



CARMHA Centre for Applied Research in
Mental Health and Addiction
Faculty of Health Sciences
Simon Fraser University

Housing for People with Substance Use and Concurrent Disorders: Summary of Literature and Annotated Bibliography

Dr. Julian Somers
Dr. Ernest Drucker
Dr. Jim Frankish
Dr. Brian Rush

Researched and Prepared for Vancouver Coastal Health
by:
The Centre for Applied Research in Mental Health and Addiction
Faculty of Health Sciences
Simon Fraser University
January 2007

**Housing for People with Substance Use and Concurrent Disorders:
Summary of Literature and Annotated Bibliography**

Table of Contents

Reviewers and Contributors	1
Terms of Reference for this Review	2
Synopsis of Findings	2
Annotated Bibliography	5
Appendix 1: Research Methodology	29
Appendix 1.1: Search Strategy	30
Appendix 1.2: Complete Reference Search List	33

Reviewers and Contributors

Articles for this Annotated Bibliography were selected and reviewed by the following researchers:

Dr. Julian Somers
Centre for Applied Research in Mental Health & Addiction
Faculty of Health Sciences
Simon Fraser University
Vancouver, BC

Dr. Ernest Drucker
Professor of Epidemiology and Social Medicine
Montefiore Medical Center
Albert Einstein College of Medicine
New York, NY

Dr. Jim Frankish
Senior Scholar, Institute of Health Promotion Research
College for Interdisciplinary Studies
University of British Columbia
Vancouver, BC

Dr. Brian Rush
Associate Director and Senior Scientist
Health System Research and Consulting Unit
Centre for Addiction and Mental Health
Toronto, ON

Research support was provided by:
Barbara Scott, MA, MLIS
Independent Information Specialist
Guelph, ON

Project Manager:
Keith Reynolds, MBA
Centre for Applied Research in Mental Health & Addiction
Faculty of Health Sciences
Simon Fraser University
Vancouver, BC

Please direct all enquiries to:

Dr. Julian Somers
Centre for Applied Research in Mental Health & Addiction
Faculty of Health Sciences
Simon Fraser University
Vancouver, BC
jsomers@sfu.ca

Housing for People with Substance Use and Concurrent Disorders: Summary of Literature and Annotated Bibliography

Terms of Reference for this Review

Researchers at the Centre for Applied Research on Mental Health and Addiction (CARMHA) were contracted by Vancouver Coastal Health Authority to compile a brief, annotated bibliography focussing on the provision of housing for people with substance use and co-occurring mental disorders. A comprehensive literature review was completed. The list of publications and search methods are attached. The initial list was culled to extract those manuscripts with the greatest relevance. An expert panel reviewed each of the selected manuscripts and reached consensus on the major conclusions, implications, and quality of each paper. Finally, a brief synopsis of findings was produced.

Synopsis of Findings

Principal Finding

Stable housing is a fundamental need for all people, but this is especially true for individuals with substance use and mental disorders who also require varying levels of support commensurate with their needs. The preponderance of evidence indicates that supportive housing is an essential component of an effective overall therapeutic and rehabilitation strategy for individuals with dual diagnoses, and with careful planning and consultation, these programs can function well and be perceived as an asset to their communities and neighbourhoods.

Summary of Evidence

Individuals with substance use and mental disorders are at risk of homelessness, and constitute a highly vulnerable sub-population among the homeless. Moreover, service providers encounter great difficulty engaging mentally ill people who are living on the street (Tsemberis and Eisenberg, 2000). The treatment of substance use and mental disorders cannot therefore be meaningfully considered in the absence of appropriate housing.

Models of housing: A variety of models of housing have been studied in relation to the needs of people with substance use and mental disorders. Housing may be peer-based or run by professional staff. Some housing models require abstinence and others do not. “Supportive housing” is itself a broad term that refers to programs that provide a range of human services to meet the special needs of client populations, complementing some form of housing assistance – e.g., case management, health care, addiction treatment. A positive relationship has been reported between supportive housing and various measures of social and occupational functioning for persons with substance use or mental disorders. Individuals who are randomly assigned to housing (versus usual community

care) have significantly higher monthly income and lower incarceration rates two years later (Jason et al., 2005). As well, people with substance use or mental disorders tend to remain in supportive housing once it has been provided. However, numerous barriers impede access and stability of all housing for such clients. But despite these challenges, assertive community treatment (linked to housing) involving outreach workers has shown a positive impact on both engagement and retention in housing (Tsemberis & Eisenberg, 2000).

Once housed, people with substance use and mental disorders require varying levels of support in order to maintain positive outcomes, (including the maintenance of stable housing). The effectiveness of housing services can be improved by matching the type and intensity of service to an individual's level of psychiatric and substance use severity. In particular, people with higher psychiatric and substance use symptoms seem to require housing, support, and case management combined, while those with lower levels of symptoms achieve similar outcomes with case management alone (Clark and Rich, 2003). Supportive housing for homeless people with substance use and mental disorders results in superior retention in housing compared to case management or usual care in the community, and achieve these benefits with only modest increases in public costs (Rosenheck et al., 2003).

Impact on psychiatric symptoms and substance use disorders: The provision of housing has a clear and positive impact on psychiatric symptoms and substance use disorders. As noted above, the impact of housing can be maximized by matching the type and intensity of resources with the needs of each individual. People with substance use and mental disorders report that stable housing is one of the most important factors contributing to periods of successful abstinence from drug use (Davis & O'Neill, 2005). This finding is confirmed by other research showing improved abstinence among people who receive drug treatment with housing in comparison to those who receive treatment only (Milby et al., 2004). The effectiveness of housing has also been demonstrated when provided without professional treatment but involving peer-based support (Jason et al., 2005). Treatment for people with co-occurring substance use and mental disorders has shown greater effectiveness when provided in long-term versus short-term residential format. Long-term care may facilitate engagement in treatment and provide a stable living environment in which people can learn the skills necessary to maintain change (Brunette et al., 2001).

Community responses: Proposals to establish supportive housing typically encounter some degree of neighbourhood resistance – often expressed as fears regarding increased crime or declining property values. The level of resistance varies by neighbourhood and also by the needs of the intended client group. Proposals concerning criminal offenders and people with substance use and mental disorders elicit greater resistance than proposals for the frail elderly and terminally ill (Takahashi & Dear, 1997). The opinions of neighbours have, however, been reported to change over time (Arens, 1993), with initial opposition being replaced by the view that residents of community housing facilities are good neighbours. Community studies suggest that there is no negative impact on safety or property values (Arens, 1993). Neighbours who live within one

block of recovery homes have expressed significantly greater support for these facilities than neighbours living more than one block away (Jason et al., 2005). Most residents are unaware of the presence of community residences in their neighbourhood. A meta-analysis of 18 studies reported no observable relationship between residential recovery homes and either property values or crime rates (Aamodt and Chiglinsky, 1989). However, a modestly statistically significant relationship has been observed between larger supportive housing units (i.e., 53 or more residents) and an increase in crime rates (Galster et al., 2002).

Conclusions: A large and diverse body of research addresses the housing needs of people with substance use and mental disorders. Many of the publications reviewed here are based on community research conducted in the United States, and many of the housing programs studied differ from one another in aspects of their design (for example, whether or not they are accompanied by substance use treatment, include assertive community outreach, or are contingent on abstinence). Results must be applied carefully to other jurisdictions, respecting differences in legislative and regulatory environments, among other factors. Despite the diversity across studies, there is consistent support for the positive impact of housing on health and social outcomes for people with substance use and mental disorders. Moreover, evidence suggests that this type of housing can have a minimal (or even positive) impact on the neighbourhoods in which they are sited. There is not sufficient evidence to differentiate the effectiveness of any single model of housing. Rather, the available research suggests that housing should be made as accessible as possible, with the flexibility to add additional supports in response to the expressed needs and wishes of each individual.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper

Communal housing settings enhance substance abuse recovery. *American Journal of Public Health, Vol. 96(10) (pp 1727-1729)*, 2006.

2. Author(s)

Jason, L. A., Olson, B. D., Ferrari, J. R., & Lo Sasso, A. T.

3. Major Findings

Individuals randomized to abstinence-contingent housing (Oxford House) exhibited superior outcomes at 24 months compared to individuals assigned to usual care (outpatient treatment or self-help groups). Compared to usual care, individuals in the housing condition exhibited significantly lower substance use (31.3% vs. 64.8%), significantly higher monthly income (\$989 vs. \$440) and significantly lower incarceration rates (3% vs. 9%).

4. Implications for Drug and Alcohol-Free Housing

Housing in the present study consisted of rented, multi-bedroom dwellings in low-crime, residential neighbourhoods. Reductions in criminal activity may have been partially attributable to the structure and location of housing. The authors advise that housing may offer benefits to other subgroups of individuals who are attempting to maintain abstinence, such as ex-offenders, individuals with psychiatric disorders, and those who are homeless. The Oxford House model illustrates the value of peer-based abstinence-contingent housing.

5. Evaluation of paper (research methodology, level of confidence, etc.)

The study involved a randomized controlled trial of 150 individuals, with over 90% follow up over 24 months. Collateral information was obtained in order to confirm self-reported abstinence rates at 24 months. The design and execution of the research was robust. Designing and implementing research with this type of peer-run program is difficult and the long term collaborative relationship between the researchers and the program was seen as critical for the successful implementation of the project. It would be challenging to replicate these findings without a similar collaborative research model.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper

A meta-analytic review of the effects of residential homes on neighborhood property values and crime rates. *Journal of Police and Criminal Psychology, Vol. 5 (pp 20-24), 1989.*

2. Author(s)

Aamodt, M. G. & Chiglinsky, M.

3. Major Findings

Results of this meta-analysis showed that the location of residential treatment facilities had no significant effect on either the sales price of homes in the neighbourhood or on the number of property sales. A single study observed a decrease in crime after the establishment of a residential treatment facility. Two studies observed that homes located in neighbourhoods with residential treatment facilities took longer to sell than homes located in other neighbourhoods.

4. Implications for Drug and Alcohol-Free Housing

This research was focused on studies testing the impact of residential treatment homes for the severely mentally ill and did not include facilities focused specifically on abstinence based housing regarding substance use/abuse. However, the consistency in the results is important for the type of facilities examined –the research suggesting that the presence of a residential treatment facility does not adversely impact property values.

5. Evaluation of paper (research methodology, level of confidence, etc.)

A total of 18 studies were identified for inclusion in this meta-analysis. The selected studies utilized one of four research designs: experimental control (1); pre-post (9); experimental control with pre-post (5); regression analysis (4). A traditional meta-analytic approach was utilized, including 95% confidence interval. Methods employed were rigorous. The number of studies included was not sufficient to examine moderating effects.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper

The impact of supportive housing on neighborhood crime rates. *Journal of Urban Affairs, Vol. 24 (pp 289-315)*, 2002.

2. Author(s)

Galster, G., Pettit, K., Santiago, A., & Tatian, P.

3. Major Findings

Analyses of 14 supportive housing units of various sizes and types found no statistically significant relationship between facility operation and levels of reported crime within any distance of the facility. Large supportive housing units (53 or more tenants) evinced a higher rate of criminal mischief reports within 501-1,000 feet, but a reduction in such reports within 1,001 to 2,000 feet. The authors interpret this effect as a statistical anomaly. Focus groups involving neighbourhood residents elicited positive and critical opinions of supportive housing. Neighbour concerns were typically focussed on specific client groups (e.g., criminal offenders), though the authors found no evidence linking those groups with increases in adjacent crime.

4. Implications for Drug and Alcohol-Free Housing

This research is not directly related to abstinence-contingent housing but does involve a diverse array of supportive housing units, including community corrections facilities, residential care homes for people with physical illnesses, mental illnesses, or behavioural problems, and homeless shelters. The results support the development of such units below 53 residents. They also underscore the need for public education concerning supportive housing in general, noting that conventional fears about crime rates are not justified. The authors conclude that their research supports results from national opinion polls showing that neighbours' experiences with nearby supportive housing are much more satisfactory than they predicted.

5. Evaluation of paper (research methodology, level of confidence, etc.)

The authors employed multivariate predictive modelling with a special autocorrelation adjustment to test the association between supportive housing and crime impacts pre and post development. The methodology is technically complex but sound. A significant strength of the paper is the mix of sound quantitative and qualitative methods. However, the analyses are not specific to abstinence-contingent housing, and so the implications for the current initiative must be considered cautiously. In addition, the supportive housing units evaluated in this study (all in Denver CO) were closely regulated with regard to siting, design, size, and public notification. The relevance of the present findings to supportive housing in other cities is likely to be greater where similar processes are followed to plan and regulate supportive housing developments.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper

Criminal Offending in Schizophrenia Over a 25-year Period Marked by Deinstitutionalization and Increasing Prevalence of Comorbid Substance Use Disorders. *American Journal of Psychiatry*, Vol. 161(4) (pp 716-727), 2004.

2. Author(s)

Wallace, C., Mullen, P., & Burgess, P.

3. Major Findings

The study observed that individuals with schizophrenia had a higher frequency of criminal convictions compared to the general population. Rates of convictions increased over a 25-year period for patients with schizophrenia, but at levels commensurate with those of the general population. Subjects with schizophrenia, particularly males, were more likely to commit violent offences than members of the general population. Property-related offences were the most commonly recorded form of conviction among persons with schizophrenia. The authors report that the “failure to provide adequate social and financial support to persons who are disabled by schizophrenia may be contributing to the use of prisons as primary providers of mental health care and to the use of judicial sentences as a primary form of intervention”. Co-occurring substance use was present in 37% of all lifetime-to-date offending in the 1975 schizophrenia cohort, rising to 69% in the 1995 cohort. The change in rates of co-occurring disorders over time is significant – the authors summarize: “Had the study been confined to subjects recruited after 1990, it is likely that the conclusion reached would have been that patients with schizophrenia but no substance use problem were no more likely to offend than the general population”.

4. Implications for Drug and Alcohol-Free Housing

This study does not involve a specific focus on abstinence-contingent housing or related supports. The authors conclude that their research gives no support to the hypothesis that deinstitutionalization has contributed to higher rates of offending among persons with schizophrenia. The results also lend no support to the view that neither substance abuse nor other single factors explain the mediation of offending behaviours in schizophrenia. The authors advise that improved community services may mediate the risk of offending. Rather than commenting on the impact of specific interventions, this research reflects some of the consequences of failing to provide housing and supports for persons with schizophrenia.

5. Evaluation of paper (research methodology, level of confidence, etc.)

The research methodology involves population-level registry linkages. The quality and rigour of the methodology are high. Despite the study having systematic biases likely to underestimate rates of conviction among persons with schizophrenia, the study provides evidence of an association between schizophrenia and higher rates of conviction for all major types of offending, including violent offences.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper

Pathways to housing: supported housing for street-dwelling homeless individuals with psychiatric disabilities. *Psychiatric Services, Vol. 51(4) (pp 487-493), 2000.*

2. Author(s)

Tsemberis, S., & Eisenberg, R. F.

3. Major Findings

This paper reviews the evidence for supportive housing and the paths by which homeless persons become housed. They note that homeless individuals face distressing consequences, including acute and chronic physical health problems, exacerbation of ongoing psychiatric symptoms, alcohol and drug use, and a higher likelihood of victimization and incarceration. They have psychiatric disabilities and concurrent substance addictions making them an extremely vulnerable population. They also note the sentiment that individuals reject services because they distrust and are frustrated with the fragmented mental health, drug treatment, and medical care systems, which are unable to coordinate services to meet their needs, especially the need for housing. Homeless consumers also have different perceptions of their service needs than do providers. Consumers' self-determination appears to predict whether or not an individual will accept services. Mental health programs, especially those involving housing, have not been characterized by consumer-driven service approaches.

Tsemberis et al., report on the residential treatment model in New York City. The system consists of several program components, which as a whole form a linear continuum of care. The system is designed to assist clients through a step-by-step progression of services that begins with outreach, includes treatment, and ends with permanent housing.

The authors provide a clear and useful outline of the steps in the program. The first step engages individuals who are homeless and encourages them to accept a referral to low-demand program, such as drop-in centers, shelters, safe havens, or other transitional settings. These programs provide shelter and provide assistance in obtaining entitlements and psychiatric or substance abuse treatment. The second-step programs are aimed at developing the clients' housing readiness so that they will be able to meet eligibility criteria required by housing providers. Complying with psychiatric treatment and maintaining periods of sobriety are frequently among such criteria.

Permanent housing is the third point on the continuum. The programs consist of a wide assortment of living facilities, such as group homes, community residences, and single-room-occupancy residences, with on-site services. The intended end point is independent housing where clients can live with few supports. The model combines treatment and housing. People are placed in a variety of congregate living options with varying degrees of supervision.

Clinical status is closely related to housing status. Clients must agree to participate in psychiatric and substance abuse treatment. Crises or relapses may lead to more intensely supervised housing. The programs require clients to participate in psychiatric treatment and to maintain sobriety. The overall goal is to stabilize clients and prepare them for independent living.

The authors note that consumers and advocates have identified several flaws in this linear residential treatment model. One problem is a lack of consumer choice and freedom in treatment or housing. Another is the stress that results from congregate living and frequent changes of residence. Skills learned for successful functioning are not necessarily transferable to other living situations. It also takes a substantial amount of time for clients to reach the final step. The most important problem is that individuals are denied housing because placement is contingent on accepting treatment first.

The Pathways to Housing (non-profit agency New York City) developed a supported housing program to meet the housing and service needs of homeless individuals with severe psychiatric disabilities and concurrent addiction disorders. The program is designed for individuals who are unable or unwilling to obtain housing through linear residential treatment programs.

The program provides clients with housing first-before other services are offered. All clients are offered immediate access to permanent independent apartments of their own. Clients enter directly or through referrals from outreach teams, drop-in centers, or shelters. Priority is given to women and elderly persons, who are at greater risk of victimization and health problems, and to others with a history of incarceration.

Pathways staff assists clients with locating and selecting an apartment, executing the lease, furnishing the apartment, and moving in. If a suitable apartment is not found immediately, clients who are living on the streets are provided with a room at the local YMCA or a hotel until an apartment is secured. The program subsidizes approximately 70%, and sometimes more, of tenants' rents through grants from city, state, and federal governments and section 8 vouchers. Honouring consumer preference is at the heart of the programs. Mental health, physical health, substance abuse, vocational, and other services are provided using an assertive community treatment format.

The Pathways program allows clients to determine the type and intensity of services or refuse them entirely. Other modifications include radical acceptance of the consumer's point of view, use of a harm-reduction approach to drug use, and full-time employees (50% consumers). The Pathways program requires clients to meet with staff a minimum of twice a month and to participate in a money management plan.

The authors note the tensions between treatment first (preferred by clinicians) and housing first (preferred by consumers). Pathways regards consumer choice rather than treatment compliance as the necessary first step in the recovery process.

They cite consumer-preference studies that have found that a lack of consumer choice can accelerate homelessness, because consumers may choose the relative independence of the streets. They also regard their housing problems as more strongly related to economic and social factors than to psychiatric disability.

4. Implications for Drug and Alcohol-Free Housing

This paper identifies what may be seen as a *paradigm shift* toward a new housing model. This shift entails a movement away from residential treatment to supported housing models guided by consumer preference. Policy shifts favouring the new paradigm have occurred. The implementation of supported housing programs has been relatively slow because it entails dramatic changes in program philosophy and practice. Pathways is one of the few models available to advocates of supported housing.

The authors next observe that little empirical evidence directly compares supported housing and residential treatment programs. This study examined the issue of program effectiveness. The 88 percent housing retention rate for Pathways over a 5-year period, together with the much lower risk of homelessness supports the new model for housing the homeless. Pathways blends supported housing with assertive community treatment by engaging the homeless. Housing first is stabilized by assertive community treatment as the clinical component.

The findings support the program assumption that program characteristics are more important than most personal or clinical variables in accounting for housing retention. The goal is to live independently in the community, and the optimal setting to learn the necessary skills is the community. This study challenge the assumed strong relationship exists between psychopathology and one's ability to maintain housing. Pathways effectively serves clients with severe psychiatric disabilities and substance addictions.

The Pathways program represents a significant paradigm shift from the linear residential treatment model. It challenges popular clinical assumptions about the limitations of people with severe mental illness and the type of housing and support that is best suited to meet their needs.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper

A comparison of long-term and short-term residential treatment programs for dual diagnosis patients. *Psychiatric Services, Vol. 52 (pp 526-528), 2001.*

2. Author(s)

Brunette, M. F., Drake, R. E., Woods, M., & Hartnett, T.

3. Major Findings

The present authors compared measures of process and six-month outcomes for individuals who were treated in a long-term residential treatment program for patients with dual diagnoses with measures for individuals who were treated in a short-term program. They also compared outcomes for individuals within each group. Those who received long-term treatment experienced improvements between entry into the program and a six-month follow-up. They were more likely to have engaged in treatment than individuals in the short-term group. At follow-up, individuals in the residential treatment group were more likely to have maintained abstinence and less likely to have experienced homelessness than those in the short-term group.

The authors predicate their work on several points. They note that approximately half of all individuals with severe mental illness have co-occurring substance use. They cite evidence that integrated outpatient treatment, in which dual diagnosis patients receive treatment for mental illness and substance abuse, results in high rates of engagement, reduced institutionalization, and remission of substance abuse.

Residential treatment also provides intensive services combined with safe housing and assistance with daily living, and it is less expensive than inpatient treatment. The authors created a long-term residential treatment program for adults with dual diagnoses. This program differed from the short-term program in several ways. It was community based rather than hospital based. Patients were allowed to enter, leave, and re-enter the program over several months. Abstinence was required. Living and vocational skills were emphasized. The patients' length of stay was unlimited.

The stated purpose of this study was to compare the effectiveness of a long-term residential treatment program for dual diagnosis patients with that of a short-term treatment program. The hypothesis was that patients in a long-term program would be more likely to become engaged in treatment, to reduce substance abuse, and to avoid institutionalization (hospital or jail). Patients in the long-term program were also expected to show improvement on measures of adjustment between admission and discharge.

Their results showed that patients in the long-term program were significantly more likely to become engaged in treatment, and after discharge they were more likely to maintain abstinence and

less likely to experience homelessness. No differences were found between the two groups for incarceration, psychiatric hospitalization, or number of moves. Psychiatric hospital use was also significantly less among patients in the long-term group at follow-up. No statistically significant changes in homelessness, housing instability were found.

4. Implications for Drug and Alcohol-Free Housing

The results of this study appear to support the effectiveness of long-term residential treatment for individuals with dual disorders who have not responded to outpatient treatment. Overall, patients had significantly better outcomes than those in the short-term program. Patients who achieved full remission of their substance use stayed in the program longer. Treatment duration and flexibility were cited as critical features of successful treatment. Longer stays may have resulted in better outcomes because patients were provided with a safe, sober, stable living environment in which they could take time to learn the skills necessary to maintain abstinence. In addition, longer stays allowed more flexibility in engagement, social and vocational rehabilitation, and transition back to the community.

5. Evaluation of paper (research methodology, level of confidence, etc.)

This study was limited by the non-equivalence of study groups and time periods, small group sizes, and potential regression to the mean. Results may not be generalizable because of circumstances particular to small sample size. Further research is needed to confirm the effectiveness of treatment and the relative cost-effectiveness of long-term residential treatment for this population.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper

Cost-effectiveness of supported housing for homeless persons with mental illness.
Archives of General Psychiatry, Vol. 60 (pp 940-951), 2003.

2. Author(s)

Rosenheck, R., Kaspro, W., Frisman, L., & Liu-Mares, W.

3. Major Findings

The authors note that supported housing (i.e., integrating clinical & housing services) is a widely advocated intervention for homeless people with mental illness. Their work focussed on homeless veterans with psychiatric and/or substance abuse disorders. People were randomly assigned to 3 groups: 1) Department of Housing and Urban Development – Veteran Affairs Supportive Housing (HUD-VASH) with rent subsidies and intensive case management; (2) case management only, without special access to vouchers and 3) standard VA care. The primary outcome measures were days housed and days homeless. Secondary outcomes were mental health status, community adjustment, and costs. HUD-VASH veterans had 16% more days housed than the case management-only group and 25% more days housed than the standard care group. The case management-only group had only 7% more days housed than the standard care group. The HUD-VASH group also experienced 35% and 36% fewer days homeless than each of the control groups. There were no significant differences on any measures of psychiatric or substance abuse status or community adjustment, although HUD-VASH clients had larger social networks. From the societal perspective, HUD-VASH was \$6200 (15%) more costly than standard care. Cost-effectiveness ratios suggested that HUD-VASH cost \$45 more than standard care for each additional day housed. The authors correctly conclude that supported housing for homeless people with mental illness results in superior housing outcomes than intensive case management alone or standard care and modestly increases societal costs.

The present literature review correctly notes that few studies have attempted to disentangle the effect of housing subsidies and intensive case management. One study reported that clients who received rent subsidies were more likely to be independently housed after 18 months but that intensive case management was not associated with greater improvement than standard case management

The authors note the complexities in trying to ascertain whether supported housing services are most costly. A study that assessed the costs for the New York supported housing initiative and a matched control group found substantially greater reductions in

hospital use among clients than controls, offsetting almost the entire \$19000 annual program cost. This study lacked random assignment.

4. Implications for Drug and Alcohol-Free Housing

In a 3-year prospective experimental study, the present authors compared outcomes and societal costs among clients randomly assigned to (1) HUD-VASH, (2) intensive case management without access to vouchers, or (3) standard VA homeless services. The hypotheses were two fold: housing subsidies in HUD-VASH would result in better housing, mental health, and social adjustment outcomes and that intensive case management, in turn, would result in better outcomes than standard care. Second, HUD-VASH would generate sufficient savings in hospital, halfway house, criminal justice, and emergency shelter costs to offset additional costs of intensive case management services.

Across all 3 years, repeated-measures analysis shows that the HUD-VASH group had 25% more days in an apartment, room, or house than the standard care group and 16.9% more days housed than the case management-only group. HUD-VASH group reported greater subjective satisfaction with housing than either of the other groups and, among those who were housed, experienced fewer housing problems.

