit methodology and the measurement of health outcomes in terms of quality-adjusted life years. An example comparing the life years associated with coronary artery bypass surgery and those associated with medical management of heart disease is given. (13 references) CH-P

Address for reprint requests: Department of Economics, University of York, Heslington, York YO1 5DD, United Kingdom

**Professional Journals Reviewed**

Articles cited in the ANNOTATIONS Section have been identified from a set of journals that are routinely reviewed by the Clearinghouse staff. Each new issue is examined for book reviews, current research funding opportunities, and forthcoming conferences as well as relevant articles. Journal titles along with the volume and issue number reviewed for this issue of the *Bibliography on Health Indexes* are listed below.

- ABS-American Behavioral Scientist 30(1)  
 Acta Psychiatrica Scandinavica 74(4) 74(5)  
 74 (Suppl 332)  
 American Economic Review 76(5)  
 American Journal of Economics and  
 Sociology 45(4)  
 American Journal of Epidemiology 124(4-6)  
 American Journal of Orthopsychiatry 56(3)  
 56(4)  
 American Journal of Psychiatry 143(10-12)  
 American Journal of Public Health 76(10-12)  
 American Journal of Sociology 92(3)  
 American Psychologist 41(10-12)  
 American Sociological Review 51(5) 51(6)  
 Archives of Environmental Health 41(5) 41(6)  
 Archives of Physical Medicine and  
 Rehabilitation Behavioral Science 31(4)  
 British Journal of Psychology 77(1) 77(4)  
 British Journal of Sociology 37(4)  
 British Medical Journal 293(6551-6559)  
 293(6561) 293(6562)  
 Canadian Journal of Public Health 77(5)  
 77(6)  
 Canadian Medical Association Journal  
 135(7-12)  
 Child Welfare 65(6)  
 Clinical Gerontologist 6(2)  
 Clinical Pediatrics 25(10) 25(12)  
 Cognitive Psychology 18(4)  
 Cognitive Therapy and Research 10(5) 10(6)  
 Community Mental Health Journal 22(4)  
 Econometrica 54(6)  
 Economic Development and Cultural  
 Change 35(1)  
 Family and Community Health 9(3)  
 Geriatrics 41(10-12)  
 Gerontologist 26(5) 26(6)  
 Hastings Center Report 16(4-6)  
 Health Affairs 5(3)  
 Health Care Financing Review 1986 Annual  
 Suppl  
 Health Psychology 5(6)  
 Health Services Research 21(4) 21(5)  
 Health Values 10(6)  
 Home Health Care Services Quarterly 7(3/4)  
 Inquiry 23(4)  
 International Journal of Aging and  
 Human 23(4)  
 Development International Journal of  
 Epidemiology 15(4)  
 International Journal of Health Services 16(4)  
 Issues of Science and Technology 2(2)  
 Journal of Allied Health 15(4)  
 Journal of Applied Psychology 71(4)  
 Journal of Behavioral Medicine 9(5) 9(6)  
 Journal of Chronic Diseases 39(10-12)  
 Journal of Econometrics 33(1/2)  
 Journal of Environmental Health 49(2) 49(3)  
 Journal of Epidemiology and Community  
 Health 40(4)  
 Journal of family Practice 23(16)  
 Journal of Health and Social Behavior 27(2)  
 27(4)  
 Journal of Health Economics 5(4)  
 Journal of Nervous and Mental Diseases  
 174(10)  
 Journal of the American Geriatrics Society  
 34(10-12)  
 Journal of the American Medical Association  
 256(13-24)  
 Lancet II(8510-8522)  
 Medical Care 24(10-12)  
 Milbank Memorial Fund Quarterly 64(4)  
 Multivariate Behavioral Research 21(4)  
 New England Journal of Medicine 315(14-26)  
 New York Academy of Medicine Bulletin  
 62(8-10)  
 Preventive Medicine 15(6)  
 Psychosomatic Medicine 48(8)  
 Psychosomatics 27(10-12)  
 Public Health Reports 101(6)  
 Quality of Life and Cardiovascular Care 2(7)  
 Review of Economics and Statistics 68(4)

Social Indicators Research 18(4)  
Social Science and Medicine 23(7-12)  
Sociology of Health and Illness 8(4)

Statistics in Medicine 5(5) 5(6)  
World Health Forum 7(4)  
World Health Statistics Quarterly 39(4)

### **Monographs, Government Documents and Unpublished Reports**

The unpublished reports cover work in progress and articles submitted for publication. Monographs, government publications and unpublished reports cited in the ANNOTATIONS Section have been received by the Clearinghouse during the October through December 1986 period. Thus, it is possible for unpublished materials that have been written prior to these months to appear in this issue.

