

Health Care for the Homeless

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Bibliography #16

Outcomes for Primary Health Care Programs Serving People Who Are Homeless

March 2004

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Under contract to the Health Resources and Services Administration, Bureau of Primary Health Care

McNamara C; Schumacher J; Milby J; Wallace D; Usdan, S. **Prevalence of nonpsychotic mental disorders does not affect treatment outcome in a homeless cocaine-dependent sample.** American Journal of Drug and Alcohol Abuse 27(1): 91-106, 2001.

This study presents the prevalence and treatment outcome of DUAL diagnoses (psychoactive substance use disorders [PSUD] plus other nonpsychotic mental disorders) among a population of homeless persons participating in a behavioral day treatment and contingency management drug abuse treatment program. Cocaine and alcohol disorders were most prevalent overall, and over half of participants had two or more psychoactive substance use disorders. DUAL participants had significantly more alcohol disorders than PSUD's. The most prevalent mental disorders, other than substance abuse, for the total and DUAL samples were mood and anxiety. The DUAL group had more severe problems than the PSUD group at baseline in alcohol, medical condition, employment/support, and psychiatric status areas. Both groups showed treatment improvements at 6-month follow-up, with the DUAL group showing greater mean change than the PSUD group. These findings are discussed in terms of effect of dual diagnoses on treatment outcome and study limitations related to a retrospective design and select sample of nonpsychotic mental disorders.

Rosenheck R; Morrissey J; Lam J; Calloway M; Stolar M; Johnsen M; Randolph F; Blasinsky M; Goldman H. **Service delivery and community: social capital, service systems integration, and outcomes among homeless persons with severe mental illness.** Health Serv Res, 36(4):691-710, Aug 2001.

OBJECTIVES: This study evaluated the influence of features of community social environment and service system integration on service use, housing, and clinical outcomes among homeless people with serious mental illness. **STUDY SETTING:** A one-year observational outcome study was conducted of homeless people with serious mental illness at 18 sites. **DATA SOURCES:** Measures of community social environment (e.g., social capital) were based on local surveys and voting records. Housing affordability was assessed with housing survey data. Service system integration was assessed through interviews with key informants at each site to document interorganizational transactions. Standardized clinical measures were used to assess clinical and housing outcomes in face-to-face interviews. **RESEARCH DESIGN:** Structural equation modeling was used to determine the relationship between (1) characteristics of the social environment (social capital, housing affordability); (2) the level of integration of the service system for persons who are homeless in each community; (3) access to and use of services by individual clients; and (4) successful exit from homelessness or clinical improvement. **PRINCIPAL FINDINGS:** Social capital was associated with greater service systems integration, which was associated in turn with greater access to assistance from a public housing agency and to a greater probability of exiting from homelessness at 12 months. Housing affordability also predicted exit from homelessness. either environmental factors nor systems integration predicted outcomes for psychiatric problems, substance abuse, employment, physical health, or income support. **CONCLUSION:** Community social capital and service system integration are related through a series of direct and indirect pathways with better housing outcomes but not with superior clinical outcomes for homeless people with mental illness. Implications for designing improved service systems are discussed.

Sciacca K; Dobbins KR. **Kentucky dual-diagnosis residence yields remarkable outcome.** Alcoholism and Drug Abuse Weekly 13(7): 5, 2001.

Evaluates the outcome of the establishment of a dual diagnosis residence for homeless women with mental illness and chemical dependency in Kentucky.

Solz H; Gilbert K. **Health claims data as a strategy and tool in disease management.** J Ambulatory Care Manage, 24(2):69-85, April 2001.

A comprehensive definition of disease management provides an opportunity to track a population of patients across the entire continuum of a condition, from wellness through disease and disability, so that improvements in health status and quality of life and efficiencies in the application of health care resources can be demonstrated. The need is great for information systems that can computerize clinical encounter, summarize, and apply the information to help identify opportunities for improvement in the performance of quality and cost control, monitor processes of care, and report outcomes that are meaningful to the organization. By tracking health care charges as a proxy for the application of health care resources, health claim data analyses can identify conditions for disease management, facilitate provider buy-in, develop the disease management program, monitor interventions, and report outcomes.

Stahler GJ; Shipley Jr TF; Bartelt D; DuCette JP; Shandler IW. **Evaluating alternative treatments for homeless substance-abusing men: outcomes and predictors of success.** Journal of Addictive Diseases 14(4): 151-167, 1995.

This study explored the relative efficacy of three types of service delivery intervention models for homeless men with alcohol and/or drug problems: integrated comprehensive residential services provided at one site (Group 1); on-site shelter-based intensive case management with referrals to a community network of services (Group 2); and usual care shelter services with case management (Group 3). In addition to assessing the relative efficacy of these approaches in terms of drug and alcohol use, residential stability, economic and employment status, the project also sought to examine what personal factors best predicted successful outcomes. Clients were assessed at baseline and six months after discharge. All three treatment groups improved significantly over time in terms of reduced alcohol and cocaine use, increased employment, and increased stable housing, but no differential improvement was found among groups. Successful outcomes were predicted by lower recent and lifetime substance use, fewer prior treatment episodes, more stable housing at baseline, fewer incarcerations and less social isolation.

Stein JA; Lu MC; Gelberg L. **Severity of homelessness and adverse birth outcomes.** Health Psychology 19(6): 524-534, 2000.

Predictors and the prevalence of adverse birth outcomes among 237 homeless women interviewed at 78 shelters and meal programs in Los Angeles in 1997 were assessed. It was hypothesized that they would report worse outcomes than national norms, that African Americans would report the worst outcomes because of their greater risk in the general population, and that homelessness severity would independently predict poorer outcomes beyond its association with other adverse conditions. Other predictors included reproductive history, behavioral and health-related variables, psychological trauma and distress, ethnicity, and income. African Americans and Hispanics reported worse outcomes than normal. Severity of homelessness significantly predicted low birth weight and preterm births beyond its relationship with prenatal care and other risk factors.

2000

Calsyn RJ; Winter JP; Morse GA. **Do Consumers Who Have a Choice of Treatment Have Better**

Outcomes? Community Mental Health Journal 36(2): 149-160, 2000.

This study used a non-equivalent control group design to investigate the effect of consumer choice of treatment on both process and outcome variables. All study participants suffered from severe mental illness, were homeless at baseline, and were enrolled in a modified Assertive Community Treatment (ACT) program. Consumers in the choice condition had selected the ACT program from a menu of five treatment programs; clients in the no-choice condition were simply assigned to the ACT program by an intake worker. Results found that consumers in the choice condition visited the ACT staff at their offices more than consumers in the no-choice condition, but there were no significant differences between groups on the other treatment process variables. Although consumers in the choice condition increased their income more than consumers in the no-choice condition, there were no significant differences between groups on the other outcome variables (stable housing, psychotic symptoms, depression, and substance abuse).

Campbell GJ; McCarthy E. **Conveying Mission Through Outcome Measurement: Services to the Homeless in New York City.** Policy Studies Journal 28(2): 338-352, 2000.

This article outlines the policy decision to implement a performance incentive program in a large social services agency. Specifically, it describes the evolution of services to people who are homeless in New York City, including the creation of the New York City Department of Homeless Services, the privatization of a majority of the shelter system, and the redefinition of the role of government in the provision of homeless services. The article explains how performance measurement is an integral part of this evolution, and the numerous challenges that this initiative has presented to management of the Department.

DeLeon G; Sacks S; Staines G; McKendrick K. **Modified Therapeutic Community for Homeless Mentally Ill Chemical Abusers: Treatment Outcomes.** American Journal of Drug and Alcohol Abuse 26(3): 461-480, 2000.

This article compares homeless mentally ill chemical abuser (MICA) clients, male and female, sequentially assigned to either of two modified therapeutic community programs (TC-1 and TC-2) and to a treatment as usual (TAU) control group. Follow-up interviews were obtained at 12 months post-baseline and at time F (on average more than two years post-baseline). Outcome measures assessed five domains: drug use, crime, HIV risk behavior, psychological symptoms, and employment. Individuals in both modified TC groups showed significantly greater behavioral improvement than TAU at 12 months and time F, and the modified TC-2, with lower demands and staff guidance, was superior to modified TC-1. Completers of both TC programs showed significantly greater improvement than dropouts and a subgroup of TAU clients with high exposure (i.e., more than eight months) to other treatment protocols. The present findings support the effectiveness and longer term stability of effects of a modified TC program for treating homeless MICA clients.

Fleming MF; Mundt MP; French MT; Manwell LB; Stauffacher EA; Barry KL. **Benefit-cost analysis of brief physician advice with problem drinkers in primary care settings.** Med Care, 38(1):7-18, January 2000. Comment in: ACP J Club., 133(2):75, Sept.-Oct. 2000. Med Care, 38(1):4-6, January 2000.

BACKGROUND: Few studies have estimated the economic costs and benefits of brief physician advice in managed care settings. **OBJECTIVE:** To conduct a benefit-cost analysis of brief physician advice

regarding problem drinking. DESIGN: Patient and health care costs associated with brief advice were compared with economic benefits associated with changes in health care utilization, legal events, and motor vehicle accidents using 6- and 12-month follow-up data from Project TrEAT (Trial for Early Alcohol Treatment), a randomized controlled clinical trial. SUBJECTS: 482 men and 292 women who reported drinking above a threshold limit were randomized into control (n=382) or intervention (n=392) groups. MEASURES: Outcomes included alcohol use, emergency department visits, hospital days, legal events, and motor vehicle accidents. RESULTS: No significant differences between control and intervention subjects were present for baseline alcohol use, age, socioeconomic status, smoking, depression or anxiety, conduct disorders, drug use, crimes, motor vehicle accidents, or health care utilization. The total economic benefit of the brief intervention was \$423,519, composed of \$195,448 in savings in emergency department and hospital use and \$228,071 in avoided costs of crime and motor vehicle accidents. The average (per subject) benefit was \$1,151. The estimated total economic cost of the intervention was \$80,210, or \$205 per subject. The benefit-cost ratio was 5.6:1, or \$56,263 in total benefit for every \$10,000 invested. CONCLUSIONS: These results offer the first quantitative evidence that implementation of a brief intervention for problem drinkers can generate positive net benefit for patients, the health care system, and society.

Gelberg L; Andersen RM; Leake BD. **The behavioral model for vulnerable populations: application to medical care use and outcomes for homeless people.** Health Services Research 34(6): 1273-1302, 2000.

OBJECTIVES: (1) To present the Behavioral Model for Vulnerable Populations, a major revision of a leading model of access to care that is particularly applicable to vulnerable populations; and (2) to test the model in a prospective study designed to define and determine predictors of the course of health services utilization and physical health outcomes within one vulnerable population: homeless adults. We paid particular attention to the effects of mental health, substance use, residential history, competing needs, and victimization. METHOD: A community-based probability sample of 363 homeless individuals was interviewed and examined for four study conditions (high blood pressure, functional vision impairment, skin/leg/foot problems, and tuberculosis skin test positivity). Persons with at least one study condition were followed longitudinally for up to eight months. FINDINGS: Homeless adults had high rates of functional vision impairment (37 percent), skin/leg/foot problems (36 percent), and TB skin test positivity (31 percent), but a rate of high blood pressure similar to that of the general population (14 percent). Utilization was high for high blood pressure (81 percent) and TB skin test positivity (78 percent), but lower for vision impairment (33 percent) and skin/leg/foot problems (44 percent). Health status for high blood pressure, vision impairment, and skin/leg/foot problems improved over time. In general, more severe homeless status, mental health problems, and substance abuse did not deter homeless individuals from obtaining care. Better health outcomes were predicted by a variety of variables, most notably having a community clinic or private physician as a regular source of care. Generally, use of currently available services did not affect health outcomes. CONCLUSION: Homeless persons are willing to obtain care if they believe it is important. Our findings suggest that case identification and referral for physical health care can be successfully accomplished among homeless persons and can occur concurrently with successful efforts to help them find permanent housing, alleviate their mental illness, and abstain from substance abuse.

Holl JL; Szilagyi PG; Rodewald LE; Shone LP; Zwanziger J; Mukamel DB; Trafton S; Dick AW; Barth R; Raubertas RF. **Evaluation of New York State's Child Health Plus: access, utilization, quality of health care, and health status.** Pediatrics, 105(3 Suppl E):711-8, March 2000.

BACKGROUND: The recently enacted State Children's Health Insurance Program (SCHIP) is modeled after New York State's Child Health Plus (CHPlus) program. Since 1991, CHPlus has provided health

insurance to children 0 to 13 years old whose annual family income was below 222% of the federal poverty level and who were ineligible for Medicaid or did not have equivalent health insurance coverage. CHPlus covered the costs for ambulatory, emergency, and specialty care, and prescriptions, but not inpatient services. OBJECTIVES: To assess the change associated with CHPlus regarding 1) access to health care; 2) utilization of ambulatory, inpatient, and emergency services; 3) quality of health care; and 4) health status. SETTING: Six western New York State counties (including the city of Rochester). SUBJECTS: Children (0-6.99 years old) enrolled for at least 9 consecutive months in CHPlus. METHODS: The design was a before-and-after study, comparing individual-level outcomes for the 12 months immediately before CHPlus enrollment and the 12 months immediately after enrollment in CHPlus. Parent telephone interviews and medical chart reviews conducted 12 months after enrollment to gather information. Subjects' primary care charts were located by using interview information; emergency department (ED) charts were identified by searching patient records at all 12 EDs serving children in the study; and health department charts were identified by searching patient records at the 6 county health department clinics. Logistic regression and Poisson regression were used to compare the means of dependent measures with and without CHPlus coverage, while controlling for age, prior insurance type, and gap in insurance coverage before CHPlus. RESULTS: Complete data were obtained for 1730 children. Coverage by CHPlus was associated with a significant improvement in access to care as measured by the proportion of children reported as having a usual source of care (preventive care: +1.9% improvement during CHPlus and sick care: +2.7%). CHPlus was associated, among children 1 to 5 years old, with a significant increase in utilization of preventive care (+.23 visits/child/year) and sick care (+.91 visits/child/year) but no measurable change in utilization of specialty, emergency, or inpatient care. CHPlus was also associated, among children 1 to 5 years old, with significantly higher immunization rates (up-to-date for immunizations: 76% vs 71%), and screening rates for anemia (+11% increased proportion screened/year), lead (+9%), vision (+11%), and hearing (+7%). For 25% of the children, a parent reported that their child's health was improved as a result of having CHPlus. CONCLUSION: After enrollment in CHPlus, access to and utilization of primary care increased, continuity of care improved, and many quality of care measures were improved while utilization of emergency and specialty care did not change. Many parents reported improved health status of their child as a result of enrollment in CHPlus. Implication. This evaluation suggests that SCHIP programs are likely to improve access to, quality of, and participation in primary care significantly and may not be associated with significant changes in specialty or emergency care.

Rossiter LF; Whitehurst-Cook MY; Small RE; Shasky C; Bovbjerg VE; Penberthy L; Okasha A; Green J, Ibrahim IA; Yang S; Lee K. **The impact of disease management on outcomes and cost of care: a study of low-income asthma patients.** *Inquiry*, 37(2):188-202, Summer 2000.

