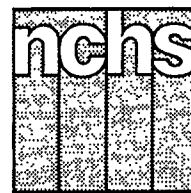


Clearinghouse on Health Indexes



National Center for Health Statistics

Bibliography on Health Indexes

2 ACKNOWLEDGMENTS

3 ANNOTATIONS

3 Alden, Dale; Austin, Clyde; Sturgeon, Robert; A Correlation Between the Geriatric Depression Scale Long and Short Forms; *Journal of Gerontology: Psychological Sciences* 44(4):P124-125, 1989

3 Bloom, Bernard S.; Does It Work? The Outcome of Medical Interventions; *International Journal of Technology Assessment in Health Care* 6:326-332, 1990

4 Branch, Laurence G.; Ku, Leighton; Transition Probabilities to Dependency, Institutionalization, and Death Among the Elderly Over a Decade; *Journal of Aging and Health* 1(3):370-408, 1989

4 Brody, Elaine M.; Hoffman, Christine; Kleban, Morton H.; Schoonover, Claire B.; Caregiving Daughters and Their Local Siblings: Perceptions, Strains, and Interactions; *Gerontologist* 29(4):529-538, 1989

4 Carr-Hill, Roy A.; Background Material for the Workshop on QALYs; *Social Science and Medicine* 29(3):469-477, 1989

5 Dam, H.; Pedersen, H.E.; Ahlgren, P.; Depression among Patients with Stroke; *Acta Psychiatrica Scandinavica* 80(2):118-124, 1989

5 Ebbs, Stephen R.; Fallowfield, Lesley J.; Fraser, Simon C.A.; Baum, Michael; Treatment Outcomes and Quality of Life; *International Journal of Technology Assessment in Health Care* 5(3):391-400, 1989

5 Edbril, Susan D.; Rieker, Patricia P.; The Impact of Testicular Cancer on the Work Lives of Survivors; *Journal of Psychosocial Oncology* 7(3):17-29, 1989

6 Ell, Kathleen O.; Nishimoto, Robert H.; Coping Resources in Adaptation to Cancer: Socioeconomic and Racial Differences; *Social Service Review* (Sep):433-445, 1989

6 Ell, Kathleen O.; Mantell, Joanne E.; Hamovitch, Maurice B.; Nishimoto, Robert H.; Social Support, Sense of Control, and Coping Among Patients with Breast, Lung, or Colorectal Cancer; *Journal of Psychosocial Oncology* 7(3):63-89, 1989

(continued on page 49)



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control
National Center for Health Statistics
Manning Feinleib, M.D., Dr. P.H., Director



ACKNOWLEDGMENTS

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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 July, August, or September 1989. Materials searched in the preparation of this issue are given in the section entitled Sources of Information, which follows the annotation section. 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: Alden, Dale; Austin, Clyde; Sturgeon, Robert

Ti: **A Correlation Between the Geriatric Depression Scale Long and Short Forms**

So: *Journal of Gerontology: Psychological Sciences* 44(4):P124-125, 1989

A sample of 81 elderly subjects (M age=76 years) volunteered to take part in a study to determine whether the Geriatric Depression Scale (GDS) Short Form is an acceptable substitute for the GDS Long Form. Half of the subjects took the GDS Long Form first, and half took the GDS Short Form first. After 2 weeks, the subjects were given the remaining form. Although the mean scores were lower than in previous correlation studies, the results indicated that the GDS Short Form correlated significantly ($r=0.66$, $p < .01$) with the GDS Long Form, but not highly enough to be considered an appropriate substitute. (4 references) AA

Address for reprint requests: 1275 K Street NW, Suite 350, Washington, DC 20005-4006

REFERENCE NUMBER 2

Au: Bloom, Bernard S.

Ti: **Does It Work? The Outcome of Medical Interventions**

So: *International Journal of Technology Assessment in Health Care* 6:326-332, 1990

The focus of this article is on contemporary roots of medical care quality measurement. Specifically, it singles out Dr. E. A. Codman and his early 20th century work emphasizing the assessment of outcome as the paramount indicators of medical care quality. The standard that Codman set for himself and for others is the one that late 20th century researchers must uphold. (51 references) AA

Address for reprint requests: University of Pennsylvania, Philadelphia, Pennsylvania

REFERENCE NUMBER 3

Au: Branch, Laurence G.; Ku, Leighton

Ti: **Transition Probabilities to Dependency, Institutionalization, and Death Among the Elderly Over a Decade**

So: *Journal of Aging and Health* 1(3):370-408, 1989

This article provides data, based on the Massachusetts Health Care Panel Study, on the probabilities that elderly people living in the community make transitions to dependency, institutionalization, or death over a 10-year interval. Assessments of dependency, as classified by activities of daily living (ADLs), are particularly important because they have been proposed as criteria to determine beneficiary eligibility to receive long-term care (LTC) services. After age and gender were controlled, the best predictors of subsequent status were initial ADL status, hospitalization, or institutionalization in the year prior to baseline, self-reported health status at baseline, and poverty at baseline. These data can be used as the basis for actuarial estimates for long-term care policies, whether public or private LTC insurance or self-insurance options, such as continuing care retirement communities or life care at home. The uses and implications of these findings are discussed. (18 references) AA

Address for reprint requests: Boston University School of Medicine, 80 E. Concord Street, M-936, Boston, Massachusetts, 02118

REFERENCE NUMBER 4

Au: Brody, Elaine M.; Hoffman, Christine; Kleban, Morton H.; Schoonover, Claire B.

Ti: **Caregiving Daughters and Their Local Siblings: Perceptions, Strains, and Interactions**

So: *Gerontologist* 29(4):529-538, 1989

Daughters who are principal caregivers to disabled elderly mothers are compared with their geographically proximate sisters and brothers as to the amount of help each group provides, the effects of care they experience, and the problems and benefits of the siblings' interactions about the caregiving situations. Caregivers reported the most and brothers the least service provision and strain; sisters fell in between, and also equaled caregivers in strain from intersibling problems. Negative intersibling interactions are associated with less emotional closeness in the families and the mothers' greater care needs. (41 references) AA

Address for reprint requests: Philadelphia Geriatric Center, 5301 Old York Road, Philadelphia, Pennsylvania 19141

REFERENCE NUMBER 5

Au: Carr-Hill, Roy A.

Ti: **Background Material for the Workshop on QALYs**

So: *Social Science and Medicine* 29(3):469-477, 1989

The Quality-Adjusted Life Year (QALY) has been proposed as a useful index for those managing the provision of health care because it enables the decisionmaker to compare the "value" of different health care programs and in a way that, potentially at least, reflects social preferences about the appropriate pattern of provision. The index depends on a combination of a measure of morbidity and the risk of mortality. Methodological debate has tended to concentrate on the technicalities of producing a scale of health; and philosophical argument has concentrated on the ethics of interpersonal comparison. There is little recognition of the fragility of the theoretical assumptions underpinning the proposed combination of morbidity and risk of mortality. The context in which the proposed indexes are being developed is examined in Section 2. While most working in the field of health measurement eschew oversimplification,

it is clear that the application of microeconomics to management is greatly facilitated if a single index can be agreed on. The various approaches to combining morbidity and mortality are described in Section 3. The crucial assumptions concern the measurement and valuation of morbidity, the procedures used for scaling morbidity with mortality, and the role of risk. The nature of the valuations involved are examined in Section 4. It seems unlikely that they could ever be widely acceptable; the combination with death and perfect health poses particular problems; and aggregation across individuals compounds the problem. There are also several technical difficulties of scaling and of allowing for risk that have been discussed elsewhere and so are only considered briefly in Section 5 of this paper. The paper concludes by emphasizing the importance of measuring outcomes but doubting the utility of pursuing the chimera of a global index given the wide variety of different kinds of assumptions involved. (40 references) AA

Address for reprint requests: Center for Health Economics, University of York, York YO1 5DD, England

REFERENCE NUMBER 6

Au: Dam, H.; Pedersen, H.E.; Ahlgren, P.
 Ti: **Depression among Patients with Stroke**
 So: *Acta Psychiatrica Scandinavica* 80(2):118-124, 1989

Ninety-two stroke patients and 30 control patients participated in the study. Stroke patients showed a higher frequency of depression than controls. Stroke patients with lesion in the right hemisphere were more depressed than patients with lesion in the left hemisphere. No correlation was found between the degree of depression and the degree of impaired physical function, degree of aphasia, or volume of lesion. (21 references) AA

Address for reprint requests: Rigshospitalet Blegdamsvej 9 2100 Copenhagen 0 Denmark

REFERENCE NUMBER 7

Au: Ebbs, Stephen R.; Fallowfield, Lesley J.; Fraser, Simon C.A.; Baum, Michael
 Ti: **Treatment Outcomes and Quality of Life**
 So: *International Journal of Technology Assessment in Health Care* 5(3):391-400, 1989

Physicians through the ages have practiced their trade with more or less regard to the effects of their treatment on their patients' sense of well-being if not as much as on the disease itself. Until recently, however, little attempt has been made to measure the effect of disease on quality of life and how this quality is or is not improved by the treatment. Several means have now evolved and in areas of medicine where the treatment may profoundly affect the patient's sense of well-being, effort is being made to gauge these consequences. (59 references) AA

Address for reprint requests: King's College School of Medicine and Dentistry, United Kingdom

REFERENCE NUMBER 8

Au: Edbril, Susan D.; Rieker, Patricia P.
 Ti: **The Impact of Testicular Cancer on the Work Lives of Survivors**
 So: *Journal of Psychosocial Oncology* 7(3):17-29, 1989

This study examines the impact of cancer on work among adult male survivors of testicular cancer. The sample consisted of 74 patients with cancer of the testis (median age, 30.0 years) who had completed treatment 2 to 10 years before the study. The results indicated that the cancer experience generally does not disrupt ability to work, job mobility, or career plans. The findings also suggested that work serves an important psychological function after treatment and that for a subgroup of survivors, it may provide a

means of managing depression and anxiety. These findings have important clinical implications for intervention with adult survivors of this type of cancer, given the role that work has traditionally played in men's lives. (24 references) AA

Address for reprint requests: Division of Cancer Control, Dana-Farber Cancer Institute, 44 Binney Street, Boston, Massachusetts 02115

REFERENCE NUMBER 9

Au: Ell, Kathleen O.; Nishimoto, Robert H.

Ti: **Coping Resources in Adaptation to Cancer: Socioeconomic and Racial Differences**

So: *Social Service Review* (Sep):433-445, 1989

This study examined the relationship between socioeconomic status (SES) and race and adaptation to a diagnosis of breast, colorectal, or lung cancer. A group of 369 patients were interviewed within 3-6 months of diagnosis. Nonillness-related stress, social support, coping strategies, and psychological adaptation were found to vary by race and SES. Moreover, relationships between coping resources and adaptation varied by sociocultural group. (23 references) AA

Address for reprint requests: 21448 Entrada Road, Topanga, California 90290

REFERENCE NUMBER 10

Au: Ell, Kathleen O.; Mantell, Joanne E.; Hamovitch, Maurice B.; Nishimoto, Robert H.

Ti: **Social Support, Sense of Control, and Coping Among Patients with Breast, Lung, or Colorectal Cancer**

So: *Journal of Psychosocial Oncology* 7(3):63-89, 1989

The role of social support, a personal sense of control, and coping, as well as the interplay among them, in psychological and functional adaptation to a recent first diagnosis of cancer was examined in 369 patients with breast, colorectal, or lung cancer. Multivariate techniques were used to assess the relationships among the dimensions of support as measured by the Interview Schedule for Social Interaction, sense of control, reliance on religion, cognitive restructuring, psychological well-being, and psychological distress as measured by the Mental Health Inventory and role functioning. The results indicated significant independent associations among support and control and adaptation outcomes. The findings underscore the importance of examining social support and the sense of control within an overall structure of coping with serious illness. (60 references) AA

Address for reprint requests: 21448 Entrada Road, Topanga, California 90290

REFERENCE NUMBER 11

Au: Essex, Marilyn J.; Klein, Marjorie H.

Ti: **The Importance of the Self-Concept and Coping Responses in Explaining Physical Health Status and Depression Among Older Women**

So: *Journal of Aging and Health* 1(3):327-348, 1989

This study examined a model specifying the links among the physical, functional, and subjective components of physical health status and depression among older women and assessed the effects of the self-concept (i.e., health confidence and self-esteem) and coping responses (i.e., direct action, positive cognitive, and passive cognitive coping) at each point in the model. Based on cross-sectional interview data with 274 older women, a series of regression analyses indicated that the self-concept and coping responses were significantly involved at each step of the health process but that the specific effects of the self-concept were different earlier from later in the model. Earlier in the model, self-esteem and physical health status indirectly influenced subsequent health status through their effects on health confidence and the cognitive

coping responses. At the final point in the model, physical health status continued to operate indirectly through health confidence and the cognitive coping responses; however, health confidence and positive cognitive coping responses then directly affected self-esteem which, together with health confidence, subsequently had direct negative effects on depression. These results were interpreted within a social psychological framework that incorporated self-concept theory with cognitive theories of depression. (32 references) AA

Address for reprint requests: University of Wisconsin, Madison, Wisconsin

REFERENCE NUMBER 12

Au: Fiedler, Klaus; Knoss, Rudolf; Lubke-Sure, Beate; Osada, Isabelle

Ti: **Understanding Other People's Preferences: Epistemic Constraints on Social Inferences**

So: *Journal of Experimental Social Psychology* 25:326-342, 1989

Two experiments are reported that investigate the ability to reconstruct another person's mental representations. A target person's vocational preferences were described in an incomplete paired comparison, and the subject's task was to infer the target's preferences on the remaining pairs of professions. In Experiment 1, the preference structures to be abstracted were manipulated. The predictions indicated that social inferences are guided and biased by schema-like preconceptions of the form of preference structures. In particular, monotonic preference functions (e.g., maximal preference for the riskiest or the most secure profession) or inverted-U-shaped functions (maximal preference for intermediate risk) were easier to understand and to complete than a preference function with more than one peak (U-shaped). Thus, the cognitive preconceptions are characterized by the same essential restriction (i.e., single-peakedness) that is assumed to characterize actual preference functions (Coombs and Avrunin, 1977). Experiment 2 replicates and extends these results, showing that abstracted preference structures for professions are readily transferred to related domains (hobbies and sports) that can be organized according to the same underlying dimension (i.e., risky versus secure). Performance differences are partly dissociated from differences in subjective confidence, which is generally strong and highlights the readiness for social inferences based on little information. Psychological implications of these findings as well as possible extensions and applications of the research method are discussed. (32 references) AA

Address for reprint requests: Universitat Giessen, Otto-Behaghel-Strasse 10, LD-6300 Giessen, West Germany

REFERENCE NUMBER 13

Au: Fink, Raymond

Ti: **Issues and Problems in Measuring Children's Health Status in Community Health Research**

So: *Social Science and Medicine* 29(6):715-719, 1989

The measurement of children's health status in community surveys is hampered by both methodologic and substantive problems. These include relatively low prevalence of medical conditions among children, appropriate selection of sample questionnaire items, and difficulties in measuring health status change. There is potential value in including measures of health risk instead of, or in addition to, health status measures. This may overcome problems of low prevalence and provide a broader base for testing the effects of program and policy changes. (31 references) AA

Address for reprint requests: Community and Preventive Medicine, New York Medical College, Valhalla, New York 10595

REFERENCE NUMBER 14

Au: Froberg, Debra G.; Kane, Robert L.