This section lists citations to journal articles which have been classified under the medical subject heading "health status indicators" by the National Library of Medicine (NLM) and which were entered into the NLM's SDILINE or FILE HEALTH databases in October, November, or December 1986. Citations are printed, with only slight modification of format, in the order and form in which they appear in the NLM files. Following NLM's convention, titles which are enclosed in brackets indicate that the article is published in some language other than English. Abstracts and addresses are also printed here when they are available from NLM's database. The author's address is given, even though some are quite incomplete, to facilitate readers locating more information for requesting reprints or for making further inquiry into the author's research.

**REFERENCE NUMBER 50**

Au: Kelly W; Parkin G.; King RW

Ti: **Intensive care unit audit. Prince Henry's Hospital 1983-4.**

So: *Aust Clin Rev* 1986 Mar; 6(20):12-6

**REFERENCE NUMBER 51**

Au: Bac M

Ti: **Evaluation of child health services at Gelukspan Community Hospital, Radithuso, Bophuthatswana, 1976-1984.**

So: *S Afr Med J* 1986 Aug 30;70(5):277-80

Since the independence of Bophuthatswana in 1977 many new services have been established. The policy of the Department of Health and Social Welfare to practise primary health care has been implemented step by step and special attention has been given to the well-being of infants and preschool children. During this period several parameters of child health have been monitored, such as mortality rates, nutritional status and immunization status. In a few years significant changes have taken place.

**REFERENCE NUMBER 52**

Au: Yule BF; Van Amerongen BM; Van Schaik MC

Ti: **The economics and evaluation of dental care and treatment.**

So: *Soc Sci Med* 1986;22(11):1131-9

This paper is concerned with economic evaluation in dentistry. The potential for such evaluation is great, but has not been fully realised to date. A number of issues which are common to the existing literature are discussed, and particular attention is paid to the question of measuring dental health in economic appraisal. Directions for future research are presented. The paper concludes that the future for economic evaluation in dentistry is favourable and that there is a need for greater collaboration between economic and dental researchers in this area.

**REFERENCE NUMBER 53**

Au: Sullivan M ; Ahlmen M ; Archenholtz B ; Svensson G

Ti: **Measuring health in rheumatic disorders by means of a Swedish version of the sickness impact profile. Results from a population study.**

So: *Scand J Rheumatol* 1986;15(2):193-200

A technique for assessing the overall consequences of disease is introduced, comprising a Swedish version of a behaviour-based measure, the Sickness Impact Profile (SIP). Measurement characteristics of the profile are defined in an epidemiological study of 147 women with rheumatic disorders. The drop-out rate

was 7.5%. Cross-cultural evidence of the validity of the SIP was obtained in this study. Test-retest reliability was substantial. A high level of validity of the Swedish version was demonstrated, as assessed by hypothesized significant relationships with selected functional, psychological, and social correlates. The profile was able to describe the various sickness impacts in a specific and sensitive manner. In the epidemiological setting, the subscales representing Ambulation, Body care and movement, Emotional behaviour, Social interaction, Sleep and rest, Home management and Recreation and pastimes, all showed discriminatory capacity. The categories Mobility, Alertness behavior, Communication, Work, and Eating discriminated lesswell. The response pattern was recognizably related to rheumatic complaints, emphasizing a broader applicability of this scale in rheumatology.