An asthma disease management program designed specifically for low-income patients experiencing significant adverse events can improve health outcomes substantially, while lowering costs. The Virginia Health Outcomes Partnership aimed to help physicians in a fee-for-service primary care case management program manage asthma in Medicaid recipients. Approximately one-third of physicians treating asthma in an area designated as the intervention community volunteered to participate in training on disease management and communication skills. This large-scale study discovered that the rate of emergency visit claims for patients of participating physicians who received feedback reports dropped an average of 41% from the same quarter a year earlier, compared to only 18% for comparison community physicians. Although only a third of the intervention community physicians participated in the training, emergency visit rates for all intervention community physicians nonetheless declined by 6% relative to the comparison community among moderate-to-severe asthma patients when data for participating and nonparticipating physicians were combined. At the same time, the dispensing of some reliever drugs recommended for asthma increased 25% relative to the comparison community. A cost-effectiveness analysis projected direct savings to Medicaid of \$3 to \$4 for every incremental dollar spent providing

disease management support to physicians. The results of this study demonstrate the potential this program offers, especially for Medicaid programs in other states that want to improve the care of their primary care case management networks and, at the same time, manage costs.

Sellers KF; Hargrove B; Jenkins P. **Asthma disease management programs improve clinical and economic outcomes.** Medsurg Nurs, 9(4):201-3, 207, August 2000.

Whittemore R. **Consequences of not "knowing the patient"**. Clin Nurse Spec, 14(2):75-81, March 2000.

"Knowing the patient" is an emerging concept in nursing that appears to be a central aspect of practice. "Knowing the patient" encompasses the complex process whereby the nurse acquires understanding of a specific patient as a unique individual, which subsequently enhances clinical decision-making, selection of optimal nursing interventions, and patient outcomes. Despite these heralded benefits, "knowing the patient" is severely undervalued in contemporary health care. Organizational arrangements, economic restraints, and efficiency of healthcare systems currently are of top priority. The potential effect on nursing practice is disconcerting; the effect on the discipline and the patient potentially devastating. This article explores the specific bureaucratic obstacles that impinge on "knowing the patient" within the context of nursing practice. It is hoped that illumination of the issues will beget viable alternative solutions, facilitating the transformation of awareness into action.

1999

Brown BJ. **How does management affect clinical outcomes of care?** Nurs Adm Q, 24(1):v-vi, Fall 1999.

Brush BL; McGee EM. **The Expanded Care for Healthy Outcomes (ECHO) Project: addressing the spiritual care needs of homeless men in recovery.** Clinical Excellence for Nurse Practitioners 3(2): 116-122, 1999.

As the nation's homeless population continues to rise, new practice models will need to address the specific health care needs of the homeless while providing cost-effective wellness-oriented quality care. This article describes the early development of one such model. The Expanded Care for Healthy Outcomes (ECHO) Project is an interdisciplinary curriculum/practice model that explores the vital intersection of spiritual and primary care in promoting health among homeless guests at the Pine Street Inn Nurses Clinics in Boston, Massachusetts. The authors describe the incorporation of spiritual assessment and care in clinical practice with homeless men to maximize patients' physical, psychosocial, and spiritual wellness.

French MT; Sacks S; De Leon G; Staines G; McKendrick K. **Modified therapeutic community for**

mentally ill chemical abusers: outcomes and costs. *Evaluation and the Health Professions* 22(1): 60-85, 1999.

This article presents outcomes and costs of a modified therapeutic community (TC) intervention for homeless mentally ill chemical abusers (MICAs). Outcomes at follow-up are compared with those for a control group of homeless MICAs receiving standard services in a "treatment as usual" (TAU) condition. Annual economic costs for the modified TC and the average weekly cost of treating a single client are estimated. Treatment and other health service costs at 12 months post-baseline are compared for modified TC and TAU clients. The results of the study indicate that, suitably modified, the TC approach is an effective treatment alternative for homeless MICAs, with the potential to be highly cost-effective relative to standard services.

Frohna JG; Lantz PM; Pollack H. **Maternal substance abuse and infant health: policy options across the life course.** *Milbank Q*, 77(4):531-70, iii, 1999.

Maternal substance abuse is a significant contributor to infant morbidity and mortality. The setting of prenatal care has long been the focus of interventions and policies to prevent these adverse outcomes. However, substance abuse programs and policies that are designed for women who are not yet pregnant can have a significant impact upon this problem. Thus it is essential to view the female life course from a broader perspective in order to consider the full range of policy options for reducing the infant mortality and morbidity caused by maternal substance abuse. This framework also allows comparisons across and between substances and offers new directions for policy development.

Harris LE; Swindle RW; Mungai SM; Weinberger M; Tierney WM. **Measuring patient satisfaction for quality improvement.** *Med Care*, 37(12):1207-13, December 1999.

BACKGROUND: Surveys used for health plan quality reporting are generally administered annually to health plan enrollees to assess satisfaction with the health plan and health services. Surveys may lack sensitivity to measure effects of patient-focused, quality improvement initiatives that could demonstrate results in a shorter time period. **OBJECTIVES:** We describe the development and testing of a multidimensional, visit-specific measure of satisfaction with primary care that may be used in quality improvement. **METHODS:** Conducted in five adult and pediatric primary care sites serving a commercial, largely managed-care population, the survey includes the Medical Outcomes Study Visit-Specific Questionnaire, the American Board of Internal Medicine Patient Satisfaction Questionnaire, and locally developed items. We assessed the instrument's reliability, validity and utility for quality improvement. **RESULTS:** For both adult and pediatric samples, three factors emerged: satisfaction (1) with the provider, (2) with access, and (3) with the office. Satisfaction with the provider and the office were independently correlated with overall satisfaction in both samples; satisfaction with access was significantly correlated with overall satisfaction only for adults. For adults, patients who disenrolled from the health plan were less satisfied with the office compared with patients who remained with the health plan. Finally, for adults, we detected significant differences across practice sites in terms of satisfaction with office and access. For children, there were intersite differences in terms of satisfaction with provider, office and access. **CONCLUSIONS:** We have support for the reliability and validity of this instrument that has identified differences in satisfaction between practice sites that may be used for quality improvement.

Miller NS; Ninonuevo F; Hoffmann NG; Astrachan BM. **Prediction of treatment outcomes: lifetime depression versus the continuum of care.** *Am J Addict*, 8(3):243-53, Summer 1999.

We sought to determine the impact of a lifetime diagnosis of major depression on addiction treatment outcome. Structured interviews were conducted upon admission, and consecutive structured interviews were conducted prospectively for treatment outcome at 6 and 12 month follow-up periods. A multisite evaluation study of patients undergoing addiction treatment for alcohol and drug dependence was conducted in private outpatient facilities. Two thousand twenty-nine subjects from 33 independent programs were enrolled in a national registry for addiction treatment outcomes. The patients received abstinence-based addiction treatment with referral to a 12-step recovery program, often Alcoholics Anonymous, and continuing care in the treatment programs. The outcome areas measured were treatment completion, posttreatment substance use, exposure to psychosocial relapse risk factors, involvement with continuing care (formal aftercare and peer support groups), and posttreatment vocational functioning, health care utilization, and legal involvement. The prevalence rate of depressive symptoms over at least a 2-week period (major depression) in our sample was 28%. Multivariate analysis with stepwise multiple regression indicated that the most powerful predictors (relatively) of posttreatment alcohol/drug use were peer support group attendance and program continuing care involvement. Lifetime depression by itself and in interaction with each of these factors accounted for less than 2% of the variance in outcome. Logistic regression yielded similar results in the prediction of abstinence versus relapse. Posttreatment more than pretreatment factors appear to be more decisive in predicting risk for relapse.

Pierce KJ. **The effect of matching client and case and case manager on gender and race on outcomes of case management with the homeless mentally ill.** Dissertation (DAI), University of Missouri, St. Louis, MO, 1999.

One-hundred nineteen participants were pooled from two independent studies examining assertive case management interventions with the severely mentally ill homeless population in the metropolitan St. Louis area to examine the impact of matching clients and case management staff with regard to race and gender on treatment outcomes. Data analysis indicated that a match on either race or gender, but not both, between black males and their case manager led to better outcomes. Second, it did not seem that white male clients benefited from being matched on gender or race with their case management staff. Third, as was the case with black male clients, data indicated a trend towards black female benefiting from being matched with their case manager on either gender race, but not both characteristics. Finally results for white female clients were not interpretable due to concerns regarding cell sizes. A main effect for case manager gender was that female case managers were more likely to have clients with a great number of days of stable housing than male case managers at twelve month follow-up. Clinical implications of the findings are discussed, as well as recommendations for future research.

Toro PA; Goldstein MS; Rowland LL; Bellavia CW; Wolfe SM; Thomas DM; Acosta O. **Severe mental illness among homeless adults and its association with longitudinal outcomes.** Behavior Therapy 30: 431-452, 1999.

A probability sample of urban homeless adults (n=420) from Buffalo, NY, was followed every three months for 18 months using measures with established reliability and validity. Rates of mental disorder varied depending on the measure and/or operationalization applied (e.g. 46% had a high score on a symptom checklist but only 13% had been hospitalized for a mental disorder). Based on the Diagnostic Interview Schedule (DIS), 23% received a lifetime DSM-III diagnosis of severe mental illness (schizophrenia or major affective disorder). Those with a diagnosis of severe mental illness differed from those without a diagnosis on many dimensions at baseline, reporting more negative recent and past family environments, more housing moves, greater stress, more psychological and health symptoms, and poorer

self-efficacy. However, those with and without a diagnosis differed only on a few longitudinal outcomes, and the entire sample showed improvement on the time spent homeless, income, stress, and physical and psychological symptoms. Both groups also showed significant declines in two measures of social support.

Trumbetta SL; Mueser KT; Quimby E; Bebout R; Teague GB. **Social networks and clinical outcomes of dually diagnosed homeless persons.** Behavior Therapy 30(3): 407-430, 1999.

This article examines longitudinal associations between social network characteristics and clinical outcomes in a group of 130 homeless persons diagnosed with substance abuse and severe mental illness. Patients whose alcohol-use disorder remitted over 18 months had more frequent contact with Alcoholics Anonymous or Narcotics Anonymous members at baseline, and those whose other substance use disorder remitted had fewer substance users in their baseline social networks. Smaller social networks predicted heavier alcohol use over time which, in turn, predicted attrition of abstinence supporters and decreased multiplexity of relationships. More social contact predicted improved Expanded Brief Psychiatric Rating Scale (BPRS) symptoms. Improved symptoms and greater multiplexity of social relationships predicted each other over time.

1998

Brindis C; Hughes D; Halfon N; Newacheck P. **The use of formative evaluation to assess integrated services for children: the Robert Wood Johnson Foundation Child Health Initiative.** Evaluation & the Health Professions 21(1): 66-90, March 1998.

This article describes the use of formative evaluation in assessing the feasibility of implementing a new service integration effort. The Child Health Initiative, a nine-state, national demonstration project funded in 1991 by the Robert Wood Johnson Foundation, sought to implement systemic change through the creation of new mechanisms for spending service dollars more flexibly at the local site. The Child Health Initiative called for developing local child health-monitoring systems, a care coordination mechanism, and a program for decategorizing the many restrictive categorical public programs serving children. Most demonstration communities experienced some degree of success achieving the first two components, but none was able to implement decategorization during the three- to five-year funding period. Key lessons for evaluators include the need for: (1) a flexible evaluation design that can sequentially adapt to changes in program implementation; (2) repeated longitudinal data collection measures to document changes over time; (3) avoidance of a premature focus on program outcomes; and (4) methods to establish attribution of outcomes.

Bureau of Primary Health Care. **Health Care for the Homeless outcome measures: a chronicle of twenty pilot studies.** Bethesda, MD: Health Care for the Homeless Branch, April 27, 1998.

This paper is intended as an overview of an initiative, funded by the Bureau of Primary Health Care, which involved the participation of 20 Health Care for the Homeless grantees in studies on multiple topics related to the provision of health care services to homeless people. The first part of the document contains

information regarding the history of this initiative and general observations made throughout the course of the initiative. Following that is a compilation of individual summaries that are edited versions of the 20 participants' final project reports. AVAILABLE FROM: Health Care for the Homeless Information Resource Center, 262 Delaware Avenue, Delmar, NY 12054. Phone: (888) 439-3300.

Clardy JA; Booth BM; Smith LG; Nordquist CR; Smith GR. **Implementing a statewide outcomes management system for consumers of public mental health service.** *Psychiatric Services* 49(2): 191-195, 1998.

This paper describes a public-academic collaboration in Arkansas to develop a statewide outcomes management system for measuring outcomes and processes of care for public mental health patients at risk for hospital admission. All 15 community mental health centers in the state participate in the project, which prospectively measures longitudinal outcomes of care for the tracer conditions of major depression and schizophrenia. The authors state it is feasible to implement an outcomes based management system in the public mental health setting. They conclude that such projects add to the knowledge about processes of care and treatment and provide guidance in solving practical problems.

Crombie IK; Davies HT. **Beyond health outcomes: the advantages of measuring process.** *J Eval Clin Pract*, 4(1):31-8, February 1998.

The use of process measures in the assessment of the quality of care has been neglected of late. The outcomes movement has gathered momentum and process measurement appears to have been left trailing in the wake. Yet process measures can be sensitive indicators of the quality of care and have many advantages over outcomes. They are readily measured and can easily be interpreted; comparisons are not essential (as they are with outcomes monitoring) but even if used they are little bothered by the case-mix arguments which bedevil outcomes assessment. Further, the direct measurement of process can directly indicate deficiencies of care which need to be remedied. Finally, there are some aspects of care which are only amenable to study using measures of process. These benefits come at a price: first there must be good evidence that links the processes of care to desirable outcomes. This paper explores the advantages of measuring processes of care in quality assessment and advocates a balanced approach to the process vs. outcome debate.

Culhane D; Eldridge D; Rosenheck R; Wilkins C. **Making homelessness programs accountable to consumers, funders and the public.** Washington, DC: Presented at the National Symposium of Homelessness Research, October 29-30, 1998.

This paper discusses how different types of performance measurement can be used to improve the accountability of homeless programs to consumers, funders, and to the public. A distinction is made between the kinds of data used in formal research projects and data that can be practically obtained in a practice setting. Consumer outcomes are discussed in terms of accountability to consumers, program outcomes in terms of accountability to funders, and systems outcomes in terms of accountability to the public. Cost-benefit analyses are also discussed as providing another critical dimension of accountability, to funders and the public.

Edwards JB; Kaplan A; Barnett JT; Logan CL. **Nurse-managed primary care in a rural community. Outcomes of five years of practice.** *Nurs Health Care Perspect*, 19(1):20-5, Jan-Feb 1998.

Nursing centers offer underserved populations affordable access to primary health care. But to build their case for inclusion in managed care plans and the health care delivery systems of the future, they must document their successes.

Elasz TA; Gaddy G. **Measuring subjective outcomes: rethinking reliability and validity.** J Gen Intern Med, 13(11):757-61, November 1998.