Ti: **Methodology for Measuring Health-State Preferences-IV: Progress and a Research Agenda**

So: *Journal of Clinical Epidemiology* 42(7):675-685, 1989

Remaining questions relative to the measurement of health-state preferences are outlined and applications discussed. We recommend more widespread use of functional measurement to better understand preference structures. Further research should be conducted on the reliability and validity of preference values produced by different scaling methods, including careful examination of the content validity of health-state descriptions. Construct validation studies using the multitrait-multimethod matrix would be useful as well as comparisons of stated preferences with revealed preferences. Despite the many unanswered measurement questions, preference values are currently being used in decisionmaking at both the individual and societal levels. Several global health status measures incorporate preference values, and preferences are increasingly being used in cost-effectiveness studies. If preferences are to be used effectively, research on their measurement must accelerate to keep pace with the urgency for application. (59 references) AA

Address for reprint requests: Division of Human Development and Nutrition, School of Public Health, University of Minnesota, Minneapolis, Minnesota 55455

REFERENCE NUMBER 15

Au: Gardner, Gerald T.; Gould, Leroy C.

Ti: **Public Perceptions of the Risks and Benefits of Technology**

So: *Risk Analysis* 9(2):225-242, 1989

The study attempted to verify and extend previous research on people's perceptions of the risks and benefits of technology and their judgments concerning the acceptability of technology safety regulations. The study addressed several limitations of prior work, in that: (1) it was the first "expressed-preference" study to collect data from large, representative samples of Americans; (2) the research design made "person," rather than "technology," the unit of statistical analysis; and (3) the study employed an expanded set of independent variables, including three qualitative benefit characteristics. The results confirmed several major conclusions of prior expressed-preference research, the most important being that members of the public tend to define "risk," "benefits," and "acceptability" in a complex, multidimensional manner; and that their definitions differ significantly from those used by professional risk-managers and other technical experts in quantitative assessments of risk and acceptability. The results also indicated that people's stances toward technology regulation tend to cut across traditional sociodemographic lines. (36 references) AA

Address for reprint requests: Department of Behavioral Sciences, University of Michigan—Dearborn, Dearborn, Michigan 48128

REFERENCE NUMBER 16

Au: Gelber, Richard D.; Goldhirsch A.

Ti: **Comparison of Adjuvant Therapies Using Quality-of-Life Considerations**

So: *International Journal of Technology Assessment in Health Care* 5(3):401-413, 1989

The benefit for patients with operable breast cancer treated with adjuvant systemic therapy is small, if reduction of early mortality within the context of randomized control trials is used for treatment comparison. One might consider that the 75-85 percent of patients who die despite treatment are overtreated, as are patients who remain alive even without therapy within a given time frame. Larger treatment benefits in terms of avoided or delayed breast cancer relapse have been demonstrated even at early phases of followup in the vast majority of adjuvant trials. Exposure of all patients to adjuvant

therapy at a time when no symptoms of disease are present is detrimental in terms of quality of life. Based on our assumption that the quality of life of the patient is typically altered both by subjective toxic effects of adjuvant treatment and by the appearance of relapse, we developed a method of comparing treatment effects in terms of time without symptoms of disease and toxicity of treatment (TWiST). Because the impact of treatment on relapse rates appears earlier than survival effects in all adjuvant therapy trials, and because the value of time without relapse in terms of the quality of life of the patients is as yet poorly defined, we have generalized our method of comparing treatment attitudes to include individual qualitative judgment values. The experience gained from integrating quality-of-life issues into clinical trials for breast cancer might also be applied to other diseases characterized by a chronic course, toxic treatments, and gains in periods of relative or absolute freedom from toxic effects and progressive disease. (13 references) AA

Address for reprint requests: Harvard Medical School, Boston, Massachusetts 02115

REFERENCE NUMBER 17

Au: Guralnik, Jack M.; Branch, Laurence G.; Cummings, Steven R.; Curb, David
 Ti: **Physical Performance Measures in Aging Research**
 So: *Journal of Gerontology: Medical Sciences* 44(5):M141-M146, 1989

Evaluation of physical functioning plays a valuable role in clinical geriatrics as well as in aging research. Physical functioning has generally been assessed through self- or proxy report. An important addition to this form of assessment is the use of performance measures of physical function, in which individuals are asked to actually perform specific tasks and are evaluated using standardized criteria. Although there has been limited methodological work in physical performance instruments, this approach offers a number of potential advantages. Several performance assessments have been developed that correlate highly with other measures of health status and predict need for long-term care and mortality. It is suggested that more widespread use be made of physical performance assessments and that they be evaluated as measures of functioning in cross-national studies, as indicators of change in functioning over time, as endpoints in intervention studies, as tools for identifying persons functioning at high levels, and as sources of relevant information for the clinician. (44 references) AA

Address for reprint requests: National Institute on Aging, 7550 Wisconsin Avenue, Federal Building, Room 612, Bethesda, Maryland 20892

REFERENCE NUMBER 18

Au: Guyatt, Gordon H.; Townsend, Marie; Keller, Jana L.; Singer, Joel
 Ti: **Should Study Subjects see their Previous Responses: Data from a Randomized Control Trial**
 So: *Journal of Clinical Epidemiology* 42(9):913-920, 1989

To test the relative merits of administering questionnaires with previous responses available (the informed condition) or unavailable (the blind condition), we administered blind and informed versions of a quality-of-life questionnaire (the Chronic Respiratory Disease Questionnaire, or CRQ) in a randomized, double-blind trial of bronchodilators in chronic airflow limitation. The responsiveness of the two methods, as reflected in the *p*-values associated with salbutamol and theophylline effects, were comparable for three of the four dimensions of the CRQ. The data suggested possible increased responsiveness of the informed method for the emotional function dimension of the questionnaire. Changes in the informed CRQ dyspnea and fatigue dimensions showed stronger correlations with changes in spirometry, 6-minute walk distance, and rating of dyspnea after the walk test than did blind administration. Further, changes in all four CRQ dimensions showed stronger correlations with corresponding global ratings using the informed

questionnaire. These results suggest that by letting study subjects see their previous responses, the validity of subjective measures of health status in clinical trials can be improved. (11 references) AA

Address for reprint requests: Department of Medicine, McMaster University, Hamilton, Ontario, Canada

REFERENCE NUMBER 19

Au: Hendryx, Patricia M.

Ti: **Psychosocial Changes Perceived by Closed-Head-Injured Adults and Their Families**

So: *Archives of Physical Medicine and Rehabilitation* 70(7):526-530, 1989

Response of 20 closed-head-injured adults with moderate to good recovery (Glasgow Coma Outcome Scale), 20 controls, and 13 family members were statistically compared in a questionnaire study of the relative importance of cognitive, emotional, and physical changes. Perceptions of preinjury psychosocial and preinjury and post-injury employment status were also evaluated. Significant changes in psychosocial functioning were perceived. Cognitive changes were rated as more extreme than changes in emotions by head-injured subjects, whereas ratings of cognitive, emotional, or physical changes did not differ significantly in ratings of family members. A between-group comparison indicated that family members tended to rate emotional changes as more extreme than did head-injury subjects. Degree of physical change was the only change that was correlated in the responses of head-injured subjects and family members. Differences in perceptions may limit long-term progress in rehabilitation. Explanations for the results include differences between family members and head-injured adults in awareness and understanding of the cognitive and emotional sequelae to head injury. Implications for involving families in counseling of head-injured adults are discussed. (13 references) AA

Address for reprint requests: Loma Linda University, Loma Linda, California 92350

REFERENCE NUMBER 20

Au: Hoehn-Saric, Rudolf; McLeod, Daniel R.; Zimmerli, Wesley D.

Ti: **Symptoms and Treatment Responses of Generalized Anxiety Disorder Patients with High Versus Low Levels of Cardiovascular Complaints**

So: *American Journal of Psychiatry* 146(7):854-859, 1989

Clinical observations suggest that patients with generalized anxiety disorder differ in somatic symptoms. The authors compared 28 patients with generalized anxiety disorder who had high levels of cardiovascular complaints with 32 patients with generalized anxiety disorder who had low levels of cardiovascular complaints on rating instruments, physiological measures, and use of anxiolytic medication. The two groups differed on somatic but not on psychic symptoms on rating instruments. Patients with high levels of cardiovascular symptoms had higher levels of cardiac lability and required higher doses of alprazolam. These findings suggest that anxious patients with comparable levels of psychic anxiety may differ in levels of physical symptoms. (20 references) AA

Address for reprint requests: 115 Meyer Building, Johns Hopkins Hospital, Baltimore, Maryland 21205

REFERENCE NUMBER 21

Au: Howard, Ronald A.

Ti: **Microrisks For Medical Decision Analysis**

So: *International Journal of Technology Assessment in Health Care* 5(3):357-370, 1989

Many would agree on the need to inform patients about the risks of medical conditions of treatments and to consider those risks in making medical decisions. The question is how to describe the risks and how to balance them with other factors in arriving at a decision. In this article, we present the thesis that part of

the answer lies in defining an appropriate scale for risks that are often quite small. We propose that a convenient unit in which to measure most medical risks is the microprobability, a probability of 1 in 1 million. When the risk consequence is death, we can define a micromort as one microprobability of death. Medical risks can be placed in perspective by noting that we live in a society where people face about 270 micromorts per year from interactions with motor vehicles. Continuing risks or hazards, such as are posed by following unhealthful practices or by the side effects of drugs, can be described in the same micromort framework. If the consequence is not death, but some other serious consequence like blindness, or amputation, the microrisk structure can be used to characterize the probability of disability. Once the risks are described in the microrisk form, they can be evaluated in terms of the patient's willingness to pay to avoid them. The suggested procedure is illustrated in the case of a woman facing a cranial arteriogram of a suspected arteriovenous malformation. Generic curves allow such analyses to be performed approximately in terms of the patient's sex, age, and economic situation. More detailed analyses can be performed if desired. Microrisk analysis is based on the proposition that precision in language permits the soundness of thought that produces clarity of action and peace of mind. (2 references) AA

Address for reprint requests: Stanford University, Palo Alto, California

REFERENCE NUMBER 22

Au: Infante-Rivard, Claire; Villeneuve, Jean-Pierre; Esnaola, Santiago

Ti: **A Framework For Evaluating and Conducting Prognostic Studies: An Application to Cirrhosis of the Liver**

So: *Journal of Clinical Epidemiology* 42(8):791-805, 1989

A framework for evaluating and conducting prognostic studies is proposed. Recently published studies on prognosis of cirrhosis of the liver are evaluated according to the proposed framework. It was found that appropriate statistical techniques were often used to analyze the results of prognostic studies of cirrhosis of the liver. On the other hand, the studies performed poorly with regard to study design, the determination of the usefulness of the data, the validity of the collected information, and the analytic strategy. It is hoped that the criteria suggested in this paper will improve the planning and the reporting of prognostic studies. (65 references) AA

Address for reprint requests: 1130 Pine Avenue West, Montreal, Quebec, Canada H3A 1A3

REFERENCE NUMBER 23

Au: Jackson, Mary E.; Drugovich, Margaret L.; Fretwell, Marsha D.; Spector, William D.; Sternberg, Josef; et al.

Ti: **Prevalence and Correlates of Disruptive Behavior in the Nursing Home**

So: *Journal of Aging and Health* 1(3):349-369, 1989

Estimates of the prevalence of disruptive behavior in the nursing home are presented based upon a representative sample of nursing home residents from intermediate care and skilled nursing facilities (ICF and SNF) in Rhode Island. Results indicate that 26.4 percent of residents had engaged in some form of disruptive behavior within 2 weeks prior to assessment. Abusiveness (physical and verbal) and noisiness were identified as the most prevalent behavior types (11.6 percent and 10.2 percent, respectively). Given the similarity of Rhode Island nursing home residents to nursing home residents nationally, these estimates may be considered as estimates for the national nursing home population. Older residents and those with greater physical and cognitive impairments were more likely to exhibit behavior problems. Although disruptive behavior seems to be associated with the dementing process, cognitively intact residents also demonstrated these behaviors. These findings suggest that an etiology of disruptive behavior should include physiological as well as social and psychological factors. (21 references) AA

Address for reprint requests: Department of Community Health Center for Gerontology and Health Care Research, Brown University, Providence, Rhode Island 02912

REFERENCE NUMBER 24

Au: Koenig, Harold G.; Shelp, Frank; Goli, Veeraindar; Cohen, Harvey J.; Blazer, Dan G.