#### REFERENCE NUMBER 54

Au: Hall J ; Masters G

Ti: **Measuring outcomes of health services: a review of some available measures.**

So: *Community Health Stud* 1986;10(2):147-55

#### REFERENCE NUMBER 55

Au: Crook J ; Tunks E ; Rideout E ; Browne G

Ti: **Epidemiologic comparison of persistent pain sufferers in a specialty pain clinic and in the community.**

So: *Arch Phys Med Rehabil* 1986 Jul;67(7):451-5

Most research into the causes and management of chronic pain has come from specialized chronic pain clinics, where patients have been selected through referral. Because it is assumed that persistent pain problems result in important socioeconomic and medical problems, it seemed important to determine whether the problems reported by patients in specialty pain clinics are characteristic of those reported by persistent pain sufferers in general. An epidemiologic study compared two groups of individuals with self-reported persistent pain complaints. One group was drawn randomly from a typical family medical group practice and the other was drawn from a specialized multidisciplinary pain clinic. The two groups were similar in most demographic variables, the length of the pain history, and the most commonly reported sites of pain. However, patients from the pain clinic were more likely to have had work-related accidents, to report greater health-care utilization, and to complain of more constant pain and greater levels of disability. Patients from the pain clinic reported greater impairment on the indices constructed to measure psychologic, social, and performance consequences of the pain experience. What most distinguished patients from the pain clinic was not medical factors alone, but reported impairment in function, and psychosocial difficulties. The implications are that patients referred to specialized pain clinics may not be representative of individuals in general who suffer persistent pain; the former likely require an interdisciplinary approach that includes attention to psychosocial and disability issues, not just medical or surgical treatments for pain.

#### REFERENCE NUMBER 56

Au: Dogle NV ; Radionova GK

Ti: **[Use of the chief indices of information-entropy analysis in studies of the health status of workers]**

So: *Sov Zdravookhr* 1986;(6):14-9

**REFERENCE NUMBER 57**

Au: Medina E ; Kaempffer AM ; Cumsille F  
Ti: **[Health care in the metropolitan region: comparison of 1977 and 1983 surveys]**  
So: *Rev Med Chil* 1985 Oct;113(10):1007-15

**REFERENCE NUMBER 58**

Au: Wood TJ ; Thomas SE  
Ti: Severity of illness and Diagnosis Related Groups.  
So: *Med J Aust* 1986 Jul 21;145(2):79-81

**REFERENCE NUMBER 59**

Au: Paganini-Hill A ; Ross RK ; Henderson BE  
Ti: **Prevalence of chronic disease and health practices in a retirement community.**  
So: *J Chronic Dis* 1986;39(9):699-707

The prevalence of chronic disease based on a mailed questionnaire was estimated as part of a continuing epidemiological study of a retirement community. The prevalence of eight chronic diseases (high blood pressure, angina, myocardial infarction, stroke, diabetes, rheumatoid arthritis, glaucoma, and cancer) was determined across all age and sex groups. The relationships between these diseases and several health related life-style practices were assessed. A health index summarizing five practices (smoking, alcohol consumption, exercise, sleep and obesity) was clearly related to the prevalence of disease.

**REFERENCE NUMBER 60**

Au: Cadman D ; Goldsmith C  
Ti: **Construction of social value or utility-based health indices: the usefulness of factorial experimental design plans.**  
So: *J Chronic Dis* 1986;39(8):643-51

Global indices, which aggregate multiple health or function attributes into a single summary indicator, are useful measures in health research. Two key issues must be addressed in the initial stages of index construction from the universe of possible health and function attributes, which ones should be included in a new index? and how simple can the statistical model be to combine attributes into a single numeric index value? Factorial experimental designs were used in the initial stages of developing a function index for evaluating a program for the care of young handicapped children. Beginning with eight attributes judged important to the goals of the program by clinicians, social preference values for different function states were obtained from 32 parents of handicapped children and 32 members of the community. Using category rating methods each rater scored 16 written multi-attribute case descriptions which contained information about a child's status for all eight attributes. Either a good or poor level of each function attribute and age 3 or 5 years were described in each case. Thus,  $2(8) = 256$  different cases were rated. Two factorial design plans were selected and used to allocate case descriptions to raters. Analysis of variance determined that seven of the eight clinician selected attributes were required in a social value based index for handicapped children. Most importantly, the subsequent steps of index construction could be greatly simplified by the finding that a simple additive statistical model without complex attribute interaction terms was adequate for the index. We conclude that factorial experimental designs are an efficient, feasible and powerful tool for the initial stages of constructing a multi-attribute health index.