A key feature of the present paper is its diverse analyses of costs. Total 3-year VA health costs for HUD-VASH clients were \$8009 (28%) greater than those for in standard care group; costs for the case management-only group were \$6580 (23%) greater; and non-VA health costs were 10% lower for HUD-VASH clients. Combining VA and non-VA health cost data showed that HUD-VASH clients were (18%) greater than costs for standard care clients. Combining health care and non-health care resource consumption showed that HUD-VASH clients consumed 15% more resources than standard care clients.

Cost-effectiveness ratios show that each additional day housed among HUD-VASH clients cost \$58. If valued at \$125 per day housed, there was a 90% chance of benefits exceeding costs from all perspectives. Cost-effectiveness acceptability curves showed that from the societal perspective, benefits are likely to outweigh costs with a probability of 56% if a day of housing is valued at \$50; 80% if valued at \$75; 92% at \$100; and 97% above \$125. It is crucial to note the probabilities of achieving cost-effectiveness were modestly greater from the societal perspective than from the perspective of the health.

5. Evaluation of paper (research methodology, level of confidence, etc.)

This is an important study for a number of reasons. There were no significant differences among groups on any socio-demographic, clinical, or community-adjustment measures at baseline. The sample was diagnostically heterogeneous. There were greater participation rates among HUD-VASH group.

The authors note that the principal limitation of their study is the substantial and differential follow-up attrition across treatment groups. The intrinsic limitation of any cost-effectiveness analysis is that in the absence of a monetary evaluation of the

outcomes it is not possible to decide whether the added costs of a program are justified by the benefits. Cost-effectiveness acceptability curves suggest that if a day of housing for a homeless person with mental illness is valued at \$125 or more, HUD-VASH is likely to be an efficient investment from all 4 cost perspectives. But it is unclear whether \$125 is an appropriate shadow price for a day of housing for this population. This comes to the core question of estimating willingness to pay for various states of health. To evaluate case management in an absolute sense, one would have to compare outcomes for recipients of those services with outcomes for clients who were kept from using any such services at all, which is not a feasible alternative. In sum, this study demonstrates the potential benefit of housing and support services. The *exact* costs warrant further exploration.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper

Transitions during effective treatment for cocaine-abusing homeless persons: establishing abstinence, lapse, and relapse, and reestablishing abstinence. *Psychology of Addictive Behaviors*, Vol. 18(3) (pp 250-256), 2004.

2. Author(s)

Milby, J. B., Schumacher J. E., Vuchinich, R. E., Plant, M. A., Freedman, M. J., McNamara, C., & Ward, C. L.

3. Major Findings

Milby et al. 2004 report data on drug use among cocaine-dependent homeless persons. These persons participated in a clinical trial that compared day treatment only (DT), with day treatment plus abstinent-contingent housing and work (DT+). The authors also measured drug use via multiple weekly urine toxicologies.

Their results indicated that compared with DT folks, more DT+ people achieved abstinence, maintained abstinence for longer durations, were marginally significantly more likely to lapse, and significantly less likely to relapse. Among people who abstained and then relapsed, DT+ participants relapsed later and were more likely to re-establish abstinence. The authors conclude that "analyses yield information on the processes involved in the manner in which drug use changes as a result of abstinent-contingent housing and work."

All participants got 8 weeks of day treatment including client-governed morning meetings, a process group, AIDS education, relapse prevention, goal development, goal review, assertiveness training, role play, recreation planning, weekend planning, reinforcement exposure and planning, recreation outing, a 12-step group, relaxation training, and recreation goal review. They also met with an individual counsellor once per week.

Phase II consisted of 16 weeks of aftercare. During Phase I, DT+ participants had access to free program-provided housing contingent on abstinence. DT+ participants also had access to abstinence-contingent work therapy during Phase II.

4. Implications for Drug and Alcohol-Free Housing

The authors argue that their results provide some clues regarding the processes that underlie the overall efficacy of day treatment-plus-abstinence contingencies over day treatment alone. These contingencies appear to foster greater abstinence that is in turn, better maintained. The significant effect of lapses in the DT+ condition is contrary to

expectation. It remains hard to explain. The study included only one housing condition, which required abstinence. It is therefore unknown whether similar effects would have been observed if housing had been provided in the absence of the abstinence requirement.

5. Evaluation of paper (research methodology, level of confidence, etc.)

The literature review is reasonable, clear and well-written. It is not particularly comprehensive. The authors use their review to highlight a particular argument. Their argument is predicated on two prior clinical trials. The first (Milby et al. 1996) found that an enhanced-care condition produced greater attendance during the treatment phase and less alcohol and drug use and less homelessness over 12-months. The second trial (Milby et al., 2000; Milby et al., 2003) found that DT+ participants showed significantly more consecutive weeks of abstinence. Together, these studies led to the present interest in change processes during the treatments. The stated purpose of this article is to report more detailed data regarding drug use and abstinence by the DT and DT+ groups during the 24-week treatment and aftercare period.

Limited methodological information is provided as it is described in detail elsewhere (Milby et al., 2000; Milby et al., 2003). Participants were recruited from a large health care agency that served homeless individuals. The inclusion criteria make sense. 141 participants were randomly assigned to one of two treatment conditions. The use of urine testing is a strength.

The authors conclude by citing some reasonable limits to their work. First, the two groups may have been affected by differential response to treatment or other variables. The population included persons with non-psychotic mental disorders who were dependent on cocaine (crack). Third, it remains unknown if processes of effective treatment would be found in non-homeless, employed persons who use IV or other routes of cocaine use. Finally, there is a lack of long-term maintenance data on abstinence. The present work could be replicated/expanded to include a longer time frame and a more diverse sample of homeless persons.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper:

Attitudes toward recovery homes and residents: does proximity make a difference?
Journal of Community Psychology, Vol. 33 (pp 529-535), 2005.

2. Author(s):

Jason, L. A., Roberts, K., & Olson, B. D.

3. Major Findings

The study examined the attitudes of community residents towards recovery homes (Oxford House model) – those who lived closer to the recovery home had more positive attitudes than those who lived a block away. The majority of those living a block away did not know of the existence of a home in the neighbourhood. Knowledge of the recovery home was associated with more positive attitudes. Perceived value of their homes also did not differ. Qualitative data suggested a perceived increase in neighbourhood security as part of the overall net benefit.

4. Implications for Drug and Alcohol-Free Housing

Policy to site substance abuse recovery homes in community residential neighbourhoods should anticipate largely positive reactions among closest neighbours and especially as familiarity increases.

These and similar findings should be part of communications planning around such policy initiatives.

5. Evaluation of paper (research methodology, level of confidence, etc.)

The project used a good sampling methodology – household respondents – and developed two samples differing only on distance from the Oxford House in the neighbourhood. A mix of quantitative (rating scales) and qualitative (open ended responses) methods were employed and the results triangulated.

Limitations: sample was small but findings relevant and in same direction on central research question.

Study was based on one community (stated as northern Illinois).

Overall confidence in findings is high.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper:

Special section on relapse prevention: A focus group analysis of relapse prevention strategies for persons with substance use and mental disorders. *Psychiatric Services*, Vol. 56 (pp 1288-1291), 2005.

2. Author(s):

Davis, K. E., & O'Neill, S. J.

3. Major Findings

Structured focus groups were held with consumers with mental illness and substance use disorders who had been "in recovery" for various lengths of time (average 2.9 +/- 2.2 years alcohol + drug free). Questions focused on factors they associated with being successful in staying substance free and showed the high importance attached to stable, supportive housing (part of an avoidance strategy) as well as other factors such as clinical and non-clinical supports, meaningful activities such as employment and going to school, personal care, developing insight/setting goals.

4. Implications for Drug and Alcohol-Free Housing

The clarity of the "consumer voice" in this paper combined with the clear link between perceived risk of relapse and various types of programs/activities makes this a valuable contribution to policy development.

Results suggest that housing and other supports beyond clinical/medical management, such as employment and education support, should be an important part of the treatment and support continuum available to people with severe mental illness and substance use disorders.

5. Evaluation of paper (research methodology, level of confidence, etc.)

The qualitative methodology used in this paper is exemplary.
Confidence in results is very high.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper:

Outcomes of homeless adults with mental illness in a housing program and in case management only. *Psychiatric Services, Vol. 54(1) (pp 78-83), 2003.*

2. Author(s):

Clark, C., & Rich, A. R.

3. Major Findings

The study compared housing-related, substance use and psychiatric symptom outcomes across two groups of homeless people with severe mental illness. One group received housing support plus case management; the other received only case management. The main finding was that “high impairment” participants had better outcome with the housing support plus case management while moderate to low impairment participants did equally well with case management and no housing support component.

4. Implications for Drug and Alcohol-Free Housing

This study suggests that the effectiveness rates can be increased by careful matching of intervention and consumer characteristics.

These results would support policy makers, funders and service providers in providing the most impaired homeless individuals the greatest access to comprehensive housing programs.

5. Evaluation of paper (research methodology, level of confidence, etc.)

This study is based on a quasi-experimental, non-equivalent control group design. Baseline differences in level of impairment (systems, alcohol and drug use) were adjusted by sub-typing the study population with propensity scores derived from measures of these variables. This was a successful strategy setting the stage for the assessment of a significant 3-way interaction – type of program x level of impairment x outcome.

Another strength of the study is the use of fidelity scales that confirmed the similarities in the two program models with the exception of the comprehensive package of housing support.

Confidence in the findings is high, although results could differ with a longer follow up (over one year).

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. **Title of Paper:**

What do the neighbors think now? Community residences on Long Island, New York. *Community Mental Health Journal, Vol. 29 (pp 235-245), 1993.*

2. **Author(s):**

Antos Arens, D.

3. **Major Findings**

Based on interviews of neighbours in close proximity to community residences for adults disabled by mental illness, it was shown that the large majority found the people in the residences to be good neighbours; they had experienced few or no problems; and property values had not declined. Importantly the majority of neighbours who had initially objected to the residences were quite supportive 2-5 years later. 13% of current neighbours did not even know a residence existed in their neighbourhood.

4. **Implications for Drug and Alcohol-Free Housing**

Results provide considerable support for policies aimed at community integration of people with mental illness via neighbourhood location of their residence.

Results address common community concerns, namely decreased property values, difficulty selling a home and increased community incidents such as crime or aggressive behaviour.

5. **Evaluation of paper (research methodology, level of confidence, etc.)**

Study used a qualitative approach appropriate to the research question. Interviews were conducted in several neighbourhoods, all of which had gone through the process of site selection for a residence; neighbourhood resistance and appeal, and final placement of a residence.

Potential study limitation is that all sites were based in New York State, and study period is a bit dated (residences opened between 1984 and 1987, and data collected 2-5 years later).

Level of confidence is high based on consistency in the findings.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper:

Reconsidering the evaluation of addiction treatment: from retrospective follow-up to concurrent recovery monitoring. *Addiction*, Vol. 100(4) (pp 447-458), 2005.

2. Author(s)

McLellan, A. T., McKay, J. R., Forman, R., Cacciola, J., & Kemp, J.

3. Major Findings

This is an important conceptual paper that argues for treating addiction treatment within the same model that we use to examine the success of long-term treatments of chronic diseases (e.g. of diabetes and hypertension). It argues that we must use ongoing clinical data monitoring to assist in the evaluation and clinical management of addiction treatment over longer time periods. An essential feature of this model is the need for concurrent data collection frequently within the course of treatment – and using it for ongoing monitoring of treatment adherence and for measuring progress and setbacks (relapses).

It notes that most addiction treatments have been delivered and evaluated under an acute-care format (with) fixed durations of treatment with outcomes typically evaluated 6–12 months after completion of care. Critically in these methods “The explicit expectation of treatment has been enduring reductions in substance use, improved personal health and social function, generally referred to as ‘recovery’. In contrast, treatments for chronic illnesses such as diabetes, hypertension and asthma have been provided for indeterminate periods and their effects also evaluated during the course of those treatments.”

The many similarities between addiction and mainstream chronic illnesses stand in contrast to the differences in the ways addiction is conceptualized, treated and evaluated. This paper discusses the use of “methods of during-treatment evaluation”, many models of which have been developed for the treatment of other chronic illnesses (e.g. regular blood testing for glucose in diabetes). The paper suggests a parallel evaluation system for outpatient, continuing-care forms of addiction treatment. This paradigm is termed ‘concurrent recovery monitoring’ and the authors make a strong case for “its potential for producing more timely, efficient, clinically relevant and accountable evaluations.”

4. Implications for Drug and Alcohol-Free Housing

Results are not directly applicable to the current task re: abstinence-based housing, however, the approach advocated here is highly relevant for any future evaluations of

such facilities. This is an essential paradigm shift if we are to make any sense of the long term chronic multi-diagnosed patients we are most concerned with in community housing projects. The availability in BC of the linked data sets of the corrections, drug /mental health systems, and healthcare data may make this feasible in practice in BC in ways that are not achievable in most other areas. This would require a significant resource allocation, potentially with funding from NIDA. A major challenge, however, would be the current poor quality of the basic client information system, upon which a provincial continuous outcome monitoring system could be built. More trials specific to local facilities and jurisdictions would be necessary as the beginning steps toward a provincial system.

5. Evaluation of paper (research methodology, level of confidence, etc.)

The suggested methods are sound – a system that collects, retains and monitors traditional patient-level, behavioral outcome measures of recovery. The paper suggests that “these outcomes should be collected and reported immediately and regularly by clinicians at the beginning of addiction treatment sessions, as a way of evaluating recovery progress and making decisions about continuing care.” Limitations are noted, such as the potential for clinicians to over-estimate the outcomes actually being achieved, and these should be the object of further research, rather than dismissed as “Achilles-heels” for these continuous monitoring systems.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper :

Use of case manager ratings and weekly urine toxicology tests among outpatients with dual diagnosis. *Psychiatric Services, Vol. 53(6) (pp 764-766), 2002.*

2. Author(s)

Ries, R. K., Dyck, D. G., Short, R., Srebnik, D., Snowden, M., & Comtois, K. A.

3. Major Findings

Use of drugs and alcohol by 43 predominantly male outpatients who had severe mental illness and a co-morbid substance use disorder were assessed weekly through the ratings of experienced dual disorder case managers and through blinded research urine toxicology tests. The percentage of weeks in which drugs or alcohol were used was calculated on the basis of one or both assessments. The case managers often missed drug use over the weekends, which was detected by the urine toxicology tests. Agreement between the two methods varied widely, even when the ratings were made by highly experienced case managers. Results can be seen in the table below.

Weeks during which alcohol or drug use was detected through case manager ratings and urine toxicology tests (N=734 weeks)

Substance	Case manager		Urine toxicology		Either method	
	N	%	N	%	N	%
Alcohol	327	45	27	4	327	45
Drugs	233	32	277	38	352	48
Alcohol or drugs	373	51	282	38	423	58

4. Implications for Drug and Alcohol-Free Housing

This paper is relevant to the evaluation of substance contingent housing insofar as it assesses concordance between various methods of assessing recent substance use. The authors claim that these findings have “implications for monitoring patients with dual diagnoses and provide insight into the accuracy of case manager ratings”, but they make a poor case: i.e. case manager ratings that simply focus on estimated days of use of drugs; and urine tests for alcohol are notoriously useless. It is clear though that if a program wants to know about its clients’ drug and alcohol use, then tests need to complement real knowledge of the patients’ ups and downs.

5. Evaluation of paper (research methodology, level of confidence, etc.)

The theme of this paper can be related to the McClelland “Concurrent Recovery Monitoring” paper, which stresses the need for some rigorous manualized training of case managers in assessment methods – and the need to rationalize this assessment in the light of treatment duration, resources, and goals – e.g. patients use of self medications may relate to how well their prescribed medication regimes are managed.

Regardless of whether a concurrent outcome monitoring approach is used or a more traditional outcome monitoring design, issues regarding measurement (reliability/validity) are equally salient. Complementary methods are typically required, which this paper advocates for in the end.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper :

Special section on relapse prevention: Substance abuse relapse in a ten-year prospective follow-up of clients with mental and substance use disorders. *Psychiatric Services, Vol. 56 (pp 1282-1287)*, 2005.

2. Author(s):

Xie, H., McHugo, G. J., Fox, M. B., & Drake, R. E.

3. Major Findings

This is a ten-year prospective follow-up study of the rate and predictors of substance abuse relapse among chronic clients with “severe mental illness” (N= 169) following “full remission from substance abuse” (6 months drug free). Cannabis was the most common drug. At baseline 58% had recent hospitalization, homelessness (26%), and unemployed (91%).

Results: Kaplan-Meier survival curve to show the pattern of relapse, and identify predictors of relapse: one-third relapsed in the first year, and two-thirds relapsed over 10 years. Predictors of relapse included male sex, less than a high school education, living independently, and lack of continued substance abuse treatment. No info on criminal justice involvement.

Conclusions: After attaining full remission, clients with severe mental disorders continue to be at risk of substance abuse relapse for many years. Relapse prevention efforts should concentrate on helping clients to continue with substance abuse treatment as well as on developing housing programs that promote recovery.

4. Implications for Drug and Alcohol-Free Housing

The study population includes the typical “clinical and social instability” and “chronic fluctuating nature characteristic” of co-occurring disorder patients, in and out of treatment; the study doesn't address criminal justice events. While details of housing are sketchy, the authors conclude that living in high risk communities with access to drugs and drug associate use (due to poverty and local housing policies) is a predictor of relapses. They stress need for supportive residential programs. Similarly they point to discontinuities in drug treatment and case management (see Susser et al), thus supporting McLellan's CMR model of ongoing chronic disease management.

5. Evaluation of paper (research methodology, level of confidence, etc.)

The strength of this paper is the natural history approach – with a well characterized large prospective sample and 10 years of follow up. The findings make clear that with “business as usual” with this population we can predict relapse to drug use in most cases, but since cannabis is the drug mentioned as most significant it's not clear that the drug use is actually associated with any more serious adverse outcomes. In that respect, the study is short sighted. The authors acknowledge that the findings may be circular –where it is impossible to attribute causes and effects in the results – clients most motivated to improve will seek out residential care and drug treatment.

Housing for People with Substance Use and Concurrent Disorders: Annotated Bibliography

Reviewers' Summary

1. Title of Paper

To house or not to house: the effects of providing housing to homeless substance abusers in treatment. *American Journal of Public Health, Vol. 95 (pp 1259-1265), 2005.*

2. Author(s)

Milby, J. B., Schumacher, J. E., Wallace, D., Freedman, M. J., & Vuchinich, R. E.

3. Major Findings

The study is framed as a challenge to “housing first” approaches, which do not require drug abstinence. The study examined rates of drug abstinence and other outcomes in 196 cocaine-dependent participants who received 12 months of phased day treatment (for mental health and drug use) under 3 conditions: no housing (NH), housing contingent on drug abstinence (ACH), or housing not contingent on abstinence (NACH). Drug use was monitored with urine testing.

Results: While the ACH group had a slightly higher prevalence of drug abstinence than the NACH group, both did substantially better than the NH group. All 3 groups showed significant improvement in maintaining employment and housing – doubling the prevalence over 12 months. But there was a steady decline in abstinence over 12 months – generally about 50% from baseline – as a function of their participation in the treatment program.

4. Implications for Drug and Alcohol-Free Housing

The authors conclude that “results of this and previous trials indicate that providing abstinence-contingent housing to homeless substance abusers in treatment is an efficacious, effective, and practical intervention” and that “Programs to provide such housing should be considered in policy initiatives.” I don’t believe that their results support that interpretation. Taken as a whole the study most strongly suggests that provision of housing is by far the most important factor in predicting outcomes on drugs – and that sufficient flexibility in the conditions of housing are needed to accommodate the range of pathologies encountered in these clients and the inevitable swings in their state over time. (See Ries paper.)

5. Evaluation of paper (research methodology, level of confidence, etc.)

The rough similarities in abstinence rates between the NACH and ACH groups suggest that it’s not worth all the trouble to make housing contingent on drug use – and the rise in housing (>100% for all 3 groups). The three groups start with different abstinence rates (40% for the NH group and 60 – 69 % for the NACH and ACH groups respectively) – this is a serious problem for the comparison. Further, the decay of the abstinence curve is profound (as in the Xie study) – by about 50% within 25 weeks. While there is a positive relation of abstinence rate to program attendance, this relationship is based on the self-determined treatment participation throughout each treatment phase of the program – a real weakness.

Appendix 1: Research Methodology

An initial search was conducted of a number of databases to identify articles which were potentially relevant to the subject. This search resulted in a list of approximately 160 articles. The abstracts of these articles were reviewed and sixteen representative articles with the greatest relevance were selected for review. The articles that were chosen include five articles that were identified by Vancouver Coastal Health as articles referenced by community groups with an interest in this subject. An expert panel reviewed each of the selected manuscripts and reached consensus on the major conclusions, implications, and quality of each paper. Finally, a brief synopsis of findings was produced.

This appendix includes the following sections:

1. A table which shows the databases searched, some of the search terms used, and the approximate number of results.
2. Abstracts of the approximately 160 articles that were considered for the annotated bibliography.

Appendix 1.1: Search Strategy

- 1) Effectiveness of abstinence-contingent housing
- 2) Integrating recovery housing into existing neighbourhoods

Database	Search Terms	Number of items found	Number of potentially useful items
PubMed	"Housing"[MeSH] AND "Diagnosis, Dual (Psychiatry)"[MeSH]	17	Also worked with the "related links" option for articles related to topics. At least 54 of results were from PubMed.

Database	Search Terms	Number of items found	Number of potentially useful items
PsycINFO	Housing AND ("Dual diagnosis" OR "Drug abuse")	1047	Results too broad to be efficient use of database/researcher's time
	KW=Housing AND (KW="Dual diagnosis" OR KW="Drug abuse") – reviewed results for 2006 through 1999	269	22
	KW=Housing AND (KW="Dual diagnosis" OR KW="Drug abuse")AND KW="Relapse prevention"	7	0 (Relevant results were duplicates of items already retrieved.)
	Housing AND ("Dual diagnosis" OR "Drug abuse") AND "community facilities"	5	1
	KW=Housing AND (KW="Dual diagnosis" OR KW="Drug abuse")AND (KW="Community attitudes" OR KW="Public opinion")	1	0
	"Drug-free Housing"	7	0
	Alcohol-free Housing	2	0
	Neighborhood* AND Housing AND ("Dual diagnosis" OR "Drug abuse")	142	5 (Few results relevant.)
	Neighbourhood* AND Housing AND ("Dual diagnosis" OR "Drug abuse")	24	0
	Attitude* AND Housing AND ("Dual diagnosis" OR "Drug abuse")	264	2 retained. Largely not relevant.
	"Public Attitude*" AND Housing AND ("Dual diagnosis" OR "Drug abuse")	14	0
	"Community Attitude*" AND Housing AND ("Dual diagnosis" OR "Drug abuse")	10	0
	Program* AND ("Dual diagnosis" OR "Drug abuse") AND TI=housing	42	5
	DE="drug rehabilitation" and DE="community attitudes"	20	2
	"recovery homes" AND impact AND neighborhood*	2	1

Database	Search Terms	Number of items found	Number of potentially useful items
	"residential care institutions" AND impact AND neighborhood*		
	"drug rehabilitation" AND "community services" AND neighborhood*	9	2
	"drug rehabilitation" AND "community services" AND "community attitudes"	4	1

Database	Search Terms	Number of items found	Number of potentially useful items
Urban Studies Abstracts	Housing	67	0

Database	Search Terms	Number of items found	Number of potentially useful items
Sociological Abstracts	DE=("substance abuse" or "alcohol abuse" or "drug abuse" or "drug addiction") AND KW=housing	66	0
	DE="comorbidity"	38	0
	Dual diagnosis*	31	0
	Concurrent disorder*	1	0
	"residential care institutions" AND impact AND neighborhood*	0	0
	"residential institutions" AND neighborhood*	11	6
	"treatment programs" AND neighborhood*	30	2
	DE="facility siting disputes" AND DE=neighborhoods	11	1
	DE="facility siting disputes" AND "recovery homes"	2	duplicates
	DE="facility siting disputes" AND drug*	3	1
	facilities AND drugs and neighborhood*	9	2
	"inclusive communities"	26	0

Database	Search Terms	Number of items found	Number of potentially useful items
EMBASE	("dual diagnosis" OR "concurrent disorder" OR comorbidity OR "substance abuse" OR "drug abuse") AND housing	506	26
	("dual diagnosis" OR "concurrent disorder" OR comorbidity OR "substance abuse" OR "drug abuse") AND TI=housing	64	7

Database	Search Terms	Number of items found	Number of potentially useful items
Cochrane Library	“dual diagnosis” AND housing	9	0
	“concurrent disorders” AND housing	48	0

Database	Search Terms	Number of items found	Number of potentially useful items
Google Scholar	“not in my back yard” and “concurrent disorder*”	0	0
	“not in my back yard” and “dual diagnosis”	13	1
	"abstinent contingent housing" (neighborhood OR neighbourhood)	2	1
	“abstinence contingent housing” (neighborhood OR neighbourhood)	5	0
	"residential care institutions" neighborhood*	12	0
	drug recovery facility (neighborhood OR neighbourhood) (limited to 1990 and later)	9,590	Excessively large number – 3 relevant documents identified within first 4 pages of results
	“drug recovery facility” (neighborhood OR neighbourhood)	0	0
	drug rehabilitation facility (neighborhood OR neighbourhood) +housing (limited to 1990 and later)	9,250	Excessively large number
	“drug rehabilitation facility” (neighborhood OR neighbourhood)	15	0

Search engine	Search Terms	Number of items found	Number of potentially useful items
Google	"abstinent contingent housing"	75	Located relevant bibliographies - 18 articles
	"abstinence contingent housing"	70	1
	“recovery homes” (neighborhood OR neighbourhood)	10,200 / 9,940	Results too numerous and too broad to be useful.