Reliability and validity are criteria used to assess metric adequacy and are typically quantified by correlation coefficients. Reliability is described as the extent to which repeated measurements yield consistent results. Validity is described as the extent to which a measure actually measures what it purports to measure. These conceptualizations are less useful when applied to measures of subjective outcomes because they do not convey other influences that "drive" correlation coefficients. Consistency is a manifestation of a reliable instrument but does not ensure that an instrument is reliable. Establishing the validity of an instrument is a complex process that is heavily dependent on an investigator's hypothesis. Hence, validity coefficients may be more a reflection of hypothesis adequacy than of the extent to which instruments measure what they purport to measure. Appreciating how coefficients are influenced will better enable clinicians to assess the adequacy of subjective outcome measures.

Ferguson JA; Weinberger M. **Case management programs in primary care.** J Gen Intern Med, 13(2):123-6, February 1998. Comment in: J Gen Intern Med, 13(2):144-5, February 1998. Comment in: ACP J Club, 129(2):53, September-October 1998.

To review the impact of case management programs on health care resource use; their impact on patient satisfaction, quality of life, and functional status (patient-centered outcomes); and their cost-effectiveness, we reviewed the English language literature utilizing the following MEDLINE and HealthSTAR headings: case management, patient care planning, patient-centered care, disease management, care management, and managed care programs. Bibliographies of relevant articles were also reviewed. Only randomized controlled trials were included. Data were extracted manually from relevant publications and are presented descriptively because formal, quantitative methods were not applicable. Nine studies met our inclusion criteria. Of the seven studies examining case management's impact on health resource use, only two found a positive effect. Both successful programs targeted patients with specified disease conditions and care was supervised by a medical subspecialist. None of the programs targeting general disease conditions or supervised by generalists reported a positive effect. All six studies examining patient-centered outcomes reported a positive impact. These effects were unrelated to the patient's conditions or the study personnel. Both studies examining clinical parameters found a positive impact. Only three studies examined costs; all reported nonsignificant cost savings. While case management programs offer theoretical benefits, few examples of successful programs were found. Positive effect was related to disease condition and specialty training of study personnel. Patient-centered outcomes were often improved upon but at unknown cost. Further multi-site clinical trials are needed to define case management's role in our future health care system.

Gentry D; Howze T; Lehrman SE. **The partnership for empowerment: redesigning a community-based AIDS case management program to achieve planned care outcomes.** International Conference on AIDS 12: 732 (abstract no. 34237), 1998.

ISSUES: Issues of re-engineering for an HIV/AIDS case management system are discussed. Major topics

covered include needs assessment, development of an explicit model for a particular community, implementing changes, and evaluation considerations. **PROJECT:** This project is a partnership between a local public health department, a school of public health, and the HIV/AIDS community to build a strong centralized case management program--a program to ensure coordination across the continuum of care for PLWH/A. During an assessment phase, an HIV/AIDS case management taxonomy was developed that facilitates both describing an existing program and developing a new program. The assessment phase also included a consideration of case management needs for specific populations, such as women and children, the homeless, substance abusers, minority populations. During the development phase, work groups made up of case managers, clients, and other service providers developed a specific program by focusing on the following areas: 1) mission, purpose, goals and objectives, and the general design of an explicit system utilizing the case management taxonomy; 2) client acuity and levels of care; 3) information and referral, resource inventory, and system advocacy; and 4) accountability issues and standards of care. Implementation tasks included a new Policies and Procedures Manual, a new Staff Development Manual, and implementation of a system for Quality Assurance and Evaluation. **RESULTS:** A new comprehensive HIV/AIDS case management system, The Partnership for Empowerment, was developed and implemented for St. Louis, Missouri, US It has been well received by the community (clients), case managers, and other service providers. It is client-centered and based on empowering PLWH/A to take the lead in managing their disease and their lives. The program has been nominated for a 1998 US Conference of Mayors Innovations Award. **LESSONS LEARNED:** These include: 1) programs should be based on community needs assessments; 2) balancing the desire for community-based services with the need for standards across the program is a challenge; 3) program development efforts should include community involvement; and finally, 4) operationalized, measurable process and outcome indicators for quality assurance and evaluation should be part of the initial program design and should be tied to specific program objectives.

Gerszten PC. **Outcomes research: a review.** *Neurosurgery*, 43(5):1146-56, November 1998.

PURPOSE: To review the history of the medical outcomes movement as well as the methodologies used in outcomes research. **CONCEPT:** Outcomes research refers to a genre of clinical investigation that emphasizes the measurement of patient health outcomes, including the patient's symptoms, functional status, quality of life, satisfaction with treatment, and health care costs. **RATIONALE:** Outcomes research evolved from studies that demonstrated the presence of wide geographic variations in the practice of medicine and surgery. Such differences in utilization were unaccompanied by any discernible difference in patient outcomes. With escalating health care costs, there has been a growing interest in measuring the outcomes of medical intervention to determine the quality and appropriateness of medical care. **DISCUSSION:** Outcomes may be measured both directly and indirectly, over differing periods of time, and with varying degrees of objectivity, reliability, and validity. Current research has focused on quality of life issues, which include the extent to which a patient's usual or expected physical, emotional, and social well-being have been affected by a medical condition or treatment. The true value of health care can be determined only by a systematic examination of patient outcomes. To accomplish this goal, methods are required that are relatively unfamiliar to many clinical researchers. Future clinical research should include patient-oriented outcome measures that would otherwise focus solely on physiological or anatomic outcomes. Such information will be essential in determining which medical and surgical treatment strategies should be abandoned and which will gain acceptance in the future.

Hayes C. **The use of patient based outcome measures in clinical decision making.** *Community Dent Health*, 15(1):19-21, March 1998.

OBJECTIVE: Three questions were proposed in this presentation. 1) How can existing quality of life measures be used most effectively now? (2) What additional work is needed in their development or application? (3) Can existing data be used for secondary analyses of 'generic questions' concerning the

relationships between oral health and quality of life outcomes? CONCLUSIONS: The availability of existing measures can provide directions for future refinement particularly if existing measures are tested across diverse populations and within the community of practicing dentists. Additionally the use of existing data for secondary data analysis of 'generic questions' could provide information, which would help to sharpen the instruments. However, if patient based outcome measures are to be used in clinical decision, making the clinical community must be involved in the development of instruments which are seen as useful to clinicians. A shift toward health status assessments, in order to be accepted by clinicians, must benefit patients and enhance the clinician's ability to function. For clinicians to embrace this idea it must be clear how they can use this information to design therapeutic interventions. The argument for the use of these measures must be made on practical not theoretical grounds. Therefore it is important to prove to clinicians that measuring health status is useful in improving patient care and that these measures are tools in the service of their patients.

Kann PE; Bradley C; Lane D. **Outcomes of recommendations for breast biopsies in women receiving mammograms from a county health van.** Public Health Reports, 113: 71-4, January-February 1998.

OBJECTIVE: To describe the outcomes of breast biopsy recommendations for women screened through a mobile mammography van. METHODS: Data on all women screened through the Mobile Mammography Program (MMP) in Suffolk Co., Long Island, NY, from 1990 to 1994 were analyzed to determine biopsy recommendation rates, biopsy rates, positive biopsy rates, and cancer detection rates. Follow-up information was obtained from the women's physicians. RESULTS: the breast cancer detection rate for women screened through the MMP averaged 0.33% over a five-year period. The biopsy recommendation rate based on abnormal mammograms remained stable, at about 1% to 2% over a five-year period, as did the rate of positive biopsies among women having biopsies (36.8% to 44.4%). For women ages 50 and older, the cancer rate in 1994 was .36%, while women younger than age 50, the cancer rate was 0.25% (0.32% for all ages). CONCLUSIONS: these findings show that a breast cancer screening program using a mobile van can have comparable cancer detection rate to national figures and a fairly stable biopsy recommendation rate from which follow-up resource needs can be estimated.

Lam JA; Rosenheck R. **The effect of victimization on clinical outcomes of homeless persons with serious mental illness.** Psychiatric Services 49(5): 678-683, 1998.

This article examined the prevalence and correlates of criminal victimization and the relationship between victimization and outcomes for homeless clients with mental illness. Interviews were conducted with 1,839 clients in the Access to Community Care and Effective Services and Supports (ACCESS) program. Clients at 18 sites were interviewed, and interviews were performed at program entry and at three and 12 months after entry. Forty-four percent of the clients were the victims of at least one crime during the two months before entering the program. Women were significantly more likely than men to have been victimized. Recent victimization had a significant impact on client outcomes in terms of increased homelessness and decreased quality of life. These findings suggest the critical need for service providers to assess the extent to which clients have been victims of crime and to address issues of victimization.

Leonard LG. **Primary health care and partnerships: collaboration of a community agency, health department, and university nursing program.** Journal of Nursing Education, 37(3): 144-148, March 1998.

Health care reform proposals emphasize health care that is essential, practical, scientifically sound, coordinated, accessible, appropriately delivered, and affordable. One route to achievement of improved health outcomes within these parameters is the formation of partnerships. Partnerships adopting the

philosophy and five principles of Primary Health Care (PHC) focus on health promotion and prevention of illness and disability, maximum community participation, accessibility to health and health services, interdisciplinary and intersectoral collaboration, and use of appropriate technologies such as resources and strategies. A community service agency serving a multicultural population initiated a partnership with a health department and a university undergraduate nursing program. The result was a preschool health fair with benefits for each partner which could not have been realized without the collaboration. The health fair partnership planning, implementation, and evaluation process was guided by a framework shaped by the philosophy and five principles of PHC. The educational process described can be applied to other learning experiences where the goal is to help students understand and apply the concepts of PHC, develop myriad nursing competencies, and form collaborative relationships with the community and health agencies. Community health care dilemmas and nursing education challenges can be successfully addressed when various disciplines and sectors form effective partnerships.

Lenaway D; Koepsell T; Vaughan T; et al. **Evaluation of a public-private certified nurse-midwife maternity program for indigent women.** Am J Public Health, 88(4); 675-679, April 1998.

OBJECTIVES: This study assessed the impact of a public-private certified nurse-midwife program on prenatal and delivery outcomes among medically indigent women. **METHODS:** A population-based quasi-experimental design was used to compare one intervention county with two nonintervention counties. **RESULTS:** The program significantly reduced the number of women who received no prenatal care and the risk of acquiring less than adequate prenatal care. Reductions in the proportion of infants born premature or with low birth weights were of borderline significance. The use of induction and/or stimulation of labor was statistically elevated. **CONCLUSIONS:** These results suggest that the intervention program was instrumental in reducing some, but not all, negative prenatal and delivery outcomes.

Rosenheck R; Morrissey J; Lam J; Calloway M; Johnsen M; Goldman H; Randolph F; Blasinsky M; Fontana A; Calsyn R; Teague G. **Service system integration, access to services, and housing outcomes in a program for homeless persons with severe mental illness.** American Journal of Public Health 88(11): 1610-1615, 1998.

This article examines the hypothesis that greater integration and coordination between agencies within service systems is associated with greater accessibility of services and improved client housing outcomes. As part of the Access to Community Care and Effective Services and Supports (ACCESS) program, data were obtained on baseline client characteristics, service use, and three- and 12-month outcomes. Data on interorganizational relationships were obtained from structured interviews with key informants from relevant organizations in each community. Complete follow-up data were obtained from 1,340 clients. Service system integration was associated with superior housing outcomes at 12 months, and this relationship was mediated through greater access to housing agencies. The authors conclude that system integration is related to improved access to housing services and better housing outcomes among homeless people with mental illness.

Sacks JY; Sacks S; Harle M; De Leon G. **Homelessness prevention therapeutic community (TC) for addicted mothers.** Under review at Alcohol Treatment Quarterly, 1998.

This chapter describes a homelessness prevention therapeutic community (TC) for addicted mothers and their children developed in response to increasing numbers of homeless addicted mothers and families entering the Philadelphia shelter system. The program uses TC principles and methods as the foundation for recovery and the structure within which the homelessness prevention interventions unfold. The

chapter describes the program's conceptual framework and logic model, setting, client profiles, goals, and interventions. The outcome evaluation compares the effectiveness of the homelessness prevention TC with a standard TC on both traditional outcomes and prevention outcomes. The authors state this program has considerable significance for policy and planning, especially for the development of integrated mother-child programs and for the application of TC principles and methods to homelessness prevention.

Society for Adolescent Medicine. **Special projects of national significance program: ten models of adolescent HIV care.** *Journal of Adolescent Health*, Supplement, 23(2): August 1998.

This special supplement is the result of a collaboration on the part of 10 Federally-funded adolescent care providers to individually and collectively demonstrate innovative models of care for youth infected or at high risk for infection with HIV/AIDS. Through a partnership between the Federal government and leading evaluation and HIV research experts, project leaders have sought not only to better understand the needs of youth affected by HIV disease, but also to test models of care and treatment to improve their clinical, medical, and psychological health outcomes, and to increase the collective knowledge about HIV disease in adolescent populations in the U. S. This publication presents an overview and conclusions from the program, as well as reporting on each of the 10 programs. AVAILABLE FROM: Society for Adolescent Medicine, 1961 Copper Oaks Circle, Blue Springs, MO 64015. (816) 224-8010.

Weinreb L; Goldberg R; Perloff J. **Health characteristics and medical service use patterns of sheltered homeless and low-income housed mothers.** *J Gen Intern Med*, 13(6):389-97, June 1998.

OBJECTIVE: To compare the health characteristics and service utilization patterns of homeless women and low-income housed women who are heads of household. DESIGN: Case-control study. SETTING: Community of Worcester, Mass. PARTICIPANTS: A sample of 220 homeless mothers and 216 low-income housed mothers receiving welfare. MEASUREMENTS AND MAIN RESULTS: Outcome measures included health status, chronic conditions, adverse lifestyle practices, outpatient and emergency department use and hospitalization rates, and use of preventive screening measures. Both homeless mothers and housed mothers demonstrated low levels of physical and role functioning and high levels of bodily pain. Prevalence rates of asthma, anemia, and ulcer disease were high in both groups. More than half of both groups were current smokers. Compared with the housed mothers, homeless mothers reported more HIV risk behaviors. Although 90% of the homeless mothers had been screened for cervical cancer, almost one third had not been screened for tuberculosis. The homeless mothers had more frequent emergency room visits in the past year and were significantly more likely to be hospitalized in the past year. CONCLUSIONS: Both homeless mothers and low-income housed mothers had lower health status, more chronic health problems, and higher smoking rates than the general population. High rates of hospitalization, emergency department visits, and more risk behaviors among homeless mothers suggest that they are at even greater risk of adverse health outcomes. Efforts to address gaps in access to primary care and to integrate psychosocial supports with health care delivery may improve health outcomes for homeless mothers and reduce use of costly medical care services.

1997

Aiken LH; Sochalski J; Lake ET. **Studying outcomes of organizational change in health services.** *Med Care*, 35(11 Suppl):NS6-18, November 1997.