Ti: **Survival and Health Care Utilization in Elderly Medical Inpatients with Major Depression**

So: *Journal of the American Geriatrics Society* 37(7):599-606, 1989

Forty-one elderly medical inpatients with active major depression were matched with nondepressed controls from the same population. Survival and health care utilization were examined during a mean followup period of 5 months. Cases and controls were matched by age, functional status, severity and type of medical illness, and extent of disease. In-hospital mortality was significantly higher among depressed compared with nondepressed controls (6 versus 0 deaths, $p = .03$). For patients discharged from the hospital alive, however, depression did not have a substantial impact on mortality. Health care utilization—in terms of days of inpatient care—was significantly higher, both during the index admission (25 versus 14 days, $p < .005$) and during the followup period (16 versus 7 days, $p < .05$) for depressed patients compared with controls. Hence, older medically ill patients with major depression consume more health care resources and experience greater mortality during their initial hospital stay. After discharge, while survival is little affected, excess resource utilization persists among those with depression. (32 references) AA

Address for reprint requests: Geriatric Research Education and Clinical Center, Durham, North Carolina 27710

REFERENCE NUMBER 25

Au: Liang, Jersey; Levin, Jeffrey S.; Krause, Neal M.

Ti: **Dimensions of the OARS Mental Health Measures**

So: *Journal of Gerontology: Psychological Sciences* 44(5):P127-138, 1989

A measurement model of mental health for the Older Americans Resources and Services (OARS) questionnaire is described. Using confirmatory factor analysis on noninstitutionalized elderly from Cleveland ($n = 1,834$) and Virginia ($n = 2,146$), the 21 OARS mental health items were fit to a 15-item model. In addition to the second-order construct of mental health, there were four first-order dimensions: life satisfaction, psychosomatic symptomatology, alienation, and cognitive deficit. Analyses were further replicated by splitting both samples in half. The model fit well and compared favorably with other alternative specifications. In addition to this analysis of internal structure, the model was also examined in relation to several exogenous factors including age, sex, race, education, and physical health. Although the model again fit well, a model with cognitive deficit separate from the other factors seemed more reasonable. (46 references) AA

Address for reprint requests: Institute of Gerontology, University of Michigan, 300 North Ingalls, Ann Arbor, Michigan 48109-2007

REFERENCE NUMBER 26

Au: Liu, Ingrid Y.; Anthony, James C.

Ti: **Using the "Mini-Mental State" Examination to Predict Elderly Subjects' Completion of a Follow-Up Interview**

So: *American Journal of Epidemiology* 130(2):416-422, 1989

The aim of this study was to test whether the Mini-Mental State scores obtained in a baseline survey might also help identify subgroups of elderly subjects who would be more likely to successfully complete personal interviews at followup in longitudinal epidemiological research. This predictive association has plausibility, in part, because of previously observed associations among Mini-Mental State scores, dementia, and

related disorders and disabilities. (11 references) CH-P

Address for reprint requests: Federal Building, Room 618, 7550 Wisconsin Avenue, Bethesda, Maryland 20892

REFERENCE NUMBER 27

Au: Lorig, Kate; Holman, Halsted R.

Ti: **Long-Term Outcomes of an Arthritis Self-Management Study: Effects of Reinforcement Efforts**

So: *Social Science and Medicine* 29(2):221-224, 1989

An underlying assumption of self-care interventions is that they are most effective when reinforced. To test this assumption, 8 months after baseline, 589 subjects who had taken the 6-week Arthritis Self-Management Course (ASMC) were randomized to (1) receive a bi-monthly arthritis newsletter, (2) attend a new 6-week Arthritis Reinforcement Course (ARC), or (3) receive no reinforcement. Between 8 and 20 months, there were no significant differences among the three randomized groups. The results were unaltered by the inclusion of assumed data of no charge for the 46 subjects who did not complete the full 20-month study. Between baseline and 20 months, all participants reduced their pain by 20 percent, depression by 14 percent, and visits to physicians by 35 percent ($p < 0.01$). There were no trends toward loss of these effects over time. These findings indicate that the effects of a self-care intervention were sustained over 20 months and that the tested forms of reinforcement did not alter those effects. (14 references) AA

Address for reprint requests: Department of Medicine, Stanford University School of Medicine, HRP Building, Room 6, Stanford, California 94305

REFERENCE NUMBER 28

Au: Meissner, Paul; Andolsek, Kathryn; Mears, Pamela A.; Fletcher, Barbara

Ti: **Maximizing the Functional Status of Geriatric Patients in an Acute Community Hospital**

So: *Gerontologist* 29(4):524-528, 1989

Patients ($n = 103$) admitted to an inpatient geriatric care unit focusing on restoration of functional status were compared with similar patients ($n = 75$) admitted to a control unit. Study-unit patients showed significantly greater improvement in basic functional capabilities from admission to discharge than did control-unit patients. A mixed picture evolved when length of stay and total charges of study and control-unit patients were compared by diagnostic-related groups. (9 references) AA

Address for reprint requests: Durham County General Hospital, 3643 North Roxboro Street, Durham, North Carolina 27704

REFERENCE NUMBER 29

Au: Mor, Vincent; Murphy, John; Masterson-Allen, Susan; Willey, Cynthia; Razmpour, Ahmad; et al.

Ti: **Risk of Functional Decline Among Well Elders**

So: *Journal of Clinical Epidemiology* 42(9):895-904, 1989

Active lifestyles may delay the onset of the functional consequences of chronic disease, potentially increasing active life expectancy. We analyzed the Longitudinal Study of Aging (LSOA) to test the hypothesis that elders' participation in an active lifestyle prevents loss of function. Focusing on the cohort aged 70-74 who reported being able to carry 25 lbs., walk 1/4 mile, climb 10 steps, and do heavy housework without help and without difficulty at baseline, decline was defined as no longer being able to perform these tasks independently and without difficulty 2 years later. Using multivariate logistic regression, results reveal that those who did not report regularly exercising or walking a mile were 1.5 times more likely to decline than those who did, controlling for reported medical conditions and demographic factors. Similar

findings (with different models) were observed for both men and women. Findings suggest the potential value of programs oriented toward the primary prevention of functional decline. (36 references) AA

Address for reprint requests: Brown University Center for Gerontology and Health Care Research, Providence, Rhode Island

REFERENCE NUMBER 30

Au: Neuhauser, Duncan

Ti: **Ernest Amory Codman, M.D., and End Results of Medical Care**

So: *International Journal of Technology Assessment in Health Care* 6:307-325, 1990

Ernest Amory Codman, M.D., was one of the most important figures in the history of outcomes research in medicine. Although his contemporaries scorned his efforts to create systematic procedures to evaluate the end results of medical care, his work foreshadowed many of today's most pressing issues in technology assessment. This article traces Codman's career as an innovator and political gadfly at the Massachusetts General Hospital during the first three decades of this century and examines the development and demise of his end-result system. (97 references) AA

Address for reprint requests: School of Medicine, Case Western Reserve University, Cleveland, Ohio

REFERENCE NUMBER 31

Au: Ouslander, Joseph; Leach, Gary; Staskin, David; Abelson, Susan; Blaustein, Jenna

Ti: **Prospective Evaluation of an Assessment Strategy for Geriatric Urinary Incontinence**

So: *Journal of the American Geriatrics Society* 37(8):715-724, 1989

The objectives of this study were to design and prospectively evaluate a strategy to assess geriatric urinary incontinence in primary care settings. A management plan for urinary incontinence was determined for 264 elderly incontinent patients (205 females and 59 males) based on a clinical evaluation, simple tests of lower urinary tract function, and several criteria for referral for further evaluation derived from the literature on incontinence. Of the 264 patients, 168 (64 percent) also consented to undergo a urologic and formal urodynamic evaluation. Half of these 168 patients met at least one criterion for referral for further evaluation. At least one-quarter of the patients who met one or more of the criteria were found not to require surgical intervention, and they probably did not benefit from the urologic and urodynamic evaluation. Among 84 patients who did not meet any of the criteria for referral, the urologic and urodynamic evaluation changed the initial treatment plan for or of only 10 (12 percent). The risks associated with the treatment plan based on the clinical assessment in these patients were, however, relatively small. Although further refinement and testing in larger numbers of incontinent patients are needed, the data presented document that a substantial proportion of elderly patients with a treatable and often ignored problem can be appropriately managed based on a relatively simple and inexpensive assessment, which can easily be carried out in primary care settings. (37 references) AA

Address for reprint requests: Jewish Homes for the Aging, 1885 Victory Boulevard, Reseda, California 91335

REFERENCE NUMBER 32

Au: Parker, Dorothy F.; Levinson, Wendy; Mullooly, John P.; Frymark, Sue L.

Ti: **Using the Quality of Life Index in a Cancer Rehabilitation Program**

So: *Journal of Psychosocial Oncology* 7(3):47-62, 1989

The purpose of the study reported in this article was to describe the quality of life of a group of cancer patients and to examine the usefulness of the Quality of Life Index (QLI) in a clinical setting. All 283

patients referred to the Cancer Rehabilitation Service at Good Samaritan Hospital in Portland, Oregon, during a 1-year period were assessed, and the physicians who referred them were surveyed to determine their opinions about the usefulness of the QLI. Although significant variations were found in the QLI scores by type of cancer, all patients scored highest in the support category. The QLI is useful in identifying patterns and areas of need, rather than in making a decision about the care of individual patients. Health care professionals may find this information helpful for planning rehabilitation services. (19 references) AA

Address for reprint requests: University of South Florida, 13301 Bruce B. Downs Boulevard, Tampa, Florida 33612-3899

REFERENCE NUMBER 33

Au: Parkerson, George R., Jr.; Michener, Lloyd; Wu, Lawrence R.; Finch, James N.; Broadhead, W.E.; et al.

Ti: **The Effect of a Telephone Family Assessment Intervention on the Functional Health of Patients with Elevated Family Stress**

So: *Medical Care* 27(7):683-693, 1989

A randomized trial of a telephone family assessment intervention was conducted during a 2.5-month period on 224 ambulatory primary care patients, aged 18-49 years, who were selected according to self-report of elevated family stress levels. Family physicians conducted telephone interviews to collect information from patients on their supportive and stressful family members. The working hypothesis was that this process would lead to reduction in the patient's family stress and to improvement in family support and personal health status. Patients reported that the intervention caused them to think about their family support and helped them to feel better. Comparison of family factor and functional health scores before and after intervention also indicated a limited beneficial effect, but only for a small subset of black patients. These results suggest that the telephone family assessment alone is inadequate as an intervention and should be strengthened to include professional assistance to patients for the family problems that are identified by the assessment. (25 references) AA

Address for reprint requests: Box 2914, Duke University Medical Center, Durham, North Carolina 27710

REFERENCE NUMBER 34

Au: Pearson, Jane L.; Cherrier, Monique; Teri, Linda

Ti: **The Mini-Mental State Exam and the Medical Status Questionnaire: Depression in Alzheimer's Patients**

So: *Clinical Gerontologist* 8(4):31-37, 1989

Performance on the Mini-Mental State Exam (MMSE) and the Mental Status Questionnaire (MSQ) was compared among 80 Alzheimer's Disease (DAT) patients, 32 of whom also met DSM-III criteria for Major Depressive Disorder. As expected, the MSQ and MMSE were highly correlated, with 55 percent of the variance shared between total scores on the tests, and 64 percent of the variance shared between the MMSE orientation items and total MSQ. Depressed DAT patients' performance differed significantly from that of nondepressed patients on the MMSE, but not on the MSQ, with depressed patients exhibiting less cognitive impairment. It was concluded that the MSQ is a measure of orientation and is a task subsumed by the MMSE. Consequently, the MMSE is a more sensitive test, capable of detecting more subtle impairment levels and sensitive to coexistent diagnostic issues. (14 references) AA

Address for reprint requests: Department of Psychiatry and Behavioral Sciences, RP-10, University of Washington, Seattle, Washington 98195

REFERENCE NUMBER 35

Au: Perkins, Rachel E.; King, Sylvia A.; Hollyman, Julie A.

Ti: **Resettlement of Old Long-Stay Psychiatric Patients: The Use of the Private Sector**

So: *British Journal of Psychiatry* 155:233-238, 1989

A followup study of 17 old long-stay psychiatric patients resettled in private facilities for the elderly is reported. Resident satisfaction with the placement and functioning (using the CAPE Behavior Rating Scale) was assessed, together with the quality of the physical and social environment and the regime characteristics in the establishments. All residents were satisfied with life, and their functioning had improved significantly. The private facilities were more resident-orientated and had a generally superior social environment to that of their local authority "old people's home" counterparts. The physical amenities, safety features, and architectural choice available were of a standard similar to that in local authority old people's homes, but there were fewer prosthetic and orientational aids and on-site recreational amenities. (8 references) AA

Address for reprint requests: The Israel Institute of Applied Social Research, P.O. Box 7150, Jerusalem, Israel

REFERENCE NUMBER 36

Au: Schwartz, J. Sanford; Lurie, Nicole

Ti: **Assessment of Medical Outcomes: New Opportunities for Achieving a Long Sought-After Objective**

So: *International Journal of Technology Assessment in Health Care* 6:333-339, 1990

Health outcome assessment may be used for a variety of purposes: to evaluate the effectiveness of medical practices; to assess the quality of services provided; to educate providers, purchasers, and users of health services about the sequelae of treated and untreated disease; to guide reimbursement and regulatory policy; and to characterize the health status of a population. This article focuses on the use of health outcomes to evaluate the effectiveness of medical practices and to assess the quality of services provided.