**REFERENCE NUMBER 61**

Au: Winefield HR ; Cormack SM

Ti: **Regular activities as indicators of subjective health status.**

So: *Int J Rehabil Res* 1986;9(1):47-52

In order to measure rehabilitation effectiveness, both functional limitations and symptoms need to be assessed. The utility of activity measures as health indicators was explored by studying patterns of everyday activity in two samples, using 26 self-report items. Subjects in one group had survived a myocardial infarction (MI) four months beforehand, while subjects in the other were members of an exercise class whose infarcts had occurred several years previously. For the recent MI group, the variable most closely associated with fewer mental and physical symptoms was the number of different activities involving social interaction. On the other hand, the fitter subjects related their subjective health to the more conventional activity indicators; frequency of working, sexual activity and exercise. It appears that immediately after an acute episode of illness, chronically ill people may judge their recovery in terms of resuming normal social relationships.

**REFERENCE NUMBER 62**

Au: Kaznacheev SV ; Udalova SV

Ti: **[Use of the constitutional approach to evaluating health status]**

So: *Fiziol Cheloveka* 1986 May-Jun;12(3):489-94

**REFERENCE NUMBER 63**

Au: Brown M ; Gordon WA

Ti: **Rehabilitation indicators: a complement to traditional approaches to patient assessment.**

So: *Cent Nerv Syst Trauma* 1986 Winter;3(1):25-35

Rehabilitation Indicators (RI) form a multipart system for assessing the macrofunctioning of patients in medical rehabilitation. The RI system was designed to provide a holistic view of the patient as a means of integrating the diverse data sets that are obtained at present. The computerization of the RI system creates an easily accessible database to optimize intrateam communication and the sharing of information with patients and families, as well as to optimize the service provider's response to increasing demands for accountability.

**REFERENCE NUMBER 64**

Au: Skinner HA ; Holt S ; Sheu WJ ; Israel Y

Ti: **Clinical versus laboratory detection of alcohol abuse: the alcohol clinical index.**

So: *Br Med J [Clin Res]* 1986 Jun 28;292(6537):1703-8

To determine reliable indicators of alcohol abuse a comprehensive set of clinical and laboratory information was acquired from three groups of subjects with a wide range of drinking histories: 131 outpatients with alcohol problems, 131 social drinkers, and 52 patients from family practice. Findings from clinical examination provided greater diagnostic accuracy than laboratory tests for detecting alcohol abuse. Logistic regression analysis produced an overall accuracy of 85-91% for clinical signs, 84-88% for items from the medical history, and 71-83% for laboratory tests in differentiating the three groups. Further analyses showed 17 clinical signs and 13 medical history items that formed a highly diagnostic instrument (alcohol clinical index) that could be used in clinical practice. A probability of alcohol abuse exceeding 0.90 was found if four or more clinical signs or four or more medical history items from the index were present. Despite recent emphasis on the laboratory diagnosis of alcohol abuse simple clinical measures seem to provide better diagnostic accuracy.

**REFERENCE NUMBER 65**

Au: Sterkowicz S ; Sypczynski A ; Kwiatkowski S

Ti: **[Chances of survival of patients after myocardial infarction evaluated by the coronary prognostic index]**

So: *Wiad Lek* 1986 Mar 1;39(5):319-22

**REFERENCE NUMBER 66**

Au: Kulmanov ME

Ti: **[Organization of the system of controlling the quality of the environment and health status of the population in Kazakhstan]**

So: *Gig Sanit* 1986 May;(5):21-4

**REFERENCE NUMBER 67**

Au: Dionigi R ; Dominionioni L

Ti: **Predictive indices for the identification of high-risk patients.**

So: *Eur Surg Res* 1986;18(3-4):201-6

In this article, the predictive indices which have been developed during the last decade to assess the risk of complications during hospitalization are reviewed. These indices are based on the evaluation of nutritional and immunological parameters and are particularly suitable for the identification of the surgical patient at risk for postoperative septic complications. The authors also review the methods which have been proposed for the classification of the severity of disease in critically ill subjects and the sepsis score method for the prediction of clinical outcome in severely septic surgical patients.