OBJECTIVES: The rapidly changing organizational context within which health care is delivered is altering provider-patient relations and processes of clinical decision-making, with significant implications for patient outcomes. Yet definitive research on such effects is lacking. The authors seek to underscore the contribution of organizational research to studies of clinical outcomes and demonstrates several approaches to further such efforts. **METHODS:** The authors present a theoretical framework of the operant mechanisms linking organizational attributes and patient outcomes. They use case examples from their ongoing research on hospitals to illustrate strategies for measuring these mechanisms and for overcoming some of the feasibility issues inherent in organizational research. **RESULTS:** Several methodological issues are explored: (1) exploiting "targets of opportunity" and "natural experiments" is a promising strategy for studying patient outcomes related to organizational reform; (2) indices of organizational traits, constructed from individual survey responses, can illuminate the operant mechanisms by which structure affects outcomes; and (3) secondary data sources and innovative statistical matching procedures provide a feasible strategy for constructing study comparison groups. Extending the organizational outcomes research strategy to new areas of inquiry offers an opportunity to enhance our understanding of how nursing organization affects outcomes. **CONCLUSIONS:** Improving the effectiveness of medical care in a health-care system undergoing fundamental restructuring requires greater understanding of how organizational context affects clinical outcomes. A higher priority should be placed on organizational outcomes research by researchers and funding agencies.

Burman WJ; Cohn DL; Rietmeijer CA; Judson FN; Sbarbaro JA; Reves RR. **Noncompliance with directly observed therapy for Tuberculosis. epidemiology and effect on the outcome of treatment.** Chest 111(5): 1168-1173, 1997. (

OBJECTIVES: To describe the epidemiology and clinical consequences of noncompliance with directly observed therapy (DOT) for treatment of tuberculosis. **DESIGN:** Retrospective review. **SETTING:** An urban tuberculosis control program that emphasizes DOT. **PATIENTS:** All patients treated with outpatient DOT from 1984 to 1994. **RESULTS:** We defined noncompliance as follows: (1) missing > or = 2 consecutive weeks of DOT; (2) prolongation of treatment > 30 days due to sporadic missed doses; or (3) incarceration for presenting a threat to public health. Poor outcomes of therapy were defined as a microbiologic or clinical failure of initial therapy, relapse, or death due to tuberculosis. Fifty-two of 294 patients (18%) who received outpatient DOT fulfilled one or more criteria for noncompliance. Using multivariate logistic regression, risk factors for noncompliance were alcohol abuse and homelessness. noncompliant patients had poor outcomes from the initial course of therapy more often than compliant patients: 17 of 52 (32.7%) vs. 8 of 242 (3.3%). **CONCLUSION:** In an urban tuberculosis control program, noncompliance with DOT was common and was closely associated with alcoholism and homelessness. Noncompliance was associated with a 10-fold increase in the occurrence of poor outcomes from treatment and accounted for most treatment failures. Innovative programs are needed to deal with alcoholism and homelessness in patients with tuberculosis.

Cousineau M; Shostak S. **Using chart reviews to determine clinical outcomes in Health Care for the Homeless outcomes programs.** Los Angeles, CA: UCLA Center for Health Policy Research, March 1997.

The purpose of the Health Care for the Homeless (HCH) Outcomes Project was to determine the feasibility of using clinical tracer conditions for assessing the effectiveness of HCH programs in achieving intermediate and health status outcomes. This project evolved from the national HCH evaluation project that focused on structural and process indicators, in which a chart scan was conducted.

The chart scan assesses the potential of randomly selected medical charts to capture data on a wide range of indicators, including: patient demographics, housing history, health history, treatment by the HCH, referral systems, uses of services other than the HCH program, diagnosis of specific tracer conditions, and compliance with follow-up instructions. Also discussed are issues surrounding a tracer condition outcomes study and indicator approach that assesses the project's achievement of specific clinical intermediate and health status outcomes associated with a particular tracer condition. This report includes background information on the development of the project, including a review of the literature of outcomes studies, the results of the pilot of the chart scan, and a discussion of hypertension, tuberculosis, and childhood immunization status as potential tracer condition indicators.

Currie JM. **Choosing among alternative programs for poor children.** *The Future of Children* 7(2): 113-131, 1997.

This article suggests four criteria (efficiency, return on investment, incentives, and equity) for evaluating and comparing public programs for poor children, and provides an overview of the patchwork of information that is currently available about the effects of eight large federal programs using these criteria. Several themes emerged from the study: 1) several programs that target specific benefits have been shown to positively effect a range of outcomes; 2) even before the current welfare reform, federal support to poor children had changed to emphasize benefits in-kind; and 3) more must be learned about the effects of programs for poor children before sweeping policy recommendations can be made. The article concludes with policy recommendations that can be supported by the available evidence.

Devine JA; Brody CJ; Wright JD. **Evaluating an alcohol and drug treatment program for the homeless: an econometric approach.** *Evaluation and Program Planning*, 20(2): 205-215, 1997.

The New Orleans Homeless Substance Abusers Project (NOHSAP) was designed as a randomized field experiment to test the effectiveness of a residential alcohol and drug treatment program on the sobriety, employment, housing, and social integration of homeless substance abusers. However, program staff sabotaged randomization into treatment and control groups, and research attrition was also non-random. Non-random assignment to treatment and non-random research attrition threaten internal and external validity by biasing OLS estimates of the effects of treatment and necessitate use of econometric selection bias correction modeling techniques. Results of these corrected models are then used in subsequent estimates of treatment effects on a variety of outcome measures. After correction, positive treatment effects prove relatively modest. However, subsequent analysis suggests that NOHSAP exerted a critical indirect effect on outcomes by facilitating subject's participation in outside substance abuse groups.

Dickerson FB. **Assessing clinical outcomes: the community functioning of persons with serious mental illness.** *Psychiatric Services*, 48(7): 897-902, 1997.

This article identifies challenges in measuring the outcomes of persons with serious mental illness and reviews selected instruments that measure the community functioning of this population. Papers in peer-reviewed psychiatric journals between 1986-1996 were reviewed to select nine instruments that were then evaluated, focusing on their format, content, item scoring, length, and original sample population. Results indicated that the challenges to measuring the community functioning of persons with serious

mental illness include the multiplicity of domains that must be measured, the conflicting interests of various stakeholders involved in care, the limitations of self-report data, and other methodological problems. Content areas most consistently represented and additional limitations of individual instruments are also discussed, and the author provides recommendations for further work in this area.

Hunter JK; Crosby FE; Ventura MR; Warkentin L. **Factors limiting evaluation for health care programs for the homeless.** *Nursing Outlook*, 45(5): 224-228, 1997.

With the current emphasis on health care cost containment, efforts to evaluate effectiveness, efficiency, and appropriateness of care have become increasingly important to the viability of programs for the homeless. A survey of 93 administrators of health care programs for the homeless has helped to identify key information needed to evaluate homeless programs, along with actual and potential barriers to data collection and suggested approaches to overcome these barriers. Results indicated that obstacles to effective evaluation related to the following issues: (1) the physical settings in which health care was being provided; (2) the nature of homelessness; (3) the unavailability of resources; and (4) a lack of convenient and efficient data systems.

Huz S; Andersen D; Richardson G; Boothroyd R. **A framework for evaluating systems thinking interventions: an experimental approach to mental health systems change.** *System Dynamics Review* 13(2): 149-169, 1997.

This article proposes a framework for beginning to address questions that are important to understanding the impact of systems thinking interventions. It also presents preliminary findings from a pilot test that evaluated such interventions in New York State. Researchers from SUNY Albany and the New York State Office of Mental Health have been engaged in testing the experimental approach to be repeated in four counties with four control counties also selected and observed via pre- and post-intervention measures. The overall context of the project focuses on integration of mental health and vocational rehabilitation services. The experiment is designed to evaluate measurable outcomes, including shifts in goal structures and change strategies of the management team, shifts in relative alignment of the management team as a whole, perceived success of the intervention, and changes in systems and procedures necessary to improve client services.

Johnson T; Tahan H. **Care management: outcomes-based practice for the primary nurse.** *J Nurs Care Qual*, 11(5):55-68, June 1997. Published erratum appears in *J Nurse Care Qual*, 11(6):62, August 1997.

Managed care penetration is increasingly dramatically in most health care markets across the country. The impact is the radical redesign of health care systems and the reshaping of the approach to health care from an illness model to a wellness, health promotion model. Integrated delivery systems will facilitate the patient's journey through the continuum of care. The article describes how one institution is streamlining that journey through the integration of care management into the role of the primary nurse who provides direct care.

KasproWJ; Rosenheck R; Chapdelaine JD. **Health Care for Homeless Veterans Programs: the tenth annual report.** West Haven, CT: Department of Veterans Affairs, Northeast Program Evaluation Center, 1997.

This report is the 10th in a series concerning the Department of Veterans Affairs' Health Care for Homeless Veterans (HCHV) programs. The programs involve a number of specialized programs in addition to providing outreach services to severely mentally ill veterans, linkage with VA services, and treatment and rehabilitation services. This report provides an overview of the program's history and services, describes monitoring of the program and veterans served, discusses program process and treatment outcomes, and explains the supported housing program. A summary of program performances is also included. AVAILABLE FROM: Department of Veterans Affairs, Northeast Program Evaluation Center, VA CT Healthcare System, West Haven, CT 06516, (203) 937-3850.

Marek KD. **Measuring the effectiveness of nursing care.** Outcomes Manag Nurs Pract, 1(1):8-12; quiz 13, October-December 1997.

Identification and measurement of the outcomes of nursing care have received great attention in the past decade. With advances in information technology, large clinical data bases are being developed for use in outcomes evaluation. It is important that nurses be thoughtful in designing the data elements that will be included in these data bases. Key data elements include nursing diagnoses, interventions, and nursing sensitive outcomes. Multiple variables influence the outcome of health care. It is important in evaluation that system, patient, and provider characteristics be considered, especially when developing benchmarks for comparison of outcome achievement. Data related to the process of care are needed beyond provider encounter, and nurses must be cautious that the care they give is not credited to other providers. Longitudinal clinical data bases that contain key variables related to the delivery of nursing care can yield valuable knowledge on the best methods to measure and interpret the contribution of nursing care to the health of the nation.

McGee MD; Mee-Lee D. **Rethinking patient placement: the human service matrix model for matching services to needs.** J Subst Abuse Treat, 14(2):141-8, March-April 1997.

The improvements in both clinical and fiscal outcomes necessary for prosperity in the current healthcare environment require a rethinking of our conceptual approaches to patient assessment, treatment planning, and service delivery. Conventional practice rests in part on the Level of Care concept, which assigns intensities of both clinical services and treatment settings in a linked manner according to impairment severity. Although this approach has resulted in more efficient matching of resources to needs, it is overly restrictive, and does not speak directly to the need to match both healthcare and social services (including treatment setting) to human needs for treatment to be successful. The Human Service Matrix model presented in this article delinks clinical from social services and creates a conceptual framework for integrating social and healthcare services in the cure of patients with addictions. Our experience with this model suggests it has heuristic value in promoting cost and outcome effective treatment.

Morrissey J; Calloway M; Johnsen M; Ullman M. **Service system performance and integration: a baseline profile of the ACCESS demonstration sites. Access to Community Care and Effective Services and Supports.** Psychiatr Serv, 48(3):374-80, March 1997.

OBJECTIVE: Networks of agencies at the 18 demonstration sites in the Access to Community Care and Effective Services and Supports (ACCESS) program for homeless persons with serious mental illness were surveyed to profile baseline levels of systems performance and integration as part of a longitudinal evaluation of systems change and client outcomes. METHODS: Interviews were conducted with a

representative from each of 875 agencies in the 18 service networks. Information was obtained about the perceived performance of the service system and the extent of systems integration as measured by client referrals, funds exchanges, and information sharing between agencies. Measures consisted of two multi-item scales assessing the accessibility and coordination of services for the target population in each community and four indexes of interagency relationships. **RESULTS:** Services at baseline for homeless mentally ill persons at the program sites were rated as relatively inaccessible, and the coordination of services between agencies was rated as even more problematic. Interagency ties were largely based on client referrals and information exchanges, with very few instances of funding transfers in the form of contracts or grants. On average, at baseline agencies that had received an ACCESS grant were better connected to their local service network than were other agencies. **CONCLUSIONS:** Consistent with the premise of the ACCESS demonstration, services for persons who are homeless and mentally ill in urban America are fragmented and not very accessible. The longitudinal design of the evaluation will allow for an assessment of efforts to improve services and systems integration and of the effects of these improvements on client outcomes.

Plant A; Rushworth L. **Health outcomes and infectious disease control.** *Health Policy*, 39:17-27, 1997.

With the development of improved health systems, antibiotics and vaccines throughout the 20th century, the prospects for control of infectious diseases improved. During the same time frame, an approach to disease control was developed that used the health outcomes resulting from various interventions to choose, guide and modify those interventions. Despite these major advances in the control of diseases, infectious diseases have (with occasional exceptions) not only continued to occur but in many instances the situation has deteriorated with the emergence and re-emergence in recent years of a range of infectious diseases. In this paper we consider why infectious disease control has not benefitted from the move toward a health outcomes approach, why infectious disease control might benefit from such a move, and the differences between infectious and non-infectious diseases when considering health outcomes. We follow-up with some practical approaches to the use of health outcomes. We argue that appropriate use of health outcomes when planning and evaluating infectious disease control programs will improve human health.

Rosenheck R; Leda C; Frisman L; Gallup P. **Homeless mentally ill veterans: race, service use, and treatment outcomes.** *American Journal of Orthopsychiatry* 67(4): 632-638, 1997.

This article reports the findings of a study that used outcome data from a Department of Veterans Affairs Homeless Chronically Mentally Ill veterans program to determine whether there are differences between black and white veterans in program participation, receipt of other health services, and in degree of observed improvement, and whether or not such differences are related to the use of residential treatment services. The authors found that comparisons of service use and treatment outcomes for 145 black and 236 white homeless veterans with mental disorders showed few differences. The greater improvement on psychological and alcohol problem measures shown by white veterans was true only in comparisons with black veterans who had not been admitted to residential treatment, suggesting that residential treatment may be an especially important first step out of homelessness for black veterans. The authors concluded that the findings of the present study suggest that blacks have a greater need for residential treatment services to maximize their gains in some areas.

Schechter S; Herrmann D. **The proper use of self-report questions in effective measurement of health outcomes.** *Evaluation and the Health Professions*, 20(1): 28-46, March 1997.

Outcomes research often relies on the use of general population survey data. The recent efforts to employ cognitive science theory in the development of data collection instruments has led to the establishment of new questionnaire design research methods. Intensive cognitive techniques are used in laboratory interviews to develop and pretest self-report survey questions with the goal of reducing non-sampling response error. This article presents the theoretical and applied approach used in the cognitive laboratory to study the ways people respond to surveys, and offers guidelines for improving self-report survey questions.

Sherbourne CD; Wells K; Sturm R. **Measuring health outcomes for depression.** *Evaluation and the Health Professions*, 20(1):47-64, March 1997.

Described in this article are the clinical and health-related quality of life outcome measures for depressed patients in the Medical Outcomes Study, a four-year longitudinal study that started in 1986. Researchers prioritized the measures in terms of importance, considered how they could be improved in future studies, and discuss how they should be used by managed care companies and group practices. The authors emphasize the importance of identifying appropriate evaluation questions and selecting study designs and patient populations that permit meaningful answers about evaluating outcomes of care for depression. Although the outcome measures described here may be a useful starting point, they will need to be combined with carefully constructed measures of process of care as well, so that links between the two can be maximized.