Address for reprint requests: School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

REFERENCE NUMBER 37

Au: Seeman, Julius

Ti: **Toward a Model of Positive Health**

So: *American Psychologist* 44(8):1099-1109, 1989

This article proposes a model of positive health based on a human-system framework. Such a framework is comprehensive in that (a) it encompasses all of the human system's behavioral subsystems (biochemical, physiological, perceptual, cognitive, and interpersonal), and (b) it permits a higher asymptote of health conceptualization and measurement than that afforded by Western biomedical theory. The article sets forth the conceptual basis of the model and reviews empirical studies that support the model. Finally, the article explores implication of the model for health research, for programs of health enhancement, and for the role of the behavioral sciences in health theory. (86 references) AA

Address for reprint requests: Peabody College for Teachers, Vanderbilt University, Nashville, Tennessee 37203

REFERENCE NUMBER 38

Au: Segovia, Jorge; Bartlett, Roy F.; Edwards, Alison C.
 Ti: **An Empirical Analysis of the Dimensions of Health Status Measures**
 So: *Social Science and Medicine* 29(6):761-768, 1989

The objective of this study is to verify empirically the existence of separate dimensions in the overall concept of health status by analyzing 10 variables included in a questionnaire that was applied to all adults in a simple random sample of households in St. John's, Newfoundland. The response rate was 85 percent for a total of 3,300 subjects. These data were analyzed by frequencies and by associations with sex, age, and education. Nonparametric correlation, factor, and cluster analyses on variables were used to verify if health status had identifiable dimensions. All these methods produced similar results showing five distinct factors. The first factor is composed of variables related to disease (disability/chronic conditions/worry about health); the second, to happiness (happiness/emotional); the third, to subjective appraisal of health (physical condition/comparative level of energy/self-rated health status). Finally, the fourth and fifth factors were single variables: restriction of normal activities and social contacts. An interesting finding was that self-rated health status was distributed with almost equal weight in both the first and third factors. A validation of the 10 variables and the five factors was undertaken by studying their association with health care utilization. Two measures of utilization were used: number of physicians' visits in a year and number of hospital days in a 4-year period. Number of chronic conditions, disability, and self-rated health status were associated with both measures of utilization; factor 1 was the only summary construct showing association with utilization. This paper demonstrates that self-rated health status is valid as a single measure of overall health status in this sample, being associated with both disease and subjective assessment components. (33 references) AA

Address for reprint requests: Faculty of Medicine, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1B 3V6

REFERENCE NUMBER 39

Au: Shah, Surya; Vanclay, Frank; Cooper, Betty
 Ti: **Improving the Sensitivity of the Barthel Index for Stroke Rehabilitation**
 So: *Journal of Clinical Epidemiology* 42(8):703-709, 1989

The Barthel Index is considered to be the best of the ADL measurement scales. However, there are some scales that are more sensitive to small changes in functional independence than the Barthel Index. The sensitivity of the Barthel Index can be improved by expanding the number of categories used to record improvement in each ADL function. Suggested changes to the scoring of the Barthel Index and guidelines were applied in the assessment of 258 first-stroke patients referred for inpatient comprehensive rehabilitation in Brisbane, Australia, during calendar year 1984. The modified scoring of the Barthel Index achieved greater sensitivity and improved reliability than the original version, without causing additional difficulty of affecting the implementation time. The internal consistency reliability coefficient for the modified scoring of the Barthel Index was 0.90, compared with 0.87 for the original scoring. (14 references) AA

Address for reprint requests: Occupational Therapy, University of Queensland, St. Lucia, Queensland 4067, Australia

REFERENCE NUMBER 40

Au: Shye, Samuel
 Ti: **The Systemic Life Quality Model: A Basis for Urban Renewal Evaluation**
 So: *Social Indicators Research* 21:343-378, 1989

This paper develops, on the basis of explicit assumptions and axioms, a conceptual framework for observing the effectiveness of the functioning of action systems and, in particular, of the human individual.

The framework is used to construct a facet definition of human quality of life (QOL) which is claimed to be exclusive and exhaustive: The contents of the observational items it produces do not overlap and cover the entire QOL universe. A specification of two facets—the subsystem facet (personality, physical, social, cultural-value) and the functioning mode facet (expressive, adaptive, integrative, conservative)—results in 16 content areas, each of which can be represented or covered by an observational item. The systemic QOL measuring instrument is examined with respect to its reliability and validity. Structural hypotheses whose rationale is grounded in the elementary considerations that led to systemic model of QOL are formulated, tested, and are largely confirmed. Finally, the systemic QOL model is applied to the evaluation of life quality and environmental conditions in a neighborhood designated as “distress neighborhood” within national urban renewal projects. (35 references) AA

Address for reprint requests: The Israel Institute of Applied Social Research, P.O. Box 7150, Jerusalem, Israel.

REFERENCE NUMBER 41

Au: Siegrist, Johannes; Junge, Astrid

Ti: **Conceptual and Methodological Problems in Research on the Quality of Life in Clinical Medicine**

So: *Social Science and Medicine* 29(3):463–468, 1989

This introductory paper discusses three issues: theory, validity of measurement, and benefits of assessment. It is argued that the conceptual entity “quality of life” remains ill-defined, although researchers commonly agree on its multidimensional nature. The selectivity of dimensions under study is illustrated by referring to recent works on the quality of life in cancer and in cardiovascular disease. Despite conceptual weaknesses, promising developments are apparent in research methodology. The issue is discussed with special reference to the convergent and discriminant validity of some widely used research methods. Improvements in therapy and patient-physician relationships are considered among the major benefits of assessing the quality of life in clinical practice. In conclusion, this field of research, if based on appropriate theory, opens important opportunities for cross-fertilization between advanced medicine and the social sciences. (37 references) AA

Address for reprint requests: Department of Medical Sociology, University of Marburg, Bunsenstrasse 2, D-3550 Marburg, F.R.G.

REFERENCE NUMBER 42

Au: Sunderland, Trey; Hill, James L.; Mellow, Alan M.; Lawlor, Brian A.; Gundersheimer, Joshua; et al.

Ti: **Clock Drawing in Alzheimer's Disease: A Novel Measure of Dementia Severity**

So: *Journal of the American Geriatrics Society* 37(8):725–729, 1989

We have tested a simple and reliable measure of visuospatial ability in Alzheimer patients—the Clock Drawing Test. To determine the usefulness of this measure, we asked 67 Alzheimer patients and 83 normal controls to draw the face of a clock reading the time of 2:45. Six independent observers blindly evaluated the results with ratings from 10 (best) to 1 (worst). The mean performance score of Alzheimer subjects was 4.9 ± 2.7 compared with 8.7 ± 1.1 for normal controls ($p < .001$). Inter-rater reliability for the clocks drawn by Alzheimer patients was highly significant ($r = 0.86$; $P < .001$), and there was relatively little overlap between ratings for Alzheimer patients and normal controls. Furthermore, correlations were highly significant ($p = .001$) between the mean score of clock drawing and three independent global measures of dementia severity. Although the Clock Drawing Test is certainly not a definitive indicator of Alzheimer's disease, the test is easy to administer and provides a useful measure of

dementia severity for both research and office settings where sophisticated neuropsychological testing is not available. (32 references)

Address for reprint requests: Unit on Geriatric Psychopharmacology, LCS, National Institute of Mental Health, Building 10, Room 3D41, Bethesda, Maryland 20892

REFERENCE NUMBER 43

Au: Tempelaar, R.; De Haes, J.C.J.M.; de Ruiter, J.H.; Bakker, D.; Van Den Heuvel, W.J.A.; et al.

Ti: **The Social Experiences of Cancer Patients under Treatment: A Comparative Study**

So: *Social Science and Medicine* 29(5):635-642, 1989

As part of a larger study on the quality of life of cancer patients under treatment, the positive and negative experiences in social interaction have been examined as compared with those of a control group (nonpatients, $n = 201$). Two patient groups were included: 109 patients who had recently undergone surgery and 108 patients receiving chemotherapy. The respondents returned a mailed questionnaire. Contrary to the assumptions based on a review from the literature, cancer patients appear to have more positive and fewer negative social experiences than a random sample from the "normal" population. Even under more severe medical circumstances (a poor prognosis or heavy chemotherapy, a large number of chemotherapy cycles, poor progress after surgery), the poorer the patients are, medically speaking, the more help and support they perceive. The results of this study do not support the idea of stigmatization. The personality characteristics neuroticism and self-esteem are especially important for the having of positive and negative experiences in social interaction. Positive social experiences show a relationship with self-esteem and negative social experiences show a relationship with neuroticism. (54 references) AA

Address for reprint requests: Department of Medical Sociology, Groningen University, Antonius Deusinglaan 1, 9713 AV Groningen, The Netherlands

REFERENCE NUMBER 44

Au: Teresi, Jeanne A.; Cross, Peter S.; Golden, Robert R.

Ti: **Some Application of Latent Trait Analysis to the Measurement of ADL**

So: *Journal of Gerontology: Social Sciences* 44(5):S196-S204, 1989

The use of latent trait methods for detection of biased items used in scales is discussed and two examples are given. In the first, items measuring functional impairment in elderly community residents are tested for possible sex bias, and items predicted on the basis of clinical judgment to be clearly sex biased are correctly identified. In the second example, taken from a cross-national study of elderly residents in long-stay institutions in New York and London, scale items suspected of bias because of interviewer variability and to cross-national differences in institutional environments are identified. It is shown that estimated rates of impairment are affected by the presence of variant (biased) items. We argue that latent trait methods are useful for identifying biased items and may have wide application in gerontological research. (39 references) AA

Address for reprint requests: Center for Geriatrics and Gerontology, Columbia University Faculty of Medicine, New York 10032

REFERENCE NUMBER 45

Au: Thapa, K.; Rowland, L.A.

Ti: **Quality of Life Perspective in Long-term Care: Staff and Patient Perceptions**

So: *Acta Psychiatrica Scandinavica* 80(3):267-271, 1989

In the rehabilitation of chronically mentally ill patients, social impairments and multiple disabilities necessitate the use of comprehensive and complex services encompassing many areas of life. It is suggested

that quality of life (QOL) can be used as an organizing framework for long-term care. Subjects in the present study included staff and patients from a rehabilitation unit that offers individualized long-term care, day services, inpatient and outreach facilities. Using subjective indexes, staff and patient perceptions of QOL were compared across several life domains. Significant differences between the two groups were found in several areas, including leisure activities, law and safety, and health. The implications of these findings for long-term care are discussed. (25 references) AA

Address for reprint requests: Department of Psychology, Institute of Psychiatry, De Crespigny Park, Camberwell, London SE5 8AF, United Kingdom

REFERENCE NUMBER 46

Au: Williams, Simon J.; Bury, Michael R.

Ti: **Impairment, Disability and Handicap in Chronic Respiratory Illness**

So: *Social Science and Medicine* 29(5):609-616, 1989

Chronic obstructive airways disease (COAD) is a major, though neglected, medical and social problem in the United Kingdom. Ninety-two patients suffering from COAD were interviewed in order to assess impairment, disability, and handicap. Measures included spirometric tests of lung function; the Fletcher breathlessness grading scale, the oxygen cost diagram, and a visual analogue scale of dyspnea; the Functional Limitations Profile (FLP); and the shortened 12-item General Health Questionnaire (GHQ-12), supplemented by the 7-item GHQ subscales of anxiety and severe depression. Low correlations were found between lung function and disability ($-0.38, p < 0.001$), accounting for only 14 percent of the variance, and high correlations were found to exist between measures of dyspnoea and disability ($-0.90, p < 0.0001$). Major areas of disability and handicap included: household management, ambulation, sleep and rest, recreation and pastimes, and work. Financial problems and difficulties, housing problems, and problems of social isolation were also frequently reported. The paper goes on to discuss both the need for a more integrated approach to the care and rehabilitation of COAD patients and their families and for a complementary social perspective and approach to COAD and its treatment. (54 references) AA

Address for reprint requests: Medical Sociology Section, Department of Social Policy and Social Science, University of London, Egham Hill, Egham, Surrey TW20 0EX, England

REFERENCE NUMBER 47

Au: Zonderman, Alan B.; Costa, Paul T., Jr.; McCrae, Robert R.

Ti: **Depression as a Risk for Cancer Morbidity and Mortality in a Nationally Representative Sample**

So: *Journal of the American Medical Association* 262(9):1191-1195, 1989

The relative risks of cancer morbidity and mortality associated with depressive symptoms were examined using data from the National Health and Nutrition Examination Survey I Epidemiologic Followup Study. The Center for Epidemiologic Studies Depression scale and the depression subscale from the General Well-Being Schedule were used as predictors in this 10-year followup study of a nationally representative sample. No significant risk of cancer morbidity or mortality was associated with depressive symptoms with or without adjustment for age, sex, marital status, smoking, family history of cancer, hypertension, or serum cholesterol level. These data were also reanalyzed for subjects aged 55 years or older who were retraced by a second followup. Neither measure of depressive symptoms was a significant risk of cancer death during the 15-year followup interval. These results call into question the causal connection between depressive symptoms and cancer morbidity and mortality. (35 references) AA

Address for reprint requests: National Institutes of Health, Francis Scott Key Medical Center, Baltimore, Maryland 21224

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	32(6)	International Journal of Health Services	19(3)
Acta Psychiatrica Scandinavica	80(1-3)	International Journal Technology Assessment in Health Care	5(3)
American Journal of Epidemiology	130(1-3)	Journal of Aging and Health	1(3)
American Journal of Medicine	87(1-3)(2A)(3A-C)(3N)	Journal of Allied Health	18(5)
American Journal of Orthopsychiatry	59(3)	Journal of Applied Psychology	74(4)
American Journal of Psychiatry	146(7-9)	Journal of Behavioral Medicine	12(4)
American Journal of Psychology	102(3)	Journal of Clinical Epidemiology	42(7-9)
American Journal of Sociology	95(1-2)	Journal of Community Health	14(3)
American Political Science Review	83(3)	Journal of Consulting and Clinical Psychology	57(3)(4)
American Psychologist	44(7-9)	Journal of Epidemiology and Community Health	43(3)
American Sociological Review	54(4)	Journal of Experimental Child Psychology	48(1)
Archives of Environmental Health	44(4)	Journal of Experimental Social Psychology	25(4)
Archives of Gerontology and Geriatrics	9(1)	Journal of Family Practice	29(1-3)
Archives of Physical Medicine and Rehabilitation	70(7-9)	Journal of Gerontology	44(4-5)
Australian and New Zealand Journal of Psychiatry	23(3)	Journal of Health and Social Behavior	30(3)
Behavioral Medicine	15(3)	Journal of Health Economics	8(3)
Behavioral Science	34(3)	Journal of Health Politics, Policy and Law	14(3)
British Journal of Psychology	80(3)	Journal of Nervous and Mental Disease	177(7-9)
Canadian Journal of Public Health	8(4)	Journal of Pediatrics	115(1-3)
Canadian Medical Association Journal	141(1-6)	Journal of Policy Modelling	11(3)
Clinical Gerontologist	8(4)	Journal of Political Economy	97(4)
Clinical Psychology Review	9(4)	Journal of Psychosocial Oncology	7(3)
Cognitive Psychology	21(3)	Journal of Public Health Policy	10(3)
Cognitive Therapy and Research	13(4)	Journal of School Health	59(6-7)
Community Mental Health Journal	25(3)	Journal of School Psychology	27(3)
Family and Community Health	12(3)	Journal of Social Policy	18(3)
Geriatrics	44(7-9)	Journal of the American Geriatrics Society	37(7-8)
Gerontologist	29(4)	Journal of the American Medical Association	262(1-12)
Health Affairs	8(2)	Journal of the Royal Society of Health	(2-4)
Health Care Financing Review	11(1)	Medical Care	27(7-9)
Health Education Quarterly	16(3)	Milbank Quarterly	67(3/4)
Health Policy	12(1-3)	Multivariate Behavioral Research	24(3)
Health Psychology	8(4-5)	Operations Research	37(4-5)
Health Services Research	24(3)	Organization Studies	10(3)
Inquiry	26(3)		
International Journal of Aging and Development	29(1-2)		
International Journal of Epidemiology	18(3)		

SOURCES of INFORMATION (July--September 1989)

Perspectives in Biology and Medicine	33(1)	Social Forces	68(1)
Philosophy and Public Affairs	18(3)	Social Indicators Research	21(4)
Policy Studies Journal	17(4)	Social Psychology Quarterly	52(3)
Policy Studies Review	8(4)	Social Science and Medicine	29(1-6)
Preventive Medicine	18(4-5)	Social Science Research	18(3)
Psychological Record	39(3)	Social Security Bulletin	52(4-5)(7-9)
Psychology and Aging	4(3)	Social Service Review	63(3)
Psychosomatic Medicine	51(4)	Socio-Economic Planning Sciences	23(4)
Review of Economics and Statistics	71(3)	Sociological Methods and Research	18(1)
Risk Analysis	9(2-3)	Sociology and Social Research	73(3)
Scandinavian Journal of Psychology	30(1-2)	Sociology of Health and Illness	11(3)
		Statistics in Medicine	8(7-8)

This section lists citations to journal articles that have been classified under the medical subject heading "health status indicators" by the National Library of Medicine (NLM) and that were entered into NLM's SDILINE or FILE HEALTH databases in July, August, or September 1989. Citations are printed with only slight modification of format, in the order and form in which they appear in NLM's files. Following NLM's convention, titles that are enclosed in brackets indicate that the article is published in some language other than English.