**REFERENCE NUMBER 68**

Au: Bellamy N

Ti: **The clinical evaluation of osteoarthritis in the elderly.**

So: *Clin Rheum Dis* 1986 Apr;12(1):131-53

**REFERENCE NUMBER 69**

Au: Genes VS ; Sokol TV ; Shmuter LM

Ti: **[Determining the standards and characteristic intervals of quantitative indicators in pathological states]**

So: *Lab Delo* 1986;(6):374-8

**REFERENCE NUMBER 70**

Au: Tkach IuI

Ti: **[Various methods of the effective use of laboratory indicators in mass-screening]**

So: *Lab Delo* 1986;(6):371-4

**REFERENCE NUMBER 71**

Au: Ebrahim S ; Barer D ; Nouri F P

Ti: **Use of the Nottingham Health Profile with patients after a stroke.**

So: *J Epidemiol Community Health* 1986 Jun;40(2):166-9P

The Nottingham Health Profile (NHP) is easy to use with stroke patients and may be used with those who cannot manage more complicated mood questionnaires, such as the General Health Questionnaire (GHQ).

Stroke patients rate their health, and especially emotions and feelings of social isolation, as much worse than that of people of similar age. NHP emotion scores correlate with objective measures of disability, length of hospital stay, and GHQ scores. The NHP is a valid indicator of depressed mood, and combining its components into a total score gives the greatest accuracy in detecting depression. Patients with high scores at one month continued to report large numbers of problems at six months after their stroke. Many patients experienced pain, disturbed sleep, and social isolation, which are important, potentially treatable problems not usually considered in the management of stroke patients. Many patients with problems did not see their general practitioner or any other source of help, and additional follow up was needed.

#### REFERENCE NUMBER 72

Au: Kark JD ; Kedem R ; Revach M

Ti: **Medical examination of Israeli 17-year-olds before military service as a national resource for health information.**

So: *Isr J Med Sci* 1986 Mar-Apr;22(3-4):318-25

At age 17 years Israelis undergo medical examination for the purpose of health classification for military service. The potential use of this extensive data collection system for epidemiologic studies is illustrated for selected conditions. Trends in diagnosed disorders over a 25-year period are exemplified in the changing prevalence of tuberculosis, bronchial asthma, diabetes, epilepsy and heart defects. Within birth cohorts, cross-sectional analyses of height, body mass, blood pressure and disorders—such as bronchial asthma, allergic rhinitis, diabetes, psychiatric diagnoses and such genetic conditions as familial Mediterranean fever—point to clear ethnic differences. Educational level is strongly associated with measures of health status. Potential uses of this resource include: detecting groups in need of preventive, curative and rehabilitative care, assessing changing needs and priorities of health care, evaluation of intervention programs and health services provided in childhood; a wide spectrum of etiologic studies including assessment of health effects of social change, follow-up studies including the natural history of disorders, and developing data systems such as national registries of rare or important conditions. Issues relating to data reliability and validity, changing disease classification and nonexamination of groups exempted from military service limit interpretation of findings and restrict uses of this resource. Emphasis on standardization of data collection and diagnostic criteria, quality assurance and improved data management will be necessary.

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**Health Services Research Annual Meeting  
San Francisco, California 26-28 June 1988**

Tradeoffs and interface between cost, quality and access will be the theme of the fifth annual meeting of the Association of Health Services Research (AHSR) and the Foundation for Health Services Research (FHSR). Nationally recognized health services researchers will present their latest findings on quality of care and health status, on costs and insurance coverage of mental health services, on evaluating hospital market areas, and more. Senior legislative staffs and public and private policy makers will offer their critical perspective on key cost, quality and access issues and on the difference that health services research can make in changing public policy.

The AHSR-FHSR annual meeting offers participants a unique opportunity to attend sessions featuring a small number of original research papers, extended workshops on topics of special interest and state of the art research methodology. Every session has been organized to highlight both research and policy. The AHSR-FHSR conference provides an excellent opportunity to meet fellow researchers and policy makers as well as to keep abreast of the latest developments in health policy and research.