Shiell A. **Health outcomes are about choices and values: an economic perspective on the health outcomes movement.** *Health Policy*, 39:5-15, 1997.

The aim of the health outcomes movement is to reorientate health services so that the spotlight shines less on what is done and more on what is achieved. The health outcomes movement, thus far, has been most successful in addressing what appear to be technical questions relating to the measurement and analysis of health outcomes and in placing their routine use on the agenda of clinical practice and health services planning. If there is one lesson to be drawn from an economic perspective, however, it is that health outcomes are about values and not just technicalities. The need to make choices forces one to consider whether what is achieved is also what is most valued. The success of health service delivery, be it at a clinical, planning or systems level, must therefore be measured against agreed objectives. It follows that time must be taken to establish what patients and the community want from their health services and what each is prepared to give up to achieve its ends. Value judgements are unavoidable. The challenge lies not in measuring the outcomes of health interventions but in deciding what the objectives of the health system ought to be.

Smith GR; Manderscheid RW; Flynn LM; Steinwachs DM. **Principles for assessment of patient outcomes in mental health care.** *Psychiatric Services* 48(8): 1033-1036, 1997.

This article describes a set of 12 broadly applicable principles of outcome assessment articulated by the Outcomes Roundtable, a group of mental health consumer, professional, service, and policy-making organizations, for the purpose of developing outcomes management systems. The principles call for outcomes assessments that are appropriate to the question being answered, that use tools with demonstrated validity and reliability and sensitivity to clinically important changes over time, and that

always include the consumer perspective. In addition, the principles recommend outcomes assessments that create minimal burden for respondents and are adaptable to different health care systems, that include general health status as well as mental health status, and that include consumers' evaluation of treatment and outcomes. Outcomes assessment tools should quantify the type and extent of treatment, should include generic and disorder-specific information, and should measure areas of personal functioning affected by the disorder. Outcomes should be reassessed at clinically meaningful points in time. Outcomes assessment should use appropriate scientific design and representative samples and should examine outcomes of consumers who prematurely leave treatment as well as those who continue in treatment.

Srebnik D; Hendryx M; Stevenson J; Caverly S; Dyck D; Cauce A. **Development of outcome indicators for monitoring the quality of public mental health care.** *Psychiatric Services*, 48(7):903-909, 1997.

The authors describe a study that attempted to develop a brief and integrated set of reliable and valid outcome measures that could be used by both consumers and providers to assess the quality of public mental health care. A model of outcomes in four domains was developed including: (1) consumer satisfaction; (2) functioning; (3) quality of life; and (4) clinical status. A total of 236 adult consumers of mental health services from six community mental health centers in Washington State were surveyed. Results show principal components analysis demonstrated support for the four domain model. The authors conclude the outcomes measures provide a practical, empirically supported structure for monitoring and improving public mental health services.

Tierney, W.; Overhage, J.M.; and McDonald, C. **Demonstrating the effects of IAIMS on health care quality and cost.** *Journal of the American Medical Informatics Assn.*, 4(2): S41-S46, March-April 1997.

The importance of demonstrating the effect of integrating electronic medical records into clinical practice, and methods for conducting the studies necessary to do so, are presented as a model that may be applicable to other aspects of the Integrated Advanced Information Management System (IAIMS). Integrated electronic medical record (EMR) systems offer the prospect of both improving the quality of health care by reducing variation in processes and outcomes and lowering its costs. Because such systems are expensive and require time-consuming re-engineering of health care delivery, demonstrating effectiveness should be part of system development. The expected benefits should be demonstrated using the most rigorous study design that the local clinical environment can support. Results of useful studies include both processes and outcomes of care, the latter including both objective and subjective measures. Comprehensive testing and EMR innovations requires a multi-specialty team of investigators, adequate funding, and a commitment of both informaticists and clinicians. Demonstrating the beneficial effects of integrated EMR systems will facilitate their incorporation into everyday clinical care.

Toro PA; Passero Rabideau JM; Bellavia CW; Daeschler CV; Wall DD; Thomas DM; Smith SJ. **Evaluating an intervention for homeless persons: results of a field experiment.** *J Consult Clin Psychol*, 65:476-84, June 1997.

An intensive case management intervention for homeless persons was evaluated by random assignment of 202 cases (involving 213 adults and 70 children) to the intervention or a control group. Full follow-up data (four interviews: at baseline and at six-, 12-, and 18-month follow-ups) were available on 98 cases (105 adults and 37 children). The follow-up rates for the two groups were not significantly different.

Based on 13 repeated measures analyses, there were three statistically significant linear time effects (indicating overall change across the follow-up period) and three linear Time x Condition interactions (indicating differential change over time for intervention vs. control participants). Regardless of condition, adult participants improved in terms of their experience of homelessness, as well as on physical health symptoms and stressful life events. Condition x Time interactions indicating positive intervention impact were observed on the quality of housing environments, stressful life events, and interviewer ratings of psychopathology.

Wiseman EJ; Henderson KL; Briggs MJ. **Outcomes of patients in a VA ambulatory detoxification program.** *Psychiatric Services* 48(2):200-203, 1997.

The study examined outcomes of patients enrolled in a VA ambulatory detoxification program. Statistical data were collected by routine clerical processes at a VA medical center. Outcomes were determined for 517 of the 577 patients consecutively referred to the program for nine months in 1995. Patients met established criteria for mild to moderate alcohol withdrawal syndrome. Unique factors contributing to outcomes included systematic screening, medical protocols for detoxification, psychosocial therapies, program-supported housing, and attention to patient satisfaction.

Wolff N; Helminiak TW; Morse GA; Calsyn RJ; Klinkenberg WD; Trusty ML. **Cost-effectiveness evaluation of three approaches to case management for homeless mentally ill clients.** *Am J Psychiatry*, 154(3):341-8, March 1997.

OBJECTIVE: In this study the authors compared the cost-effectiveness of three approaches to case management for individuals with severe mental illness who were at risk for homelessness: assertive community treatment alone, assertive community treatment with community workers, and brokered case management (purchase of services). **METHOD:** Individuals were randomly assigned to the three treatment conditions and followed for 18 months. Eligibility requirements included a severe DSM-III axis I diagnosis, such as schizophrenia, and either current homelessness or risk for homelessness based on prior history of homelessness. Participants were recruited from the emergency rooms and inpatient units of local psychiatric hospitals. Data on 85 people were available for analyses: 28 in assertive community treatment alone, 35 in assertive community treatment with community workers, and 22 receiving brokered case management (purchase of services). **RESULTS:** Clients assigned to the two assertive community treatment conditions had more contact with their treatment programs, experienced greater reductions in psychiatric symptoms, and were more satisfied with their treatment than clients in the brokered condition. There was no statistically significant difference between treatment conditions in terms of the total costs of treating the participants. However, the assertive community treatment conditions spent less money on inpatient services than brokered case management, but more on case management services and maintenance (i.e., food stamps, housing subsidies, and Supplemental Security Income payments). **CONCLUSIONS:** Assertive community treatment has better client outcomes at no greater cost and is, therefore, more cost-effective than brokered case management.

Wood PA; Hurlburt MS; Hough RL; Hofsetter CR. **Health status and functioning among the homeless mentally ill: an assessment of the Medical Outcomes Study SF-36 scales.** *Evaluation and Program Planning*, 20(2):151-161, 1997.

The Medical Outcomes Study Short Form-36 (SF-36), was developed as an instrument that would focus on patients' perceptions of functioning and well-being. It contains eight subscales designed to measure perceptions of both physical and mental health. This paper assesses the psychometric properties of the SF-36 when used with a population of homeless people who have mental illness. Six of the eight SF-36

subscales are evaluated including: (1) the reliability of each subscale; (2) the internal structure of the SF-36 as a measurement instrument; (3) the average levels of functioning and well-being reported compared to a general population sample; (4) the sensitivity of the scales to clinical differences; and (5) the relationship between change on the SF-36 and changes on other related measures. Results show high levels of internal reliability, a two-factor structure similar to that reported for the general population and the ability of the short-form scales to discriminate between groups varying in level of clinical disturbance.

1996

Barrow S; Cordova P; Struening EL. **Evaluation of A-plus: a report on case management services and housing outcomes.** New York, NY: New York State Psychiatric Institute, 1996.

This report examines case management and housing outcomes in a sample of homeless women with a serious mental illness who were referred to A Project to Link Up Services (A-PLUS), which provides psychiatric and case management services to residents of New York City's single women's shelters. A-PLUS is a transitional program designed to help homeless women with serious psychiatric disabilities move from the shelters into more appropriate housing settings and to obtain the supportive services they need to maintain residential stability. Topics discussed include: aims, design and methods of the outcome evaluation; delivery of case management services; housing outcomes of eligible clients; delivery of case management services; housing status, linkage to mental health services and quality of life; and summary findings. Results show that the program has succeeded in identifying women with mental illnesses in need of services, assisting a significant proportion of them to obtain more appropriate living situations. These findings not only document A-PLUS's effectiveness in serving a portion of the shelter population in special need of assistance, but also endorse the centrality of permanent housing in the effort to ensure that homeless women with mental illnesses will obtain the services they need and the quality of life they desire.

Bureau of Primary Health Care. **The working group on homeless health outcomes meeting proceedings.** Rockville, MD: April, 1996.

To assist the Health Care for the Homeless (HCH) Program begin development of a set of outcome measures specific to health care programs that serve homeless people, the Bureau of Primary Health Care convened a group of more than 40 health care professionals representing HCH grantees, other federally funded programs for homeless people, and researchers and policy makers. Topics discussed include: responding to a changing environment; outcome measures; systems-level outcomes; client-level outcomes; moving the process forward; measuring systems and client outcomes; examining potential drawbacks; barriers to measuring outcomes; and recommendations to overcome barriers. The participants concluded that the HCH Program is committed to integrating primary health care, mental health services, and substance abuse treatment within its program and between HCH grantees and housing providers, education and employment specialists, and social welfare programs. AVAILABLE FROM: National Clearinghouse for Primary Care Information, 2070 Chain Bridge road, Suite 450, Vienna, VA 22182, (800)400-2742.

Burnam, M.A. **Measuring outcomes of care for substance use and mental disorders.** *New Directions for Mental Health Services*, 71:3-17, 1996.

This article explains that one challenge in developing a system for routinely monitoring the outcomes of substance abuse and mental health treatment programs is the selection of measures for assessing outcomes. The author provides an overview of issues to consider when selecting mental health and substance abuse measures for routinely monitoring the outcomes of treatment. It is explained why routine monitoring of the outcomes of substance abuse and mental health care is important, and the key domains that clinical and services researchers have focused on when measuring outcomes are provided. Other components of outcomes monitoring systems are discussed including: assessment of case mix and process of care and use of analytic strategies that clarify the casual links between treatment processes and outcomes.

Center for Studying Health System Change. **The community tracking study: a focus on change in the health care system.** Washington, DC: Center for Studying Health System Change, 1996.

This issue focuses on tracking change in the health care system. Recognizing that health care delivery is predominately local, the authors investigate what is happening in health care financing and delivery at the community level. The Community Tracking System focuses on changes in the health care system in 60 sites that are representative of the nation. Twelve of these communities are being studied intensively. The 48 additional communities studied less intensively will permit generalization to the nation as a whole and analysis of the relationship between health system characteristics and the effects of change on people. Data collection and analysis for the Community Tracking Study are planned in two-year cycles. The first cycle, which began in spring of 1996, will establish a baseline. Topics discussed include; objectives; community focus; site selection process; data sources; tracking changes outcome; insurance coverage; access; service delivery; cost; quality; and a timetable for work. AVAILABLE FROM: Center for Studying Health System Change, 600 Maryland Ave., SW, Suite 550, Washington, DC 20024-2512, (202) 484-5261.

Chandler D; Meisel J; Hu TW; McGowen M; Madison K. **Client outcomes in a three-year controlled study of an integrated service agency model.** *Psychiatr Serv*, 47:1337-43, December 1996.

OBJECTIVE: In a three-year controlled study, two California integrated service agency demonstration programs that combined structural and program reforms were tested to see if they produced improved outcomes for a cross-section of clients with severe and persistent mental illness. **METHODS:** Clients at an urban site and a rural site were randomly assigned to an integrated service agency program or to a comparison group who received the usual services. Data on client outcomes, were drawn from databases and client and family interviews. **RESULTS:** Compared with the comparison groups, clients served by the integrated service agencies had less hospital care, greater workforce participation, fewer group and institutional housing arrangements, less use of conservatorship, greater social support, more leisure activity, less family burden, and greater client and family satisfaction. Clients in the urban demonstration program, but not those in the rural program, did better than the comparison group on measures of financial stability, personal well-being, and friendship. At the urban site, 72.6% of clients participated in the work force during the three-year study period, compared with 14.6% of the clients in the comparison group. No differences were found at either site in rates of arrest and conviction and in self-reported ratings of self-esteem, symptoms, medication compliance, homelessness, and criminal victimization. The capitated costs for demonstration clients were much higher than the costs for services used by comparison clients. **CONCLUSIONS:** Three-year outcomes for a cross-section of clients with severe mental illness in

the integrated service agencies were broadly favorable, but costs of services for those clients were high relative to costs for clients receiving the current standard of care.

Chandler D; Meisel J; McGowen M; Mintz J; Madison K. **Client outcomes in two model capitated integrated service agencies.** *Psychiatr Serv*, 47:175-80, February 1996.

OBJECTIVE: Client outcomes for the first year of a three-year study were measured in two integrated service agencies (ISAs) for severely mentally ill persons to test the effectiveness of a model combining financing reform (consolidated funding and capitation) with an assertive continuous treatment team approach. **METHODS:** Clients referred to pilot ISAs at an urban and a rural site in California were randomly assigned to the ISA programs or to comparison groups receiving usual services. Objective data from clients' records as well as subjective information from interviews were compared. **RESULTS:** At both sites, demonstration clients' participation in the work force was significantly higher than that of the comparison groups. At the urban ISA, clients' participation in the work force rose from a baseline rate of 11% to 36%. Both ISAs decreased use of hospital care, particularly the rural ISA, which reduced admissions from a baseline rate of 40% to 21% in the study year. Both ISAs retained clients in treatment with significantly more success than did comparison programs, and urban ISA clients reported participating in more leisure and social activities than did clients in the comparison group. No differences were found at either site in rates of long-term hospitalization, arrest, or conviction or in measures of self-esteem, symptomatology, substance use, homelessness, or quality of life. **CONCLUSIONS:** After 12 months of a 36-month program, demonstration clients spent less time in hospitals, were more likely to have worked for pay, and were more likely to have remained in treatment.

Corse SJ; Hirschinger NB; Caldwell S. **Conducting treatment outcome research in a community mental health center: a university-agency collaboration.** *Psychiatric Rehabilitation Journal* 20(1): 59-63, 1996.

This article describes a collaboration between university-based researchers and clinical staff in an urban, publicly-funded community mental health center to study the impact of specialized services on people who have serious mental illnesses and substance use disorders (SMISD). Conducting research in a clinical field setting rather than the laboratory can benefit both science and practice, yet holds tensions, such as conflicts between the mission and priorities of academics and clinicians, the unavoidable and unpredictable impact of research on agency practices and policies, and the potential confounding of systems-level change with individual change when assessing the effectiveness of alternative treatments. The authors present data on the collaborative process, describing these benefits and tensions from the perspectives of researchers and clinicians. Methodological challenges in the analysis and interpretation of data from clinical field settings are discussed.