REFERENCE NUMBER 48

AU: Kuhne KD ; Mikulas J ; Paul W ; Weidinger V

TI: [Measuring the age dependent psychophysical functional status of elderly humans]

SO: *Z Arztl Fortbild* (Jena) 1989;83(8):419-22

REFERENCE NUMBER 49

AU: Guyatt GH ; Deyo RA ; Charlson M ; Levine MN ; Mitchell A

TI: **Responsiveness and validity in health status measurement: a clarification.**

SO: *J Clin Epidemiol* 1989;42(5):403-8

We present data from two studies that clarify the relationship between the responsiveness and validity of instruments designed to measure health status in clinical trials. In a controlled trial of long- versus short-duration adjuvant chemotherapy for women with Stage II breast cancer, the Breast Cancer Chemotherapy Questionnaire (BCQ) proved valid as a measure of subjective health status and was able to distinguish long versus short terms. Well-validated measures of physical and emotional function developed by the Rand Corporation were unable to distinguish between the two groups. The Eastern Co-operative Oncology Group Criteria (ECOG) distinguished the two groups but failed criteria of clinical sensibility as a measure of subjective health status. In a study of patients with Crohn's disease and ulcerative colitis, the Inflammatory Bowel Disease Questionnaire (IBDQ) showed small intrasubject variability over time. Global ratings of change showed moderate to high correlations with changes in IBDQ score, and patients who reported overall improvement or deterioration showed large changes in IBDQ score. Each of these findings support, in different ways, the reproducibility, validity, and responsiveness of the questionnaire. Although the same data can at times bear on both validity and responsiveness, when assessing evaluative instruments, it is useful to make a conceptual distinction between the two.

REFERENCE NUMBER 50

AU: Whedon MB ; Shedd P

TI: **Prediction and prevention of patient falls [see comments]**

SO: *Image J Nurs Sch* 1989 Summer;21(2):108-14

Falls are a major cause of injury in hospitalized patients. To date, the focus of research has been on developing risk profiles to predict fallers and developing interventions to prevent falls. This paper presents and critiques these efforts. The authors conclude that (a) no high-risk profiles have yet been developed with adequate sensitivity and specificity to be useful as predictive instruments; (b) current fall interventions are rarely research based; and (c) the few intervention studies conducted to date seem to reduce falls primarily through consciousness raising rather than through specific changes in practice.

REFERENCE NUMBER 51

AU: Fitzpatrick R ; Newman S ; Lamb R ; Shipley M

TI: **A comparison of measures of health status in rheumatoid arthritis.**SO: *Br J Rheumatol* 1989 Jun;28(3):201-6

One hundred and five patients with rheumatoid arthritis were assessed on two occasions, separated by 15 months, by means of the ARA functional scale, the Mallya and Mace index, the Health Assessment Questionnaire (HAQ), and the Functional Limitations Profile (FLP). Thirty-three percent of patients were assessed as clinically changed in terms of the ARA scale. On both occasions, cross-sectional correlations were strongest between the health status measures (HAQ and FLP) and grip strength and the Ritchie articular index. The sensitivity and specificity of the two health status measures in relation to clinical change were calculated, and overall the HAQ and FLP achieved similarly modest levels of sensitivity and specificity. The greater amount of precision and information provided by the FLP have to be weighed against the simpler measurement assumptions and shorter time required to administer the HAQ.

REFERENCE NUMBER 52

AU: Stenback F

TI: **[Arctic medicine]**SO: *Duodecim* 1989;105(5):391-5**REFERENCE NUMBER 53**

AU: Lioy PJ

TI: **Exposure assessment of oxidant gases and acidic aerosols.**SO: *Annu Rev Public Health* 1989;10:69-84

Clearly the presence of high ozone and acidic species in North America is primarily dependent on photochemical air pollution. Evidence shows, however, that high acid exposures may occur in specific types of areas of high sulfur fuel use during the winter. At the present time, our concerns about exposure to local populations and regional populations should be directed primarily toward the outdoor activity patterns of individuals in the summer and how those activity patterns relate to the location, duration, and concentrations of ozone and acid aerosol in photochemical air pollution episodes. Lioy and Dyba (23) and Mage et al. (33) have examined the activity patterns of children in summer camps. Because they spend more time outside than the normal population, these children form an important group of exercising individuals subject to photochemical pollution exposures. The dose of ozone inhaled by the children in the camps was within 50 percent (23) and 25 percent (33) of the dose inhaled by adults in controlled clinical situations that produced clinically significant decrements in pulmonary function and increased the symptoms after 6.6 hours of exposure in a given day (12, 30). The chamber studies have used only ozone, whereas in the environment this effect may be enhanced by the presence of a complex mixture. The work of Lioy et al. (27) in Mendham, New Jersey, found that the hydrogen ion seemed to play a role in the inability of the children to return immediately to their normal peak expiratory flow rate after exposure. The camp health study conducted in Dunsville, Ontario, suggested that children participating in a summer camp where moderate levels of ozone (100 ppb) but high levels of acid (46 micrograms/m³) occurred during an episode had a similar response. Thus, for children or exercising adults who are outdoors for at least 1 hour or more during a given day, the presence and persistence of oxidants in the environment are of particular concern. Lippmann (19, 30) has suggested that the complex mixture of pollutants in the atmosphere increased the decrements in pulmonary function of children in camps, because their decrements were similar to those observed at higher ozone concentrations in the clinical studies (30). This phenomenon must be investigated in future research studies, because there appears to be a potential for enhanced exposure and effects. Ozone is present for many hours during the day in summer during episodes of photochemical pollution.

REFERENCE NUMBER 54

AU: Upton AC ; Kneip T ; Toniolo P
TI: **Public health aspects of toxic chemical disposal sites.**
SO: *Annu Rev Public Health* 1989;10:1-25

REFERENCE NUMBER 55

AU: Haljamae H
TI: **Anesthetic risk factors.**
SO: *Acta Chir Scand Suppl* 1989;550:11-9; discussion 19-21

Various patient-, surgery-, and anesthesia-related factors probably influence the outcome of surgical procedures. The American Society of Anesthesiologists' (ASA) Physical Status Classification System, although a systematic approach to the assessment of anesthetic risk factors, considers only physical status factors and lacks predictive value for individual cases. Other risk-predictive factors such as age and sex of the patient and the type, site, and duration of surgery should also be included. Multifactorial approaches include both patient- and surgery-related variables and, therefore, make an individualized risk prediction possible. Although the choice of an anesthetic agent does not appear to influence the incidence of complications or operative outcome, anesthetic technique and anesthesiologist skill are factors of some importance.

REFERENCE NUMBER 56

AU: Parfrey PS ; Vavasour H ; Bullock M ; Henry S ; Harnett JD ; Gault MH
TI: **Development of a health questionnaire specific for end-stage renal disease.**
SO: *Nephron* 1989;52(1):20-8

To compare the efficacy of various end-stage renal disease (ESRD) therapies, valid and reproducible probes that measure well-being and are specific for ESRD are necessary. Four studies were undertaken to provide and test these probes. (1) One hundred and seven dialysis patients and 119 transplant recipients were interviewed to determine the prevalence of 24 physical symptoms. (2) A questionnaire was devised using two new indexes (a symptom scale derived from the first study using 12 symptoms and an affect scale comprising 12 emotions) and six indexes previously used in other chronic illnesses. Interobserver and intraobserver reproducibility was satisfactory. (3) Construct validity for the questionnaire was shown by interviewing 97 dialysis and 82 transplant patients in whom we hypothesized that physical well-being would be better in transplant patients. After age-matching the transplant group was more active, with a higher objective quality of life and fewer physical symptoms than the dialysis group. (4) Sixty-three stable dialysis, 67 stable transplant, 15 dialysis patients successfully transplanted in the intervening year, and 5 failed transplanted patients were reinterviewed 1 year later to assess the responsiveness of the questionnaire. In the group that had recently been successfully transplanted, physical, affect, and quality of life scores showed a major improvement following transplant. We conclude that this questionnaire is specific for ESRD; examines physical, psychological, and social well-being; is brief; easily administered; reproducible; has construct validity; and is responsive to changes in therapy.

REFERENCE NUMBER 57

AU: Loomes G ; McKenzie L
TI: **The use of QALYs in health care decisionmaking.**
SO: *Soc Sci Med* 1989;28(4):299-308

This paper seeks to highlight some of the critical issues concerning the use of the Quality Adjusted Life Years (QALYs) to measure the outcome of health care choices in decisions related to both individual

patient care and social resource allocation. Much of the support for the QALY is based on its simplicity as a tool for resolving complex choices. However, it may be the case that the QALY is not sufficiently refined or robust, failing perhaps to take into account some of the critical factors that affect preferences over different health care scenarios.

REFERENCE NUMBER 58

AU: Lichtenstein MJ ; Bolton A ; Wade G

TI: **Derivation and validation of a decision rule for predicting seat belt utilization.**

SO: *J Fam Pract* 1989 Mar;28(3):289-92

Information from 3,108 health risk appraisals completed by Tennessee residents in 1986 was used to develop a decision rule for predicting seatbelt utilization. The data set was randomly divided into derivation and validation sets. The dependent variable was self-reported seatbelt use (percentage). Using multiple linear regression, the following rule was derived: score = [age (years) \times 0.24] + [mood-affecting drug use \times 4.09] + [miles driven per year \times 5.08] + [education level \times 11.18] - [race \times 18.31] - [cigarette use \times 2.73] - [satisfaction with life \times 3.50] - [body mass (kg/m²) \times 0.83] - [urban/rural residence \times 4.08]. Likelihood ratios for persons stating 0 to 25 percent seatbelt use were compared with those for persons stating 76 to 100 percent use. The prevalence of 0 to 25 percent seatbelt use was 31 percent in the derivation set and 33 percent in the validation set. At the lowest quintile of score (-1 or less), the likelihood ratios were 4.18 and 3.31 in the derivation and validation sets, respectively. At the highest quintile of score (26 or more) the likelihood ratios were 0.29 and 0.38, respectively. At score levels less than 10, the decision rule had a sensitivity of 59 percent and 55 percent and a specificity of 80 percent and 81 percent in the derivation and validation sets, respectively. This decision rule may be used by primary care physicians to identify persons likely not to use seatbelts and target them for health promotion efforts.

REFERENCE NUMBER 59

AU: Parkerson GR Jr ; Michener JL ; Wu LR ; Finch JN ; Muhlbaier LH; Magruder-Habib K; Kertesz JW ; Clapp-Channing N ; Morrow DS ; Chen AL ; et al

TI: **Associations among family support, family stress, and personal functional health status.**

SO: *J Clin Epidemiol* 1989;42(3):217-29

The self-reported family support and stress of 249 ambulatory adult patients, aged 18-49 years, were studied relative to their self-reported functional health. Support from family members was found to be related positively with emotional function. Stress from family members was associated negatively with symptom status, physical function, and emotional function. Patients' severity of illness was related negatively to their symptom status, physical function, and social function, but not to their emotional function. During the study a new self-report instrument, the Duke Social Support and Stress Scale (DUSOCS), was developed to measure family and nonfamily support and stress. Also, a new chart audit methodology, the Duke Severity of Illness Scale (DUSOI), was designed to assess severity in the ambulatory setting. Reliability and validity of the DUSOCS and the DUSOI were supported. The importance of the patient's perception of health and its family determinants is emphasized.

REFERENCE NUMBER 60

AU: Lynch WD ; Golaszewski TJ ; Clearie A ; Vickery DM

TI: **Characteristics of self-selected responders to a health risk appraisal: generalizability of corporate health assessments.**

SO: *Am J Public Health* 1989 Jul;79(7):887-8

Selected characteristics and total medical claims of health risk appraisal (HRA) responders and nonresponders were compared in a sample of employees having a 3-year employment and claims history. HRA responders were younger and more likely to file medical claims than nonresponders. Although mean medical claims were greater for HRA responders than for nonresponders, when adjusted for age and sex, this difference reflected the proportion of employees reporting claims, not a difference in the claims amount.

REFERENCE NUMBER 61

AU: Beier W

TI: **[Physical time and personal biological time in gerontologic research]**

SO: *Z Gerontol* 1989 Mar-Apr;22(2):90-5

Beside the reversible t -time of physics, an irreversible logarithmical tau-time is introduced as a second time. This time is determined by growth, vitality, and reliability of an organism. Using the tau-time, it is possible to divide the lifespan of an organism into four parts. Each segment is of approximately the same duration, namely a quarter of the lifespan. There is an analogy between tau-time and physical entropy.