Appendix 1.2: Complete Reference Search List

Concurrent Disorders: Mental Disorders and Substance Use Problems. (2004). Visions .
Ref Type: Journal (Full)

Creating Communities for Addiction Recovery: The Oxford House Model (2006). Haworth.

International journal of psychosocial rehabilitation (2006). Hampstead Psychological Associates [On-line]. Available: <http://www.psychosocial.com/pub.html#HEAD1A>
Abstract: Provides directory of web sites relating to substance abuse, addiction and dual disorders.

Aamodt, M. G. & Chiglinsky, M. (1989). A meta-analytic review of the effects of residential homes on neighborhood property values and crime rates. *Journal of police and criminal psychology*, 5, 20-24.

Abstract: "... it is the purpose of this paper to review the research that has been conducted on the effects of residential treatment homes, and through meta-analytic techniques, reach a conclusion about the effects of these homes."

Allen, M. (2003). Waking Rip van Winkle: Why Developments in the Last 20 Years Should Teach the Mental Health System Not to Use Housing as a Tool of Coercion. *Behavioral Sciences & the Law*, 21, 503-521.

Abstract: Many housing programs for people with mental illnesses rely on models that require the person to adhere to treatment as a condition of continuing access to housing. These models that "bundle" housing and treatment are relics of a past in which persons with mental illnesses were afforded little real choice in treatment, housing and other social supports. Conditioning access to housing in this manner is coercive and at odds with current thinking regarding treatment, as well as legal principles that shape the environment in which treatment is provided. This article summarizes the reasons why housing for people with mental illnesses should be provided free of the use of coercion. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Alverson, H., Alverson, M., & Drake, R. E. (2000). An ethnographic study of the longitudinal course of substance abuse among people with severe mental illness. *Community Mental Health Journal*, 36, 557-569.

Abstract: Presents ethnographic data from the New Hampshire Dual Diagnosis Study on patterns of remissions, resumption, and cessation in the use of addictive substances by a sample of 16 persons with severe mental illness over both the short term (year by year) and long term (decade) of the study period. The principal field ethnographer became a participant in the Ss' day-to-day lives, following them on a regular basis for 2 yrs and engaging in observation and dialogue in many of the settings. The findings of the ethnographer were combined with data obtained from interviews comprising the survey component of the larger study. This study yielded 2 findings. First, 4 "positive quality of life" factor's were strongly correlated with clients' efforts to cease using addictive substances: (1) regular engagement in an enjoyable activity; (2) decent, stable housing; (3) a loving relationship with someone sober who accepts the person's mental illness; and (4) a positive, valued relationship with a mental health professional. Second, the study revealed that "negative background factors" in Ss' childhood homes were predictive of long-term continuation of substance use. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Anderson, A. J. (1997). Therapeutic Program Models for Mentally Ill Chemical Abusers. *International Journal of Psychosocial Rehabilitation*, 1, 21-33.

Abstract: This paper reviews the central issues in treatment strategies and program development for mentally ill chemical abusers (MICA patients). Patient treatment needs, historical context for divisions of service/system, treatment philosophies, and program model components are discussed in the context of treatment efficacy, program funding and community based treatment policies with regard to comorbidity. An integrated services approach, utilizing symptom and deficit reduction, within a combined holistic and

patient centered treatment philosophy is outlined. A comparison of patient outcomes between a traditional disease specific program and an integrated program is provided. The potential benefits of treating MICA patients in integrated treatment programs are discussed.

Anderson, T. L., Shannon, C., Schyb, I., & Goldstein, P. (2002). Welfare reform and housing: Assessing the impact to substance abusers. *Journal of Drug Issues, 32*, 265-296.
Abstract: The addiction disability was terminated by Congress as part of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996. Discussions about welfare reform policies in the latter 20th century have centered on Aid to Families with Dependent Children. This study examines the effect of this policy change on the housing status of former addiction disability recipients and explores whether and how disruptions in living situations increased risks for drug and alcohol use, criminal participation and victimization. The authors utilize insights from 2 major sociological theories of housing or homelessness, i.e., individualistic and structural, to guide our exploration of the policy's impact on housing. A qualitative analysis, featuring in-depth interviews with 101 former recipients revealed that disability benefits promoted housing autonomy, successful cohabitation, and overall housing stability. The termination of benefits, at a time of diminishing social services and a housing market explosion, increased various types of homelessness for Ss and dependency on family and friends. Such negative living outcomes, in turn, further escalated the risk of drug and alcohol use, criminal participation, and victimization. Individual-level factors also complicated the matter. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Antos Arens, D. (1993). What do the neighbors think now? Community residences on Long Island, New York. *Community Mental Health Journal, 29*, 235-245.
Abstract: Interviews with 75 neighbors of community residences for adults disabled by mental illness assessed perceptions of impact in five suburban communities. The Not in My Backyard (NIMBY) attitude articulated during program development changed to one of acceptance over time. After a few years experience, the overwhelming majority agreed that the community residences are good neighbors; they have had no problems; and the residences had no adverse effect on property values. The New York State Site Selection Law and comparative data on property value impact are discussed.

Aubry, T. D., Tefft, B., & Currie, R. F. (1995). Public attitudes and intentions regarding tenants of community mental health residences who are neighbours. *Community Mental Health Journal, V31*, 39-52.
Abstract: A mail survey was conducted on a representative sample of 345 households in Winnipeg to examine public attitudes and behavioural intentions regarding tenants of community mental health residences who are neighbours. Vignette methodology was used to investigate the effects of mental illness labels (living in a community mental health residence vs. a normal residence), behavioural presentation (reflecting mild vs. severe disability), and sex of neighbours. Results showed behavioural presentation superseding labelling associated with tenancy in community mental health facilities in determining public attitudes toward and behavioural intentions regarding neighbouring. The study extends previous research by suggesting high levels of receptiveness on the part of community residents to having tenants as neighbours. Implications of the findings for improving the neighbourhood integration of tenants in community mental health residences are discussed.

Beardsley, K., Wish, E. D., Fitzelle, D. B., O'Grady, K., & Arria, A. M. (2003). Distance traveled to outpatient drug treatment and client retention. *J Subst Abuse Treat, 25*, 279-285.
Abstract: This study examined the association between approximate distance traveled to treatment, and treatment completion and length of stay, for 1,735 clients attending outpatient treatment in an urban area. Clients who traveled less than 1 mile were 50% more likely to complete treatment than clients who traveled more than 1 mile, after holding constant demographic variables and type of drug problem. Similarly, clients who traveled more than 4 miles were significantly more likely to have a shorter length of stay than clients who traveled less than 1 mile. These findings have important implications for the geographic placement of new treatment facilities, as well as the provision of transportation services to maximize treatment retention

Beaulieu, G. & Flanders, T. (2000). Uncovering the Elements of Success: Working with Co-occurring Disorders in Residential Support Programs. *International Journal of Psychosocial Rehabilitation, 4*, 11-17.

Bebout, R. R., Drake, R. E., Xie, H., McHugo, G. J., & Harris, M. (1997). Housing status among formerly homeless dually diagnosed adults. *Psychiatr Serv*, *48*, 936-941.
Abstract: OBJECTIVE: Residential outcomes of homeless adults with severe mental illness and a substance use disorder were studied over 18 months during which participants received integrated dual diagnosis services and housing supports based on a continuum model. METHODS: Interviews with 158 participants at baseline and at six-, 12-, and 18-month follow-ups assessed housing status, residential history, substance abuse and progress toward recovery, psychiatric symptoms, and quality of life. Complete data were available for 122 participants. If participants lived continuously in high-quality housing with no housing loss or nights of homelessness during the final six months of the study, they were classified as having stable housing. RESULTS: Of the 122 participants for whom complete data were available, 64 (52 percent) achieved stable housing. Most participants who achieved stable housing first entered staffed and supervised housing and then moved to independent arrangements by the end of the study. Stable housing during the final evaluation period was associated with lower substance use, greater progress toward substance abuse recovery, and higher quality of life. Final housing status was not predicted by baseline variables but was predicted by progress toward recovery during months 0 to 6 and 6 to 12 and by less severe drug use during months 6 to 12. Participants who abused no illicit drugs during months 6 to 12 were almost three times as likely to achieve stable housing as those who abused illicit drugs. CONCLUSIONS: Housing stability is strongly mediated by substance abuse and progress toward recovery. Nevertheless, when formerly homeless persons with dual diagnoses are provided integrated dual diagnosis treatment, they can gradually achieve stable housing

Bebout, R. R. (1999). Housing solutions: The community connections housing program: Preventing homelessness by integrating housing and supports. *Alcoholism Treatment Quarterly*. Vol.17(1-2)(pp 93-112), 1999., 93-112.
Abstract: Key features of a comprehensive housing program serving formerly homeless and at-risk adults with serious and persistent mental illness are described. The program combines intensive case management, integrated dual- diagnosis treatment, and other clinical services with a range of housing options which are operated under the auspices of a single agency. For individuals with co-occurring substance use disorder, housing responses are guided by a four stage model of treatment and recovery. The authors offer a rationale for the continuum approach's relevance for high risk populations, especially those in poor, urban settings where safety and harm-reduction are a high priority. A controlled study comparing the continuum housing approach to another leading model is underway. Primary outcomes of interest are engagement in services, establishing and maintaining high quality housing, and avoiding returns to literal homelessness

Bickel, W. K., Amass, L., Higgins, S. T., Badger, G. J., & Esch, R. A. (1997). Effects of adding behavioral treatment to opioid detoxification with buprenorphine. *J Consult Clin Psychol*, *65*, 803-810.
Abstract: This trial assessed whether behavioral treatment improves outcome during a 26-week outpatient opioid detoxification. Thirty-nine opioid-dependent adults were assigned randomly to a buprenorphine dose-taper combined with either behavioral or standard treatment. Behavioral treatment included (a) a voucher incentive program for providing opioid-free urine samples and engaging in verifiable therapeutic activities and (b) the community reinforcement approach, a multicomponent behavioral treatment. Standard treatment included lifestyle counseling. Fifty-three percent of the patients receiving behavioral treatment completed treatment, versus 20% receiving standard treatment. The percentage of patients achieving 4, 8, 12, and 16 weeks of continuous opioid abstinence were 68, 47, 26, and 11 for the behavioral group and 55, 15, 5, and 0 for the standard group, respectively. Behavioral treatment improved outcomes during outpatient detoxification

Bigelow, G. E., Brooner, R. K., & Silverman, K. (1998). Competing motivations: drug reinforcement vs non-drug reinforcement. *J Psychopharmacol.*, *12*, 8-14.
Abstract: A behavioral pharmacological conceptualization of drug abuse is summarized, which views drug abuse as learned operant behavior that is reinforced by positive effects produced by drugs of abuse. In this view drug abuse may be better characterized as involving attraction rather than compulsion. Incentive-based treatments may be useful for overcoming and competing with the reinforcing effects of drugs of abuse. Illustrative examples of incentive-based treatments for drug abuse, and their results, are described. The efficacy of incentive-based treatments indicates that many substance abusers possess the necessary skills to achieve abstinence and suggests that motivational interventions alone may be sufficient in many

cases. Areas for further research are discussed that relate to refining and developing incentive-based therapies and to improving their practical utility and public acceptability

Boardman, J. D., Finch, B. K., Ellison, C. G., Williams, D. R., & Jackson, J. S. (2001). Neighborhood disadvantage, stress, and drug use among adults. *J Health Soc.Behav*, 42, 151-165. Abstract: This paper explores the relationships among neighborhood disadvantage, stress, and the likelihood of drug use in a sample of adults (N = 1,101). Using the 1995 Detroit Area Study in conjunction with tract-level data from the 1990 census, we find a positive relationship between neighborhood disadvantage and drug use, and this relationship remains statistically significant net of controls for individual-level socioeconomic status. Neighborhood disadvantage is moderately associated with drug related behaviors, indirectly through increased social stressors and higher levels of psychological distress among residents of disadvantaged neighborhoods. A residual effect of neighborhood disadvantage remains, net of a large number of socially relevant controls. Finally, results from interactive models suggest that the relationship between neighborhood disadvantage and drug use is most pronounced among individuals with lower incomes

Booth, B. M., Sullivan, G., Koegel, P., & Burnam, A. (2002). Vulnerability factors for homelessness associated with substance dependence in a community sample of homeless adults. *American Journal of Drug & Alcohol Abuse*.Vol.28(3)(pp 429-452), 2002., 429-452. Abstract: We studied a community probability sample of 1185 homeless individuals to examine substance dependence in relationship to other personal and social vulnerabilities linked to homelessness, including sociodemographics, childhood/adolescent factors, prehomelessness factors, multiple episodes of homelessness, and the quality of shelter in their current episode of homelessness. These vulnerability factors were significantly concentrated in homeless individuals with lifetime and recent substance dependence, especially among those with both alcohol and drug dependence. In addition, the profiles of the homeless with alcohol dependence alone were distinct from those with drug dependence alone or both, with older age, more males, longer histories of homelessness, and significantly poorer quality shelter during the previous 30 days. Therefore, homeless individuals with substance dependence have many vulnerabilities beyond their substance dependence that should be dealt with in treatment or other service settings before lasting housing can be achieved

Boydell, K. M., Trainor, J. N., & Pierri, A. M. (1989). The Effect of Group Homes for the Mentally Ill on Residential Property Values. *Psychiatric Services*, 40, 957-958.

Brown, S. L. (2006). The history of housing and treatment services for people with serious psychiatric disabilities: Models of residential service delivery. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 66, 5676.

Abstract: During the last decade, supported housing has emerged as a popular new approach to the delivery of housing and treatment services for consumers who have been homeless and experience serious psychiatric disabilities and/or substance use disorders. Supported housing offers an alternative to the residential treatment programs comprising traditional linear residential continuum of care models by offering consumers access to independent, permanent housing integrated with non-disabled members of the community, choices regarding the location of their housing from available housing stock, and the availability of a wide range of community-based treatment and support services designed to maximize independent living skills and successful community integration (Carling, 1995). To date, research on supported housing has focused almost exclusively on examining concrete aspects of consumers' experiences in supported housing (e.g., changes in psychiatric stability following receipt of housing, and factors associated with increased housing satisfaction and stability) (Baker & Douglas, 1990; Cohen & Somers, 1990; Hogan & Carling, 1992; McCarthy & Nelson, 1991; Nelson, Smith-Fowler, 1987; Nelson, Wiltshire, Hall, Peirson, & Walsh-Bowers, 1995; Rimmerman, Finn, Schnee, & Klein, 1992). Research has yet to understand tenants' experiences living in supported housing, their relationships with other supported housing participants, and their definition of home. To help fill the research gap, the goal of this dissertation study was to use a grounded theory approach to qualitative data analysis to examine consumers' experiences residing in a Shelter Plus Care (SPC) funded supported housing program in Hartford, Connecticut. Using a 43-item semi-structured qualitative interview as a guide, eight tenants receiving

supported housing through the SPC program were asked to describe: (1) their experiences living in their apartments, (2) their definition of home, (3) the quality of their experiences interacting with other supported housing program participants (landlords, service providers, housing program staff), and (4) needs for a successful housing experience. Although tenants' personal experiences living in their apartments and interactions with other supported housing program participants were varied, overall tenants reported positive experiences participating in this supported housing program. Tenants' descriptions of their apartment settings and past experiences with homelessness were compared to current definitions of home. Implications of tenants' differentiation of the physical and architectural needs fulfilled by a housing environment from the subjective, intangible attributes identified as necessary to have a home were discussed. These results are followed by recommendations for service providers and housing program planners working with tenants and landlords participating in supported housing. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Brunette, M. F., Drake, R. E., Woods, M., & Hartnett, T. (2001). A comparison of long-term and short-term residential treatment programs for dual diagnosis patients. *Psychiatr Serv, 52*, 526-528.
Abstract: The authors compared measures of process and six-month outcomes for 45 individuals who were treated in a long-term residential treatment program for patients with dual diagnoses with measures for 39 individuals who were treated in a short-term program. They also compared outcomes for individuals within each group. Those who received long-term treatment experienced improvements between entry into the program and six-month follow-up, and they were more likely to have engaged in treatment than individuals in the short-term group. At follow-up, individuals in the long-term residential treatment group were more likely to have maintained abstinence and less likely to have experienced homelessness than those in the short-term group

Brunette, M. F., Mueser, K. T., & Drake, R. E. (2004). A review of research on residential programs for people with severe mental illness and co-occurring substance use disorders. *Drug Alcohol Rev., 23*, 471-481.
Abstract: Substance use disorder is the most common and clinically significant co-morbidity among clients with severe mental illnesses, associated with poor treatment response, homelessness and other adverse outcomes. Residential programs for clients with dual disorders integrate mental health treatment, substance abuse interventions, housing and other supports. Ten controlled studies suggest that greater levels of integration of substance abuse and mental health services are more effective than less integration. Because the research is limited by methodological problems, further research is needed to establish the effectiveness of residential programs, to characterize important program elements, to establish methods to improve engagement into and retention in residential programs and to clarify which clients benefit from this type of service

Budney, A. J., Moore, B. A., Rocha, H. L., & Higgins, S. T. (2006). Clinical trial of abstinence-based vouchers and cognitive-behavioral therapy for cannabis dependence. *J Consult Clin Psychol, 74*, 307-316.
Abstract: Ninety cannabis-dependent adults seeking treatment were randomly assigned to receive cognitive-behavioral therapy, abstinence-based voucher incentives, or their combination. Treatment duration was 14 weeks, and outcomes were assessed for 12 months posttreatment. Findings suggest that (a) abstinence-based vouchers were effective for engendering extended periods of continuous marijuana abstinence during treatment, (b) cognitive-behavioral therapy did not add to this during-treatment effect, and (c) cognitive-behavioral therapy enhanced the posttreatment maintenance of the initial positive effect of vouchers on abstinence. This study extends the literature on cannabis dependence, indicating that a program of abstinence-based vouchers is a potent treatment option. Discussion focuses on the strengths of each intervention, the clinical significance of the findings, and the need to continue efforts toward development of effective interventions

Burnam, M. A., Morton, S. C., McGlynn, E. A., Petersen, L. P., Stecher, B. M., Hayes, C. et al. (1995). An experimental evaluation of residential and nonresidential treatment for dually diagnosed homeless adults. *J Addict Dis, 14*, 111-134.
Abstract: Homeless adults with both a serious mental illness and substance dependence (N = 276) were randomly assigned to: (1) a social model residential program providing integrated mental health and

substance abuse treatment; (2) a community-based nonresidential program using the same social model approach; or (3) a control group receiving no intervention but free to access other community services. Interventions were designed to provide 3 months of intensive treatment, followed by 3 months of nonresidential maintenance. Subjects completed baseline interviews prior to randomization and reinterviews 3, 6, and 9 months later. Results showed that, while substance use, mental health, and housing outcomes improved from baseline, subjects assigned to treatment conditions differed little from control subjects. Examination of the relationship between length of treatment exposure and outcomes suggested that residential treatment had positive effects on outcomes at 3 months, but that these effects were eroded by 6 months

Caplan, B., Schutt, R. K., Turner, W. M., Goldfinger, S. M., & Seidman, L. J. (2006). Change in neurocognition by housing type and substance abuse among formerly homeless seriously mentally ill persons. *Schizophrenia Research*, 83, 77-86.
Abstract: Objective: To test the effect of living in group housing rather than independent apartments on executive functioning, verbal memory and sustained attention among formerly homeless persons with serious mental illness and to determine whether substance abuse modifies this effect. Method: In metropolitan Boston, 112 persons in Department of Mental Health shelters were randomly assigned to group homes ("Evolving Consumer Households", with project facilitator, group meetings, resident decision-making) or independent apartments. All were case managed. A neuropsychological test battery was administered at baseline, at 18 months (Time 2), with an 81% follow-up rate, and at 48 months (Time 3), with a 59% follow-up rate. Hierarchical Linear Modeling was applied to executive functioning-assessed with the Wisconsin Card Sorting Test (Perseverations)-Logical Memory story recall, and an auditory Continuous Performance Test (CPT) for sustained attention. Subject characteristics were controlled. Results: When moved to group homes, subjects without a lifetime substance abuse history improved on Perseverations, while those who moved to independent apartments deteriorated on Perseverations. Across the two housing conditions, subjects showed no change in Perseverations, but improved on Logical Memory story recall and the CPT. Conclusions: Type of housing placement can influence cognitive functioning; notably, socially isolating housing is associated with weakened executive functioning. Substance abuse significantly diminishes environmental effects. These are important factors to consider in housing placement and subsequent treatment. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Carroll, K. M., Ball, S. A., Nich, C., O'Connor, P. G., Eagan, D. A., Frankforter, T. L. et al. (2001). Targeting behavioral therapies to enhance naltrexone treatment of opioid dependence: efficacy of contingency management and significant other involvement. *Arch Gen.Psychiatry*, 58, 755-761.
Abstract: BACKGROUND: Contingency management (CM) and significant other involvement (SO) were evaluated as strategies to enhance treatment retention, medication compliance, and outcome for naltrexone treatment of opioid dependence. METHODS: One hundred twenty-seven recently detoxified opioid-dependent individuals were randomly assigned to 1 of 3 conditions delivered for 12 weeks: (1) standard naltrexone treatment, given 3 times a week; (2) naltrexone treatment plus contingency management (CM), with delivery of vouchers contingent on naltrexone compliance and drug-free urine specimens; or (3) naltrexone treatment, CM, plus significant other involvement (SO), where a family member was invited to participate in up to 6 family counseling sessions. Principal outcomes were retention in treatment, compliance with naltrexone therapy, and number of drug-free urine specimens. RESULTS: First, CM was associated with significant improvements in treatment retention (7.4 vs 5.6 weeks; $P = .05$) and in reduction in opioid use (19 vs 14 opioid-free urine specimens; $P = .04$) compared with standard naltrexone treatment. Second, assignment to SO did not significantly improve retention, compliance, or substance abuse outcomes compared with CM. Significant effects for the SO condition over CM on retention, compliance, and drug use outcomes were seen only for the subgroup who attended at least 1 family counseling session. The SO condition was associated with significant ($P = .02$) improvements in family functioning. CONCLUSION: Behavioral therapies, such as CM, can be targeted to address weaknesses of specific pharmacotherapies, such as noncompliance, and thus can play a substantial role in broadening the utility of available pharmacotherapies

Charuvastra, V. C., Dalali, I. D., Cassuci, M., & Ling, W. (1992). Outcome study: comparison of short-term vs long-term treatment in a residential community. *Int J Addict*, 27, 15-23.

Abstract: All patients admitted to a Residential Treatment Center (RTC), a drug-free hospital-based inpatient facility in February 1985 through July 1985, were followed-up 6 months after discharge. The results are contrasted with those obtained in 1973 in a similar follow-up study. Length of stay at RTC had been reduced from 1 year in 1973 to 3 months in 1985. Six months after discharge, the longer length of stay in 1973 appears to be almost twice as effective as the 3-month program in 1985

Clark Robbins, P., John, P., Stephanie, L., & John, M. (2006). The Use of Housing as Leverage to Increase Adherence to Psychiatric Treatment in the Community. *Administration and Policy in Mental Health and Mental Health Services Research, V33*, 226-236.

Abstract: For people with mental disorder, access to subsidized housing may be used as "leverage" to obtain adherence to treatment. Interview data from 200 outpatients at each of five sites provided the first national description of the use of housing as leverage. Results indicated that housing is most likely to be used as leverage when it is "special" housing, available only to people with mental illness. Most frequently, respondents state that the requirement that they participate in treatment is imposed by their landlord, rather than by a clinician. The use of housing as leverage strongly increases respondents' perceptions of coercion. Despite this, however, participants who experience housing as leverage are no less satisfied than other participants with the treatment that they receive, and are much *more* likely than other participants to believe that using housing as leverage is effective in helping people stay well.

Clark, C. & Rich, A. R. (2003). Outcomes of homeless adults with mental illness in a housing program and in case management only. *Psychiatric Services, Vol.54(1)(pp 78-83)*, 2003. *Date of Publication: 01 JAN 2003.*, 78-83.

Abstract: Objective: The effectiveness of two types of service programs in ameliorating homelessness among individuals with severe mental illness was compared. Methods: Homeless persons with severe mental illness were recruited into the study on their entry into one of two types of homeless service programs. The first was a comprehensive housing program, in which consumers received guaranteed access to housing, housing support services, and case management. The second was a program of case management only, in which consumers received specialized case management services. In a quasi-experimental or nonrandom-assignment design, participants responded to instruments measuring housing status, mental health symptoms, substance use, physical health, and quality of life at baseline (program entry) and at six months and 12 months after entry. The baseline interview was completed by 152 participants and at least one of the two follow-up interviews by 108 participants. High-, medium-, and low-impairment subgroups, based on psychiatric symptoms and degree of alcohol and illegal drug use, were formed by means of a propensity score subclassification. Results: Persons with high psychiatric symptom severity and high substance use achieved better housing outcomes with the comprehensive housing program than with case management alone. However, persons with low and medium symptom severity and low levels of alcohol and drug use did just as well with case management alone. Conclusions: The results suggest that the effectiveness, and ultimately the cost, of homeless services can be improved by matching the type of service to the consumer's level of psychiatric impairment and substance use rather than by treating mentally ill homeless persons as a homogeneous group. <3>

Clark, C., Teague, G. B., & Henry, R. M. (1999). Preventing homelessness in Florida. *Alcoholism Treatment Quarterly, 17*, 73-91.

Abstract: Essential elements of a housing intervention designed to serve people who are homeless or risk becoming homeless, have severe mental illness, and may have a substance use disorder are described and summarized in a logic model. Characteristics of the target population (aged 19-63 yrs), the community and the service system are examined, and how this program serves to address the issues. The effectiveness of this intervention appears to be the result of the organizational characteristics. The organizational structure and climate provide: (a) integrated services under one "umbrella"; (b) flexible, responsive service delivery; and (c) a treatment philosophy which builds on the strengths of residents through effective staff-resident relationships. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Comfort, M. & Kaltbach, K. A. (2000). Predictors of treatment outcomes for substance-abusing women: A retrospective study. *Substance Abuse, 21*, 33-45.