Health Resources and Services Administration, Bureau of Primary Health Care. **Models that work: compendium of innovative primary health care programs for underserved and vulnerable populations.** Bethesda, MD: Bureau of Primary Health Care, 1996.

This compendium is intended to serve as a resource for ideas, lessons learned, unique approaches, and contacts to help improve the health care delivery system for underserved and vulnerable populations. The

programs profiled represent creative community -driven solutions to significant health challenges, developed by building partnerships and identifying resources in the community. The "Models That Work" Campaign has five components: (1) identifying models; (2) sharing information; (3) promoting replication; (4) building partnerships; and (5) improving outcomes. AVAILABLE FROM: NCPPI, 2070 Chain Bridge Road, Suite 450, Vienna, VA 22182. Phone: (800) 400-BPHC. Fax: (703) 821-2098.

Helfinger CA; Nixon CT; Hamner K. **Handling confidentiality and disclosure in the evaluation of client outcomes in managed mental health services for children and adolescents.** *Evaluation and Program Planning*, 19(2):175-182, 1996.

The authors explain that in the process of examining client outcomes of mental health services, evaluators often find themselves immersed in ethical and legal dilemmas surrounding participant privacy and the confidentiality of information gained in the process of the evaluation. Evaluators must be prepared to make decisions about disclosure of confidential information that indicates risk of abuse or serious harm to the client or by the client toward another. This article details the experience of the investigators of the Fort Bragg Evaluation Project in the development and application of standardized decision algorithms for considering disclosure of confidential information obtained during the evaluation. The consequences of using such decision paradigms, including the number of disclosures made and the subsequent effects on family participation in the study, are also described.

Huxley P. **Social indicators of outcome at the system level.** In Knudsen HC; Thornicroft G. (eds.), *Mental Health Service Evaluation*. New York, NY: Cambridge University Press, 228-244, 1996.

This chapter considers the evaluation of service systems, with particular reference to non-health outcomes. The nature of the mental health service system is considered and system-level analysis is subdivided into idiographic, normative, and legislative types. Examples of measures developed for this kind of evaluation are given. The mental health service system interacts with many other social systems, and illustrations are given from the interfaces with work, criminal justice, housing and health care systems, together with some suggested measures.

Konrad EL. **A multidimensional framework for conceptualizing human services integration initiatives.** In Marquardt JM; Konrad EL (eds.), *Evaluating Initiatives to Integrate Human Services: New Directions for Evaluation*, 69:5-19, San Francisco, CA, Jossey-Bass, 1996.

The author explains that human services integration (SI) initiatives are, by their nature, complex approaches to service provision. They consist of multiple partners, operate along numerous dimensions and at various levels of intensity, and encompass a variety of components, structures, and designs. A brief history of services integration initiatives is provided and the following topics are discussed: levels of integration; collaboration; consolidation; dimensions of human services integration initiatives; target population; program policy and legislation; service delivery system or models; stakeholders; information systems and data management; and outcomes and accountability.

Lorig K; Stewart A; Ritter, P; et al. **Outcome measures for health education and other health care interventions.** Sage Publications: 1996.

This reference book provides the instruments used to measure behavior, self-efficacy beliefs, and outcomes in the developmental evaluation of the Chronic Disease Self-Management Program (CDSMP).

Chapter One describes the background to the study, with self-efficacy as the conceptual foundation; Chapter Two presents the methods and results. Appendices with measurement tools.

Macnee CL; Hemohill JC; Letran J. **Screening clinics for the homeless: evaluating outcomes.** Journal of Community Health Nursing 13(3):167-177, 1996.

This article describes a study that evaluated the outcomes of a series of health-screening clinics specifically developed for the homeless population. Problems this study addressed were selected because of their high prevalence among homeless people. The problems included hypertension, diabetes, anemia, tuberculosis, and foot problems. Screening clinics were developed and implemented by faculty and senior baccalaureate nursing students. Data were collected with a screening form that focused on risk factors and individual health history and by chart review. Two hundred fourteen clients were screened in 17 different clinics. Participation in the clinics ranged from 33 clients at a hypertension-screening clinic to zero at one of the foot-screening clinics. Abnormalities were identified in 22% of the clients who were screened, and documentation established that 80% of those with abnormalities received follow-up. Overall, the screening clinics appear to be an effective approach to disease prevention in a homeless population.

McQuiston HL; D'Ercole A; Kopelson E. **Urban street outreach: using clinical principles to steer the system.** New Directions for Mental Health Services, 52 (Winter): 17-27, 1996.

The authors explain that a decade ago, urban street outreach was part of a rapid response to the epidemic of homelessness, but today it struggles to develop into a clinical craft that will define its own niche in the system of services to homeless people who have mental illnesses. A study was conducted to begin to understand the process and the outcome of urban street outreach, as the engagement and referral activity of a well-established outreach service was examined. The authors contend that program planning needs to establish a structure in which sound clinical principles can flourish.

Office of National Drug Control Policy. **Treatment protocol effectiveness study.** Washington, DC: Executive Office of the President, March 1996.

The purpose of this document is to report the state of the science of measurement of drug abuse treatment services outcome and to guide future research efforts, after carefully considering relevant clinical and health services research experience. Effective drug abuse treatment is defined, and recommendations for improving drug abuse treatment are examined. Reviews of the following treatment models are included: (1) therapeutic communities; (2) pharmacological treatment; (3) outpatient drug-free treatment; and (4) inpatient treatment.

Pfeiffer SI (ed). **Outcome assessment in residential treatment.** Binghamton, NY: Haworth Press, 1996.

The chapters in this book all argue that carefully designed treatment outcome research provides clear, program-specific data about the effectiveness and utility of planned interventions. Topics examined include: (1) historical perspective and current issues in treatment outcome; (2) criteria for selecting instruments to assess treatment outcomes; (3) comparison of commonly used treatment measures; (4) implementing an outcome assessment project - logistical, practical, and ethical considerations; and (5) measuring outcomes in residential treatment with the Devereux scales of mental disorders.

AVAILABLE FROM: The Haworth Press, Inc., 10 Alice Street, Binghamton, NY 13904, (607) 722-5857. (ISBN: 1-56024-839-4)

Rohrer JE; Vaughan MS; Cadoret RJ; Carswell C; Patterson A; Zwick J. **Effect of centralized intake on outcomes of substance abuse treatment.** *Psychiatric Services* 47(11): 1233-1238, 1996.

The authors explain that state governments are exploring the potential of various forms of case management to control the costs of substance abuse treatment programs. This article describes an experimental program in one Iowa county in which clients are assessed and referred elsewhere if treatment is needed. Outcomes of clients in that county are compared with those of clients served elsewhere in the state. Results show in the county with the experimental program, 27% of clients recommended for treatment actually attended, compared with 48% in other counties. Clients who used the experimental program were also less likely to complete treatment. The authors conclude that lower utilization arising from failure to attend recommended treatment may reduce treatment costs but is not the intended outcome of the intake-and-referral program. Failure to complete treatment also is an adverse outcome. The authors contend outcomes of various types of case management programs should be carefully evaluated before statewide implementation is considered.

Snowden LR. **Ethnic minority populations and mental health outcomes.** *New Directions in Mental Health Services* 71:79-87, 1996.

This article presents a framework for evaluating outcomes from mental health intervention in ethnic minority populations, reviews existing outcomes research, and describes ways to increase the quantity and quality of minority outcomes research. The author begins to lay a foundation for the programmatic study of the impact of mental health services on ethnic minority populations. The intention is to provide a preliminary guide to administrators and policymakers working to promote accountability in the delivery of mental health care.

Spiehl LE; Harris CV. **Assessment of health-related quality of life in children and adolescents: an integrative review.** *Journal of Pediatric Psychology*, 21(2):175-193, 1996.

The authors reviewed the medical and psychological literature on the assessment of health-related quality of life (QOL) in pediatric populations. Definitions of QOL and the utility, health status, battery, and modular approaches to QOL assessment are presented. Measures available for use with children and adolescents were evaluated with respect to psychometric properties. QOL domains included, targeted age range, mode of administration, number of items, and time period assessed. The need to address methodological issues and practical barriers so as to encourage the inclusion of QOL outcomes in future clinical trials and other research is discussed.

Steinwachs DM; Fischer EP; Lehman AF. **Outcomes assessment: information for improving mental health care.** *New Directions in Mental Health Services* 71: 49-57, 1996.

This article describes efforts in two states to obtain outcomes information from persons who have mental illnesses. In Maryland, outcomes for persons with a diagnosis of schizophrenia have been obtained from a sample survey of persons with serious mental illness covered by Medicaid. In Arkansas, outcomes data

are compared for patients discharged from two different treatment systems. Together these studies illustrate fundamental strategies for using outcomes information.

Steinwachs DM; Flynn LM; Norquist GS; Skinner EA (eds). **Using client outcomes information to improve mental health and substance abuse treatment.** New Directions for Mental Health Services 71, Fall 1996.

The authors explain the ultimate criterion for judging the quality of health care is that it leads to positive health outcomes that are valued by the consumer, the payer, and society. Traditionally outcomes assessment has focused on mortality and complications. A new way of assessing outcomes of care is the measurement of health status across multiple dimensions of physical, mental, and social domains of functioning. Additional measures include quality of life and satisfaction with health outcomes. The articles in this volume examine the state of science of outcomes measurement in mental health and substance abuse care. Topics include: (1) measuring outcomes of care for substance use and mental disorders; (2) setting the context for measuring patient outcomes; (3) outcomes of psychiatric rehabilitation service delivery; (4) outcomes assessment and information for improving mental health care; (5) state of the science of mental health and substance abuse patient outcomes assessment; (6) collaborative mental health outcomes systems; (7) ethnic minority populations and mental health outcomes; (8) what drives outcomes for emotional and behavioral disorders in children and adolescents; (9) how mental health outcomes data can be used in private systems; and (10) using outcomes measurement to improve quality and value.

United Way of America. **Measuring program outcomes: a practical approach** Alexandria, VA: United Way of America, 1996.

While the concept of outcome measurement is still relatively new and many issues are still unresolved, this manual lays the groundwork for what will be a continually evolving and increasingly necessary operation in the years ahead. This comprehensive manual offers a step-by-step guide to measuring outcomes. Topics covered include: (1) getting ready; (2) choosing outcomes; (3) specifying indicators for your outcomes; (4) preparing to collect data; (5) trying out your system; (6) analyzing and reporting your findings; (7) improving your system; and (8) using your findings. AVAILABLE FROM: Sales Service/America, 3680 Wheeler Avenue, Alexandria, VA 22304. Phone: (800) 772-0008.

United Way of America **Measuring program outcomes training kit** Alexandria, VA: United Way of America, 1996.

This complete resource for delivering hands-on training is based on the manual, *Measuring Program Outcomes: A Practical Approach*. Nine modules correspond to the chapters in the manual. Includes presentation notes, activity instructions, transparency and worksheet originals, and a 23-minute video introducing key concepts and definitions. AVAILABLE FROM: Sales Service/America, 3680 Wheeler Avenue, Alexandria, VA 22304. Phone: (800) 772-008.

Weinberg D; Loegel P. **Social model treatment and individuals with dual diagnoses: an ethnographic analysis of therapeutic practice.** *The Journal of Mental Health Administration* 23(3): 272-287, 1996.

Concurrent substance and psychiatric problems have been shown to significantly reduce the probability of successful treatment outcomes while increasing vulnerability to a range of troubles including homelessness, incarceration, physical health problems, and criminal victimization. This article presents an ethnographic analysis of treatment processes in a residential social model treatment program specifically designed for individuals with dual diagnoses in an effort to inform current debates with empirically grounded knowledge regarding therapeutic practice itself. The article focuses on four fundamental themes bearing on therapeutic practice in this residential program; social model treatment; the formulation of clinical identities; recovery, personal responsibility, and authority; and the measurement of therapeutic success. In conclusion, the article suggests that the central role played by program residents in the therapeutic process deserves particular attention and makes recommendations regarding mental health services delivery that, if followed, might invigorate treatment efficacy.

1995

Beal AC; Redlener I. **Enhancing perinatal outcome in homeless women: the challenge of providing comprehensive health care.** *Seminars in Perinatology* 19(4): 307-313, 1995.

Homeless women who are pregnant present a number of challenges to health care providers. As a group, they are at risk for a variety of illnesses that could affect their pregnancies, including sexually transmitted diseases and substance abuse. Poor access to health care, inadequate prenatal care, poor nutrition, and poor housing cause these women to suffer poor birth outcomes. They are more likely to deliver low birth weight infants and have higher rates of infant mortality. It should be understood that homeless pregnant women are a heterogeneous group. Generally, they are pregnant adolescents and women in homeless families. Additionally, there are differences within these two groups. The causes of homelessness for these women vary as do their needs during pregnancy. Any provider of health care to the homeless must understand the different situations of these women to deliver directed, effective care.

Burlingame GM; Lambert MJ; Reisinger CW; Neff WM; Mosier J. **Pragmatics of tracking mental health outcomes in a managed care setting.** *The Journal of Mental Health Administration* 22(3):226-236, 1995.

In this article, administrative practices and technical issues concerning managed mental health care are addressed by a group of academically-based researchers and administrators from two large managed health care organizations. Principles related to the measurement of outcomes, instrument selection, and obstacles to the implementation of an ongoing program to assess mental health treatment outcomes are identified. Principles for successfully changing mental health provider behavior toward outcome assessment are discussed.

Cousineau MR; Wittenberg E; Pollatsek J. **A study of the Health Care for the Homeless Program. Final Report & Executive Summary.** Rockville, MD: U.S. Department of Health and Human Services, Health Resources and Services Administration, 1995.

This report was designed to combine qualitative and quantitative approaches to assess structure, process and outcome indicators of access, quality, satisfaction with care, health status, and costs. Chapter I attempts to capture the distinctive characteristics of the Health Care for the Homeless (HCH) program that makes it unique among health care delivery systems. Chapter II describes the study's research design and questions. A literature review is presented in Chapter III. In Chapter IV through IX, the study's findings are presented in the context of the research questions. The final chapter provides conclusions and recommendations. ALSO: Executive Summary, 33 pages. AVAILABLE FROM: National Clearinghouse for Primary Care Information, 2070 Chain Bridge Road, Suite 450, Vienna, VA 22182, (800) 400-2742.

Deren S; Davis WR; Beardsley M; Tortu S; Clatts M. **Outcomes of a risk-reduction intervention with high-risk populations: the Harlem AIDS project.** AIDS Education and Prevention 7: 379-390, October 1995.

AB- Many studies of interventions with high-risk populations have reported reductions in risk behaviors. To assess effectiveness of interventions, data are also needed on the characteristics of subjects lost to follow-up, and on follow-up risk behaviors for subjects who were not participants in the intervention. This paper reports on a study conducted in Harlem, New York, recruiting 1,770 injection drug users (IDUs) and sex partners of IDUs, randomly assigned to two interventions. Repeated-measures analyses for the two intervention groups and those who participated in no intervention indicated that all groups reported significant reductions in risk behaviors, with no group effect. Comparisons of those followed-up and not followed-up indicate that those followed-up were less likely to: be homeless, be Latinos, and to use "shooting galleries." The discussion focuses on the need to assess outcomes for all types of participants, and to distinguish the impact of interventions from other explanations for behavior changes.