REFERENCE NUMBER 62

AU: Ruiz-Torres A ; Agudo A ; Holzenberger M ; Beier W

TI: **[Objective assessment of biological aging in the human: results]**

SO: *Z Gerontol* 1989 Mar-Apr;22(2):85-9

From a population sample of 139 healthy persons, six specially selected aging parameters were tested for their significance to vitality, by means of four mathematical models referring to the concept of vitality. As reference values, t_m is the age expressed in years when maximal vitality occurs, and the aging constant is beta, also known as an aging factor. Our results for t_m extended from 16.6 to 39.6 years, depending on the respective mathematical model applied. We find a similar characteristic for the beta-values. A comparison with results in other publications on the subject, obtained by processing a considerably larger number of variables than we did, underlined the utility of our parameters. This is also shown by the quality of results we obtained by regression analysis, by the adjustment to the functions of the vitality concept, and by the simplicity of the required laboratory methods of analysis.

REFERENCE NUMBER 63

AU: Gichev IuP

TI: **[Elaboration of approaches to quantitative evaluation of the health status of the population in mass screening practices]**

SO: *Sov Zdravookhr* 1989;(1):47-51

The problems pertaining to the utilization of health status evaluation techniques insufficiently described in modern literature on preventive checkups and dispensarization of the population are discussed. One of the approaches to quantitative diagnosis of risk factors of main pathologic syndromes and states carried out by means of Bayes formula and automation devices is proposed. The considered technique enables one

to rank groups of healthy and practically healthy persons into arms according to quantitative indexes and to differentiate them by priority, orientation, and volume of the programs of medical observation and examination.

REFERENCE NUMBER 64

AU: Vinet A ; Vezina M ; Brisson C ; Bernard PM

TI: **Piecework, repetitive work and medicine use in the clothing industry.**

SO: *Soc Sci Med* 1989;28(12):1283-8

This study was designed to examine the potential effects of severe time constraints on workers' health. Medicine use is considered to be an indicator of nonspecific morbidity that is worthy of interest in industrial health research when it is possible to compare workers who share the same culture and socioeconomic characteristics, but are submitted to different work conditions. In the clothing industry, our hypotheses were that (1) piecework-paid operators would have a higher percentage of medicine users than the hourly paid, and (2) operators who did repetitive work would have a higher percentage of medicine users than those who did nonrepetitive work. Women selected into the study were between the ages of 45 and 70, natives of Canada, spoke French, and lived in the metropolitan region of Montreal. The occupational data came from the files of The Ladies' Clothing Joint Commission. They encompass the 30-year period 1956-85. Data on socioeconomic characteristics, smoking status, and medicine use of the 800 respondents were obtained by questionnaires administered by specially trained nurses. Among currently employed women, the probability of using stomach medication was higher for pieceworkers than for women who received an hourly wage: OR = 2.57 (1.19-3.96). The probability was also higher for women who did repetitive work than for women who did nonrepetitive work: OR = 2.43 (1.26-3.60).

REFERENCE NUMBER 65

AU: Mee-Lee D

TI: **The first shall be last; but can the last be first?**

SO: *Hawaii Med J* 1989 Mar;48(3):93-4, 96-7

The State of Hawaii has long prided itself on being a leader in the Nation in its provision of mental health and other social and health services. In 1986, and again in 1988, the Public Citizen Health Research Group, a Ralph Nader affiliated entity, ranked Hawaii 51st among the States and the District of Columbia in its care of the seriously mentally ill. Initial reaction within the mental health community in Hawaii was primarily one of perplexity and disbelief. Although it quickly realized that this report was based on the cursory opinion of one principal individual, drawing upon very little data and solid comparable information, the impact of these rankings has been to focus much more attention on what really is happening to the seriously disabled mentally ill (SDMI) in this State. Hopefully, the eventual results will conform to the original intent of the report's authors, Drs. Fuller Torrey and Sidney Wolfe, namely a new, enhanced and broad-based commitment to improving services to this special and often forgotten population in need.

REFERENCE NUMBER 66

AU: Imbeault B

TI: **Citizens' groups rank Hawaii 51st in the nation.**

SO: *Hawaii Med J* 1989 Mar;48(3):60-2

This special edition of the Hawaii Medical Journal presents a collection of articles that describe and comment on the spectrum of health care services for the seriously disabled mentally ill (SDMI) in Hawaii. It is but one of several statewide responses to the publication *Care of the Seriously Mentally Ill*:

A Rating of State Programs, Second Edition, 1988, by E. Fuller Torrey, MD, Sidney M. Wolfe, MD, and Laurie M. Flynn. Published jointly by the Public Citizen Health Research Group and the National Alliance for the Mentally Ill, first in 1986 and again in 1988, the study sought to compare and rate all States plus the District of Columbia using hospital, outpatient, rehabilitation, and housing services as indexes of care. The published results ranked Hawaii last (51st) in the Nation in its care of the SDMI in both years of the survey. On a scale of 1 to 20, no State ranked higher than a total of 14 points across the four categories of care (Table 1: Summary of State Ratings by Points). Additionally, only 12 States showed significant improvement between 1986 and 1988. Hawaii is included among those States deemed to be "going nowhere."

REFERENCE NUMBER 67

AU: Fielding JE

TI: **Frequency of health risk assessment activities at U.S. worksites.**SO: *Am J Prev Med* 1989 Mar-Apr;5(2):73-81

Data from the National Survey of Worksite Health Promotion Activities include information about health risk assessment (HRA) activities available at private-sector worksites in the United States. HRA activities were found at 29.5 percent of all worksites. Of those worksites, 24 percent provided HRA questionnaires and 77.4 percent provided periodic health and physical examinations. Screening tests provided as part of the health and physical exams included blood pressure screening (55.4 percent), cancer screening (19.5 percent), blood tests for cholesterol (28.3 percent) and sugar (39 percent), and tests of physical fitness (15.1 percent). In most cases, the frequency increased as worksite size increased, regional variations were small, and there was significant variation among different industry types. HRA activities were overrepresented at worksites where the majority of workers were women, over 30 years of age, not blue collar, and not represented by a union. On-site health personnel increased the likelihood of the presence of HRA activities. At 85 percent of the worksites with HRA activities, all permanent employees were eligible. The full costs of screening were paid by 87.9 percent of the worksites, activities were held on company time at 74.5 percent, and time off to participate was available at 78.2 percent of worksites. The most commonly mentioned benefit of HRA activities was improved employee health (47.1 percent). Other health promotion activities frequently found in association with HRA activities were smoking cessation (54.1 percent), care and prevention of back pain (50.8 percent), and stress management (49.6 percent).

REFERENCE NUMBER 68

AU: Burack RC ; Liang J

TI: **The acceptance and completion of mammography by older black women.**SO: *Am J Public Health* 1989 Jun;79(6):721-6

We assessed the relation of patient characteristics, knowledge, and beliefs to the utilization of mammography in an inner-city setting by 187 black women over the age of 50. Thirty percent of those who were offered mammography initially declined the offer, and 40 percent were subsequently unable to complete the procedure. Patient interviews were used to derive 27 potential knowledge and health belief predictor scales. In multiple regression analysis, two health belief scales and two knowledge scales accounted for 15 percent of the observed variance in the model of acceptance. The strongest predictor of subsequent completion was initial acceptance. The presence of breast symptoms and two health belief scales together with initial acceptance accounted for 26 percent of variance in the model of completion. These results suggest that the successful accomplishment of mammography requires coordinated efforts at the level of the provider, patient, and setting. Health beliefs may influence the patient's behavior in this process, but their effect appears to be modest.

REFERENCE NUMBER 69

AU: Finkelstein MM

TI: **Mortality among employees of an Ontario factory manufacturing insulation materials from amosite asbestos.**SO: *Am J Ind Med* 1989;15(4):477-81

The mortality of workers from an Ontario factory manufacturing amosite asbestos insulation materials under poorly controlled environmental conditions is reported here. Seven (58 percent) of 12 deaths among exposed workers 10 or more years after first exposure were due to malignancies; 4 (25 percent) were from lung cancer, and there were 2 deaths from peritoneal mesothelioma. Those dying from mesothelioma were 47 and 49 years of age. Three (25 percent) of 12 deaths were from respiratory disease, 2 were attributed to asbestosis (in men 42 and 53 years of age), and 1 to pneumonia in a 54-year-old male.

REFERENCE NUMBER 70

AU: Power M

TI: **Linear Index of Mortality as a measure of health status [letter]**SO: *Int J Epidemiol* 1989 Mar;18(1):281-3**REFERENCE NUMBER 71**

AU: Slagle JR ; Finkelstein SM ; Leung LA ; Warwick WJ

TI: **Monitor: an expert system that validates and interprets time-dependent partial data based on a cystic fibrosis home monitoring program.**SO: *IEEE Trans Biomed Eng* 1989 May;36(5):552-8

The use of health diaries to monitor patients with chronic diseases has often been complicated by difficulties encountered in data quality assurance and interpretation. An expert system, Monitor, has been developed to predict the health status of cystic fibrosis patients based on daily home measurements of pulse, respiratory rate, weight, inspired vital capacity, and a check list of symptoms of acute illness. This system ensures data reliability beyond what can be achieved in most current automatic error detection procedures by validating inputs against patient-specific expectations. Its explicit representation of the time dimension and the hierarchical structure of its knowledge base facilitate the abstraction of trends and relationships among the time-dependent data. Dynamically imposed expectations also lend flexibility to the interpretation process by allowing the processing of partial (incomplete) data. Monitor correctly classified 86 percent (three-category classification) and 94 percent (two-category classification) of 111 cases. This demonstrates that expert systems can be a feasible approach in building more robust diary monitoring systems.

REFERENCE NUMBER 72

AU: Goldsmith G ; Brodwick M

TI: **Assessing the functional status of older patients with chronic illness.**SO: *Fam Med* 1989 Jan-Feb;21(1):38-41

The purpose of this study was to investigate the value of using a validated functional assessment instrument, the Sickness Impact Profile (SIP), with older, chronically ill patients seeking care at the family physician's office. The SIP was completed by the patient and the family physician on patients 55 years of age or older who were seen at a family practice residency clinic. The study used stratified, random assignment in an experimental design to compare physician and patient reaction to the SIP. Both physicians (residents and faculty) and patients felt the SIP was useful in detecting disabilities. Approximately half of the physicians felt the SIP was helpful in patient management. Patients reported twice as

many disabilities as were reported by physicians. Half of the clinic physicians had the opportunity to review a patient's SIP immediately prior to a visit. They recognized more disabilities and agreed more often with the patients about the presence of a disability. The physicians felt the SIP was too lengthy to assimilate easily into the clinic setting. Use of a functional assessment instrument is advocated because of its ability to increase both physician awareness and physician-patient communication regarding the presence of a functional deficit.

REFERENCE NUMBER 73

AU: Georgiades G ; Klissouras V

TI: **Assessment of youth fitness: the European perspective.**

SO: *Am J Clin Nutr* 1989 May;49(5 Suppl):1048-53

REFERENCE NUMBER 74

AU: Trichopoulou AD ; Efstathiadis PP

TI: **Changes of nutrition patterns and health indicators at the population level in Greece.**

SO: *Am J Clin Nutr* 1989 May;49(5 Suppl):1042-7

REFERENCE NUMBER 75

AU: Van Norren B ; Boerma JT ; Sempebwa EK

TI: **Simplifying the evaluation of primary health care programmes.**

SO: *Soc Sci Med* 1989;28(10):1091-7

Currently, there is considerable attention for health impact--as measured by mortality, morbidity, or nutrition indicators--in the evaluation of primary health care (PHC) programmes. In most cases, health impact evaluations tend to be dominated by methodological discussions on data collection, analysis, and interpretation, which are not relevant to the majority of PHC programmes. In this paper a theoretical framework of variables, affecting child survival, is presented. The key to this action-oriented framework is the identification of a set of intermediate variables that directly affect the health status of children, but can be influenced by PHC interventions as well. It is recommended that evaluations of PHC programmes should focus on these intermediate variables and be less concerned with health impact of the interventions.

REFERENCE NUMBER 76

AU: Baum FE ; Cooke RD

TI: **Community-health needs assessment: use of the Nottingham health profile in an Australian study.**

SO: *Med J Aust* 1989 May 15;150(10):581, 584, 587-90

This article reports on the use of the Nottingham health profile (which was developed in the United Kingdom as a valid and reliable indicator of perceived health status) in a community health survey in Noarlunga, an outer suburban area of Adelaide. The instrument appears valid for use with an Australian population. It was used in Noarlunga to demonstrate a correlation between health status and a range of social and economic variables. The uses of the Nottingham health profile in health services planning are discussed.

REFERENCE NUMBER 77

AU: Krout JA

TI: **Rural versus urban differences in health dependence among the elderly population.**SO: *Int J Aging Hum Dev* 1989;28(2):141-56

This article examines data on rural versus urban differences in health dependency for a random sample of 600 western New York elderly people residing in a range of community settings from farm areas to a metropolitan central city. Data were collected via personal interviews, and health dependency was operationalized as an index composed of nine criterion measures. The nonmetropolitan elderly population is found to be less health dependent as are elderly persons who are younger, white, married, and have higher incomes. However, the rural-urban variable is not a significant predictor of health dependency when included in a multiple regression analysis. These findings do not support the rural elderly health disadvantage argument and serve to illustrate some of the shortcomings of existing research on this topic.