Abstract: Examined whether client characteristics at admission predict Retention, Abstinence, and utilization of Required Services and Specialized Services for 183 pregnant women in outpatient (mean age

30.5 yrs) and residential (mean age 28 yrs) substance abuse treatment. Retrospective data were collected with the Psychosocial History (PSH), a structured clinical interview that is an expansion of the Addiction Severity Index, designed specifically to assess substance abusing women. The PSH was administered at intake for all Ss. Factor analysis reduced predictors to 5 factors with composite scores, and multiple regression procedures determined client characteristics that predict treatment outcomes. Significant predictors were composites of variables that encompassed all aspects of women's personal and family lives including medical and psychiatric needs, family and parenting issues, housing, victimization, and clients' perceived needs for treatment and assistance in all of these areas. The results suggest the need for a holistic approach to substance abuse treatment and continued exploration of a broad range of psychosocial assessments at intake in order to develop substance abuse treatment programs that effectively address multiple aspects of women's lives. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Compton, M. T., Weiss, P. S., West, J. C., & Kaslow, N. J. (2005). The associations between substance use disorders, schizophrenia-spectrum disorders, and Axis IV psychosocial problems. *Social Psychiatry & Psychiatric Epidemiology*. Vol.40(12)(pp 939-946), 2005., 939-946.

Abstract: Background: Substance abuse among individuals with schizophrenia-spectrum disorders (SSDs) is associated with a range of adverse psychosocial outcomes in the areas of occupational functioning, housing stability, economic independence, access to health care, and involvement with the legal system. The aim of this study was to estimate the effects of substance use disorders (SUDs), SSDs, and dual diagnosis with both disorders on the risk for six important Axis IV psychosocial problems. This was accomplished using a large dataset of patients who are representative of individuals in routine US psychiatric practice. Method: Weighted data from the 1999 Study of Psychiatric Patients and Treatments from a practice-based research network of the American Psychiatric Institute for Research and Education were analyzed. Some 615 US psychiatrists provided detailed clinical, psychosocial, and health services information on 1,843 patients, including 285 patients with one or more SUDs without an SSD, 180 patients with a diagnosis of an SSD without substance abuse comorbidity, and 68 dually diagnosed patients. Logistic regression models were used to determine effect estimates (adjusted odds ratios), and corresponding 95% confidence intervals were calculated. Results: After adjusting for sociodemographic variables and for SSD diagnosis, SUD diagnosis was independently associated with increased risk for five of the Axis IV psychosocial problems of interest (occupational problems, housing problems, economic problems, problems with access to health care services, and problems related to interaction with the legal system/crime) when compared to all other psychiatric patients (n=1,310). After adjusting for the sociodemographic variables and for SUD diagnosis, SSD diagnosis (compared to all other psychiatric diagnoses) was associated with Axis IV economic problems, but not with the other five psychosocial problems of interest. The presence of both an SUD and an SSD diagnosis (dual diagnosis) was associated with a greater risk for four of the six Axis IV psychosocial problems studied, compared to the risks associated with either diagnosis alone. Limiting the substance of abuse to alcohol resulted in similar findings. Conclusions: Although SUDs are associated with increased risk for poor social adjustment, the comorbidity of SUDs and SSDs is associated with greatly compounded psychosocial burdens. These findings, from a large sample of representative US psychiatric patients, demonstrate the ongoing need for improved services and policies for those specially burdened patients with the dual diagnosis of both an SSD and substance abuse or dependence. copyright Springer-Verlag 2005. <6>

Conrad, K. J., Lutz, G., Matters, M. D., Donner, L., Clark, E., & Lynch, P. (2006). Randomized trial of psychiatric care with representative payeeship for persons with serious mental illness. *Psychiatric Services*. Vol.57(2)(pp 197-204), 2006., 197-204.

Abstract: Objectives: This randomized clinical trial assessed whether a community-based representative payee program that was coordinated with psychiatric care from the Department of Veterans Affairs was more effective than customary treatment. Methods: In the experimental condition representative payeeship was provided by a community agency that worked to enroll clients and coordinate payeeship with clinical care through communication with clinical staff. The control condition consisted of customary clinical care that included the typical availability of representative payeeship. Hypotheses were that, compared with the control group, the experimental group would experience greater enrollment in a representative payee program; improved residential status; improved quality of life, including fewer symptoms of mental illness; less substance abuse; and improved money management. Participants were interviewed at baseline and at six and 12 months. Outcomes were analyzed with analysis of covariance by using covariates from the

baseline. Results: A total of 184 participants were enrolled at baseline (94 in the experimental group and 90 in the control group). A total of 152 interviews were completed at six months, and 149 were completed at 12 months. At 12 months, 31 percent of patients in the experimental group and 14 percent of those in the control group were receiving representative payee services. At 12 months, significant positive effects were observed for the experimental group on enrollment in a representative payeeship, alcohol and drug use, quality of life, and money management. Residential status approached significance. Conclusions: Use of a coordinated representative payee program was found to be effective in improving outcomes at 12 months. Although this evidence supports the wider implementation of a coordinated representative payee program, only 31 percent of the experimental group had their money banked with a representative payee. Therefore, future studies should focus on achieving a better understanding of the causal components of the intervention. <4>

Cook, J. R. (1997). Neighbors' Perceptions of Group Homes. *Community Mental Health Journal*, *V33*, 287-299.

Abstract: Neighbors often presume that group homes (GHs) have negative effects on their neighborhoods, but it is unclear how often GHs actually have adverse effects. Neighbors of GHs and a matched set of people who did not live near a GH were interviewed. Neighbors of GHs were asked about their experiences with the specific GH near them, while non-neighbors were asked similar questions about their expectations of what it would be like to live near a GH. For both negative (e.g., noise, traffic) and positive effects (e.g., learning about disabilities) of GHs, non-neighbors expected GHs would have a much greater impact on them than what was actually reported by neighbors. This research supports prior findings that expectations of negative effects are much greater than what is actually experienced by neighbors. It also suggests that GH operators might wish to capitalize on the positive expectations that may be overshadowed by the more commonly voiced negative expectations.

Corneil, T. A., Kuyper, L. M., Shoveller, J., Hogg, R. S., Li, K., Spittal, P. M. et al. (2006). Unstable housing, associated risk behaviour, and increased risk for HIV infection among injection drug users. *Health & Place*. *Vol.12(1)(pp 79-85)*, 2006., 79-85.

Abstract: We sought to examine the relationship between housing status and risk of HIV-infection among injection drug users in Vancouver, Canada. Using Kaplan-Meier survival analysis, we found an elevated HIV incidence rate among those who reported residing in unstable housing (log-rank $p=0.006$). In Cox's regression survival analysis, unstable housing remained marginally associated with elevated risks of HIV infection (relative hazard=1.40 (95% confidence interval: 0.09-2.00); $p=0.084$) after adjustment for potential confounders including syringe sharing. Adjusted generalized estimating equations analysis that examined factors associated with unstable housing demonstrated that residing in unstable housing was independently associated with several HIV risk behaviours including borrowing used needles (adjusted odds ratio (OR)=1.14) and sex-trade involvement (adjusted OR=1.19). Our findings suggest that unstable housing environments are associated with elevated risk of HIV- infection due to risk behaviours that take place in these environments. Implications for policy including more comprehensive housing interventions (e.g. 'floating support') are discussed. copyright 2004 Elsevier Ltd. All rights reserved. <2>

Correia, C. J., Carey, K. B., & Borsari, B. (2002). Measuring substance-free and substance-related reinforcement in the natural environment. *Psychol Addict Behav*, *16*, 28-34.

Abstract: The present study sought to provide further evidence for the validity of a modified version of the Pleasant Events Schedule (PES; D. J. MacPhillamy & P. M. Lewinsohn, 1982) designed to measure substance-free and substance-related reinforcement. A sample of 134 young adults completed the modified PES along with measures of substance use and quality of life. The results extend previous research on the modified PES in 3 ways: (a) Information regarding the relationships between substance-related reinforcement and substance use are expanded to include substance-use frequency, quantity, and related negative consequences; (b) relationships between substance-free reinforcement and non-substance-related variables are established; and (c) the distinctiveness of the substance-free and substance-related reinforcement scores is demonstrated. The utility of reinforcement surveys in the study of substance use is discussed, with special emphasis placed on possible treatment implications

Coughey, K., Feighan, K., Lavelle, K., Olson, K., DeCarlo, M., & Medina, M. (1999). Project H. O. M. E.: A comprehensive program for homeless individuals with mental illness and substance use

disorders. *Alcoholism Treatment Quarterly*, 17, 133-148.

Abstract: Project H.O.M.E. (Housing Opportunities, Medical Care and Education) is an innovative, multi-faceted homelessness prevention program in Philadelphia, PA, designed to reduce individual, community/neighborhood and societal risk factors for the recurrence of homelessness among individuals with severe mental illness and/or substance use disorders. Tailored to the needs and abilities of each individual, Project H.O.M.E. uses a combination of prevention strategies that includes street outreach, three levels of housing, extensive on-site services (education, employment, health care, addictions counseling, and social activities) and linkages to other services. Project H.O.M.E. also advocates for the homeless population through political activism. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Davis, K. E. & O'Neill, S. J. (2005). Special section on relapse prevention: A focus group analysis of relapse prevention strategies for persons with substance use and mental disorders. *Psychiatric Services*, 56, 1288-1291.

Abstract: Objective: The authors conducted a qualitative, thematic analysis of focus group data to determine the strategies and supports persons with dual diagnoses rely on in their relapse prevention efforts. Methods: Data from four focus group sessions conducted at a large psychosocial rehabilitation center were analyzed for recurrent responses about what was most helpful in maintaining remission and grouped into major categories and subcategories. Each focus group comprised four to nine consumers who had been in remission from substance use for at least six months. A total of 27 consumers participated in the focus groups. Results: The data indicate that maintaining stable housing, relying on "positive" social support, engaging in prayer or relying on a "higher power," participating in a meaningful activity, and thinking differently about life are important strategies for consumers in their attempts to stay clean. Just as frequently mentioned in the groups were conscious attempts to eat regularly, get sufficient sleep, and look presentable. Conclusion: Although this study was exploratory in nature, it identified areas for further qualitative study of strategies for relapse prevention among persons with dual diagnoses. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Davis, M. I., Olson, B. D., Jason, L. A., Alvarez, J., & Ferrari, J. R. (2006). Cultivating and maintaining effective action research partnerships: The DePaul and Oxford house collaborative. *Journal of Prevention & Intervention in the Community*, 31, 3-12.

Abstract: In this paper, we review the result of research conducted in the context of a 13-year collaborative partnership between DePaul University and a community-based, self-run, residential substance abuse recovery program called Oxford House. This collaborative effort highlights several examples of the research and action activities fostering a positive alliance that benefited both the research team and the Oxford House community. It also proposed practical guidelines for developing effective action research collaboratives that may be helpful to others who desire to cultivate and maintain similar mutually beneficial partnerships; including such processes as the development of trust, respecting the personal experiences of the community members and group, commitment to serving the community, validating findings with organization members, and accountability. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

De, L. G., Sacks, S., Staines, G., & McKendrick, K. (2000). Modified therapeutic community for homeless mentally ill chemical abusers: treatment outcomes. *Am J Drug Alcohol Abuse*, 26, 461-480.

Abstract: This study compared homeless mentally ill chemical abuser (MICA) clients (n = 342), male and female, sequentially assigned to either of two modified therapeutic community programs (TC1 and TC2) and to a treatment-as-usual (TAU) control group. Follow-up interviews were obtained at 12 months postbaseline and at time F (on average more than 2 years postbaseline) on a retrieved sample of 232 (68%) clients and 281 (82%) clients, respectively. 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 TC2, with lower demands and more staff guidance, was superior to modified TC1. Completers of both TC programs showed significantly greater improvement than dropouts and a subgroup of TAU clients with high exposure (i.e., more than 8 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

Dear, M. (1992). Understanding and overcoming the NIMBY syndrome. *Journal of the American Planning Association*, 58.

Abstract: This essay focuses on the siting of human services facilities. NIMBY sentiments can have a devastating effect on the provision of human services, leading to the withdrawal of tax dollars for needed programs or to the closure of a facility. Consumers, thus, either have to do without service, or travel excessive distances to obtain service. At the very minimum, NIMBY sentiments can sour community-facility relations in ways that are detrimental to client well-being. Of course, not all opposition is counterproductive: Neighborhood complaints can result in valuable improvements to proposed programs; and vocal, client-led opposition may cause positive adjustments to the program plans of human service providers. This essay, however, focuses on the more self-interested, turf-protectionist behavior of facility opponents in an attempt to provide a perspective on the NIMBY phenomenon and to reduce an apparently chaotic concept to manageable proportions in ways that will be useful for planners, advocates, and service providers.

Drake, R. E., Yovetich, N. A., Bebout, R. R., Harris, M., & McHugo, G. J. (1997). Integrated treatment for dually diagnosed homeless adults. *J Nerv.Ment Dis*, 185, 298-305.

Abstract: This study examined the effects of integrating mental health, substance abuse, and housing interventions for homeless persons with co-occurring severe mental illness and substance use disorder. With the use of a quasi-experimental design, integrated treatment was compared with standard treatment for 217 homeless, dually diagnosed adults over an 18-month period. The integrated treatment group had fewer institutional days and more days in stable housing, made more progress toward recovery from substance abuse, and showed greater improvement of alcohol use disorders than the standard treatment group. Abuse of drugs other than alcohol (primarily cocaine) improved similarly for both groups. Secondary outcomes, such as psychiatric symptoms, functional status, and quality of life, also improved for both groups, with minimal group differences favoring integrated treatment

Drake, R. E., Essock, S. M., Shaner, A., Carey, K. B., Minkoff, K., Kola, L. et al. (2001). Implementing dual diagnosis services for clients with severe mental illness. *Psychiatr Serv*, 52, 469-476.

Abstract: After 20 years of development and research, dual diagnosis services for clients with severe mental illness are emerging as an evidence-based practice. Effective dual diagnosis programs combine mental health and substance abuse interventions that are tailored for the complex needs of clients with comorbid disorders. The authors describe the critical components of effective programs, which include a comprehensive, long-term, staged approach to recovery; assertive outreach; motivational interventions; provision of help to clients in acquiring skills and supports to manage both illnesses and to pursue functional goals; and cultural sensitivity and competence. Many state mental health systems are implementing dual diagnosis services, but high-quality services are rare. The authors provide an overview of the numerous barriers to implementation and describe implementation strategies to overcome the barriers. Current approaches to implementing dual diagnosis programs involve organizational and financing changes at the policy level, clarity of program mission with structural changes to support dual diagnosis services, training and supervision for clinicians, and dissemination of accurate information to consumers and families to support understanding, demand, and advocacy

Drake, R. E., Mueser, K. T., Brunette, M. F., & McHugo, G. J. (2004). A review of treatments for people with severe mental illnesses and co-occurring substance use disorders. *Psychiatr Rehabil.J*, 27, 360-374.

Abstract: Several interventions for people with co-occurring severe mental illnesses and substance use disorders have emerged since the early 1980s. This paper reviews 26 controlled studies of psychosocial interventions published or reported in the last 10 years (1994-2003). Though most studies have methodological weaknesses, the cumulative evidence from experimental and quasi-experimental research supports integrating outpatient mental health and substance abuse treatments into a single, cohesive package. Effective treatments are also individualized to address personal factors and stage of motivation, e.g., engaging people in services, helping them to develop motivation, and helping them to develop skills and supports for recovery. Accumulating evidence from quasi-experimental studies also suggests that integrated residential treatment, especially long-term (one year or more) treatment, is helpful for individuals who do not respond to outpatient dual disorders interventions. Current research aims to refine and test individual components and combinations of integrated treatments

Drake, R. E. & Mueser, K. T. (2000). Psychosocial approaches to dual diagnosis. *Schizophrenia Bulletin, Special Issue: Psychosocial treatment for schizophrenia*, 26, 105-118.

Abstract: Provides a brief overview of current research on the epidemiology, adverse consequences, and phenomenology of co-occurring substance use disorder (SUD) in patients with severe mental illness, followed by a more extensive review of current approaches to services, assessment, and treatment. Accumulating evidence shows that comorbid SUD is quite common among individuals with severe mental illness and that these individuals suffer serious adverse consequences of SUD. The research further suggests that traditional, separate services for individuals with dual disorders are ineffective, and that integrated treatment programs, which combine mental health and substance abuse interventions, offer more promise. In addition to a comprehensive integration of services, successful programs include assessment, assertive case management, motivational interventions for patients who do not recognize the need for substance abuse treatment, behavioral interventions for those who are trying to attain or maintain abstinence, family interventions, housing, rehabilitation, and psychopharmacology. Further research is needed on the organization and financing of dual-diagnosis services and on specific components of the integrated treatment model, such as group treatments, family interventions, and housing approaches. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Drake, R. E., Wallach, M. A., & McGovern, M. P. (2005). Special section on relapse prevention: Future directions in preventing relapse to substance abuse among clients with severe mental illnesses. *Psychiatric Services*, 56, 1297-1302.

Abstract: The authors review the literature on substance use disorders among persons with severe mental illnesses, including the other papers in this special section on relapse prevention, and suggest future directions. Although prevention of relapse to substance abuse has a well-developed theoretical and empirical base, this perspective has rarely been applied to persons with co-occurring severe mental illness. Research indicates that clients with co-occurring disorders are highly prone to relapse to substance abuse, even after they have attained full remission. Their risk factors include exacerbations of mental illness, social pressures within drug-using networks, lack of meaningful activities and social supports for recovery, independent housing in high-risk neighborhoods, and lack of substance abuse or dual diagnosis treatments. The evidence in hand suggests several steps: developing healthy and protective environments that are experienced as nurturing of recovery; helping people make fundamental changes in their lives, such as finding satisfying jobs, abstinent friends, networks of people who are in the process of recovery, and a sense of meaning; providing specific and individualized treatments for mental illnesses, substance use disorders, and other co-occurring problems; and developing longitudinal research on understanding and preventing relapse that addresses social context as well as biological vulnerabilities and cognitive strategies. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Evans, L. & Strathdee, S. A. (2006). A roof is not enough: Unstable housing, vulnerability to HIV infection and the plight of the SRO. *International Journal of Drug Policy*, 17, 115-117.

Abstract: Comments on the article by Shannon et al. (see record 2006-03426-008). Indeed, in this issue of the *International Journal of Drug Policy*, Shannon, Ishida, Lai, and Tyndall (2006) report that HIV-infected residents of the downtown eastside in Vancouver were 1.5 times more likely to live in SROs than HIV-uninfected persons from the same community. Although they do not assert that this relationship is causal, these authors argue that the SRO problem in Vancouver will undermine the city's "Four Pillar" strategy that attempts to integrate prevention, harm reduction, drug treatment and enforcement to address the problem of illicit drug use in Vancouver's neighbourhoods. If there were mobile teams that were funded through the health care system to provide services into the SRO hotels in a flexible and accessible way, those who are currently not in receipt of basic services would be engaged. This is a transportable model, which requires adequate staffing levels, appropriate training and supports, in addition to health partners. The challenges in providing the right level of supports to this population are many. With Vancouver's supervised injection site, city officials took the critical first step in publicly acknowledging drug injectors' rights to use drugs without being sentenced to death. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Fairbairn, N., Wood, E., Small, W., Stoltz, J.-A., Li, K., & Kerr, T. (2006). Risk profile of individuals who provide assistance with illicit drug injections. *Drug & Alcohol Dependence*, Vol. 82(1)(pp 41-46), 2006. Date of Publication: 15 MAR 2006., 41-46.

Abstract: Background: Assisted injection is a common practice among injection drug users (IDU) that

carries significant risk for health-related harm. However, little is known about the individuals who provide assistance with injections. Methods: We evaluated factors associated with providing help injecting among participants enrolled in the Vancouver Injection Drug User Study (VIDUS) using univariate and logistic regression analyses. We also examined self-reported relationships between the provider and the receiver of assisted injection, if compensation was provided for assistance, and what type of compensation was given. Results: Of the 704 IDU eligible for this analysis, 193 (27.4%) had provided help injecting during the last 6 months. Variables independently associated with providing help injecting included: lending one's own syringe (adjusted odds ratio [AOR] = 3.99, $p = 0.004$); frequent heroin injection (AOR = 3.75, $p < 0.001$); unstable housing (AOR = 2.15, $p < 0.001$); binge drug use (AOR = 2.01, $p = 0.012$); frequent cocaine injection (AOR = 1.95, $p = 0.002$); and frequent use of crack cocaine (AOR = 1.85, $p = 0.002$). Help was most often provided to a casual (47.2%) or a close friend (41.5%). Of the 96 (49.7%) individuals who received compensation for providing help, the most common forms of compensation were drugs (89.6%) and money (45.8%). Conclusion: Providing help injecting was common among IDU in this cohort and was associated with various high-risk behaviours, including elevated levels of syringe lending. These findings indicate the need for interventions that offset the risks associated with this dangerous practice. copyright 2005 Elsevier Ireland Ltd. All rights reserved. <2>

Fakhoury, W. K. H., Murray, A., Shepherd, G., & Priebe, S. (2002). Research in supported housing. *Social Psychiatry & Psychiatric Epidemiology*. Vol.37(7)(pp 301-315), 2002., 301-315. Abstract: Background. De-institutionalization has led to the provision of various forms of housing with or without support for people with mental illness in the community. In this paper, we review the conceptual issues related to the provision of supported housing schemes, the characteristics of residents, research methods and outcomes, and the factors influencing the quality of care provided. Methods. A Medline and hand search of published literature was complemented by information derived from contacting expert researchers in the field. Findings. There is considerable diversity of models of supported housing and inconsistent use of terminology to describe them. This makes it difficult to compare schemes, processes, and outcomes. Patients in supported housing are characterized by deficits in self-care and general functioning, whilst behavioral problems such as violence, drug abuse and extreme antisocial habits predict exclusion from supported housing. Most evaluative studies are merely descriptive. In terms of outcomes, it seems that functioning can improve, social integration can be facilitated, and residents are generally more satisfied in supported housing compared with conventional hospital care. Further evidence suggests that most patients prefer regimes with low restrictiveness and more independent living arrangements, although loneliness and isolation have occasionally been reported to be a problem. Little information is available on the factors that mediate outcomes and on skills required by staff. Conclusion. Research in supported housing for psychiatric patients has so far been neglected. Large scale surveys on structure, process, and outcomes across a variety of housing schemes may be useful in the future to identify some of the key variables influencing outcomes. The use of direct observation methods in conjunction with other more conventional, standardized instruments may also highlight areas for improvement. In conducting research, structure and process, as well as outcomes, need to be considered. Thus, we need to know not just what to provide, but how to provide it in such a way that it will maximize beneficial outcomes. This represents a considerable research agenda. <3>

Freisthler, B. & Gruenewald, P. J. (2005). Social Ecology and the Invention of New Regulatory Strategies for Preventing Drug and Alcohol Problems. In T. Stockwell, P. J. Gruenewald, J. W. Toumbourou, & W. Loxley (Eds.), *Preventing harmful substance use: The evidence base for policy and practice* (pp. 291-306). New York, NY, US: John Wiley & Sons Ltd. Abstract: (From the chapter) Community-based prevention programs are one effective means of reducing alcohol- and drug-related harm. But there is little information on how policy and regulatory change in communities interact with local conditions to moderate reductions in harm. Understanding the differential effectiveness of policies across different neighborhoods will enable focused preventive interventions to reduce alcohol and drug problems. In order to understand the impact of community-wide global policies on local neighborhood problems, prevention researchers must understand the local correlates of problem outcomes. The current chapter uses social disorganization and routine activities theories to explain how different characteristics of neighborhoods (population and place characteristics) are related to a variety of problem outcomes (assaults, motor vehicle crashes, drug sales, drug possession, and drug overdoses). An ecological model is developed which describes how neighborhood conditions may be related to outcomes

across areas of one community. An important facet of this model is that it assumes the movement of populations within and across neighborhood areas and interactions between local and neighboring populations are important components of a full explanation of the geographic distribution of alcohol and drug problems. Results from statistical analyses of community-based data show: (1) population and place characteristics both make important contributions to problem rates; (2) spatial interactions of populations between neighborhood areas affect drug and alcohol problems; and (3) risk and protective factors are heterogeneously related to problem outcomes across community areas. Policies that continue global efforts to reduce poverty, improve education, and eliminate poor housing will generally act to reduce alcohol- and drug-related problems. Furthermore, regulatory efforts to change rates of drug and alcohol problems using other mechanisms (i.e., reductions in outlet densities) would benefit from some local focus. Until the mechanisms that relate these characteristics of regulation to problem outcomes are better understood, blanket regulation of these aspects of drug and alcohol markets will have to be undertaken with considerable care. Consequently, the local effects of preventive interventions will be moderated by the larger social contexts of community settings, contexts that, once recognized, may be used to enhance the effectiveness of these programs. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

French, M. T., Sacks, S., De, L. G., Staines, G., & McKendrick, K. (1999). Modified therapeutic community for mentally ill chemical abusers: outcomes and costs. *Eval.Health Prof.*, 22, 60-85.
Abstract: Several studies have established that the personal and social consequences of substance abuse are extensive and costly. These consequences are frequently compounded by mental illness. Although interventions that target mentally ill chemical abusers (MICAs) present several challenges, the potential benefits of successful interventions are significant. This article presents outcomes and costs of a modified therapeutic community (TC) intervention for homeless 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 postbaseline are compared for modified TC and TAU clients. The results of this 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

Galster, G., Pettit, K., Santiago, A., & Tatian, P. (2002). The Impact Of Supportive Housing On Neighborhood Crime Rates. *Journal of Urban Affairs*, 24, 289-315.
Abstract: Quantitative and qualitative methods are employed to investigate the extent to which proximity to 14 supportive housing facilities opening in Denver from 1992 to 1995 affects crime rates. The econometric specification provides pre- and post- controls for selection bias as well as a spatial autocorrelation correction. Focus groups with homeowners living near supportive housing provide richer context for interpreting the econometric results. The findings suggest that developers paying close attention to facility scale and siting can avoid negative neighborhood impacts and render their supportive housing invisible to neighbors. Implications for structuring local regulations and public education regarding supportive housing facilities follow.