Erickson JR,;Stevens S; McKnight P; Figueredo AJ. **Willingness for treatment as a predictor of retention and outcomes.** J Addict Dis, 14(4):135-50, 1995.

Retention in drug treatment is important to successful outcomes. The purpose of this study was to test assumptions made in the development and implementation of the ASSET project. The three assumptions were that living conditions of the homeless adult drug user influence willingness for treatment; willingness relates to treatment tenure; and, conditions, willingness and time in treatment influence treatment outcomes. Data on alcohol use, drug use, employment and housing as well as motivation, readiness and suitability of treatment were collected from 494 homeless adults at baseline and at follow-up. The measurement model confirmed a higher order construct labelled willingness encompassing motivation, readiness and suitability. The structural model demonstrated that willingness positively related to treatment tenure; willingness positively influenced change in drug use and housing; and, tenure related positively to change in housing.

Harrison, P. **Developing state outcomes monitoring systems for alcohol and other drug abuse treatment.** Rockville, MD: SAMHSA, Center for Substance Abuse Treatment, TIP 14, 1995.

The purpose of this Treatment Improvement Protocol (TIP) is to assist single state agencies in the development, implementation, and management of an Outcomes Monitoring System (OMS) to improve treatment outcomes and to increase accountability for alcohol and other drug (AOD) treatment expenditures. AVAILABLE FROM: National Clearinghouse for Alcohol and Drug Information, P.O. Box 2345, Rockville, MD 20852, (800) 729-6686.

Lehman AF. **Measuring quality of life in a reformed health system.** Health Affairs, 90-101, Fall 1995.

Quality of Life (QOL) encompasses functional status, access to resources and opportunities, and sense of well-being. It offers useful perspective on the value of health care, especially for chronically disabling conditions, including chronic mental illness. At least three major QOL outcome assessment frameworks are available: general QOL, health-related QOL, and disease-specific QOL. Choice of a framework must be driven by the intent of the services. Persons with chronic, disabling conditions, a general QOL perspective is most appropriate, on that accounts not only for direct health outcomes but also for the potential social and economic effects of medical disability.

Padgett DK; Struening EL; Andrews H; Pittman J. **Predictors of emergency room use by homeless adults in New York City: the influence of predisposing, enabling and need factors.** Soc Sci Med, 41(4):547-56, August 1995.

Employing data from a 1987 shelter survey of 1260 homeless adults in New York City, models of emergency room (ER) use are developed which include an array of risk factors for visiting a hospital ER including health and mental health problems, victimization and injuries. The study's primary goal is to identify factors that predict ER use in this population. Three outcomes were examined: (1) any use of the ER during the past 6 months; (2) use of the ER for injuries vs all other reasons (given any ER use); and (3) the number of ER visits (given any ER use). Lower alcohol dependence, health symptoms and injuries were strong predictors for both men and women; other significant predictors differed markedly by gender. Both models were highly significant and produced strikingly high risk profiles. A high prevalence of victimization and injuries underlies ER use among the homeless. Based upon the findings, we recommend expanded health and victim services as well as preventive measures. Until primary care becomes available for this population, we advise against policies that discourage ER use by the homeless.

Plante TG; Couchman CE; Diaz AR. **Measuring treatment outcome and client satisfaction among children and families.** The Journal of Mental Health Administration 22(3): 261-269, 1995.

Because the delivery and reimbursement methods for mental health services are changing rapidly under managed care initiative, measuring treatment outcome and client satisfaction have become critical. This article describes a case example of a treatment outcome and client satisfaction assessment program at the Children's Health Council, a private nonprofit agency affiliated with Stanford University that provides comprehensive mental health services to children and families in Palo Alto, Calif. Approximately 300 families receive mental health treatment per year at the agency.

Research Committee of the International Association of Psychosocial Rehabilitation Services. **Toolkit for measuring psychosocial outcomes.** Cambridge, MA: Evaluation Center at the Human Services Research Institute, 1995.

This toolkit provides an industry standard for the psychosocial rehabilitation community in developing outcome measure systems within agencies. Recognizing that every agency has different resources, needs and levels of sophistication, the recommendations are meant to be tailored to each individual agency. The authors intent is to provide psychosocial rehabilitation programs with the necessary guidelines and tool to collect reliable data. Topics discussed include: (1) general guidelines and potential uses; (2) a note on baseline data collection; (3) baseline demographics; (4) hospitalization domain; (5) residential domain; (6) employment domain; (7) education domain; (8) financial domain; (9) legal domain; and (10) member/consumer survey. AVAILABLE FROM: Evaluation Center at the Human Services Research Institute, 2336 Massachusetts Ave., Cambridge, MA 02140-9707.

Rog DJ; Holupka CS; McCombs-Thornton KL. **Implementation of the Homeless Families Program: 1. Service models and preliminary outcomes.** American Journal of Orthopsychiatry 65(4): 502-513, 1995.

This article examines the implementation and early outcomes of a large-scale, services-enriched housing program for homeless families across nine metropolitan sites. Differing models of case management and service access are described. Early reports on families' residential stability are high across all service models.

Rosenheck R; Frisman L; Gallup P. **Effectiveness and cost of specific treatment elements in a program for homeless mentally ill veterans.** Psychiatr Serv, 46:1131-9, November 1995.

OBJECTIVES: The study examined relationships between specific treatment elements and their costs and 10 outcome measures using data from a longitudinal outcome study of a Veterans Affairs program for homeless mentally ill veterans. **METHODS:** Baseline and outcome data over an eight-month period were analyzed for 406 homeless veterans with psychiatric and substance use disorders who were treated in VA's Homeless Chronically Mentally Ill Veterans Program. Multivariate techniques were used to examine the relationship between 10 measures of outcome and six treatment elements: program entry via community outreach, the number of contacts with program clinicians, the number of referrals for other services, duration of program involvement, number of days of residential treatment, and increased public support payments. **RESULTS:** Each of the six treatment elements was significantly related to improvement on at least one of the 10 outcome measures. The number of clinical contacts with program staff and the number of days in residential treatment were associated with improvement in the greatest number of outcome domains. However, improvement associated with residential treatment was far more costly than improvement related to other treatment elements. **CONCLUSION:** This study provides evidence of the effectiveness of a multimodal approach to the treatment of homeless mentally ill persons. However, results indicate that special attention should be paid to differences in the cost of improvement associated with various treatment elements.

Schumacher JE; Milby JB; Caldwell E; Raczynski J; Engle M; Michael M; Carr J. **Treatment outcome as a function of treatment attendance with homeless persons abusing cocaine.** Journal of Addictive Diseases 14(4): 73-85, 1995.

This research examines the influence of treatment attendance at two substance abuse outpatient treatment programs of the Birmingham Substance Abuse Homeless Project on substance abuse, homelessness, and unemployment outcomes with homeless persons abusing primarily crack cocaine. Results revealed that significant reductions across a one year period in alcohol use, cocaine use, and homelessness were more likely to occur in clients who attended an average of 4.1 treatment days per week (High attendance or

Enhanced Care group) than clients who attended less than one day a week on the average (Low attendance or Usual Care and Medium attendance groups). These results are consistent with the literature suggesting that more intensive contact early in treatment results in better long-term outcome with cocaine abusers, but has now been demonstrated with homeless cocaine abusers who have additional problems associated with housing and employment.

Wright JD; Devine JA. **Factors that interact with treatment to predict outcomes in substance abuse programs for the homeless.** J Addict Dis, 14:169-81, 1995.

This paper reviews the main treatment effects observed in the New Orleans Homeless Substance Abusers Project and analyzes and discusses factors that interact with treatment to produce successful treatment outcomes. Outcomes are assessed for alcohol and drug use, housing stability, and employment. Results show marginally significant positive effects for long-term treatment, but only for clients retained in treatment for more than three months. Client characteristics that predict successful treatment outcomes include gender, education, age, psychiatric morbidity, drug of choice, attendance at AA/NA meetings, and prior treatment histories. Some of these same factors also predict success among controls. The significance, sign, and magnitude of these effects, however, varies depending on which specific outcome one analyzes. Thus, variation in treatment effectiveness is associated with entering conditions, as the literature suggests, but which entering conditions matter most depends on which specific outcome one examines.

1994

Barlow J. **Practice parameters and outcomes measurement: managing for quality.** Medical Group Management Journal, 41(1):12-17, 1994.

This article focuses on key areas for practice assessment, offering recommendations for the following issues: (1) the business environment; (2) cultural factors; (3) who within the practice will be responsible for conducting initial and ongoing review of parameters and outcomes measures; (4) where to begin the program prior to implementation; (5) assessing parameters and outcomes prior to and throughout their implementation; (6) parameter evaluation, data collection and analysis plans for accuracy and consistency; and (7) training and informational needs of all staff-simple, routine data collection and analysis techniques and data interpretation. The author also looks at "public knowledge" issues, costs, and getting started.

Balsamo RR; Pine M. **Twelve questions to ask about your outcomes monitoring system: Part I.** Physician Executive, 20(4):13-17, 1994.

Outcomes monitoring is an integral part of any decision maker's information resources - the cornerstone of a provider's commitment to quality improvement or of a purchaser's strategy for seeking value. In their eagerness to obtain useful information about provider performance, purchasers and consumers naively may accept flawed evaluations and thereby create perverse incentives for providers that undermine the very qualities they wish to foster. Inaccurate or misleading information about provider performance will lead managers to reward the wrong behavior and so induce more of it. Inaccurate information can also discourage better providers whose performances are not recognized and can lead all providers to distrust and denounce clinical monitoring in general. When these things happen, the great value of outcomes

monitoring systems as a tool for quality improvement is lost. Part one of this series of two articles presents the first six questions that will help users understand the basic workings of an outcomes monitoring system.

Balsamo RR; Pine M. **Twelve questions to ask about your outcomes monitoring system: Part II.** Physician Executive, 20(5):22-25, 1994.

Commercial and customized outcomes monitoring systems designed to assess the results of care, whether clinical outcomes or resource use, are not all of equal value or equally appropriate for every use. In creating each system, its developers had to make critical decisions about such matters as definitions of outcomes for study, selection of patients, selection of data elements, methods and timing of data collection, and method of analysis and reporting. Each system represents a unique set of choices that were made. Part Two of this series of two articles presents answers to six questions that will help users understand the basic workings of an outcomes monitoring system - to be able to distinguish good systems from the mediocre and the bad, and to make wise use of a system already in operation. These questions are of critical importance in determining a system's value.

Batalden PB. **Linking outcomes measurement to continual improvement: the serial 'v' way of thinking about improving clinical care.** The Joint Commission Journal on Quality Improvement, 20(4):167-180, 1994.

This article offers an integrated strategy to quality improvement, called the "Serial V" concept. It combines three mutually complementary approaches: (1) outcomes measurement primarily identifies variations in care and determines corrective actions that may minimize those variations; (2) process improvement focuses on breaking down the components of a specific process of health care delivery, identifying or reworking the problem areas in the process, then rebuilding the process; and (3) continual improvement involves pinpointing a particular area for improvement, proposing specific changes, testing the instituted changes, and evaluating the success of such changes. The result is a comprehensive way to evaluate, institute, and reflect on change. The author provides a practical worksheet that details the seven steps which unite measurement outcomes, analysis of the clinical process, and repeated pilot tests to improve outcomes, accelerate improvements, and eliminate unnecessary costs.

Bergman R. **Getting the goods on guidelines.** Hospitals and Health Networks, Oct. 20:70-74, 1994.

This article states that despite the number of organizations researching and churning out guidelines, the question remains as to the correlation between guideline compliance and good results. This lack of a proven track record results from a dearth of valid mechanisms for demonstrating that managing certain types of patients in certain ways achieves better results at lower costs. The degree of acceptance of guidelines splits between physicians practicing managed care and those still primarily fee-for-service. Perhaps the biggest benefit of guidelines lies in the relief they offer practitioners, by crystallizing the research on any given condition. Guidelines are becoming a tool to help them organize their care as opposed to some way for an administrative team to come in and micromanage clinical care and, in that light, doctors will come to recognize the potential value of such practice aids.

Burling TA; Seidner AL; Salvio MA; Marshal GD. **A cognitive-behavioral therapeutic community for substance dependent and homeless veterans: treatment outcome.** *Addictive Behaviors* 19(6): 621-629, 1994.

This article presents data regarding a residential rehabilitation program that integrates cognitive-behavioral and therapeutic community techniques to treat homeless persons with substance use disorders. The study cohort was 110 military veterans admitted to a Domiciliary Care for Homeless Veterans Program of the Dept. of Veterans Affairs. The cohort had multiple psychosocial problems at admission, and all had drug/alcohol abstinence as a treatment goal. Structured interviews conducted at three, six, nine, and 12 months postdischarge revealed that a substantial proportion had positive outcomes with respect to housing, substance abuse abstinence, employment, and self-rated psychological symptoms. This integrated cognitive-behavioral therapeutic community approach appears to be a viable treatment for this subset of homeless individuals and also may be effective for other populations with similar clinical characteristics.

Davies AR; et al. **Outcomes assessment in clinical settings: a consensus statement on principles and best practices in project management.** *The Joint Commission Journal of Quality Improvement*, 20(1):6-16, 1994.

Excerpted from *A Guide to Establishing Programs for Assessing Outcomes in Clinical Settings*, the authors - including the directors of five major health outcomes assessment programs - provide a step-by-step guide to implementing an outcome project. The focus of the article is on health-related outcomes, particularly reducing symptoms and improving health status. Principles and recommended best practices for project management are provided. The emphasis on health outcomes represents the authors' shared belief that health care should be patient centered and that the patient is the best judge of the outcomes. A case study for a typical outcomes project - total hip replacement - is described.

Fahey PS. **Outcomes research: it's not just for academic medicine.** *Medical Group Management Journal*, 41(3):16, 1994.

The author addresses the reasons for health care reform from the point of view of the patient, the payer, the employer, and the medical profession. The author also looks at: (1) practice guidelines; (2) a series of questionnaires called the Outcomes Management System (OMS); (3) outcome studies test instruments; (4) outcomes database development; (5) government's role; and (6) the administrator's role. The article concludes with some predictions for the future.

Guadagnoli E; McNeil BJ. **Outcomes research: hope for the future or the latest rage?** *Inquiry*, 31(1):14-24, 1994.

Outcomes research is a broad term. It involves not only investigations of the link between medical care and outcomes, but also activities aimed at assessing quality of care. The number of individuals and organizations involved in outcomes research has grown rapidly over the past decade. Despite this activity, some observers question whether outcomes research can deliver on its promises. In this paper, the scope of outcomes research is defined, followed by a discussion of its potential for fulfilling the expectations of various stakeholders who have played a role in its design and implementation.

Hadorn D; et al. **Making judgments about treatment effectiveness based on health outcomes: theoretical and practical issues.** The Joint Commission Journal on Quality Improvement, 20(10):547-554, 1994.