REFERENCE NUMBER 78

AU: Bedi R

TI: **Ethnic indicators of dental health for young Asian schoolchildren resident in areas of multiple deprivation.**SO: *Br Dent J* 1989 May 6;166(9):331-4UI-89228793

The aim of the study was to explore the use of two social indicators in a dental caries epidemiological study of 5-year-old Asian schoolchildren in an area of multiple deprivation. The two indicators selected were religious background and the mother's ability to speak English. Six hundred and forty-three 5-year-old schoolchildren from three schools were examined; the mean dmft was 2.84 (SD 3.63). Children were classified into three groups on broad ethnic and facial characteristics, and the mean dmft for Asians (3.64) differed statistically significantly from those of both Whites (1.83) and Afro-Caribbeans (1.87). When the Asian population was divided into four groups, to explore the effects of religion and the mother's ability to speak English, a statistically significant interaction was observed between religion and language for mean dmft and dental cleanliness. The Asian non-Muslim children whose mothers were English speaking (ES) compared well with the White and Afro-Caribbean group for mean dmft, percentage caries-free, and oral cleanliness. When these variables were examined for the two Muslim groups and the non-Muslim group whose mothers were non-English speaking (NES), no statistically significant differences were observed. Oral health promotion should therefore consider that there are three distinct dental high-risk groups for young Asian children: Muslim ES and NES mothers and non-Muslim NES mothers. Each group will require a different health promotion strategy. Non-English speaking mothers need adequate translation, whereas all Muslim mothers need help to find proper alternatives to baby foods which, although common in the UK, are culturally inappropriate to Muslims.

REFERENCE NUMBER 79

AU: D'Souza S

TI: **The assessment of preventable infant and child deaths in developing countries: some applications of a new index.**SO: *World Health Stat Q* 1989;42(1):16-25

This article briefly reviews epidemiological and demographic measures used to assess preventable deaths in developing country situations. Problems with the use of the infant mortality rate (IMR) as a health-policy indicator are illustrated. The Matlab experience of rural Bangladesh is used to develop a new index for preventable infant and child deaths. This index, based on a statistical transformation of usual demographic measures, links mortality levels and cause-of-death structure. The use of this index is

illustrated with applications to Asia and Africa. It is claimed that the index exhibits more clearly the difficulty involved in the control of particular causes of death, thus providing important information for health policy makers.

REFERENCE NUMBER 80

AU: Robine JM ; Labbe M ; Seroussi MC ; Colvez A

TI: **[Longitudinal study of the functional capacity of aged persons in Upper Normandy, 1978-1988**

SO: *Rev Epidemiol Sante Publique* 1989;37(1):37-48

A longitudinal study of 1,082 elderly persons was conducted by INSERM over a 6-year period in order to identify risk factors in pathological aging. Several functional capacities were selected for study on the basis of their relevance to independent daily living. This article describes the methodology and the extent to which research objectives were able to be fulfilled. The initial survey took place in 1978-79. A followup study targeted two distinct areas of interest: the monitoring of mortality rates and the re-evaluation of the performance of survivors at 3- and 6-year intervals. Re-evaluation of performance involved the exploration of the individual's mobility, capacity to carry out activities of daily living, etc. The consistency of the entire data set assembled over the 6-year period was assessed in various ways. A 6-year followup survival rate could be determined for 98.8 percent of the initial cohort, and 87.1 percent of the survivors were able to be reinterviewed. The different probabilities of healthy survival, by sex and age, are tabulated in the appendices.

REFERENCE NUMBER 81

AU: Laurenzi M ; Stamler R ; Trevisan M ; Dyer A ; Stamler J

TI: **Is Italy losing the "Mediterranean advantage?" Report on the Gubbio population study: cardiovascular risk factors at baseline. Gubbio Collaborative Study Group.**

SO: *Prev Med* 1989 Jan;18(1):35-44

The coronary heart disease mortality rate in Italy—lower than in many other industrialized countries—has changed little in the last 20 years; whereas in the United States, a major decline in deaths resulting from coronary heart disease has occurred. These differing trends have reduced considerably the gap between the two countries in coronary mortality rates. Several recent population studies in Italy have found a change in the previously more favorable risk-factor profile. In the northern hill town of Gubbio, studied in 1983-1985, median serum cholesterol level of men ages 40-59 was 223 mg/dl, considerably higher than was found in the 1960 Italian population samples of the Seven Countries Study (197-206 mg/dl). In the earlier study, the cholesterol levels in the Italian men who were still mainly consuming the traditional Mediterranean diet were 30-40 mg/dl lower than in the U.S. sample. The 1980 Gubbio levels, however, were at least as high as those of their U.S. contemporaries. Cigarette smoking was much higher among the middle-aged men of Gubbio than among a similar U.S. population sample (56 percent versus 36 percent). Hypertension prevalence was high, and several risk factors for hypertension—obesity, high salt intake, and alcohol—were common in the Gubbio as well as in other recent Italian population studies. The changing coronary risk profile in Italy, which now includes higher population levels of serum cholesterol as well as the other major coronary heart disease risk factors of cigarette smoking and hypertension, threatens to reduce markedly the "Mediterranean advantage" enjoyed by Italy in the past.

REFERENCE NUMBER 82

AU: Bennett NL ; Botti JJ

TI: **New strategies for preterm labor.**SO: *Nurse Pract* 1989 Apr;14(4):27-30, 33-4, 37-8

Preterm birth is the leading cause of perinatal mortality and morbidity despite the technological advances in neonatology and maternal-fetal medicine. Risk factors have been tabulated that can help identify the woman at risk for preterm birth. Past medical history, present pregnancy events, and demographic and environmental characteristics can help the practitioner select women who need special care to help prevent or reduce the effects of premature delivery. Recently, new concepts of risk have been identified through research, and emphasis needs to shift from intervention to prevention of the low birth weight infant. Past and present management of premature labor is discussed. New research protocols are presented. Strategies for nurses working in family planning or obstetrical areas are discussed, demonstrating areas for interventions from a prevention-oriented nursing base.

REFERENCE NUMBER 83

AU: Guyatt GH ; Nogradi S ; Halcrow S ; Singer J ; Sullivan MJ ; Fallen EL

TI: **Development and testing of a new measure of health status for clinical trials in heart failure.**SO: *J Gen Intern Med* 1989 Mar-Apr;4(2):101-7

The authors developed a new measure of subjective health status for patients with heart failure. Eighty-eight patients with heart failure were asked about the impact of their condition on 123 items related to physical and emotional function. The most frequently chosen and important items were included in the 16-item Chronic Heart Failure Questionnaire (CHQ) that examines dyspnea during daily activities, fatigue, and emotional function. The CHQ was tested in a controlled trial of digoxin in heart failure patients in sinus rhythm. When administered serially to 25 patients in the run-in phase of the trial, the CHQ proved reproducible. Subsequently, CHQ results distinguished those who reported improvement or deterioration from those who did not. The CHQ showed moderate correlations with patient global ratings, walk test scores, and clinical assessments of heart failure. The authors conclude that the CHQ may be useful for measuring health status in clinical trials in heart failure.

REFERENCE NUMBER 84

AU: Verhasselt Y ; Mansourian B

TI: **Method for the classification of countries according to health-related indicators.**SO: *Bull World Health Organ* 1989;67(1):81-4

A taxonomic approach using cluster analysis and principal component analysis has grouped the countries of the world in eight clusters, in an initial attempt to propose a worldwide spatial classification based on the following health-related indicators: (a) those directly related to the health status of the population; (b) those measuring the provision of health care; (c) those linked to population characteristics; and (d) those reflecting economic parameters. The cartographic representation was based on demographic maps that display the area of each country in proportion to its population size.

REFERENCE NUMBER 85

AU: Carr-Hill RA ; Kind P

TI: **The Nottingham Health Profile [letter]**SO: *Soc Sci Med* 1989;28(8):885

REFERENCE NUMBER 86

AU: Konttinen YT ; Segerberg-Konttinen M ; Guseva N ; Keinonen M ; Kirtava ZZ; Kaarela K ;
Molander G ; Lehtinen K ; Sorsa S
TI: **Subjective disease experience in Sjogren's syndrome. A computerized discrimination analysis**
[published erratum appears in *Scand J Rheumatol* 1989;18(3):188]
SO: *Scand J Rheumatol* 1989;18(1):13-20

A study was made of the ability of a computerized discrimination analysis to distinguish between primary and secondary Sjogren's syndrome on the one hand and, on the other, various rheumatic diseases that may be, but in this study were not, complicated by Sjogren's syndrome. The analysis was based on a questionnaire including 76 two- or three-scale items. Among these 76 questions, 5 with a maximum potential for distinguishing among various subgroups were selected and obviously represent the questions for the physician to ask when taking the patient's history. As shown by classification matrix tables, computerized analysis of questionnaires might represent a useful way to assess the prevalence of clinical cases of Sjogren's syndrome and to aid health care administrators in assessing the extent of the Sjogren's syndrome problem. In contrast, manual analysis of patients' graded answers did not provide any simple or practicable method for the diagnostic workup of cases. Therefore it seems that subjective symptoms should not be included in the diagnostic criteria for Sjogren's syndrome, which in clinical work should be based on objective evidence alone.

REFERENCE NUMBER 87

AU: Clarridge BR ; Massagli MP
TI: **The use of female spouse proxies in common symptom reporting.**
SO: *Med Care* 1989 Apr;27(4):352-66

To determine the quality of proxy health reports by telephone, the 1984 Wisconsin Health Status Survey employed a repeated-measure design in an interview covering 22 recently occurring health and psychologic complaints. Comparisons on individuals in households containing two or more adults revealed a relatively weak correspondence between the respondent and proxy reports. Although a previous analysis of these data found that certain characteristics thought to underlie reporting differences are not useful in explaining proxy underreporting, the current analysis focuses on spousal pairs and achieves greater success by applying somewhat more sophisticated methods. The authors examined the nature, persistence, and number of health complaints as factors in reporting bias. They find evidence that female proxies vary by symptom in their ability to report common complaints and also observed that proxy underreporting diminishes somewhat as the persistence of symptoms increases. Using multiplicative models, the authors show that the gross misclassification of complaints is concentrated in the respondent-proxy pairs with the shortest exposure to the symptom. Finally, an examination of the disagreements on all 22 health complaints simultaneously revealed that neither mutual misallocation by respondents and proxies nor a diminished health status of the individual reported on are important influences on reporting behavior.

REFERENCE NUMBER 88

AU: Nakamura M ; Miura M ; Oshima A ; Akiba S ; Mizuno S ; Mabuchi H
TI: **[The development of health risk appraisal for Japanese as a new health educational tool]**
SO: *Gan No Rinsho* 1989 Jan;35(2):177-81

Health risk appraisal (HRA) is a new health educational tool widely used in the United States that informs clients about how their health habits and lifestyles affect their probability of dying from potentially preventable causes and helps to motivate them to reduce their personal health risks. It personalizes mortality statistics and epidemiologic data by combining these data with a person's risk factors. We have

started the development of HRA for Japanese with reference to a new version of HRA named "Healthier People" revised by the Carter Center of Emory University and the Centers for Disease Control in the United States.

REFERENCE NUMBER 89

AU: Millard RW

TI: **The Functional Assessment Screening Questionnaire: application for evaluating pain-related disability.**

SO: *Arch Phys Med Rehabil* 1989 Apr;70(4):303-7

The Functional Assessment Screening Questionnaire (FASQ) is a 15-item checklist that was developed for primary-care populations and may serve as a questionnaire method for evaluating disability that is associated with chronic pain. One hundred and fifty-eight patients completed the FASQ as part of an initial multidisciplinary evaluation of chronic pain. Reliability was reaffirmed through split-half and alternate-form methods. Responses were examined to explore relationships to aspects of disability. Although job functions were not directly assessed, the scores of employed versus unemployed respondents differed significantly. Findings were related to Minnesota Multiphasic Personality Inventory scale scores but appeared to reflect a separate phenomenon. Scale 1 (Hs) was the most useful scale for predicting level of reported impairment. Nonparametric methods showed levels of functioning varying significantly by site of pain complaint. Patients with back pain reported the most difficulty; those with head pain and genital pain reported the least difficulty. An internal structure appropriate to chronic pain populations was discerned, with two general factors measuring either physical-motoric or cognitive-social aspects of disability. Aside from constraints associated with the use of self-report methods, the FASQ may be helpful as part of efforts to portray pain-related disability.

REFERENCE NUMBER 90

AU: Bodenheimer TS

TI: **The fruits of empire rot on the vine: United States health policy in the austerity era.**

SO: *Soc Sci Med* 1989;28(6):531-8

Since 1970—with the decline in the hegemonic empire—the U.S. economy has entered a period of lower profitability, producing a major shift in the economic behavior of corporate capital. In contrast with the demand stimulation (New Deal) programs of the earlier period of prosperity capitalism, capital has moved toward a profit stimulation strategy in the current era of austerity capitalism. Fundamental to this austerity strategy is the drive to reduce costs of production. Both governmental and employee health benefits represent a cost of production. Thus in the health field, austerity strategy signifies a reduction in the provision of health benefits to employees and cuts in governmental health programs. An effect of austerity capitalism may be that health patterns now mainly confined to the underdeveloped world will become more prominent among the low-wage and unemployed sectors of the working class in the United States.

REFERENCE NUMBER 91

AU: Haig TH ; Scott DA ; Stevens GB

TI: **Measurement of the discomfort component of illness.**

SO: *Med Care* 1989 Mar;27(3):280-7

Discomfort is a prominent component of illness, but it is difficult to measure on a scale that allows its formal inclusion in a health status index. The authors tested the content validity of defining various discomforts in terms of their quality, duration, and intensity and found no responses that could not be categorized within this conceptual framework. They then analyzed the ability of patients to ascribe

preference values to a sample of discomfort statements, based on this characterization of discomfort, and found them able to do this reliably using magnitude estimation. These results show that, although the universe of discomforts cannot be measured directly on a common scale, they can be compared using a scale of social preference. This will allow the formal incorporation of the discomfort component of illness into health status indexes based upon dysfunctions, discomforts, and prognosis.

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International Society of Technology Assessment in Health Care

Helsinki, Finland 24-26 June 1991

The aim of this meeting is to summarize the current experiences in implications and manifestations of medical technologies; to appraise their impact on various players in the health care field; and to explore future directions for health care technology assessment in the changing health care scene. The meeting will focus on a number of areas in health care technology assessment.

For more information contact:

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Association for Health Services Research Annual Meeting

San Diego, California 30 June-2 July 1991

The cost, quality, and availability of health services are determined by the decisions made by clinicians, managers of health care organizations, payers, and public and private sector policymakers. Over the past several decades, health services research has produced information crucial to efforts to control costs, improve quality, and increase access to health services. In recognition of these important contributions, and in celebration of the association's 10th anniversary, the focus of this meeting will be on the implications of health services research for policy, management, and clinical practice.