**American Medical Review Research Center's Symposium  
Washington, D.C. 28-29 October 1988**

Abstracts of papers dealing with the following topics are sought:

- uncertainty in medicine and physician pattern variations
- clinical decision making in operational settings
- medical quality information for consumers
- research and application studies on uniform clinical databases
- models for or applications of quality assessment tools in nonacute settings: long term, ambulatory, home health
- corporate quality assessment programs

Abstracts will be selected by a peer review process. Abstracts should be typed and approximately 700 words in length. All abstracts should be identified by name, organizational affiliation, address and telephone number of author contact. Abstracts must be submitted by June 15 to

Program Committee, AMRRC  
Suite 505  
440 First Street, N.W.  
Washington, D.C. 20001  
(202) 639-8614

Authors will be notified of acceptance by July 30; papers are due September 30. Authors who wish to attend the entire Symposium (papers will be presented on October 29) will be asked to submit a reduced registration fee of \$250, along with their completed papers, by September 30.

**American Public Health Association Boston,  
Massachusetts 13-17 November 1988**

The theme for this year's annual meeting is "Technology and Health: Problems and Promises." The meeting is expected to consist of a number of sessions of interest to persons working in the area of health status and quality of life assessment.

On Wednesday afternoon, 16 November, there will be a session entitled "National Data for Measuring Health and Quality of Life." The first half of this session will present current activities in measuring health related quality of life that are underway at the National Center for Health Statistics (NCHS) and the National Heart, Lung and Blood Institute. The second half will discuss future directions being considered by NCHS and the National Institutes of Health.

**Clearinghouse Update**

Over the next few months the Clearinghouse staff will be devoting its energies to bringing the Bibliography on Health Indexes series up to date. To do this as expeditiously as possible, sections other than the annotations and the selections from NLM may be somewhat shorter than in some of the previous issues. When the Bibliography is once again current, the news sections will once again be expanded as resources permit. The Clearinghouse thanks everyone for their patience.

**Publication Note**

Issue number 1, 1986 of the Bibliography on Health Indexes contained references to and annotations of presentations made at the Advances in Health Status Assessment Conference that was held in Palm Springs, California in February 1986. These papers have now been published in Journal of Chronic Diseases 40 (Supplement 1) which came out in summer 1987.

### Why “Indexes”?

In the health field the terms “index” and “indicator” have been used interchangeably when the primary measure of health status was a single measure such as a mortality rate or life expectancy. More recently, however, research efforts have focused on developing composite measures which reflect the positive side of health as well as changing disease and death patterns. Progress is being made; and the resultant health status measures are being applied. Although the measures have become more complex, the terms “index” and “indicator” are still used interchangeably. In providing information to assist in the development of composite health measures, the Clearinghouse 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.

### Why a “Clearinghouse”?

It has become apparent that different health indexes will be necessary for different purposes; a single GNP-type index is impractical and unrealistic. Public interest coupled with increased government financing of health care has brought new urgency for health indexes. Their development can be hastened through active communications; the Clearinghouse was established to provide a channel for these communications.

### What’s Included?

The selection of documents for the Clearinghouse focuses on efforts to develop and/or apply composite measures of health status. A reprint or photocopy of each selection is kept on file in the Clearinghouse. Domestic and foreign sources of information will 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 will systematically search current literature and indexes of literature to maintain an up-to-date file of documents and retrospectively search to trace the development of health indexes. Specifically, items will be included if they:

1. advance the concepts and definitions of health status by
  - a) operationalizing the definition
  - b) deriving an algorithm for assigning weights
  - c) computing transitional probabilities
  - d) validating new measures
2. use composite measure(s) for the purpose of
  - a) describing or comparing the health status of two or more groups
  - b) evaluating a health care delivery program
3. involve policy implications for health indexes
4. review the “state of the art”
5. discuss a measure termed “health index” by the author

### What Services?

The Clearinghouse publishes the *Bibliography on Health Indexes* four times each year. This compilation consists of citations of recent reprints or photocopies included in the Clearinghouse file of documents. Each citation in the ANNOTATIONS Section will be followed by a brief summary of the article. The period covered and the sources used in the compilation will be clearly stated in each issue. At present, the



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