Genevie, L., Struening, E. L., Kallos, J. E., & Geiler, I. (1988). Urban community reaction to health facilities in residential areas: Lessons from the placement of methadone facilities in New York City. *International Journal of the Addictions*, 23, 603-616.
Abstract: Neighborhood characteristics associated with negative reaction to community-based methadone maintenance treatment programs (MMTPs) were studied using the MMTPs in Brooklyn, Bronx, Manhattan, and Queens (71 census tracts). A measure of community opposition to the establishment of the clinics was developed (community reaction to methadone clinics [CRMCs]). Census and survey data were combined for data analysis. Results are presented following a fourfold conceptual framework focused on the community's social ecology, patient characteristics, clinic administration, and the physical ecology of the clinic location. Eight specific characteristics found within these 4 conceptual areas accounted for 49% of the variation in CRMCs. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Goldstein, M. B., Goodrich, E. J., & Brown, C. H. (1987). Where the Group Homes Are Found. *Sociology and Social Research*, 1987, 72, 1, Oct, 55-56, 566-56.
Abstract: Street addresses were determined for residential treatment centers (total N = 313) in Conn serving

5 client populations: criminal offenders, emotionally disturbed children, mentally ill adults, mentally retarded adults, & substance abusers. Characteristics of census tracts where centers were located are compared with characteristics of typical census tracts. Group homes serving the mentally retarded tend to be located in relatively advantaged communities, as compared to other types of group homes; community residences generally are located in larger urban centers. The reasons for differing geographic distribution patterns should be explored. W. H. Stoddard

Graham, L. & Hogan, R. (1990). Social Class and Tactics: Neighborhood Opposition to Group Homes. *The Sociological Quarterly*, 1990, 31, 4, winter, 513-529, -5299529.

Abstract: An analysis of community opposition to group homes for the mentally handicapped, using interview data obtained in a survey of NJ group home providers (N = 171). Since few neighborhoods successfully blocked the group homes, the success of neighborhood opposition is measured by its ability to sustain local government opposition to the home. Results indicate that deteriorating neighborhoods are most likely to organize in opposition, but that upper-middle class neighborhoods are most likely to enjoy private access to local officials & can, therefore, lobby effectively in opposition to group homes in their neighborhoods. Generally, lower & lower-middle class neighborhoods do not have lobbying privileges & must rely on mass mobilization, petition campaigns, & other public political tactics that are less effective in influencing local officials. If, however, they gain access to local officials & secure lobbying privileges, they are no less successful than their upper-middle class counterparts in influencing them. 3 Tables, 1 Figure, 1 Appendix, 36 References. Adapted from the source document

Greenfield, L., Burgdorf, K., Chen, X., Porowski, A., Roberts, T., & Herrell, J. (2004). Effectiveness of long-term residential substance abuse treatment for women: findings from three national studies. *Am J Drug Alcohol Abuse*, 30, 537-550.

Abstract: The effectiveness of residential substance abuse treatment for women was examined using data from the Center for Substance Abuse Treatment's Residential Women and Children/Pregnant and Postpartum Women (RWC/PPW) Cross-Site Study and two other recent national studies. Treatment success was defined as posttreatment abstinence from further drug or alcohol use, measured through in-person follow-up interviews conducted 6-12 months after each client's discharge. Despite differences in treatment programs, client profiles, follow-up intervals, data collection methods, and other factors, all three studies found high treatment success rates--ranging narrowly from 68% to 71% abstinent--among women who spent six months or more in treatment. Success rates were lower, and between-study differences were larger, for clients with shorter stays in treatment. Controlling for salient client and treatment project characteristics, strong associations between length of stay in treatment and posttreatment abstinence rate were found in all three studies, suggesting that women's length of stay in residential treatment is a major determinant of treatment effectiveness. In further analysis of RWC/PPW data, treatment completion was also found to be an important outcome factor. Among clients who remained in treatment for at least three months, those who achieved their treatment goals in three to five months abstinence outcomes were as good as those for clients who took more than six months to complete their treatment (76%-78% abstinent) and substantially better than those for clients who did not complete treatment (51%-52% abstinent). Notably, however, most of the RWC/PPW clients who successfully completed treatment (71%) required six months or more to do so

Harkness, J., Newman, S. J., & Salkever, D. (2004). The cost-effectiveness of independent housing for the chronically mentally ill: Do housing and neighborhood features matter? *Health Services Research*. Vol.39(5)(pp 1341-1360), 2004., 1341-1360.

Abstract: Objective. To determine the effects of housing and neighborhood features on residential instability and the costs of mental health services for individuals with chronic mental illness (CMI). Data Sources. Medicaid and service provider data on the mental health service utilization of 670 individuals with CMI between 1988 and 1993 were combined with primary data on housing attributes and costs, as well as census data on neighborhood characteristics. Study participants were living in independent housing units developed under the Robert Wood Johnson Foundation Program on Chronic Mental Illness in four of nine demonstration cities between 1988 and 1993. Study Design. Participants were assigned on a first-come, first-served basis to housing units as they became available for occupancy after renovation by the housing providers. Multivariate statistical models are used to examine the relationship between features of the residential environment and three outcomes that were measured during the participant's occupancy in a

study property: residential instability, community-based service costs, and hospital-based service costs. To assess cost-effectiveness, the mental health care cost savings associated with some residential features are compared with the cost of providing housing with these features. Data Collection/Extraction Methods. Health service utilization data were obtained from Medicaid and from state and local departments of mental health. Non-mental-health services, substance abuse services, and pharmaceuticals were screened out. Principal Findings. Study participants living in newer and properly maintained buildings had lower mental health care costs and residential instability. Buildings with a richer set of amenity features, neighborhoods with no outward signs of physical deterioration, and neighborhoods with newer housing stock were also associated with reduced mental health care costs. Study participants were more residentially stable in buildings with fewer units and where a greater proportion of tenants were other individuals with CMI. Mental health care costs and residential instability tend to be reduced in neighborhoods with many nonresidential land uses and a higher proportion of renters. Mixed-race neighborhoods are associated with reduced probability of mental health hospitalization, but they also are associated with much higher hospitalization costs if hospitalized. The degree of income mixing in the neighborhood has no effect. Conclusions. Several of the key findings are consistent with theoretical expectations that higher-quality housing and neighborhoods lead to better mental health outcomes among individuals with CMI. The mental health care cost savings associated with these favorable features far outweigh the costs of developing and operating properties with them. Support for the hypothesis that 'diverse-disorganized' neighborhoods are more accepting of individuals with CMI and, hence, associated with better mental health outcomes, is mixed

Havassy, B. E., Alvidrez, J., & Owen, K. K. (2004). Comparisons of patients with comorbid psychiatric and substance use disorders: implications for treatment and service delivery. *Am J Psychiatry*, *161*, 139-145.

Abstract: OBJECTIVE: Individuals with co-occurring psychiatric and substance use disorders are treated in mental health and substance abuse treatment systems, yet research on comorbid disorders rarely includes comparisons across systems. Knowledge about patients who share the label "comorbid" but are found in different treatment sectors should illuminate service issues and inform policy development. Differences across systems should provide support for separate treatments; similarities should indicate the value of the integration of services. The hypothesis that there are meaningful clinical differences between patients with comorbid mental health disorders and patients in drug treatment was tested. METHOD: As part of a larger longitudinal study, 106 patients with comorbid illness from mental health (N=106) and drug treatment (N=120) settings were compared regarding diagnosis, drug use, and problem severity. Data were obtained by using the Diagnostic Interview Schedule for DSM-IV and the Addiction Severity Index. RESULTS: Few differences between groups emerged. There were no diagnostic differences except that schizophrenia spectrum disorders were more common among mental health (43%) than drug treatment (31%) patients. Although more drug abuse than mental health subjects reported drug use in the 30 days before treatment entry, the average number of days of drug use in this period was not different. CONCLUSIONS: These findings document the high prevalence of severe mental illness in drug treatment clients and of serious drug problems in mental health patients. Only minimal differences emerged between the groups and none that indicated need for specialized treatments in separate systems of care

Higgins, S. T., Budney, A. J., Bickel, W. K., Foerg, F. E., Donham, R., & Badger, G. J. (1994). Incentives improve outcome in outpatient behavioral treatment of cocaine dependence. *Arch Gen.Psychiatry*, *51*, 568-576.

Abstract: OBJECTIVE: To assess whether incentives improved treatment outcome in ambulatory cocaine-dependent patients. METHOD: Forty cocaine-dependent adults were randomly assigned to behavioral treatment with or without an added incentive program. The behavioral treatment was based on the Community Reinforcement Approach and was provided to both groups. Subjects in the group with incentives received vouchers exchangeable for retail items contingent on submitting cocaine-free urine specimens during weeks 1 through 12 of treatment, while the group without incentives received no vouchers during that period. The two groups were treated the same during weeks 13 through 24. RESULTS: Seventy-five percent of patients in the group with vouchers completed 24 weeks of treatment vs 40% in the group without vouchers (P = .03). Average durations of continuous cocaine abstinence documented via urinalysis during weeks 1 through 24 of treatment were 11.7 +/- 2.0 weeks in the group with vouchers vs 6.0 +/- 1.5 weeks in the group without vouchers (P = .03). At 24 weeks after treatment

entry, the voucher group evidenced significantly greater improvement than the no-voucher group on the Drug scale of the Addiction Severity Index (ASI), and only the voucher group showed significant improvement on the ASI Psychiatric scale. CONCLUSIONS: Incentives delivered contingent on submitting cocaine-free urine specimens significantly improve treatment outcome in ambulatory cocaine-dependent patients

Higgins, S. T. & Petry, N. M. (1999). Contingency management. Incentives for sobriety. *Alcohol Res.Health*, 23, 122-127.

Abstract: Contingency management (CM), the systematic reinforcement of desired behaviors and the withholding of reinforcement or punishment of undesired behaviors, is an effective strategy in the treatment of alcohol and other drug (AOD) use disorders. Animal research provides the conceptual basis for using CM in AOD abuse treatment, and human studies have demonstrated the effectiveness of CM interventions in reducing AOD use; improving treatment attendance; and reinforcing other treatment goals, such as complying with a medication regimen or obtaining employment

Higgins, S. T., Badger, G. J., & Budney, A. J. (2000). Initial abstinence and success in achieving longer term cocaine abstinence. *Exp.Clin Psychopharmacol.*, 8, 377-386.

Abstract: This study's goals were to characterize the relationship between early and longer term cocaine abstinence and assess whether increasing early abstinence increases longer term abstinence. Results from 190 cocaine-dependent outpatients were analyzed. Participants were divided into 2 conditions: (a) those treated with community reinforcement approach (CRA) plus contingent vouchers (n = 125) and (b) those treated with control treatments (n = 65). A period of sustained abstinence during treatment was associated with significantly greater odds of posttreatment abstinence, with no evidence of differences between the 2 treatment conditions in that regard. Treatment conditions differed in that CRA plus contingent vouchers increased the proportion of participants who sustained a period of during-treatment abstinence and increased abstinence during 6-month posttreatment follow-up. Devising interventions that increase the proportion of individuals who achieve an early period of sustained abstinence may be key to increasing longer term cocaine abstinence

Higgins, S. T., Wong, C. J., Badger, G. J., Ogden, D. E., & Dantona, R. L. (2000). Contingent reinforcement increases cocaine abstinence during outpatient treatment and 1 year of follow-up. *J Consult Clin Psychol*, 68, 64-72.

Abstract: This study assessed whether contingent incentives can be used to reinforce cocaine abstinence in dependent outpatients. Seventy cocaine-dependent outpatients were randomized into 2 conditions. All participants received 24 weeks of treatment and 1 year of follow-up. The treatment provided to all participants combined counseling based on the community reinforcement approach with incentives in the form of vouchers exchangeable for retail items. In 1 condition, incentives were delivered contingent on cocaine-free urinalysis results, whereas in the other condition incentives were delivered independent of urinalysis results. Abstinence-contingent incentives significantly increased cocaine abstinence during treatment and 1 year of follow-up compared with noncontingent incentives

Higgins, S. T., Sigmon, S. C., Wong, C. J., Heil, S. H., Badger, G. J., Donham, R. et al. (2003). Community reinforcement therapy for cocaine-dependent outpatients. *Arch Gen.Psychiatry*, 60, 1043-1052.

Abstract: OBJECTIVE: To examine the contributions of community reinforcement therapy to outcome in the community reinforcement approach (CRA) + vouchers outpatient treatment for cocaine dependence. METHODS: One hundred cocaine-dependent outpatients were randomly assigned to one of 2 treatment conditions: CRA + vouchers or vouchers only. All patients earned incentives in the form of vouchers exchangeable for retail items contingent on cocaine-free urinalysis results during treatment weeks 1 to 12. Incentives were combined with a 24-week course of CRA therapy designed to promote healthy lifestyle changes in the CRA + vouchers condition, while incentives represented the primary treatment in the vouchers-only condition. Patient drug use and psychosocial functioning were assessed at intake and at least every 3 months for 2 years after treatment entry. RESULTS: Patients treated with CRA + vouchers were retained better in treatment, used cocaine at a lower frequency during treatment but not follow-up, and reported a lower frequency of drinking to intoxication during treatment and follow-up compared with patients treated with vouchers only. Patients treated with CRA + vouchers also reported a higher frequency of days of paid employment during treatment and the initial 6 months of follow-up, decreased depressive

symptoms during treatment only, and fewer hospitalizations and legal problems during follow-up.
CONCLUSIONS: Combining CRA with vouchers had therapeutic effects on substance abuse and psychosocial functioning during treatment and posttreatment follow-up in cocaine-dependent outpatients, although effects on cocaine use appear to be limited to the treatment period

Higgins, S. T., Heil, S. H., & Lussier, J. P. (2004). Clinical implications of reinforcement as a determinant of substance use disorders. *Annu.Rev.Psychol*, 55, 431-461.
Abstract: Extensive scientific evidence indicates that reinforcement plays an important role in the genesis, maintenance, and recovery from substance use disorders. In this chapter, we review recent clinical research from laboratory, clinic, and naturalistic settings examining the role of reinforcement in substance use disorders. Well-controlled human laboratory studies are reviewed characterizing orderly interactions between the reinforcing effects of drugs and environmental context that have important implications for understanding risk factors for substance use disorders and for the development of efficacious interventions. Recent treatment-outcome studies on voucher-based contingency management and community reinforcement therapy are reviewed demonstrating how reinforcement and related principles can be used to improve outcomes across a wide range of different substance use disorders and populations. Overall, the chapter characterizes a vigorous area of clinical research that has much to contribute to a scientific analysis of substance use disorders

Hogan, R. (1986). Community Opposition to Group Homes. *Social Science Quarterly*, 1986, 67, 2, June, 442-449, -4499449.
Abstract: Mailed questionnaire & telephone interview data describing 171 attempts to locate group homes for mentally retarded & mentally ill clients in NJ suggest that neighborhood opposition can be managed, if not controlled, by group home providers who are able to control the flow of information regarding the group home location. Initial neighborhood opposition, as well as the opportunity to mobilize for effective influence, is generally greater when someone other than the agency informs the neighbors that a group home will be moving onto their street. Given the opportunity to organize in opposition, neighbors are more capable of sustaining intense opposition. 2 Tables, 1 Figure, 11 References. HA

Hogan, R. (1986). It Can't Happen Here: Community Opposition to Group Homes. *Sociological Focus*, 1986, 19, 4, Oct, 361-374, -3744374.
Abstract: A presentation of preliminary results from an ongoing study of community opposition to group homes for the mentally ill & mentally retarded of NJ. Data from interviews with 10 group home providers, & from the 1980 Federal Census for New Jersey, suggest, contrary to previous findings, that prior notification of neighbors is likely to reduce opposition, particularly in Mc neighborhoods. When neighbors learn of the location more than 2 months before the scheduled move-in, opposition is generally intense, particularly if someone other than the provider agency makes the disclosure; however, even intense opposition tends to subside over time. Only in areas with a moderate proportion of Coll-educated residents are levels of initial opposition sustained, although these levels are not likely to be significantly more intense. When Mc neighbors are not informed by the agency, there is likely to be a long & bitter struggle. 5 Tables, 3 Figures, 14 References. Modified HA

Hogan, R. (1989). Managing local government opposition to community-based residential facilities for the mentally disabled. *Community Mental Health Journal*, V25, 33-41.
Abstract: Prior Notification policies have elicited fears of community opposition from agencies who have adopted a low profile approach in locating communitybased residential facilities. Nevertheless, data from a survey of New Jersey community care providers indicate that local government officials express less opposition when informed of the proposed location and invited to meet with the provider. Arranging to meet with local officials is most important when neighbors have leadership, since officials express more intense opposition when neighbors invite them to a meeting. The literature has already established the fact that meeting with neighbors can facilitate mobilization and thereby engender more intense opposition, both from neighbors and from local officials. Hence, the available evidence suggests that providers should meet with local officials to discuss the community care program but should attempt to deal with neighbors individually. This strategy is compatible with the policy of prior notification adopted in New Jersey.

Hurlburt, M. S., Hough, R. L., & Wood, P. A. (1996). Effects of substance abuse on housing stability of homeless mentally ill persons in supported housing. *Psychiatr Serv, 47*, 731-736.

Abstract: OBJECTIVE: The study examined two-year housing outcomes of homeless mentally ill clients who took part in an experimental investigation of supported housing. The relationships between housing outcomes and client characteristics, such as gender, psychiatric diagnosis, and substance use, were of primary interest. METHODS: A two-factor, longitudinal design was used. Homeless clients in San Diego County who were diagnosed as having chronic and severe mental illness were randomly assigned to four experimental conditions. Half of the clients were given better access to independent housing through Section 8 rent subsidy certificates. All clients received flexible case management, but half were provided more comprehensive case management services. The housing of each individual over a two-year period was classified in one of three categories: stable independent housing, stable housing in another setting in the community, or unstable housing. RESULTS: Clients with access to Section 8 housing certificates were much more likely to achieve independent housing than clients without access to Section 8 certificates, but no differences emerged across the two different levels of case management. Housing stability was strongly mediated by several covariates, especially the presence of problems with drugs or alcohol. CONCLUSIONS: Supported housing interventions can be very successful tools for stabilizing homeless mentally ill individuals in independent community settings. Advantages include the low level of restrictiveness of these settings and the preference of many clients for independent housing. However, the success of supported housing projects is likely to depend strongly on the specific characteristics of the population being served

Iutovich, M., Iutovich, J., & Strikland, W. J. (1996). Group Homes for the Mentally Ill? NIMBY! *Social Insight, 1996, 11-15*, 155-15.

Abstract: Investigated the level of local support for community-based group homes for the mentally ill (MI), & the type of individuals most & least willing to live & work near such homes. Telephone interview data from 418 randomly selected adults in Erie, PA, revealed that most (71.7%) were willing to locate such homes in residential neighborhoods; only 6.1% were definitely unwilling. Support was highest among those who (1) knew a MI person, (2) relied on education/experience vs the media for related information, (3) saw MIs as similar to other people, (4) believed MIs benefit from & deserve less restrictive environments, (5) did not attribute MI to lack of childhood love/attention, & (6) expressed general support for community-based services. Respondents reported decreasing comfort with increasing social proximity between themselves & the MI, suggesting that many who support group homes in the abstract would have not-in-my-backyard (NIMBY) reactions to actual homes. Nonsupporters cited safety & property value concerns. Strategies for maximizing support are outlined, including soliciting community input, increasing public contact with MIs, & using the media to educate. E. Blackwell

Jacobson, J. O. (2006). Do drug treatment facilities increase clients' exposure to potential neighborhood-level triggers for relapse? A small-area assessment of a large, public treatment system. *J Urban Health, 83*, 150-161.

Abstract: Research on drug treatment facility locations has focused narrowly on the issue of geographic proximity to clients. We argue that neighborhood conditions should also enter into the facility location decision and illustrate a formal assessment of neighborhood conditions at facilities in a large, metropolitan area, taking into account conditions clients already face at home. We discuss choice and construction of small-area measures relevant to the drug treatment context, including drug activity, disadvantage, and violence as well as statistical comparisons of clients' home and treatment locations with respect to these measures. Analysis of 22,707 clients discharged from 494 community-based outpatient and residential treatment facilities that received public funds during 1998-2000 in Los Angeles County revealed no significant mean differences between home and treatment neighborhoods. However, up to 20% of clients are exposed to markedly higher levels of disadvantage, violence, or drug activity where they attend treatment than where they live, suggesting that it is not uncommon for treatment locations to increase clients' exposure to potential environmental triggers for relapse. Whereas on average both home and treatment locations exhibit higher levels of these measures than the household locations of the general population, substantial variability in public treatment clients' home neighborhoods calls into question the notion that they hail exclusively from poor, high drug activity areas. Shortcomings of measures available for neighborhood assessment of treatment locations and implications of the findings for other areas of treatment research are also discussed

Jacobson, J. O. The Ecological Context of Substance Abuse Treatment Outcomes: Implications for NIMBY Disputes and Client Placement Decisions. *Dissertation Abstracts International, A: The Humanities and Social Sciences*, 2004, 65, 4, Oct, 1558-A, AA8-AAA.

Abstract: Treatment is an important part of the war on illicit drugs. However, most of the more than 1.1 million annual admissions to treatment end in client dropout. Why treatment often ends this way is largely unknown, though scholars have examined a number of factors related to client characteristics and program components. Absent from research on treatment outcomes to date is location: the physical, social, and economic attributes of neighborhoods where treatment clients live and receive treatment. The omission is surprising, given that drug use is often viewed as a societal pathology with its roots in a number of factors that depend on local conditions. I develop hypotheses of the influence of "treatment ecology" on retention, characterize the residential and treatment environments of the population of treatment clients in Los Angeles County in the period 1998-2000, construct multi-level Bayesian models to test for an association between neighborhood-level factors and client retention using individual-level episode data for publicly-funded programs, and derive bounds on the expected impact of location-oriented policies on individual and county-wide retention. Four contextual factors are examined: drug availability, social stressors, proximity to jobs, and proximity to retail establishments. Small-area proxy measures of each are developed using Census data and administrative data from a number of state and county agencies. I find that clients' residential environments are significantly worse than those of the non-client household population, particularly with respect to social stressors and drug availability, that the neighborhoods of treatment centers are worse still, and that homeless, African American, and other minority clients face the worst environments overall. Failure to complete in both outpatient and residential settings is associated with neighborhood-level social stressors. Provided these associations are causal, which remains to be shown, a policy that matched all clients with the most appropriate neighborhood would increase the county-wide rate of retention by up to 30%, resulting in 1670 additional completions in the first year of such a policy. Neighborhood-level variation in L.A. is such that, for each additional completion in residential care, one would need to invest 6.25 times more treatment capacity in the worst neighborhood compared to the best neighborhood (2 to 1 in outpatient). I review the literature on Locally Unwanted Land Uses and determine that while these analyses would be useful for selecting where to expand treatment, they are not likely to persuade opposed residents to host an unwanted treatment facility

James, R. (2005). *A Four Pillar Approach to Problematic Drug Use and Related Issues in the Central Okanagan*.

Jason, L. A., Olson, B. D., Ferrari, J. R., & Lo Sasso, A. T. (2006). Communal housing settings enhance substance abuse recovery. *American Journal of Public Health*. Vol.96(10)(pp 1727-1729), 2006., 1727-1729.

Abstract: Oxford Houses are democratic, mutual help-oriented recovery homes for individuals with substance abuse histories. There are more than 1200 of these houses in the United States, and each home is operated independently by its residents, without help from professional staff. In a recent experiment, 150 individuals in Illinois were randomly assigned to either an Oxford House or usual-care condition (i.e., outpatient treatment or self-help groups) after substance abuse treatment discharge. At the 24-month follow-up, those in the Oxford House condition compared with the usual-care condition had significantly lower substance use, significantly higher monthly income, and significantly lower incarceration rates

Jason, L. A., Davis, M. I., Ferrari, J. R., & Bishop, P. D. (2001). Oxford House: A review of research and implications for substance abuse recovery and community research. *Journal of Drug Education*, 31, 1-28.

Abstract: After treatment for substance abuse, whether it is in hospital-based treatment programs, therapeutic communities, or recovery homes, many patients return to former high-risk environments or stressful family situations. Returning to these settings without a network of people to support abstinence increases chances of a relapse. As a consequence, substance abuse recidivism following treatment is high for both men and women. Alternative approaches need to be explored, and there are some promising types of recovery homes. From a public health perspective, a series of studies conducted at DePaul University suggests that one type of recovery home for alcohol abuse recovery has much potential. For example, within this self-help communal living setting, recovering alcoholics were able to maintain employment, thereby reducing their need for government subsidies. Maintaining employment for recovering alcoholics

may promote increased personal responsibility, which may impact self-efficacy beliefs. These pilot studies, then, raised both theoretical and practical issues needing further evaluation. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Jason, L. A., Roberts, K., & Olson, B. D. (2005). Attitudes toward Recovery Homes and Residents: Does Proximity Make a Difference? *Journal of Community Psychology, 33*, 529-535.
Abstract: The present study investigated the attitudes of neighborhood residents toward a particular type of substance abuse recovery home (i.e., Oxford House). Individuals who lived next to these recovery homes versus those who lived a block away were assessed regarding their attitudes toward substance abuse recovery homes and individuals in recovery. The vast majority of those living next to a self-run recovery home knew of the existence of these recovery homes, whereas most residents living a block away did not know of their existence. Findings suggest that well managed and well functioning substance abuse recovery homes, such as Oxford Houses, elicit constructive and positive attitudes toward individuals in recovery and recovery homes. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Kaspro, W. J., Rosenheck, R., Frisman, L., & DiLella, D. (1999). Residential treatment for dually diagnosed homeless veterans: a comparison of program types. *Am J Addict, 8*, 34-43.
Abstract: This study compared two types of residential programs that treat dually diagnosed homeless veterans. Programs specializing in the treatment of substance abuse disorders (SA) and those programs addressing both psychiatric disorders and substance abuse problems within the same setting (DDX) were compared on (1) program characteristics, (2) clients' perceived environment, and (3) outcomes of treatment. The study was based on surveys and discharge reports from residential treatment facilities that were under contract to the Department of Veterans Affairs Health Care for Homeless Veterans program, a national outreach and case management program operating at 71 sites across the nation. Program characteristics surveys were completed by program administrators, perceived environment surveys were completed by veterans in treatment, and discharge reports were completed by VA case managers. DDX programs were characterized by lower expectations for functioning, more acceptance of problem behavior, and more accommodation for choice and privacy, relative to SA programs after adjusting for baseline differences. Dually diagnosed veterans in DDX programs perceived these programs as less controlling than SA programs, but also as having lower involvement and less practical and personal problem orientations. At discharge, a lower percentage of veterans from DDX than SA programs left without staff consultation. A higher percentage of veterans from DDX than SA programs were discharged to community housing rather than to further institutional treatment. Program effects were not different for psychotic and non-psychotic veterans. Although differences were modest, integration of substance abuse and psychiatric treatment may promote a faster return to community living for dually diagnosed homeless veterans. Such integration did not differentially benefit dually diagnosed veterans whose psychiatric problems included a psychotic disorder

Keane, T. M. & Kaloupek, D. G. (1997). Comorbid psychiatric disorders in PTSD. Implications for research. *Annals of the New York Academy of Sciences, 821*, 24-34.