For more information contact:

Foundation for Health Services Research

1350 Connecticut Avenue NW, Suite 1100

Washington, DC 20036

Telephone: (202) 223-2477

Fax: (202) 835-8972

Public Health Conference on Records and Statistics

Washington, DC 15-17 July 1991

The theme of this year's conference is "The 1990s: A Decade of Decisions for Vital and Health Statistics" and will focus on the interaction between the Nation's health agenda for the coming decade and the health statistics that will be needed to plan and monitor public health programs. Each of the 3 days will be devoted to a public health issue: Day 1—Data Systems for the Nation's Health Agenda; Day 2—Assessment of Community Health; and Day 3—New Concepts for the Decade of the 1990s. By addressing these topics, a broad spectrum of current and future public health concerns will be covered.

For more information contact:

Public Health Conference on Records and Statistics

National Center for Health Statistics: OPEP

6525 Belcrest Road, Room 1100

Hyattsville, MD

Telephone: (301) 436-7122

Fax: (301) 436-4233

American Statistical Association

Atlanta, Georgia 18-22 August 1991

This is the 151st annual meeting of the association. The program has a wide range of technical sessions on statistical and survey methods that are relevant to measuring health status and health-related quality of life.

For more information contact:

Meetings Department
ASA
1429 Duke Street
Alexandria, Virginia 22314-3402
Telephone: (703) 684-1221
Fax: (703) 684-2037

Society for Medical Decision Making

Rochester, New York 20-23 October 1991

The theme of this year's meeting will be the State of the Art in Health Care Decision Making: From Policy to Practice. The scientific program will begin with a poster session Sunday evening and Wednesday noon. In addition to poster and oral abstract sessions, there will be time for special interest groups to meet and an expert panel discussion on the role of guidelines in clinical practice and health care policy.

Details of the scientific program and short courses will be available in July. For more information contact:

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American Association of Pharmaceutical Scientists

Washington, DC 17-21 November 1991

This is the sixth annual meeting of the AAPS. The Economic, Marketing, and Management Sciences (EMMS) Section of the association has planned two sessions of interest to health status researchers. One is entitled "The Use of Economic and Quality-of-Life Data in Marketing New Pharmaceuticals Worldwide." The other is entitled "Clinical and Methodological Issues: Economic Evaluation of Medical Therapies."

For more information contact:

Dev Pathak, PhD
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500 West 12th Avenue
Columbus, Ohio 43210-1291

ECO-SANTE: German Version 2.1

Since 1985 the French research institute CREDES annually presents current trends and historical time series of the French health care system in a unique integrated program developed for use with personal computers (PCs). As a result of a joint venture between BASYS and CREDES, the German version is now available.

ECO-SANTE is a software tool designed for all those working either theoretically or in practice in the field of health policy and who are especially concerned with the demographic, social, and economic aspects of health care. The program is also designed to serve as an introduction to the structure and significance of the German health care system and to comparative studies of health care systems for university and high school students.

The German version is available from BASYS Ltd., 25 Reisingerstrasse, 8900 Augsburg, Germany

PUBLICATION NOTE

Two articles that were published during the July through September 1989 interval were overlooked in preparing issue number 2 of the Bibliography on Health Indexes. The citations and abstracts for these articles follow.

Au: Goel, Vivek; Detsky, Allan S.

Ti: **A Cost-utility Analysis of Preoperative Total Parenteral Nutrition**

So: *International Journal of Technology Assessment in Health Care* 5:183-194, 1989

It has been suggested that preoperative total parenteral nutrition may be used to reduce the risk of nutrition-associated postoperative complications in high-risk patients. These patients can be identified based on their nutritional status. The efficiency of this intervention is assessed using the technique of cost-utility analysis. Data from multiple sources is integrated to perform the economic assessment. The cost-utility ratios for treating several malnourished patients with localized upper gastrointestinal cancer are below \$40,000. These cost-utility ratios compare favorably with published results of other programs. The ratios increase considerably if patients who are better nourished (at lower risk of postoperative complication) receive the intervention. The analysis is very sensitive to the efficacy of the intervention. (29 references) AA

• Au: Guyatt, Gordon H.; Van Zanten, Sander J.O.V.; Feeny, David H.; Patrick, Donald L.

Ti: **Measuring Quality of Life in Clinical Trials: A Taxonomy and Review**

So: *Canadian Medical Association Journal* 140(June 15):1441-1448, 1989

Measurement of quality of life is becoming increasingly relevant to controlled clinical trials. Two basic types of instruments are available: generic instruments, which include health profiles and utility measurements based on the patient's preferences in regard to treatment and outcome; and specific instruments, which focus on problems associated with individual diseases, patient groups, or areas of function. The two approaches are not mutually exclusive; each has its strengths and weaknesses and may be suitable under different circumstances. The authors surveyed 75 randomized trials published in three medical journals in 1986 and categorized them according to the importance of quality of life as a measure of outcome and the extent to which quality of life was actually measured. The authors conclude that although accurate measurement of quality of life in randomized trials is now feasible, it is still not widely done. Using the framework outlined in this article, investigators can choose generic or specific instruments according to the purpose and focus of their trial. (115 references) AA-M

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 that 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

Bibliography, its abstracts, and other notes are all printed in English. Also presented in the Bibliography is information about forthcoming conferences, notification of publication of previously cited forthcoming materials, new information sources, etc. Addresses of contributors and sponsoring organizations for conferences are given in each Bibliography. Readers should contact the authors directly to request reprints or to discuss particular issues in greater detail. To obtain additional information about purchasing the *Bibliography on Health Indexes* on a regular basis, write to the following address:

National Center for Health Statistics
ATTENTION: Scientific and Technical Information Branch
6525 Belcrest Road
Room 1041
Hyattsville, Maryland 20782

- 6 Essex, Marilyn J.; Klein, Marjorie H.; The Importance of the Self-Concept and Coping Responses in Explaining Physical Health Status and Depression Among Older Women; *Journal of Aging and Health* 1(3):327-348, 1989
- 7 Fiedler, Klaus; Knoss, Rudolf; Lubke-Sure, Beate; Osada, Isabelle; Understanding Other People's Preferences: Epistemic Constraints on Social Inferences; *Journal of Experimental Social Psychology* 25:326-342, 1989
- 7 Fink, Raymond; Issues and Problems in Measuring Children's Health Status in Community Health Research; *Social Science and Medicine* 29(6):715-719, 1989
- 8 Froberg, Debra G.; Kane, Robert L.; Methodology for Measuring Health-State Preferences-IV: Progress and a Research Agenda; *Journal of Clinical Epidemiology* 42(7):675-685, 1989
- 8 Gardner, Gerald T.; Gould, Leroy C.; Public Perceptions of the Risks and Benefits of Technology; *Risk Analysis* 9(2):225-242, 1989
- 8 Gelber, Richard D.; Goldhirsch A.; Comparison of Adjuvant Therapies Using Quality-of-Life Considerations; *International Journal of Technology Assessment in Health Care* 5(3):401-413, 1989
- 9 Guralnik, Jack M.; Branch, Laurence G.; Cummings, Steven R.; Curb, David; Physical Performance Measures in Aging Research; *Journal of Gerontology: Medical Sciences* 44(5):M141-M146, 1989
- 9 Guyatt, Gordon H.; Townsend, Marie; Keller, Jana L.; Singer, Joel; Should Study Subjects see their Previous Responses: Data from a Randomized Control Trial; *Journal of Clinical Epidemiology* 42(9):913-920, 1989
- 10 Hendryx, Patricia M.; Psychosocial Changes Perceived by Closed-Head-Injured Adults and Their Families; *Archives of Physical Medicine and Rehabilitation* 70(7):526-530, 1989
- 10 Hoehn-Saric, Rudolf; McLeod, Daniel R.; Zimmerli, Wesley D.; Symptoms and Treatment Responses of Generalized Anxiety Disorder Patients with High Versus Low Levels of Cardiovascular Complaints; *American Journal of Psychiatry* 146(7):854-859, 1989
- 10 Howard, Ronald A.; Microrisks For Medical Decision Analysis; *International Journal of Technology Assessment in Health Care* 5(3):357-370, 1989
- 11 Infante-Rivard, Claire; Villeneuve, Jean-Pierre; Esnaola, Santiago; A Framework For Evaluating and Conducting Prognostic Studies: An Application to Cirrhosis of the Liver; *Journal of Clinical Epidemiology* 42(8):791-805, 1989
- 11 Jackson, Mary E.; Drugovich, Margaret L.; Fretwell, Marsha D.; Spector, William D.; Sternberg, Josef; et al.; Prevalence and Correlates of Disruptive Behavior in the Nursing Home; *Journal of Aging and Health* 1(3):349-369, 1989
- 12 Koenig, Harold G.; Shelp, Frank; Goli, Veeraindar; Cohen, Harvey J.; Blazer, Dan G.; Survival and Health Care Utilization in Elderly Medical Inpatients with Major Depression; *Journal of the American Geriatrics Society* 37(7):599-606, 1989
- 12 Liang, Jersey; Levin, Jeffrey S.; Krause, Neal M.; Dimensions of the OARS Mental Health Measures; *Journal of Gerontology: Psychological Sciences* 44(5):P127-138, 1989

- 12 Liu, Ingrid Y.; Anthony, James C.; Using the "Mini-Mental State" Examination to Predict Elderly Subjects' Completion of A Follow-Up Interview; *American Journal of Epidemiology* 130(2):416-422, 1989
- 13 Lorig, Kate; Holman, Halsted R.; Long-Term Outcomes of an Arthritis Self-Management Study: Effects of Reinforcement Efforts; *Social Science and Medicine* 29(2):221-224, 1989
- 13 Meissner, Paul; Andolsek, Kathryn; Mears, Pamela A.; Fletcher, Barbara; Maximizing the Functional Status of Geriatric Patients in an Acute Community Hospital; *Gerontologist* 29(4):524-528, 1989
- 13 Mor, Vincent; Murphy, John; Masterson-Allen, Susan; Willey, Cynthia; Razmpour, Ahmad; et al.; Risk of Functional Decline Among Well Elders; *Journal of Clinical Epidemiology* 42(9):895-904, 1989
- 14 Neuhauser, Duncan; Ernest Amory Codman, M.D., and End Results of Medical Care; *International Journal of Technology Assessment in Health Care* 6:307-325, 1990
- 14 Ouslander, Joseph; Leach, Gary; Staskin, David; Abelson, Susan; Blaustein, Jenna; Prospective Evaluation of an Assessment Strategy for Geriatric Urinary Incontinence; *Journal of the American Geriatrics Society* 37(8):715-724, 1989
- 14 Parker, Dorothy F.; Levinson, Wendy; Mullooly, John P.; Frymark, Sue L.; Using the Quality of Life Index in a Cancer Rehabilitation Program; *Journal of Psychosocial Oncology* 7(3):47-62, 1989
- 15 Parkerson, George R., Jr.; Michener, Lloyd; Wu, Lawrence R.; Finch, James N.; Broadhead, W.E.; et al.; The Effect of a Telephone Family Assessment Intervention on the Functional Health of Patients with Elevated Family Stress; *Medical Care* 27(7):683-693, 1989
- 15 Pearson, Jane L.; Cherrier, Monique; Teri, Linda; The Mini-Mental State Exam and the Medical Status Questionnaire: Depression in Alzheimer's Patients; *Clinical Gerontologist* 8(4):31-37, 1989
- 16 Perkins, Rachel E.; King, Sylvia A.; Hollyman, Julie A.; Resettlement of Old Long-Stay Psychiatric Patients: The Use of the Private Sector; *British Journal of Psychiatry* 155:233-238, 1989
- 16 Schwartz, J. Sanford; Lurie, Nicole; Assessment of Medical Outcomes: New Opportunities for Achieving a Long Sought-After Objective; *International Journal of Technology Assessment in Health Care* 6:333-339, 1990
- 16 Seeman, Julius; Toward a Model of Positive Health; *American Psychologist* 44(8):1099-1109, 1989
- 17 Segovia, Jorge; Bartlett, Roy F.; Edwards, Alison C.; An Empirical Analysis of the Dimensions of Health Status Measures; *Social Science and Medicine* 29(6):761-768, 1989
- 17 Shah, Surya; Vanclay, Frank; Cooper, Betty; Improving the Sensitivity of the Barthel Index for Stroke Rehabilitation; *Journal of Clinical Epidemiology* 42(8):703-709, 1989
- 17 Shye, Samuel; The Systemic Life Quality Model: A Basis for Urban Renewal Evaluation; *Social Indicators Research* 21:343-378, 1989
- 18 Siegrist, Johannes; Junge, Astrid; Conceptual and Methodological Problems in Research on the Quality of Life in Clinical Medicine; *Social Science and Medicine* 29(3):463-468, 1989

- 18 Sunderland, Trey; Hill, James L.; Mellow, Alan M.; Lawlor, Brian A.; Gundersheimer, Joshua; et al.; Clock Drawing in Alzheimer's Disease: A Novel Measure of Dementia Severity; *Journal of the American Geriatrics Society* 37(8):725-729, 1989
- 19 Tempelaar, R.; De Haes, J.C.J.M.; de Ruitter, J.H.; Bakker, D.; Van Den Heuvel, W.J.A.; et al.; The Social Experiences of Cancer Patients under Treatment: A Comparative Study; *Social Science and Medicine* 29(5):635-642, 1989
- 19 Teresi, Jeanne A.; Cross, Peter S.; Golden, Robert R.; Some Application of Latent Trait Analysis to the Measurement of ADL; *Journal of Gerontology: Social Sciences* 44(5):S196-S204, 1989
- 19 Thapa, K.; Rowland, L.A.; Quality of Life Perspective in Long-term Care: Staff and Patient Perceptions; *Acta Psychiatrica Scandinavica* 80(3):267-271, 1989
- 20 Williams, Simon J.; Bury, Michael R.; Impairment, Disability and Handicap in Chronic Respiratory Illness; *Social Science and Medicine* 29(5):609-616, 1989
- 20 Zonderman, Alan B.; Costa, Paul T., Jr.; McCrae, Robert R.; Depression as a Risk for Cancer Morbidity and Mortality in a Nationally Representative Sample; *Journal of the American Medical Association* 262(9):1191-1195, 1989
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