This article considers the problem of deciding which health care outcomes are important and relevant for: (1) developing management recommendations for clinical practice guidelines and (2) evaluating patients' responses to treatment. The Heart Failure Guideline Panel, sponsored by the Agency for Health Care Policy and Research, decided that the relevant outcomes for both purposes are those experienced directly by patients: mortality and health-related quality of life (HRQOL). In the context of heart failure, changes in biochemical and physiological variables do not correspond to changes in mortality risk (prognosis). Therefore, the panel recommended that patients' responses to treatment be guided by signs and symptoms. HRQOL is best assessed by direct patient self-reports, the reliability of which can be enhanced by using standardized instruments. Finally, physical examination and submaximal exercise testing can provide additional information.

Handley, MR; Stuart ME. **An evidence-based approach to evaluating and improving clinical practice: guideline development.** HMO Practice, 8(1):10-19, 1994.

Group Health Cooperative of Puget Sound has developed a model for evaluating and improving clinical practice based on an explicit, evidence-based approach. It is designed to identify gaps between current and optimal practices, and to bring about changes in physician behavior so that health care outcomes (health status, patient satisfaction, provider satisfaction, cost/utilization) are maximized. This model stresses the importance of a rigorous process in looking objectively at evidence in working to improve outcomes. Discrete tools have been developed that help teams move successfully from problem identification to the ongoing evaluation and improvement of a new clinical practice.

Jones K; Colson P; Valencia E; Susser E. **A preliminary cost effectiveness analysis of an intervention to reduce homelessness among the mentally ill.** Psychiatr Q, 65:243-56, Winter 1994.

The Critical Time Intervention Project is a three-year clinical trial that tests a time-limited, supportive intervention to reduce recurrent homelessness among mentally ill men moving from a shelter to the community. Along with a comparison of nights spent homeless and other outcomes, the evaluation of the Critical Time Intervention includes a comparison of the relative costs of the intervention, compared to usual treatment. Such cost effectiveness analyses are difficult to perform and are rarely applied to mental health treatments. This paper presents the general scheme of this analysis and discusses critical issues in the construction and measurement of cost variables. Preliminary results that have implications for the cost analysis are presented.

Krivenko CA; Chodroff C. **The analysis of clinical outcomes: getting started in benchmarking.** The Joint Commission Journal on Quality Improvement, 20(5):260-266, 1994.

The culture of the organizations exhibiting the best outcomes emphasized the continuous improvement of clinical processes. Pilot projects at Voluntary Hospitals of America, Pa, used MedisGroups data to help understand the processes of care that contributed to different clinical outcomes at different network hospitals. This set the stage for current clinical benchmarking. The committee of physicians learned that each hospital develops its own approach to common clinical conditions. These approaches become standardized at each hospital in the form of institutional attitudes, beliefs, policies, and procedures. The

methods of evaluation and treatment by hospital staff can significantly alter the clinical outcomes for the populations served.

Lehman AF; et al. **Continuity of care and client outcomes in the Robert Wood Johnson Foundation program on chronic mental illness.** *The Milbank Quarterly*, 72(1):105-122, 1994.

The author describes that under the Robert Wood Johnson Foundation (RWJF) Program on Chronic Mental Illness (PCMI), sites Baltimore, Cincinnati, Columbus, and Toledo extensively reorganized their services for the target population. The sites found that fragmentation of administrative, fiscal, and clinical responsibilities is a major impediment to effective services for persons who have chronic mental illnesses. Model clinical programs addressing this fragmentation have been found to improve continuity of care and outcomes. The authors address the following evaluation questions: (1) Did continuity of care and case management improve during the course of the program? and (2) Did client outcomes improve during the course of this program? Results show that high-quality clinical, rehabilitative, and supportive services including pharmacotherapies, family educational programs, skills training, and assertive community treatment teams, can improve client outcomes.

Longo DR. **The impact of outcomes measurement on the hospital-physician relationship.** *Topics in Health Care Financing*, 20(4):63-74, 1994.

Hospitals and physicians have a mutually dependent relationship. Although both are responsible for patient care, conflicts arise as physicians attempt to maintain professional autonomy and hospitals attempt to maintain organizational stability. In recent years, the outcomes measurement movement has influenced this relationship in a variety of ways. This review chapter traces the major sociological, historical, theoretical, and political influences that have contributed to these conflicts. Additionally, based on an analysis of these trends, speculation is offered on the future of the hospital-physician relationship as society increasingly holds both groups responsible for outcomes of care.

Montague J. **Do-it-yourself outcomes.** *Hospitals and Health Networks*, 68(13):42-44, 1994.

Experts say providers can take charge of their outcomes efforts by setting up do-it-yourself programs, adapting existing software and closely managing consultants. Gathering quality information and producing useful outcomes demands initiative, which means physicians have to play a vital role in analyzing and disseminating outcomes data about themselves, their performance, patients and communities. The author advises on how to set up an outcomes program.

Orwin RG; Goldman HH; Sonnefeld LJ; Ridgely MS; Smith NG; Garrison-Mogren R; O'Neill E; Sherman A. **Alcohol and drug abuse treatment of homeless persons: results from the NIAAA Community Demonstration Program.** *J Health Care Poor Underserved*, 5:326-52, 1994.

In a national evaluation, we assessed the implementation and outcomes of a multisite demonstration program for homeless persons with alcohol and other drug problems. We developed comprehensive case studies from data on client characteristics, utilization of services, implementation of interventions, and community systems of care at nine project sites. Client-level outcome data were analyzed to estimate the effectiveness of the interventions in a subset of projects with experimental or quasi-experimental evaluation designs. After controlling for baseline predictors, treatment clients in the majority of sites were

significantly more likely than comparison clients to report improvement on one or more outcome dimensions. On alcohol use, for example, under conservative assumptions the average treatment client was drinking less at follow-up than were 57% of comparison clients. Analyses of predictor-by-treatment interactions suggested that clients with fewer problems benefited most from the interventions. The implementation analysis yielded a number of lessons for policymakers and program planners.

Redlener I; Karich KM. **The Homeless Child Health Care Inventory: assessing the efficacy of linkages to primary care.** Bull N Y Acad Med, 71:37-48, Summer 1994.

Each year, the New York City homeless family shelter system provides transitional housing for nearly 20,000 homeless children. While the health care needs of these children are substantial, there is currently no system-wide mechanism for ensuring that they have access to appropriate medical care. This report analyzes information from the Homeless Child Health Care Inventory, a survey conducted by Montefiore Medical Center's Division of Community Pediatrics, to examine the adequacy of health care resources available to the homeless children in New York City. Results showed that available health care resources varied considerably throughout the shelter system and that nearly 50% of homeless children in New York City did not have access to appropriate medical care.

Sanderson-Austin J. **An outcomes measurement study primer.** Group Practice Journal, 43(4):14-20, 1994.

The American Group Practice Association and a number of its member groups have demonstrated that physician buy-in, education of staff and patients, and the use of technological advancements in database management all contribute to successful measurement of patient outcomes. Using a series of decision points and templates for data collection, data management, and data analysis, medical groups have added outcomes measurement to their arsenal of quality improvement techniques. This article identifies many of the strategies being employed within the Outcomes Measurement Consortium (OMC), formerly the Outcomes Measurement Project, which can be easily adopted by other health care settings.

Steinwachs DM. **How will outcomes management work?** Health Affairs, 13(4):153-162, 1994.

A consortium of employers and managed health care organizations has come together to test the feasibility and usefulness of an outcomes management system, a new strategy for providing information on what types of medical care are effective, for whom, and under what circumstances. Systematic measurement of health outcomes can provide the information that patients, providers, and insurers/employers need to make informed choices among alternative treatments and services. A pilot project in 13 sites found that outcomes management is feasible for evaluating ongoing care for chronic conditions but is difficult to apply for short-term diagnostic or treatment episodes. Further, successful implementation requires a commitment of substantial organizational resources.

United States Department of Housing and Urban Development. **Evaluation of the supplemental assistance for facilities to assist the homeless program.** Washington, DC: U.S. Department of Housing and Urban Development, 1994.

The McKinney Act of 1987 authorized the Supplemental Assistance for Facilities to Assist the Homeless (SAFAH) Program to support local homeless programs and projects. In SAFAH's first two funding rounds, fiscal years 1987 and 1990, the Department of Housing and Urban Development (HUD) awarded 65 grants totaling \$25.8 million. This report examines how grantees chose to use this program: What kinds of facilities and activities were funded? What services were provided to clients? The report also examines program outcomes: What kinds of clients did the program assist? How many clients served by emergency shelters or transitional housing went on to obtain permanent housing? AVAILABLE FROM: HUD User, P.O. Box 6091, Rockville, MD 20850, (800) 245-2691 (COST: \$15.00).

Venable RS. **Quality and outcomes management: Facilitating optimal results with caring technology.** *Managed Care Medicine*, 1(4):12-16, 1994.

Quality in medicine has many components and multiple definitions. To the medical professional, delivering quality health care means "doing the right thing." To the payer, quality means doing the cost-efficient thing. To the outcomes analyst, quality means determining whether doing what was considered "the right thing" achieved optimal results. This article looks at the relationship between cost and quality and the concept of outcomes management. It also examines the merging of the concepts of quality and outcomes management in a new era of achieving caring outcomes and managing expectations.

Waxman HM. **An inexpensive hospital-based program for outcome evaluation.** *Hospital and Community Psychiatry* 45(2):160-162, 1994.

This article describes the philosophy and basic infrastructure of an in-house, low-cost outcome evaluation program developed for a private psychiatric hospital in Philadelphia. The data collection system, including software, collection instruments and the evaluation procedure, are presented as well as the advantages and disadvantages of the program. The author contends that the program has a variety of benefits including low cost, greater staff participation, improved treatment programs, and greater autonomy in accounting for patient outcomes.

Yates BT. **Toward the incorporation of costs, cost-effectiveness analysis, and cost-benefit analysis into clinical research.** *Journal of Consulting and Clinical Psychology* 62(4):729-736, 1994.

According to the author, most research in clinical psychology and related disciplines does not measure, report, or analyze costs, cost-effectiveness, or cost-benefit. Reasons for this are discussed in this article. Data are presented to show that the values of resources consumed in treatment, such as costs, are difficult to accurately assess. Research findings show that costs, as experienced by clients, are beneficial to assess because they relate to treatment outcomes. Perceived impediments to assessing cost-effectiveness and cost-benefit analysis in psychology are considered.

Young N; Gardner S; Coley S; Schorr L; Bruner C. **Making a difference: moving to outcome-based accountability for comprehensive service reforms.** New York, NY: National Center for Service Integration, 1994.

State and community decision-makers often place issues of outcomes and accountability at the forefront of their efforts to reform children and family service delivery systems. Although this resource brief does not offer a specific approach to moving toward outcome-based accountability, it provides several different frameworks to stimulate such state and community experimentation. Programs developed in Oregon and Minnesota are used as case examples. AVAILABLE FROM: National Center for Service Integration Clearinghouse, 5111 Lessburg Pike, Suite 702, Falls Church, VA 22041, (703) 824-7447. COST: \$4.00.

1993

Center for Health Economics Research. **Access to health care: key indicators for policy.** Princeton, NJ, The Robert Wood Johnson Foundation: November 1993.

The Robert Wood Johnson Foundation is dedicated to improving health and health care of the American people. Once the authors constructed a conceptual framework to measure access to health care, indicators were selected based on their availability of data, and their ability to highlight a specific point and contribute to an overall understanding of this important policy area. Findings indicate that access to health care has worsened for many, particularly the poor. Through the publication of this report, the Foundation hopes to strengthen the ability of participants to play effective roles in the decision-making process, by arming them with simple, yet critical indicators that quickly summarize the nation's progress regarding access to health care.

Grayson J. **Outcomes, benchmarking and TQM.** Health Systems Review, 26(6):14-17, 1993.

In this article, the author states: (1) health care reform is underway; (2) any reform will include price and quality information; and (3) changes required to thrive will take time, attitude shifts, training, partnerships, and resource investments. To survive in the market-oriented health system, providers and their purchasers will have to: (1) measure, manage, and understand outcomes; (2) identify and adapt best practices through administrative and clinical benchmarking; and (3) implement and use Total Quality Management (TQM). The author, chairman of the American Productivity and Quality Center in Houston, Texas offers practical ways to make the market system work.

Mavis BE; Humphreys K; Stoffelmayr BE. **Treatment needs and outcomes of two subtypes of homeless persons who abuse substances.** Hospital and Community Psychiatry 44(12): 1185-1187, 1993.

This article reviews the development of a clinically useful typology of homeless substance abusers empirically linked to treatment outcomes. Data are reported from a large state-funded follow-up study of clients seeking substance abuse treatment at 50 randomly selected public programs in Michigan. Two

distinct groups of homeless substance abusers were identified in the study. The first group was characterized by unemployment and poor financial support. The second group was characterized by higher levels of chemical dependence, low social stability and serious psychological problems, and was therefore less responsive to treatment. The authors contend that by being sensitive to the different subgroups of homeless substance abusers, clinicians can enhance the effectiveness of their treatment programs.

Mitchell PH. **Perspectives on outcome-oriented care systems.** Nursing Administration Quarterly, 17(3):1-7, 1993.

The author states that we are entering an age of real accountability for the individual decision making and policy that drives systems of care delivery. To realize this new era, three things need to be done: (1) replace our obsession with individual-level outcomes with a recognition that outcomes exist and must be defined at the local and national care system level as well; (2) define outcomes broadly in recognition that health care is more than episodic, institutionally-based illness care and disease treatment; and (3) avoid the temptation to rectify outcomes while ignoring processes of providing individual and system-level care.

Mowbray CT; Cohen E; Bybee D. **The challenge of outcome evaluation in homeless services: engagement as an intermediate outcome measure.** Evaluation and Program Planning 16:337-346, 1993.

After a discussion of the difficulties of outcome evaluation of services for homeless people, the authors examine engagement as an intermediate outcome measure. The validity and usefulness of engagement as a way to evaluate program performance and as a guide to improving implementation are discussed. The authors contend that for services to individuals who are homeless, engagement is an important intermediary predictor of a successful intervention.

Owens DK; Nease RF. **Development of outcome-based practice guidelines: a method for structuring problems and synthesizing evidence.** Journal: 248, July 1993.

This article presents an approach that facilitates the development of outcome-based guidelines. This approach (which is illustrated in HIV screening and PCP prophylaxis examples) lends itself to the difficult, but common, situation in which there is no direct evidence for the link between an intervention and health outcomes.

Shiffman RA. **Clinical guidelines in medical practice** J Medical Practice Management, 9(2): 70-74, Sept. -Oct. 1993.

The development and implementation of clinical guidelines have become major initiatives in current medical practice. This has arisen in response to upward-spiraling health costs and widespread evidence of variation in health services. Recently, an explicit approach to guideline development has been recommended that systematically analyzes and records the evidence, estimates outcomes, assesses patient preferences, and calculates costs. However, the process of translating this material into useful and usable guidelines has not been well defined. Examples of published guidelines that are unclear, incomplete and ambiguous are described. The effectiveness of the guidelines' initiative in reducing both costs and

inappropriate care remains, at this time, largely unproven. If guidelines are to be efficacious in enhancing clinical care, they must be accepted and used by clinicians.