Kellogg, S. H., Burns, M., Coleman, P., Stitzer, M., Wale, J. B., & Kreek, M. J. (2005). Something of value: the introduction of contingency management interventions into the New York City Health and Hospital Addiction Treatment Service. *J Subst Abuse Treat, 28*, 57-65.
Abstract: This paper explores the impact of the adoption of the contingency management approach by the Chemical Dependency Treatment Services of the New York City Health and Hospitals Corporation (HHC). The utilization of this approach grew out of an alliance between NIDA Clinical Trials Network-affiliated clinicians and researchers and a leadership team at the HHC. Interviews and dialogues with administrators, staff, and patients revealed a shared sense that the use of contingency management had: (1) increased patient motivation for treatment and recovery; (2) facilitated therapeutic progress and goal attainment; (3) improved the attitude and morale of many staff members and administrators; and (4) developed a more collegial and affirming relationship not only between patients and staff, but also among staff members

Kosviner, A. (1973). Unwanted neighbors. *International Journal of the Addictions, Vol. 8*, 801-808.
Abstract: Describes attempts to establish a residential hostel project for drug addicts and the resultant

community opposition to the project. An information program designed to promote community understanding of the program is described, and methods of mobilizing support are discussed. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Kraus, D. & Serge, L. (2005). Innovative Approaches for Providing Services to Homeless People with Concurrent Disorders (Substance Use and Mental Illness): A Review of the Literature. National Homelessness Initiative, Government of Canada [On-line]. Available: http://www.homelessness.gc.ca/research/toolkit/docs/lr_sparcbc_e.pdf
Abstract: Report prepared for the Social Planning and Research Council of B.C.

Leda, C. & Rosenheck, R. (1992). Mental health status and community adjustment after treatment in a residential treatment program for homeless veterans. *Am J Psychiatry*, 149, 1219-1224.
Abstract: OBJECTIVE: An uncontrolled outcome study was conducted to examine clinical improvement and the relationship of psychiatric and substance abuse problems, community adjustment, and housing status among homeless veterans who participated in a multisite residential treatment program. METHOD: The study was performed at three U.S. Department of Veterans Affairs medical centers in Florida, Ohio, and California. Baseline, discharge, and 3-month postdischarge follow-up data were collected for 255 veterans admitted to the Domiciliary Care for Homeless Veterans Program. Multiple dimensions of outcome were examined, including psychiatric symptoms, alcohol abuse, drug abuse, social contacts, income, employment, and housing. RESULTS: Program participation was found to be associated with improvement in all areas of mental health and community adjustment. Improvement in psychiatric symptoms was associated with superior housing outcomes and improvement in community adjustment. When correlates of improvement in alcohol and drug abuse were examined, only one of eight possible relationships was found to be significant: improvement in alcohol problems was positively associated with improvement in employment. CONCLUSIONS: Homeless mentally ill veterans derive clear benefits from participation in a multidimensional residential treatment program. Improvement in mental health problems, however, is weakly linked to improvement in other areas, suggesting that treatment programs may have to attend separately to multiple domains of life adjustment

Lipton, F. R., Siegel, C., Hannigan, A., Samuels, J., & Baker, S. (2000). Tenure in supportive housing for homeless persons with severe mental illness. *Psychiatr Serv*, 51, 479-486.
Abstract: OBJECTIVE: The study examined the long-term effectiveness of approaches to housing homeless persons with serious mental illness. METHODS: A total of 2,937 persons placed in high-, moderate, -and low-intensity housing were followed for up to five years. Intensity reflected on the amount of structure and degree of clients' independence. The outcome variable was tenure in housing. Cox stepwise regression was used to calculate risk ratios of becoming discontinuously housed. RESULTS: Thirty percent of the sample were initially placed in high-intensity settings, 18 percent in moderate-intensity settings, and 52 percent in low-intensity settings. Those in high-intensity settings tended to be younger, to be referred from hospitals, and to have a history or diagnosis of substance abuse. Individuals in moderate-intensity settings were more likely to be female and were least likely to have substance abuse problems. Individuals in low-intensity settings were more likely to be referred by municipal shelters and to have lived in municipal shelters for four or more months. After one, two, and five years, 75 percent, 64 percent, and 50 percent, respectively, of the sample were continuously housed. Older age was associated with longer tenure, and having a history of substance abuse was associated with shorter tenure. Individuals referred from a state psychiatric center had a greater risk of shorter tenure than other types of referrals. CONCLUSIONS: Results show that homeless persons with serious mental illness can remain in stable housing for periods of up to five years, supporting the premise that long-term residential stability can be enhanced by providing access to safe and affordable supportive housing

Manzoni, P., Brochu, S., Fischer, B., & Rehm, J. Å. (2006). Determinants of property crime among illicit opiate users outside of treatment across Canada. *Deviant Behavior*, 27, 351-376.
Abstract: Criminal activities account for a major proportion of the social costs related to illicit drug use. This article examines the factors contributing to property crime activity among a community sample of 653 untreated regular illicit opiate users in 5 Canadian cities (OPICAN study). Multivariate analyses showed the frequency of heroin, cocaine, and crack use, gender, housing status, and past criminal justice involvement as predictors of property crime. Furthermore, crack use had a significantly different impact on

property crime depending on housing status and city. These findings underline the need for targeted intervention efforts toward a reduced crime burden. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

March, J. C., Oviedo-Joekes, E., & Romero, M. (2006). Drugs and social exclusion in ten European cities. *European Addiction Research*. Vol.12(1)(pp 33-41), 2006., 33-41.
Abstract: Aim: To describe social characteristics seen among socially excluded drug users in 10 cities from 9 European countries, and identify which social exclusion indicators (i.e. housing, employment, education) are most closely linked to intravenous drug use. Design: Cross-sectional survey. Setting: Interviews were held in social services centers, town halls, streets, squares and other usual meeting points of the target population. Participants: The sample comprises 1,879 participants who have used heroin and/or cocaine and certain derivatives (92.3%) over the last year. Males accounted for 69.7% of the sample, and the mean age was 30.19 years. Participants were recruited in 10 cities: Seville and Granada, Spain; Cologne, Germany; Vienna, Austria; Brussels, Belgium; Athens, Greece; Dublin, Ireland; London, England; Lisbon, Portugal, and Perugia, Italy. Measurements: Structured face-to-face questionnaire, conducted by privileged access interviewers. Results: Cannabis, heroin and cocaine are the most widely used substances. In the total sample, 60.2% injected drugs during the last year, 45.9% reported having hepatitis C; 54.9% have been in prison; 14.2% are homeless; 11.3% have a regular job, and 35.2% are involved in illegal activities. Hierarchical logistic regression analysis (injectors and non-injectors) showed that older participants have a greater likelihood of injecting than younger ones. Social exclusion variables associated with intravenous drug use are incarceration, homelessness, irregular employment, and delinquency. Participants who abandoned or were expelled from a drug treatment program are at greater risk of injecting drugs than participants who have never had treatment, are currently in treatment or have been released. Conclusion: Personal, social, and economic conditions are all linked in a process of social exclusion that compounds problem drug misuse. Given the findings of this study, we believe that there is a clear need for specific programs targeting specific groups, i.e., distinct strategies must be set in place, in line with the profile and needs of the patient in each context. Copyright copyright 2006 S. Karger AG. <7>

Mares, A. S., Kaspro, W. J., & Rosenheck, R. A. (2004). Outcomes of supported housing for homeless veterans with psychiatric and substance abuse problems. *Ment Health Serv Res.*, 6, 199-211.
Abstract: This study examines the effect of previous participation in time limited residential treatment and other factors on treatment outcomes among homeless veterans with serious mental illness placed into permanent supported housing. The sample consisted of 655 veterans placed into supported housing at 18 sites through the VA's Healthcare for Homeless Veterans (HCHV) Supported Housing Program during the period 1993-2000. Data on client and program characteristics, and treatment outcomes, were documented by HCHV case managers staffing these programs. Data on use of VA services, including time limited residential treatment received 6 months prior to entry into supported housing, were extracted from VA administrative files. The relationship of prior residential treatment, as well as other measures of client characteristics, service use, and program characteristics, to outcomes were assessed using both bivariate and multivariate Cox proportional hazards regression and logistic regression. After adjusting for client characteristics, service use, and program characteristics, no differences in outcomes were found between clients who had received prior residential treatment and those placed directly into permanent supported housing. Prior residential treatment appears to have little effect on treatment outcomes among formerly homeless veterans placed into permanent supported housing programs providing indirect support for the direct placement supported housing model

Mares, A. S. & Rosenheck, R. A. (2004). One-year housing arrangements among homeless adults with serious mental illness in the ACCESS program. *Psychiatr Serv*, 55, 566-574.
Abstract: OBJECTIVE: This study examined the various living arrangements among formerly homeless adults with mental illness 12 months after they entered case management. METHODS: The study surveyed 5,325 clients who received intensive case management services in the Access to Community Care and Effective Services and Supports (ACCESS) program. Living arrangements 12 months after program entry were classified into six types on the basis of residential setting, the presence of others in the home, and stability (living in the same place for 60 days). Differences in perceived housing quality, unmet housing needs, and overall satisfaction were compared across living arrangements by using analysis of covariance. RESULTS: One year after entering case management, 37 percent of clients had been independently housed

during the previous 60 days (29 percent lived alone in their own place and 8 percent lived with others in their own place), 52 percent had been dependently housed during the previous 60 days (11 percent lived in someone else's place, 10 percent lived in an institution, and 31 percent lived in multiple places), and 11 percent had literally been homeless during the previous 60 days. Clients with less severe mental health and addiction problems at baseline and those in communities that had higher social capital and more affordable housing were more likely to become independently housed, to show greater clinical improvement, and to have greater access to housing services. After the analysis adjusted for potentially confounding factors, independently housed clients were more satisfied with life overall. However, no significant association was found between specific living arrangements and either perceived housing quality or perceived unmet needs for housing. CONCLUSIONS: Living independently was positively associated with satisfaction of life overall, but it was not associated with the perception that the quality of housing was better or that there was less of a need for permanent housing

Marshall, S. K., Charles, G., Hare, J., Ponzetti Jr, J. J., & Stokl, M. (2005). Sheway's services for substance using pregnant and parenting women: Evaluating the outcomes for infants. *Canadian Journal of Community Mental Health*. Vol.24(1)(pp 19-34), 2005., 19-34.

Abstract: Sheway is a single-access comprehensive street-front service to pregnant and parenting women with a history of alcohol and/or drug abuse that is located in one of Canada's poorest neighbourhoods, the Downtown Eastside of Vancouver. This investigation assesses the concurrent health and social problems clients report upon entry into the program, service utilization, and the impact of services on neonate and infant well-being. Data were collected through the review of files from the 9 1/2 years of the agency's service. Findings suggest that the clients' concurrent health and social problems have increased over the years of operation while indicators of infant health have either improved or maintained steady rates. <5>

Martinez, T. E. & Burt, M. R. (2006). Impact of Permanent Supportive Housing on the Use of Acute Care Health Services by Homeless Adults. *Psychiatric Services*, 57, 992-999.

Abstract: Objective: This analysis examined the impact of permanent supportive housing on the use of acute care public health services by homeless people with mental illness, substance use disorder, and other disabilities. Methods: The sample consisted of 236 single adults who entered supportive housing at two San Francisco sites, Canon Kip Community House and the Lyric Hotel, between October 10, 1994, and June 30, 1998. Eighty percent had a diagnosis of dual psychiatric and substance use disorders. Administrative data from the city's public health system were used to construct a retrospective, longitudinal history of service use. Analyses compared service use during the two years before entry into supportive housing with service use during the two years after entry. Results: Eighty-one percent of residents remained in permanent supportive housing for at least one year. Housing placement significantly reduced the percentage of residents with an emergency department visit (53 to 37 percent), the average number of visits per person (1.94 to .86), and the total number of emergency department visits (56 percent decrease, from 457 to 202) for the sample as a whole. For hospitalizations, permanent supportive housing placement significantly reduced the likelihood of being hospitalized (19 to 11 percent) and the mean number of admissions per person (.34 to .19 admissions per resident). Conclusions: Providing permanent supportive housing to homeless people with psychiatric and substance use disorders reduced their use of costly hospital emergency department and inpatient services, which are publicly provided. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

McCoy, M. L., Devitt, T., Clay, R., Davis, K. E., Dincin, J., Pavick, D. et al. (2003). Gaining insight: who benefits from residential, integrated treatment for people with dual diagnoses? *Psychiatr Rehabil.J*, 27, 140-150.

Abstract: This retrospective study examines 18-month outcomes for 38 participants in an urban, residential integrated treatment (IT) program, and whether residents experienced different treatment benefits. Informed by an ACT team approach, the program emphasized harm reduction and motivational interventions. The design is naturalistic, and outcomes are self-comparisons over time reported in the aggregate. Repeated measurements with three standardized scales tracked stage of treatment and extent of alcohol and drug use. Outcomes analyses reveal advancements in stage of treatment and significant reductions in use of alcohol and drugs. Participants also worked more and were hospitalized less

McGeary, K. A., French, M. T., Sacks, S., McKendrick, K., & De, L. G. (2000). Service use and cost by mentally ill chemical abusers: differences by retention in a therapeutic community. *J Subst Abuse, 11*, 265-279.

Abstract: PURPOSE: Earlier research estimated the incremental costs and outcomes of a modified therapeutic community (modified TC) for mentally ill chemical abusers (MICAs) relative to a treatment-as-usual (TAU) control group. The present study extended the cost analysis by disaggregating the modified TC group into clients who completed the program (completers) and clients who dropped out (separaters). METHODS: Bivariate and multivariate analyses were conducted to estimate differences in treatment and other service costs among completers, separaters, and TAU. Subjects were sequentially assigned to the modified TC (n = 171) or TAU (n = 47), and the analysis period covered 12 months post-baseline. Using a standardized instrument to collect resource use and cost data, the estimated weekly cost per client in the modified TC was \$554, with completers showing a larger average cost of treatment (\$27,595) than separaters (\$9,986). RESULTS: The average TAU subject had a much higher cost for other (non-modified TC) services (\$29,795) relative to separaters (\$22,048) or completers (\$1,986). These findings suggest that, from baseline to the 12-month follow-up, the total cost of modified TC treatment and other services for completers may be slightly lower than the total cost for separaters or TAU subjects. Since the modified TC group had better outcomes than the TAU group, and the completers had better outcomes than the separaters, the modified TC program could be an effective mechanism to reduce the costs of service utilization as well as improve clinical outcomes. IMPLICATIONS: This detailed investigation into service utilization and cost provides policy-makers and program directors with valuable information regarding potentially cost-effective interventions and further underscores the importance of retention in treatment for this vulnerable population

McHugo, G. J., Mueser, K. T., & Drake, R. E. (2001). Treatment of substance abuse in persons with severe mental illness. In (pp. -259). (Ed); Bäcker, Wolfgang (Ed); Genner, Ruth (Ed). (2001). The treatment of schizophrenia--Status and emerging trends. (pp. 137-152). Ashland, OH, US: Hogrefe & Huber Publishers.

Abstract: (Created by APA) Summarizes the substance use and housing outcomes from two longitudinal evaluations of integrated treatment for dual disorders, substance abuse and severe mental illness, and draws conclusions from these studies for improving clinical practice. In the first study assertive community treatment (ACT) and standard case management programs (SCM) for persons with dual disorders were compared. Implementation criteria for the ACT teams included 9 essential features and 4 additional criteria that focused on dual disorders. The SCM programs incorporated many of the same principles, but implemented fewer of the features of the ACT model. In the second study, homeless, dually diagnosed subjects were placed in either the integrated treatment (IT) condition or the standard treatment (ST) group. Clients in the IT group received mental health treatment, substance abuse counseling, and housing services through a single community mental health center. Clients in the ST group received services through multiple agencies. Both studies showed that integrated dual disorders treatment improves the housing outcome. There was a reduction in psychiatric hospitalization in the first study for both conditions. In the second study, both hospitalization and homelessness decreased for the IT group. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

McLellan, A. T., McKay, J. R., Forman, R., Cacciola, J., & Kemp, J. (2005). Reconsidering the evaluation of addiction treatment: from retrospective follow-up to concurrent recovery monitoring. *Addiction, 100*, 447-458.

Abstract: Historically, addiction treatments have been delivered and evaluated under an acute-care format. Fixed amounts or durations of treatment have been provided and their effects evaluated 6-12 months after completion of care. The explicit expectation of treatment has been enduring reductions in substance use, improved personal health and social function, generally referred to as 'recovery'. In contrast, treatments for chronic illnesses such as diabetes, hypertension and asthma have been provided for indeterminate periods and their effects evaluated during the course of those treatments. Here the expectations are for most of the same results, but only during the course of continuing care and monitoring. The many similarities between addiction and mainstream chronic illnesses stand in contrast to the differences in the ways addiction is conceptualized, treated and evaluated. This paper builds upon established methods of during-treatment evaluation developed for the treatment of other chronic illnesses and suggests a parallel evaluation system for out-patient, continuing-care forms of addiction treatment. The suggested system retains traditional

patient-level, behavioral outcome measures of recovery, but suggests that these outcomes should be collected and reported immediately and regularly by clinicians at the beginning of addiction treatment sessions, as a way of evaluating recovery progress and making decisions about continuing care. We refer to this paradigm as 'concurrent recovery monitoring' and discuss its potential for producing more timely, efficient, clinically relevant and accountable evaluations

McNamara, C., Schumacher, J. E., Milby, J. B., Wallace, D., & Usdan, S. (2001). Prevalence of nonpsychotic mental disorders does not affect treatment outcome in a homeless cocaine-dependent sample. *Am J Drug Alcohol Abuse*, 27, 91-106.

Abstract: 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. Participants were 128 persons: 76.6% male, 23.4% female; 82.2% African-American, 17.2% Caucasian. There were 46 (35.9%) PSUDs and 82 (64.1%) DUAL participants. Cocaine (96.9%) and alcohol disorders (57.8%) were most prevalent overall, and 60.2% of participants had two or more psychoactive substance use disorders. DUAL participants had significantly more alcohol disorders than PSUDs (62.2% versus 50.0%). The most prevalent mental disorders (other than substance use) for the total and DUAL samples were, respectively, mood (51.6% and 80.5%) and anxiety (35.9% and 56.1%), and 31.3% and 48.8% had more than two mental disorders. The DUAL group had more severe problems than the PSUD group at baseline in alcohol, medical condition, employment/support, and psychiatric status areas on the ASI. Both groups showed treatment improvements at 6-months follow-up with the DUAL group showing greater mean changes than the PSUD group in five of the seven ASI areas. 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

Milby, J. B., Schumacher, J. E., Raczynski, J. M., Caldwell, E., Engle, M., Michael, M. et al. (1996). Sufficient conditions for effective treatment of substance abusing homeless. *Drug & Alcohol Dependence*, 43, 39-47.

Abstract: Treatment efficacy for homeless substance abusers (primarily crack cocaine) was studied in a randomized control design with subjects (n = 176) assigned to usual care (UC) or an enhanced day treatment program plus abstinent contingent work therapy and housing (EC). Subjects met DSM-III-R criteria for Substance Use Disorder and McKinny Act criteria for homelessness. UC involved weekly individual and group counseling. EC involved a day treatment program consisting of daily attendance, transportation, lunch, manualized psychoeducational groups, and individual counseling. A total of 131 (74.4%) subjects (62 UC and 69 EC) were treated and followed. UC subjects attended 28.5% and EC attended 48.4% of expected treatment during the first 2 months. After 2 months, EC subjects experienced up to 4 months of abstinent contingent work therapy (44.9% of EC subjects) and housing (37.7% of EC subjects), with day treatment available two afternoons per week. Longitudinal Wei-Lachin analyses of medians (reported alcohol use, days homeless and employed) and proportions (cocaine toxicologies) were conducted across 2-, 6-, and 12-month follow-up points. EC had 36% fewer positive cocaine toxicologies at 2-months and 18% fewer at 6-months than UC with regression toward baseline at 12-months. EC had 8 days fewer days of reported alcohol use in the past 30 days, 52 fewer days homeless in the past 60 days, and 10 more days employed in the past 30 days from baseline to the 12-months. UC showed no changes except a temporary increase in employment at 6-months. This is one of the first demonstrations that homeless cocaine abusers can be retained and effectively treated.

Milby, J. B., Schumacher, J. E., McNamara, C., Wallace, D., Usdan, S., McGill, T. et al. (2000). Initiating abstinence in cocaine abusing dually diagnosed homeless persons. *Drug Alcohol Depend.*, 60, 55-67.

Abstract: This study measured effectiveness of behavioral day treatment plus abstinence contingent housing and work therapy (DT+) versus behavioral day treatment alone (DT). A randomized controlled trial assessed participants at baseline, 2 and 6 months. Participants (N=110) met criteria for cocaine abuse or dependence, non-psychotic mental disorders, and homelessness. DT+ achieved greater abstinence at 2 and 6 months and more days housed at 6 months than DT. Effectiveness of DT+ was demonstrated, with greatest impacts on abstinence outcomes. Results replicated earlier work demonstrating effectiveness of

behavioral day treatment and contingency management as an effective combination for cocaine abusing homeless persons

Milby, J. B., Schumacher, J. E., Vuchinich, R. E., Wallace, D., Plant, M. A., Freedman, M. J. et al. (2004). Transitions during effective treatment for cocaine-abusing homeless persons: establishing abstinence, lapse, and relapse, and reestablishing abstinence. *Psychol Addict Behav*, *18*, 250-256. Abstract: Data are reported on drug use among cocaine-dependent homeless persons who participated in a clinical trial that compared day treatment only (DT, n = 69) with day treatment plus abstinent-contingent housing and work (DT+, n = 72). Drug use was measured with multiple weekly urine toxicologies. Compared with DT participants, more DT+ participants established abstinence, maintained abstinence for longer durations, were marginally significantly more likely to lapse, and significantly less likely to relapse. Of all participants who established abstinence and then relapsed, DT+ participants relapsed later and were more likely to reestablish abstinence. These analyses yield information on the processes involved in the manner in which drug use changes as a result of abstinent-contingent housing and work

Milby, J. B., Schumacher, J. E., Wallace, D., Frison, S., McNamara, C., Usdan, S. et al. (2003). Day treatment with contingency management for cocaine abuse in homeless persons: 12-month follow-up. *Journal of Consulting and Clinical Psychology*, *71*, 619-621.

Abstract: Abstinence, employment, and homelessness treatment outcomes at 12-month follow-up are presented from a study comparing behavioral day treatment plus abstinence-contingent housing and work therapy with behavioral day treatment only among homeless persons who abuse crack cocaine. Within-group improvements were revealed, but group differences for drug abstinence found in J. B. Milby et al. (2000) failed to persist at 12 months. Drug use measurement and treatment termination explanations are discussed. Within- but not between-group differences were found for employment and homelessness outcomes at long-term follow-up. Research extending abstinence contingencies and continuous drug use monitoring is recommended. Questions about effectiveness of contingency management alone, role of coexisting psychiatric disorders on treatment outcome, and individualized treatment dosing are offered. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Milby, J. B., Schumacher, J. E., Wallace, D., Freedman, M. J., & Vuchinich, R. E. (2005). To House or Not to House: The Effects of Providing Housing to Homeless Substance Abusers in Treatment. *American Journal of Public Health*, *95*, 1259-1265.

Abstract: Objectives: Housing typically is not provided to homeless persons during drug abuse treatment. We examined how treatment outcomes were affected under 3 different housing provision conditions. Methods: We studied 196 cocaine-dependent participants who received day treatment and no housing (NH), housing contingent on drug abstinence (ACH), or housing not contingent on abstinence (NACH). Drug use was monitored with urine testing. Results: The ACH group had a higher prevalence of drug abstinence than the NACH group (after control for treatment attendance), which in turn had a higher prevalence than the NH group. All 3 groups showed significant improvement in maintaining employment and housing. Conclusions: The results of this and previous trials indicate that providing abstinence-contingent housing to homeless substance abusers in treatment is an efficacious, effective, and practical intervention. Programs to provide such housing should be considered in policy initiatives. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Moggi, F., Brodbeck, J., Koltzsch, K., Hirsbrunner, H. P., & Bachmann, K. M. (2002). One-year follow-up of dual diagnosis patients attending a 4-month integrated inpatient treatment. *Eur.Addict Res.*, *8*, 30-37.

Abstract: The purpose of this study was to assess a 4-month inpatient treatment program based on integrated models for patients with substance use and psychiatric disorders (dual diagnosis patients). On admission and at the 1-year follow-up, a consecutive sample of 118 dual diagnosis patients who entered the program were assessed by interview. Eighty-four patients (70.6%) completed the 1-year follow-up interview, reporting less frequent substance use, less severe psychiatric symptoms, a lower rehospitalization rate, and better housing conditions than on admission. Patients diagnosed with a comorbid personality disorder had a better improvement in the frequency of drinking and were less likely to be rehospitalized than patients with schizophrenia or depression. The results suggest that the integrated inpatient program

may be a promising treatment approach for dual diagnosis patients. The results await replication in controlled studies that need to include an assessment of outpatient treatment following inpatient programs

Mojtabai, R. & Zivin, J. G. (2003). Effectiveness and cost-effectiveness of four treatment modalities for substance disorders: a propensity score analysis. *Health Serv Res.*, 38, 233-259.
Abstract: OBJECTIVE: To assess the effectiveness and cost-effectiveness of four treatment modalities for substance abuse. DATA SOURCES: The study used data from the Services Research Outcomes Study (SROS), a survey of 3,047 clients in a random sample of 99 drug treatment facilities across the United States. Detailed sociodemographic, substance use, and clinical data were abstracted from treatment records. Substance abuse outcome and treatment history following discharge from index facilities were assessed using a comprehensive interview with 1,799 of these individuals five years after discharge. Treatment success was defined in two ways: as abstinence and as any reduction in substance use. STUDY DESIGN: Effectiveness and cost-effectiveness of four modalities were compared: inpatient, residential, outpatient detox/methadone, and outpatient drug-free. Clients were stratified based on propensity scores and analyses were conducted within these strata. Sensitivity analyses examined the impact of future substance abuse treatment on effectiveness and cost-effectiveness estimates. PRINCIPAL FINDINGS: Treatment of substance disorders appears to be cost-effective compared to other health interventions. The cost per successfully treated abstinent case in the least costly modality, the outpatient drug-free programs, was 6,300 dollars (95 percent confidence intervals: 5,200-7,900 dollars) in 1990 dollars. There were only minor differences between various modalities of treatment with regard to effectiveness. However, modalities varied considerably with regard to cost-effectiveness. Outpatient drug-free programs were the most cost-effective. There was little evidence that relative effectiveness or cost-effectiveness of programs varied according to factors that were associated with selection into different programs. CONCLUSIONS: Substance disorders can be treated most cost-effectively in outpatient drug-free settings. Savings from transitioning to the most cost-effective treatment modality may free resources that could be reinvested to improve access to substance abuse treatment for a larger number of individuals in need of such treatment

Mojtabai, R. (2005). Perceived reasons for loss of housing and continued homelessness among homeless persons with mental illness. *Psychiatric Services*. Vol.56(2)(pp 172-178), 2005., 172-178.
Abstract: Objective: The objective of this study was to examine the reasons for the most recent loss of housing and for continued homelessness as perceived by homeless persons with mental illness. Methods: A total of 2,974 currently homeless participants in the 1996 National Survey of Homeless Assistance Providers and Clients (NSHAPC) were asked about the reasons for their most recent loss of housing and continued homelessness. The responses of participants who had mental illness, defined both broadly and narrowly, were compared with responses of those who were not mentally ill. The broad definition of mental illness was based on a set of criteria proposed by NSHAPC investigators. The narrow definition included past psychiatric hospitalization in addition to the NSHAPC criteria. Results: A total of 1,620 participants (56 percent) met the broad definition of mental illness, and 639 (22 percent) met the narrow definition; 1,345 participants (44 percent) did not meet any of these criteria and were categorized as not having a mental illness. Few differences in reasons for the most recent loss of housing were noted between the participants with and without mental illness. Both groups attributed their continued homelessness mostly to insufficient income, unemployment, and lack of suitable housing. Conclusions: Homeless persons with mental illness mostly report the same reasons for loss of housing and continued homelessness as those who do not have a mental illness. This finding supports the view that structural solutions, such as wider availability of low-cost housing and income support, would reduce the risk of homelessness among persons with mental illness, as among other vulnerable social groups. <3>

Monahan, J., Redlich, A. D., Swanson, J., Robbins, P. C., Appelbaum, P. S., Petrila, J. et al. (2005). Use of Leverage to Improve Adherence to Psychiatric Treatment in the Community. *Psychiatric Services*, 56, 37-44.
Abstract: Objectives: A variety of tools are being used as leverage to improve adherence to psychiatric treatment in the community. This study is the first to obtain data on the frequency with which these tools are used in the public mental health system. Patients' lifetime experience of four specific forms of leverage--money (representative payee or money handler), housing, criminal justice, and outpatient commitment--was assessed. Logistic regression was used to examine associations between clinical and demographic characteristics and receipt of different types of leverage. Methods: Ninety-minute interviews were

conducted with approximately 200 adult outpatients at each of five sites in five states in different regions of the United States. Results: The percentage of patients who experienced at least one form of leverage varied from 44 to 59 percent across sites. A fairly consistent picture emerged in which leverage was used significantly more frequently for younger patients and those with more severe, disabling, and longer lasting psychopathology; a pattern of multiple hospital readmissions; and intensive outpatient service use. Use of money as leverage ranged from 7 to 19 percent of patients; outpatient commitment, 12 to 20 percent; criminal sanction, 15 to 30 percent; and housing, 23 to 40 percent. Conclusions: Debates on current policy emphasize only one form of leverage, outpatient commitment, which is much too narrow a focus. Attempts to leverage treatment adherence are ubiquitous in serving traditional public-sector patients. Research on the outcomes associated with the use of leverage is critical to understanding the effectiveness of the psychiatric treatment system. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Moos, R. H., King, M. J., & Patterson, M. A. (1996). Outcomes of residential treatment of substance abuse in hospital- and community-based programs. *Psychiatr Serv, 47*, 68-74.
Abstract: OBJECTIVE: The study sought to determine whether inpatient readmission rates differed for patients with substance use disorders who were treated in either hospital-based or community-based transitional residential care. Length of residential care and intensity of outpatient mental health aftercare were examined as predictors of readmission. METHODS: Department of Veterans Affairs nationwide databases were used to document readmissions at one- and two-year intervals for male inpatients treated for substance use disorders who were discharged either to hospital-based (N = 2,190) or community-based (N = 4,490) residential care. Patients with and without concomitant psychiatric diagnoses were identified. RESULTS: Patients treated in community-based residential programs had lower one- and two-year readmission rates than patients who received hospital-based residential care. Longer episodes of residential care and more outpatient mental health care were also associated with lower readmission rates. Among patients with concomitant psychiatric disorders, those in hospital-based care benefited more from longer episodes of residential care and more intensive outpatient mental health aftercare. Residential care, longer episodes of care, and more outpatient mental health care were independent predictors of lower one- and two-year readmission rates after patient-based risk factors were controlled. CONCLUSIONS: The findings highlight the value of providing adequate amounts of residential and outpatient care for patients in substance abuse treatment, especially patients with concomitant psychiatric disorders

Moos, R. H., Moos, B. S., & Andrassy, J. M. (1999). Outcomes of four treatment approaches in community residential programs for patients with substance use disorders. *Psychiatr Serv, 50*, 1577-1583.
Abstract: OBJECTIVE: Treatment approaches used in community residential facilities for patients with substance use disorders were identified, and patients' participation in treatment and case-mix-adjusted one-year outcomes for substance use, symptoms, and functioning in facilities with different treatment approaches were examined. METHODS: A total of 2,376 patients with substance use disorders treated in a representative sample of 88 community residential facilities were assessed at entry to and discharge from the facility and at one-year follow-up. The community residential facilities were classified into four types based on the major emphasis of the treatment program: therapeutic community, psychosocial rehabilitation, 12-step, and undifferentiated. RESULTS: Patients in programs that used the therapeutic community, psychosocial rehabilitation, and 12-step approaches had comparable one-year outcomes in symptoms and functioning that were better than those of patients in undifferentiated programs. A more directed treatment orientation, a longer episode of care, and completion of care were independently related to better one-year outcomes. These findings held for patients with only substance use disorders and for patients with both substance use and psychiatric disorders. CONCLUSIONS: Community residential programs that have a more directed treatment orientation and that motivate patients to complete treatment have better substance use outcomes. As an increasingly important locus of specialized care, community residential facilities need to develop and maintain more differentiated and distinctive treatment orientations

Moos, R. H., Finney, J. W., & Moos, B. S. (2000). Inpatient substance abuse care and the outcome of subsequent community residential and outpatient care. *Addiction, 95*, 833-846.
Abstract: AIM: To compare participation in treatment and 1-year substance use, symptom and functioning outcomes between patients with substance use disorders who did versus those who did not have an episode of inpatient care immediately prior to an episode of community residential and outpatient mental health care. DESIGN: Two matched groups of 257 patients each with substance use disorders were assessed at

entry to and discharge from a community residential facility (CRF) and at a 1-year follow-up. FINDINGS: Patients in the two treatment groups received a comparable amount of CRF and outpatient mental health care. Nevertheless, patients who had prior inpatient care were more likely to be employed at 1-year follow-up. In addition, when they entered CRF care directly, patients with co-morbid psychiatric disorders were more likely to continue use of alcohol and drugs in the CRF and less likely to complete the program. These patients also experienced more distress and psychiatric symptoms, and were less likely to be employed at the 1-year follow-up. CONCLUSIONS: Among patients who seek treatment at Department of Veterans Affairs (VA) facilities, those who have both substance use and psychiatric disorders and enter CRF care directly have somewhat worse outcomes than those who have an immediately prior episode of inpatient care

Mulvey, K. P. (1995). Hiring, renting and treatment opportunities for the addicted person: Community attitudes. *Alcoholism Treatment Quarterly*, 13, 91-101.
Abstract: Surveyed 1,201 adults (aged 18-85+ yrs; 64% White; 24% African American; 12% other) to examine their views on alcoholism, drug addiction, the alcoholic/drug addict, and beliefs about substance abuse treatment. Attitudes about alcoholism and drug addiction, as measured by favorability of hiring, renting, or living near a substance abuse treatment facility, were relatively positive. Many of the Ss viewed alcoholism and/or drug addiction as diseases. Minorities with a friend or relative who had a problem with alcohol or other drugs were more willing to hire an alcoholic. In addition, Ss who believed treatment works extremely well and were more willing to pay an additional tax to combat drugs also were more willing to hire a recovering alcoholic. Minorities were more likely to be willing to live near a treatment facility than Whites. Ss who were never married, younger, and White were more likely to be willing to rent to an alcoholic. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Myers, J. & Bridges, S. (POLITICS). Public Discourse: Property Rights, Public Good, and NIMBY. *CONTESTED TERRAIN: POWER, POLITICS, AND PARTICIPATION IN SUBURBIA*, Silver, Marc L., & Melkonian, Martin [Eds], Westport, CT: Greenwood Press, 1995, pp 133-148, -1488148.
Abstract: The impact of the establishment of community-based residences for the mentally impaired &/or developmentally disabled on community property values is examined through empirical analysis of 1986-1992 trends in single-family residential property value in the vicinity of group homes in the cities of Beacon & Poughkeepsie, NY. Analysis reveals that the establishment of state-run & nonprofit community residences in new development & upper-middle-class neighborhoods had no impact on community property values. Despite neighborhood protests, the group home blended into the community & did not impact the self-interests of those protesting. The legal & philosophical underpinnings of not-in-my-backyard (NIMBY) property rights protests, particularly those underlying the property rights vs the public good debate, are discussed. 1 Appendix, 21 References. D. Generoli

Nuttbrock, L. A., Rahav, M., Rivera, J. J., Ng-Mak, D. S., & Link, B. G. (1998). Outcomes of homeless mentally ill chemical abusers in community residences and a therapeutic community. *Psychiatr Serv*, 49, 68-76.
Abstract: OBJECTIVES: The feasibility and effectiveness of treating homeless mentally ill chemical abusers in community residences compared with a therapeutic community were evaluated. METHODS: A total of 694 homeless mentally ill chemical abusers were randomly referred to two community residences or a therapeutic community. All programs were enhanced to treat persons with dual diagnoses. Subjects' attrition, substance use, and psychopathology were measured at two, six, and 12 months. RESULTS: Forty-two percent of the 694 referred subjects were admitted to their assigned program and showed up for treatment, and 13 percent completed 12 months or more. Clients retained at both types of program showed reductions in substance use and psychopathology, but reductions were greater at the therapeutic community. Compared with subjects in the community residences, those in the therapeutic community were more likely to be drug free, as measured by urine analysis and self-reports, and showed greater improvement in psychiatric symptoms, as measured by the Center for Epidemiological Studies--Depression Scale and the Brief Psychiatric Rating Scale. Their functioning also improved, as measured by the Global Assessment of Functioning scale. CONCLUSIONS: Homeless mentally ill chemical abusers who are retained in community-based residential programs, especially in therapeutic communities, can be successfully treated

O'Connell, M., Rosenheck, R., Kaspro, W., & Frisman, L. (2006). An Examination of Fulfilled Housing Preferences and Quality of Life among Homeless Persons with Mental Illness and/or Substance Use Disorders. *Journal of Behavioral Health Services & Research*, 33, 354-365.

Abstract: This study examined the types of housing features considered important to a sample of homeless persons diagnosed with a mental illness and/or substance use disorder and the relationship between the degree to which important features were obtained in subsequent housing and subjective quality of life, clinical and housing outcomes at 3-month and 1-year follow-up periods. After controlling for significant clinical and sociodemographic covariates, results from regression analyses indicate that the degree to which a client's individual housing preferences were realized in dwellings is significantly associated with greater quality of life in the future, but not clinical outcomes or housing tenure. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Odom, A. E. (2006). A randomized study of integrated outpatient treatment and assertive community treatment for patients with comorbid mental illness and substance use disorders: Comparing treatment outcome for domiciled and homeless patients. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 66, 4495.

Abstract: Persons with co-occurring schizophrenia and substance use disorders are retained in integrated psychiatric and substance abuse treatment at higher rates than those receiving comparable but separate services (Hellerstein, Rosenthal, Miner, 1992; 1995; 2001). Integrated treatment also yields low rates of re-hospitalization, significantly reduced substance use severity, and improved positive symptom severity after 1-year (Hellerstein, Rosenthal, Miner, 1995; 2001). When clinic-based integrated treatment is compared at one year to a similar service enhanced by Assertive Community Treatment (ACT), the two treatments are equally efficacious in significantly reducing hospitalization, substance use severity, interpersonal problems, and enhancing patients' quality of life. However, compared to integrated clinic-based services, ACT-enhanced treatment yields significant added improvements in treatment retention, positive symptom severity, and reduced illicit drug use (Miner, Rosenthal & Hellerstein, 1999; 1999, 2000). In the context of this research program, the present study examined how various types of housing influence psychiatric treatment outcomes. This study examined, post hoc, subjects' housing status over the course of a one-year treatment study and evaluated its impact on outcome. A sample of 78 subjects was randomly assigned to one of two outpatient psychiatric treatment programs: integrated psychiatric and substance abuse treatment or a similar program enhanced by ACT-style services. Subjects from both conditions were evaluated at an initial assessment and referred for housing as needed throughout the study period. Follow-up assessments were conducted at 4, 8, and 12-months. Measures included positive and negative symptom severity, substance use severity, quality of life, and housing stability. Data were analyzed by the longitudinal method of Generalized Estimating Equations. Subjects who were domiciled in any setting had generally better treatment outcomes than those who were homeless. Further, participants living in a specialized residence with links to the treatment study had better outcomes than those housed in other facilities. While participants living in the specialized residence reported a modestly diminished quality of life compared to those in other community settings, length of exposure to this residence predicted better outcomes for negative symptom severity and substance use severity. Obviously important in its own right, housing is an important factor in treatment outcome studies. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Padgett, D. K., Gulcur, L., & Tsemberis, S. (2006). Housing First Services for People Who Are Homeless With Co-Occurring Serious Mental Illness and Substance Abuse. *Research on Social Work Practice*, 16, 74-83.

Abstract: The literature on homeless adults with severe mental illness is generally silent on a critical issue surrounding service delivery--the contrast between housing first and treatment first program philosophies. This study draws on data from a longitudinal experiment contrasting a housing first program (which offers immediate permanent housing without requiring treatment compliance or abstinence) and treatment first (standard care) programs for 225 adults who were homeless with mental illness in New York City. After 48 months, results showed no significant group differences in alcohol and drug use. Treatment first participants were significantly more likely to use treatment services. These findings, in combination with previous reports of much higher rates of housing stability in the housing first group, show that "dual diagnosed" adults can remain stably housed without increasing their substance use. Thus, housing first

programs favoring immediate housing and consumer choice deserve consideration as a viable alternative to standard care. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Page, S. & Day, D. (1990). Acceptance of the "mentally ill" in Canadian society: Reality and illusion. *Canadian journal of community mental health*.

Petry, N. M. (2000). A comprehensive guide to the application of contingency management procedures in clinical settings. *Drug Alcohol Depend.*, 58, 9-25.
Abstract: Controlled clinical research has demonstrated the efficacy of contingency management procedures in treating substance use disorders. Now is the time to begin introducing these procedures into standard clinical practice. This article reviews the rationale of contingency management interventions and provides a review of representative scientific work in the area. It also discusses behaviors that can be modified, reinforcers that can be used, and behavioral principles that can be adapted to improve outcomes. This paper provides practical advice and a guideline for clinicians and researchers to use when designing and administering contingency management interventions. The recommendations are based on empirically validated manipulations. Areas in which more research is needed are suggested as well

Petry, N. M., Tedford, J., & Martin, B. (2001). Reinforcing compliance with non-drug-related activities. *J Subst Abuse Treat*, 20, 33-44.
Abstract: Contingency management (CM) procedures, that provide incentives for specific behaviors, are efficacious in treating substance use disorders. Typically, CM interventions reinforce submission of urine specimens negative for the targeted drug(s) of abuse, but other behaviors can be reinforced as well, such as compliance with non-drug-related activities. This article describes 1,059 activities chosen by 46 subjects participating in one of two CM studies. The most frequently chosen activities were related to recreational activities (going to movies, library, or church) and sobriety (attending Alcoholics Anonymous meetings, completing worksheets). Over 95% of subjects participated in at least one of these types of activities, and together they accounted for over 70% of the activities selected. Over half the subjects participated in at least one activity related to employment, health, family, and personal improvement, such as applying for a job, attending a medical appointment, taking their child to an event, or creating weekly to-do lists. A detailed description of activity selection and verification procedures may assist in developing consistent approaches across treatment settings, and future research may evaluate further the efficacy of this contingency management approach in treating substance abusers

Petry, N. M., Petrakis, I., Trevisan, L., Wiredu, G., Boutros, N. N., Martin, B. et al. (2001). Contingency management interventions: from research to practice. *Am J Psychiatry*, 158, 694-702.

Polcin, D. L. (2001). Sober living houses: Potential roles in substance abuse services and suggestions for research. *Substance Use & Misuse*, 36, 301-311.
Abstract: Notes that "sober living houses" are alcohol- and drug-free residences for individuals attempting to establish or maintain sobriety. This article briefly reviews the history, philosophy, benefits, and limitations of sober living houses. Areas of research needing attention are identified and it is suggested that sober living houses have the potential to play a stronger role in the continuum of substance misuse services. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Prabucki, K., Wootton, E., McCormick, R., & Washam, T. (1995). Evaluating the effectiveness of a residential rehabilitation program for homeless veterans. *Psychiatr Serv*, 46, 372-375.
Abstract: OBJECTIVE: This study sought to evaluate the effects of a residential rehabilitation program for homeless mentally ill veterans on several measures of subjects' community adjustment. METHODS: Subjects' housing status, financial and vocational status, psychological stability, utilization of coping resources, and extent of social contacts were measured at entry into the program and at follow-up six months after discharge. Data were available for 58 subjects at follow-up. Outcomes for subjects who successfully completed the program were compared with outcomes for those who did not. RESULTS: As a group, subjects assessed at follow-up showed significant improvement in housing, financial, and vocational status, in severity of several symptoms of psychological and emotional distress, in utilization of some types of coping resources, and in measures of social contacts and satisfaction. However, subjects who completed the program were more likely to have improved their housing, financial, and vocational situations.

CONCLUSIONS: Comprehensive residential rehabilitation programs can help homeless veterans improve several aspects of their lives and maintain stability in those areas after discharge

Preston, K. L., Umbricht, A., & Epstein, D. H. (2000). Methadone dose increase and abstinence reinforcement for treatment of continued heroin use during methadone maintenance. *Arch Gen.Psychiatry*, 57, 395-404.

Abstract: BACKGROUND: Although methadone maintenance is an effective therapy for heroin dependence, some patients continue to use heroin and may benefit from therapeutic modifications. This study evaluated a behavioral intervention, a pharmacological intervention, and a combination of both interventions. METHODS: Throughout the study all patients received daily methadone hydrochloride maintenance (initially 50 mg/d orally) and weekly counseling. Following baseline treatment patients who continued to use heroin were randomly assigned to 1 of 4 interventions: (1) contingent vouchers for opiate-negative urine specimens (n = 29 patients); (2) methadone hydrochloride dose increase to 70 mg/d (n = 31 patients); (3) combined contingent vouchers and methadone dose increase (n = 32 patients); and (4) neither intervention (comparison standard; n = 28 patients). Methadone dose increases were double blind. Vouchers had monetary value and were exchangeable for goods and services. Groups not receiving contingent vouchers received matching vouchers independent of urine test results. Primary outcome measure was opiate-negative urine specimens (thrice weekly urinalysis). RESULTS: Contingent vouchers and a methadone dose increase each significantly increased the percentage of opiate-negative urine specimens during intervention. Contingent vouchers, with or without a methadone dose increase, increased the duration of sustained abstinence as assessed by urine screenings. Methadone dose increase, with or without contingent vouchers, reduced self-reported frequency of use and self-reported craving. CONCLUSIONS: In patients enrolled in a methadone-maintenance program who continued to use heroin, abstinence reinforcement and a methadone dose increase were each effective in reducing use. When combined, they did not dramatically enhance each other's effects on any 1 outcome measure, but they did seem to have complementary benefits

Putnam, S. (2006). Where is the 'where?' in considerations of treatment for drug abuse? *J Urban Health*, 83, 144-145.

Ries, Richard et.al. Use of Case Manager Ratings and Weekly Urine Toxicology Tests Among Outpatients with Dual Diagnosis. *Psychiatric Services*, June 2002, Volume 53 No. 6, pages 764-766.

Abstract: Use of drugs and alcohol by 43 predominantly male outpatients who had severe mental illness and a comorbid substance use disorder were assessed weekly through the ratings of experienced dual disorder case managers and through blinded research urine toxicology tests. The percentage of weeks in which drugs or alcohol were used was calculated on the basis of one or both assessments. The case managers often missed drug use over the weekends, which was detected by the urine toxicology tests. Agreement between the two methods varied widely, even when the ratings were made by highly experienced case managers. These findings have implications for monitoring patients with dual diagnoses and provide insight into the accuracy of case manager ratings.

Robbins, P. C., Petrila, J., LeMelle, S., & Monahan, J. (2006). The Use of Housing as Leverage to Increase Adherence to Psychiatric Treatment in the Community. *Administration and Policy in Mental Health and Mental Health Services Research*, 33, 226-236.

Abstract: For people with mental disorder, access to subsidized housing may be used as "leverage" to obtain adherence to treatment. Interview data from 200 outpatients at each of five sites provided the first national description of the use of housing as leverage. Results indicated that housing is most likely to be used as leverage when it is "special" housing, available only to people with mental illness. Most frequently, respondents state that the requirement that they participate in treatment is imposed by their landlord, rather than by a clinician. The use of housing as leverage strongly increases respondents' perceptions of coercion. Despite this, however, participants who experience housing as leverage are no less satisfied than other participants with the treatment that they receive, and are much more likely than other participants to believe that using housing as leverage is effective in helping people stay well. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Roll, J. M., Chudzynski, J. E., & Richardson, G. (2005). Potential sources of reinforcement and punishment in a drug-free treatment clinic: client and staff perceptions. *Am J Drug Alcohol Abuse, 31*, 21-33.

Abstract: Contingency management interventions are quite successful at initiating abstinence from drugs of abuse. However, these approaches to drug abuse treatment are often criticized because of their perceived cost. One way to reduce the cost of contingency management interventions would be to use nonmonetary sources of reinforcement or punishment. A number of reports have discussed the availability of potential sources of reinforcement in opiate replacement clinics. This report describes the availability of potential sources of reinforcement and punishment available in drug-free treatment programs. Both clients and clinic staff rated a number of items in terms of their potential reinforcing and punishing efficacy. Results suggest that there are several sources of reinforcement and punishment available in drug-free clinics, which could be used in contingency management programs. The results also suggest that the clinic staff perceives potential sources of punishment as more aversive than do the clients

Rosenheck, R., Gallup, P., & Frisman, L. K. (1993). Health care utilization and costs after entry into an outreach program for homeless mentally ill veterans. *Hosp Community Psychiatry, 44*, 1166-1171. Abstract: OBJECTIVE: This study evaluated the impact of a Department of Veterans Affairs outreach and residential treatment program for homeless mentally ill veterans on utilization and cost of health care services provided by the VA. METHODS: Veterans at nine program sites (N = 1,748) were assessed with a standard intake instrument. Services provided by the outreach program were documented in quarterly clinical reports and in residential treatment discharge summaries. Data on nonprogram VA health service utilization and health care costs were obtained from national VA data bases. Changes in use of services and cost of services from the year before initial contact with the program to the year after were analyzed by t test. Multivariate analyses were used to examine the relationship of these changes to indicators of clinical need and to participation in the outreach program. RESULTS: Although utilization of inpatient service did not increase after veterans' initial contact with the program, use of domiciliary and outpatient services increased substantially. Total annual costs to the VA also increased by 35 percent, from \$6,414 to \$8,699 per veteran per year. Both clinical need and participation in the program were associated with increased use of health services and increased cost. Veterans with concomitant psychiatric and substance abuse problems used fewer health care services than others. CONCLUSIONS: Specialized programs to improve the access of homeless mentally ill persons to health care services appear to be effective, but costly. Dually diagnosed persons seem especially difficult to engage in treatment

Rosenheck, R., Lam, J., & Randolph, F. (1997). Impact of representative payees on substance use by homeless persons with serious mental illness. *Psychiatr Serv, 48*, 800-806. Abstract: OBJECTIVE: Assignment of representative payees, third parties responsible for managing clients' funds, has been proposed to counter potential use of public support payments for abused substances by people with severe mental illness and substance use disorders. This study examines substance use outcomes in a sample of homeless persons with serious mental illness and substance use disorders, some of whom were assigned representative payees. METHODS: The subjects were participating in the Access to Community Care and Effective Services and Supports (ACCESS) program, a federally funded demonstration program on integrating service systems. Clients were assessed at baseline and three months after case management services were initiated. Factorial repeated-measures analysis of covariance was used to examine substance use among four client subgroups, two of which had payees and two of which did not. RESULTS: Clients in this sample (N = 1,348) showed significant improvement on all measures of substance use over the first three months in the program. Those with payees showed no greater improvement in substance abuse than those without payees, although they did have fewer days of homelessness. CONCLUSIONS: This study failed to find evidence that merely adding external money management services to existing services improves substance abuse outcomes among clients who had dual diagnoses and were homeless. Besides assigning a payee, structured behavioral interventions may be needed to produce additional clinical benefits

Rosenheck, R., Kaspro, W., Frisman, L., & Liu-Mares, W. (2003). Cost-effectiveness of supported housing for homeless persons with mental illness. *Archives of General Psychiatry, Vol.60(9)(pp 940-951), 2003. Date of Publication: 01 SEP 2003.*, 940-951.

Abstract: Background: Supported housing, integrating clinical and housing services, is a widely advocated

intervention for homeless people with mental illness. In 1992, the US Department of Housing and Urban Development (HUD) and the US Department of Veterans Affairs (VA) established the HUD-VA Supported Housing (HUD-VASH) program. Methods: Homeless veterans with psychiatric and/or substance abuse disorders or both (N = 460) were randomly assigned to 1 of 3 groups: (1) HUD-VASH, with Section 8 vouchers (rent subsidies) and intensive case management (n = 182); (2) case management only, without special access to Section 8 vouchers (n = 90); and (3) standard VA care (n = 188). Primary outcomes were days housed and days homeless. Secondary outcomes were mental health status, community adjustment, and costs from 4 perspectives. Results: During a 3-year follow-up, HUD-VASH veterans had 16% more days housed than the case management-only group and 25% more days housed than the standard care group (P<.001 for both). The case management-only group had only 7% more days housed than the standard care group (P = .29). The HUD -VASH group also experienced 35% and 36% fewer days homeless than each of the control groups (P<.005 for both). There were no significant differences on any measures of psychiatric or substance abuse status or community adjustment, although HUD-VASH clients had larger social networks. From the societal perspective, HUD-VASH was \$6200 (15%) more costly than standard care. Incremental cost-effectiveness ratios suggest that HUD-VASH cost \$45 more than standard care for each additional day housed (95% confidence interval, \$-19 to \$108). Conclusions: Supported housing for homeless people with mental illness results in superior housing outcomes than intensive case management alone or standard care and modestly increases societal costs. <2>

Rosenheck, R. A., Resnick, S. G., & Morrissey, J. P. (2003). Closing service system gaps for homeless clients with a dual diagnosis: integrated teams and interagency cooperation. *J Ment Health Policy Econ.*, 6, 77-87.

Abstract: BACKGROUND: There is great concern about fragmentation of mental health service delivery, especially for dually diagnosed homeless people, and apprehension that such fragmentation adversely affects service access and outcomes. AIMS OF THE STUDY: This study first seeks to articulate two alternative approaches to the integration of psychiatric and substance abuse services, one involving an integrated team model and the other a collaborative relationship between agencies. It then applies this conceptualization to a sample of dually diagnosed homeless people who participated in the ACCESS demonstration. METHODS: Longitudinal outcome data were obtained through interviews at baseline, 3 months, and 12 months with homeless clients with a dual diagnosis (N = 1074) who received ACT-like case management services through the ACCESS demonstration. A survey of ACCESS case managers was conducted to obtain information on: (i) the proportion of clients who received substance abuse services directly from ACCESS case management teams, and the proportion who received services from other agencies; and (ii) the perceived quality of the relationship (i.e. communication, cooperation and trust) between providers--both within the same teams and between agencies. Hierarchical linear modeling was then used to examine the relationship of these two factors to service use and outcome with mixed-model regression analysis. RESULTS: Significant (p<.05) and positive relationships were observed in 4 of the 20 analyses of the association of service use and measures of communication, cooperation, and trust (either intrateam or inter-agency) while none were significant and negative. At 12 months, receipt of a higher proportion of services from agencies other than the ACCESS team was associated with fewer days homeless, and greater reduction of psychiatric symptoms, contradicting the hypothesis that integrated team care is more effective than interagency collaborations. DISCUSSION AND LIMITATIONS: This study broadens the conceptual framework for addressing service system fragmentation by considering both single team integration and interagency coordination, and by considering both program structure and the quality of relationships between providers. Data from a multi-site outcome study demonstrated suggestive associations between perceptions of communication, cooperation and measures of clinical service use. However, the proportion of clients treated entirely within a single team was associated with poorer housing and psychiatric outcomes. These empirical results must be regarded as illustrative rather than conclusive because of the use of a non-experimental study design, imperfections in the available measures, and the incomplete sampling of case managers. IMPLICATIONS FOR HEALTH POLICY: This study suggests that fragmentation of services for dually diagnosed clients may be reduced by improving the interactions within and between agencies providing these services. While primary emphasis has been placed on developing integrated teams, interagency approaches should not be prematurely excluded. IMPLICATIONS FOR FUTURE RESEARCH: Research on approaches to reducing system fragmentation have focused on either global efforts to integrate numerous agencies in a community or highly focused efforts to develop specialized teams. Future research should also focus on the possibility of fostering

constructive relationships between selected pairs or subsets of agencies. Research in this area will also benefit from the further development measures of team integration and of both intra-team and inter-agency communication, collaboration, and trust

Rowe, J. (2005). Laying the Foundations: Addressing heroin use among the 'street homeless'.

Drugs: Education, Prevention & Policy, 12, 47-59.

Abstract: The lack of secure housing can exacerbate the health problems associated with injecting drug use. The lack of hygiene, security and personal organization that are part of a transient lifestyle increases the tendency towards, and exposure to, risky drug use behaviours with implications for both the drug user and the wider community. However, homeless drug users have little realistic hope of better 'managing' drug use without access to secure accommodation as a first step. Drug treatment and health care services are not sufficiently structured to meet the particular needs of homeless individuals. This paper acts as a 'conduit' for the words of heroin users to demonstrate, from their perspective, the need for housing provision and the dangers of injecting drug use in marginal living environments. It closes with a short discussion of how housing must be integrated with further support services if users are not to relapse. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Ruiz, P., Langrod, J., & Lowinson, J. (1975). Resistance to the opening of drug treatment centers: A problem in community psychiatry. *International Journal of the Addictions*, 10, 149-155.

Abstract: Examines the dynamics of opposition to community-based drug treatment programs in middle-class and poor neighborhoods. Recommendations for improving such programs are presented. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Sacks, S., Sacks, J., De, L. G., Bernhardt, A. I., & Staines, G. L. (1997). Modified therapeutic community for mentally ill chemical "abusers": background; influences; program description; preliminary findings. *Subst Use Misuse*, 32, 1217-1259.

Abstract: This paper briefly surveys the literature that addresses the problem of co-occurring mental and "substance abuse disorders." It discusses several convergent influences on the development of modified therapeutic community (TC) approaches. The paper describes in some detail the modified TC program for mentally ill chemical "abusers" (MICAs). The paper also summarizes research data that establish positive retention rates and significant in-treatment change to support the effectiveness of the modified TC and to underscore the limited effect of treatment-as-usual approaches. Treatment approaches must be comprehensive, multidimensional, of relatively long duration, and must systematically address the interrelated problems of mental illness and substance use

Sacks, S., Sacks, J. Y., & De, L. G. (1999). Treatment for MICAs: design and implementation of the modified TC. *J Psychoactive Drugs*, 31, 19-30.

Abstract: This article describes the main features of an innovative therapeutic community (TC) model adapted for use with mentally ill chemical abusers (MICAs). It describes the rationale for use of the modified TC with MICAs, the treatment structure and environment created, the essential components of the modified TC program, staffing, and the process and goals of client change. Details are given regarding issues and strategies for the implementation of the new program in terms of program planning, staff training, and system initiation. Evaluation data from the authors' research is summarized to support the adoption of the modified TC model. The article makes clear the feasibility of a modified TC model of established effectiveness with a MICA population. This model has now been successfully introduced into mental health, drug treatment, shelter, and correctional settings

Sacks, S., De, L. G., Sacks, J. Y., McKendrick, K., & Brown, B. S. (2003). TC-oriented supported housing for homeless MICAs. *J Psychoactive Drugs*, 35, 355-366.

Abstract: This article describes a TC-oriented aftercare program for homeless mentally ill chemical abusers (MICAs) in a supported housing facility, and presents some preliminary data on program effectiveness. The study divided the clients who had completed a residential modified TC program into two groups--those who participated in the TC-oriented supported housing program and those who did not. The data show similarities in the profile of the two groups. Improvement in negative behaviors (e.g., drug use and crime) occurred during the residential program and stabilized during the supported housing program, while improvement in prosocial behaviors (e.g., psychological functioning and employment) was incremental and

continuous over the course of both programs. Those who participated in the TC-oriented supported housing program demonstrated significantly better outcomes than those who did not. These findings provide preliminary evidence for the effectiveness of a TC-oriented supported housing program as an aftercare strategy for homeless MICA clients following residential treatment

Sacks, S., Sacks, J. Y., McKendrick, K., Banks, S., & Stommel, J. (2004). Modified TC for MICA offenders: crime outcomes. *Behav Sci Law*, 22, 477-501.

Abstract: The study randomly assigned male inmates with co-occurring serious mental illness and chemical abuse (MICA) disorders to either modified therapeutic community (MTC) or mental health (MH) treatment programs. On their release from prison, MICA inmates who completed the prison MTC program could enter the MTC aftercare program. The results, obtained from an intent-to-treat analysis of all study entries, showed that inmates randomized into the MTC group had significantly lower rates of reincarceration compared with those in the MH group. The results also show that differences between the MTC + aftercare and comparison group across a variety of crime outcomes (i.e. any criminal activity, and alcohol or drug related criminal activity) are consistent and significant, and persist after an examination of various threats to validity (e.g. initial motivation, duration of treatment, exposure to risk). This study provides some support for the effectiveness of the prison TC only condition. The findings are encouraging and consonant with other studies of integrated prison and aftercare TC programs for substance abusing non-MICA offenders, although qualified by the possibility that selection bias (i.e. differences in motivation on entry into aftercare) may be operating. Nevertheless, given the available evidence and the need for effective programming for MICA offenders, program and policy makers should strongly consider developing integrated prison and aftercare modified TC programs for MICA offenders

Schumacher, J. E., Usdan, S., Ed, M., Milby, J. B., Wallace, D., & McNamara, C. (2000). Abstinent-contingent housing and treatment retention among crack-cocaine-dependent homeless persons. *Journal of Substance Abuse Treatment*. Vol.19(1)(pp 81-88), 2000., 81-88.

Abstract: This study investigated Behavioral Day Treatment attendance in relation to treatment outcome among homeless persons dependent on crack-cocaine. Participants (N = 141) were 72.3% male and 82.7% African American. Days attended, activities attended, and follow-up rates over a 12-month period were positively affected by the more attractive treatment of providing immediate, rent-free, abstinent-contingent housing during a 2-month Behavioral Day Treatment program. Results replicated previous findings that abstinence is a function of treatment attendance and more treatment is associated with greater abstinence. The loss of predictive power at long-term follow-up, limitations of a retrospective design, need to identify most predictive therapeutic activity types, and potential influence of mental disorders were discussed. Analytical techniques used in this study allows for the planning, predictability, and measurement of drug abuse treatment success as a function of service utilization. Copyright (C) 2000 Elsevier Science Inc. <4>

Schumacher, J. E., Mennemeyer, S. T., Milby, J. B., Wallace, D., & Nolan, K. (2002). Costs and effectiveness of substance abuse treatments for homeless persons. *J Ment Health Policy Econ.*, 5, 33-42. Abstract: BACKGROUND: Several reviews of the effectiveness of drug abuse treatment have concluded that treatment works. However, studies analyzing cost-effectiveness or cost-benefits of drug treatment have been limited. Consequently, policy decisions regarding substance abuse treatment have utilized educated guesses or consensus of experts in the absence of controlled and scientifically rigorous studies of the benefits and costs of treatment. AIMS OF THE STUDY: This study presents a cost analysis of two randomized controlled studies comparing four drug addiction interventions for homeless persons. The studies controlled for some limitations of previous research in this area including random assignment. Findings are based on treatment costs obtained from actual expenditures and treatment outcomes of drug abstinence from toxicology tests. Cost-effectiveness is considered from the viewpoint of the treatment program. Cost-effectiveness from a societal viewpoint is discussed, but not calculated. METHODS: This is a retrospective analysis of treatment and treatment outcome costs from two randomized controlled drug addiction treatment outcome studies: Homeless 1 and Homeless 2. Both studies were two-group-usual versus enhanced-care designs with similar treatment components, outcome variables and assessment points, but different research questions. Both studies investigated the efficacy of a contingency management intervention specifically designed for persons who are homeless. This costs analysis reports direct costs of treatment by service category and costs of abstinence at 2-, 6-, and 12-month points by study and study treatment group. Treatment costs and costs per week abstinent are reported for four substance abuse

treatments across two studies for persons homeless and addicted primarily to crack cocaine. Treatment components for each program included counseling, housing, work, administrative, and other expenses. RESULTS: Drug abstinence rates by treatment program for each study revealed superior outcomes for the enhanced interventions with the greatest abstinence found at the earlier time points (up to 6 months) as established by previous research. Abstinence rates at 12 months failed to differentiate treatment groups. Average costs per abstinent week were generally greater for the enhanced programs compared to usual care, except early in treatment where these were similar. The incremental direct cost ratios (in year 2000 dollars) for these enhanced programs to increase abstinence by one average week were similar (\$1,244 and \$1,007) for the Homeless 1 and 2 projects at 12-months. These figures are compared to figures of other life saving events. DISCUSSION: When only the direct costs of programs and their abstinence rates are considered, treatments that involve abstinent contingent work and housing have incremental cost ratios that are within the range of many other common social and medical interventions. These enhanced programs are more cost effective earlier in treatment than at 12-month follow-up due to relapse common among existing drug treatment. A methodological limitation of this study is that direct program costs do not measure the societal value of reducing homelessness itself. IMPLICATIONS FOR HEALTH POLICIES: Usual and improved treatment methods offer a cost-effective approach to improving abstinence among addicted homeless persons. Policy makers might reasonably choose to implement enhanced treatment programs that also reduce homelessness because the incremental cost of these programs is within a reasonable range compared to other common societal interventions. IMPLICATIONS FOR FURTHER RESEARCH: Methods and data need to be developed to better measure the societal benefit to communities of reducing the numbers of homeless persons with addictive drug problems

Schutt, R. K., Weinstein, B., & Penk, W. E. (2005). Housing Preferences of Homeless Veterans With Dual Diagnoses. *Psychiatric Services, 56*, 350-352.

Abstract: Previous research indicates that most homeless persons with mental illness prefer independent living, while most clinicians recommend group housing. This study compared residential preferences of 141 homeless veterans with dual diagnoses with those of 62 homeless nonveterans with dual diagnoses. Clinicians rated both groups while they were in transitional shelters before they were placed in housing. Both samples strongly rejected group home living, but a majority of nonveterans desired staff support. Clinicians recommended staffed group homes for most veterans and nonveterans. This survey underscores the disjuncture between consumers' and clinicians' preferences as well as the need to provide a range of housing options to accommodate varied preferences. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Schwartz, C. & Rabinovitz, S. (2001). Residential facilities in the community for people with intellectual disabilities: How neighbours' perceptions are affected by the interaction of facility and neighbour variables. *Journal of Applied Research in Intellectual Disabilities, 14*, 100-109.

Abstract: The present paper reports a study of neighbours' perceptions of community-based residential facilities for people with intellectual disabilities (IDs). It analyses neighbourhood acceptance as a variable explainable by interactions between facility variables and the nature of the neighbourhood population itself. 208 neighbours (mean age 37 yrs) of 36 urban community facilities for people with IDs were surveyed, plus the facility managers. The individual characteristics of the neighbours which were found to relate to facility impact included: having young children at home, having a disabled family member; knowing that the neighbourhood contained a facility; and visiting the facility. Pertinent facility variables were: size, degree of supervision, and the pre- and post-entry strategies used by managers to gain local acceptance for the facility. Most importantly, the present study found that none of these variables can be considered or used in isolation. The direction of their effect can be positive or negative according to the variables which they interact with. Theoretical aspects of the findings are discussed and interventions are suggested which might improve the community integration of people with IDs. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Sciacca, K. & Thompson, C. M. (1996). Program development and integrated treatment across systems for dual diagnosis: mental illness, drug addiction, and alcoholism (MIDAA). *J Ment Health Adm, 23*, 288-297.

Abstract: Numerous bureaus of mental health, drug addiction, and alcoholism are designated to provide service to persons who have discrete singular disorders of mental illness, drug addiction, or alcoholism.

Mental health and substance abuse programs (nationally and internationally) have evolved with this singular limited-service capacity. Contrasting incompatible philosophies and treatment methods across the systems have resulted in minimal services for persons with dual diagnoses. The project the authors have outlined is an example of the development of a dual/multiple-disorder program that integrates these diverse systems and provides comprehensive services within each of the programs of each delivery system. These programs are cost-effective, use existing facilities, train and cross-train existing staff, correct the issues of incompatible treatment interventions, and end the dilemma of gaps in services systems and limited referral resources. As a result, the availability and quality of care for persons with dual diagnoses is greatly improved

Shah, N. G., Galai, N., Celentano, D. D., Vlahov, D., & Strathdee, S. A. (2006). Longitudinal predictors of injection cessation and subsequent relapse among a cohort of injection drug users in Baltimore, MD, 1988-2000. *Drug and Alcohol Dependence*, 83, 147-156.

Abstract: Objective: To determine predictors of injection drug use cessation and subsequent relapse among a cohort of injection drug users (IDUs). Methods: IDUs in Baltimore, MD were recruited through community outreach in 1988-1989. Among IDUs with at least three follow-up visits, parametric survival models for time to injection cessation (≥ 6 months) and subsequent relapse were constructed. Results: Of 1327 IDUs, 94.8% were African American, 77.2% were male, median age was 34 years, and 37.7% were HIV-infected. Among 936 (70.5%) subjects who ceased injection, median time from baseline to cessation was 4.0 years. Three-quarters subsequently resumed injection drug use, among whom median time to relapse was 1.0 year. Factors independently associated with a shorter time to cessation were: age < 30 years, stable housing, HIV seropositivity, methadone maintenance treatment, detoxification, abstinence from cigarettes and alcohol, injecting less than daily, not injecting heroin and cocaine together, and not having an IDU sex partner. Factors independently associated with shorter time to injection relapse were male gender, homelessness, HIV seropositivity, use of alcohol, cigarettes, non-injection cocaine, sexual abstinence and having a longer time to the first cessation. Conclusions: This study provides strong support for targeting cessation efforts among young IDUs and severely dependent, unstably housed, and HIV-infected individuals. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Shannon, K., Ishida, T., Lai, C., & Tyndall, M. W. (2006). The impact of unregulated single room occupancy hotels on the health status of illicit drug users in Vancouver. *International Journal of Drug Policy*, 17, 107-114.

Abstract: Introduction: Single room occupancy (SRO) hotel units represent the most basic shelter provided for low-income individuals living in Vancouver's Downtown Eastside (DTES). While homelessness and marginalized housing in general, have been identified as environments that facilitate HIV risk behaviours, less attention has been paid to the specific context of living in SRO hotels. This analysis was therefore undertaken to describe the characteristics of individuals living in SRO hotels and to explore the association between living in SRO hotels and health status. Methods: From January 2003 to November 2004, we enrolled participants into a large community-based cohort study (CHASE Project) involving a baseline questionnaire and data linkages to existing health service registries. Recruitment followed census track data in order to select a representative sample of the community residents. Logistic regression was used to identify socio-demographic, drug use, and health status characteristics independently associated with living in SRO hotels. Results: Of the 2574 participants included in this analysis, 1813 (70%) reported living in SROs and 761 (30%) reported living in stable housing. The median age was 42 years (IQ range: 36-49 years). Among residents of SROs, 1108 (61%) had lived in the current SRO for less than 1 year, with the median number of moves in the past year being 5. Variables found to be independently associated with SROs included HIV infection (Adjusted Odds Ratio [aOR], 1.6=95% CI:1.2-2.0), emergency room use (aOR=1.7, 95% CI:1.3-2.2), cocaine injection (aOR=1.9, 95% CI:1.5-2.5), heroin injection (aOR=2.0, 95% CI:1.6-2.3), recent incarceration (aOR=2.1, 95% CI:1.7-2.4), having been physically assaulted (aOR= 2.3, 95% CI:1.7-2.8), crack cocaine smoking (aOR=2.3, 95% CI:1.7-2.7), and crystal methamphetamine injection (aOR=2.9, 95% CI:1.7-5.8). Conclusions: Living in SRO hotels was associated with intensive illicit drug use, and poor health status, including HIV infection. These findings highlight the urgent need to address housing conditions in the DTES that threaten to undermine the harm reduction strategies and drug policy reforms in the City of Vancouver. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Sheldon, C. T., Aubry, T. D., rboleda-Florez, J., Wasylenki, D., & Goering, P. N. (2006). Social disadvantage, mental illness and predictors of legal involvement. *International Journal of Law and Psychiatry*, 29, 249-256.

Abstract: The following study evaluates the complex association between legal involvement and mental illness. It describes a population of consumers of community mental health programs, comparing those with legal involvement to those without legal involvement, on a number of demographic, clinical and social indicators. It is a secondary analysis of data collected in studies making up the Community Mental Health Evaluation Initiative (CMHEI) in the province of Ontario, Canada. Legal involvement was a significant issue among community mental health program consumers; about one in five consumers had at least some contact with the legal system in the preceding nine months. Legally involved consumers were more likely to be in receipt of social assistance and be unstably housed than those legally uninvolved. However, there were no significant differences between legally involved and uninvolved consumers with respect to severity of symptomatology, current medication use or number of hospitalization days in the past 9 months. A predictive model compared the differential impact of clinical and social determinants upon legal involvement. Analyses failed to uncover a significant relationship between severity of psychiatric symptomatology and legal involvement. Significant predictors of legal involvement included gender, race, drug use as well as housing instability, and receipt of social assistance. Legal involvement was attributable to factors other than the severity of mental illness; these results challenge assumptions that the most symptomatically severe consumers are most at risk of legal involvement. Accordingly, the rate of legal involvement in a sample of community mental health program users must be considered in a broad context, with particular emphasis on social disadvantage. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Sigmon, S. C. & Higgins, S. T. (2006). Voucher-based contingent reinforcement of marijuana abstinence among individuals with serious mental illness. *J Subst Abuse Treat*, 30, 291-295.

Abstract: Previous studies by our group have used money given contingent on abstinence to reduce drug use by individuals with schizophrenia. In this study, we examined the sensitivity of marijuana use by individuals with serious mental illness to voucher-based contingent reinforcement, which represents the first study to date investigating the efficacy of voucher incentives with this population. This within-subject reversal design consisted of three conditions: 4-week baseline, 12-week voucher intervention, and 4-week baseline. During baseline periods, subjects received 10 US dollars vouchers per urine specimen, independent of urinalysis results. During voucher intervention, only specimens testing negative for marijuana earned vouchers, with total possible earnings of 930 US dollars. Seven adults with schizophrenia or other serious mental illnesses participated in the study. The percentage of marijuana-negative specimens was significantly greater during voucher intervention than during baseline periods. These results provide evidence that marijuana use among individuals with serious mental illness is sensitive to voucher-based incentives and further support the potential feasibility of using voucher-based contingency management to reduce substance abuse in this challenging population

Silverman, K., Robles, E., Mudric, T., Bigelow, G. E., & Stitzer, M. L. (2004). A randomized trial of long-term reinforcement of cocaine abstinence in methadone-maintained patients who inject drugs. *J Consult Clin Psychol*, 72, 839-854.

Abstract: This study determined whether long-term abstinence reinforcement could maintain cocaine abstinence throughout a year long period. Patients who injected drugs and used cocaine during methadone treatment (n = 78) were randomly assigned to 1 of 2 abstinence-reinforcement groups or to a usual care control group. Participants in the 2 abstinence-reinforcement groups could earn take-home methadone doses for providing opiate- and cocaine-free urine samples; participants in 1 of those groups also could earn 5,800 US dollars in vouchers for providing cocaine-free urine samples over 52 weeks. Both abstinence-reinforcement interventions increased cocaine abstinence, but the addition of the voucher intervention resulted in the largest and most sustained abstinence. Therefore, voucher-based reinforcement of cocaine abstinence in methadone patients can be a highly effective maintenance intervention

Smith, C. J. & Hanham, R. Q. (1981). ANY PLACE BUT HERE! MENTAL HEALTH FACILITIES AS NOXIOUS NEIGHBORS. *The Professional Geographer*, 33, 326-334.

Abstract: This paper describes an experimental study that attempts to uncover some of the reasons why community residents find mental health facilities undesirable as potential neighbors. Respondents were

asked to evaluate a variety of public facilities by indicating how similar they are in terms of "noxiousness." They were also asked how close they would prefer to live to each of the different facility types. From the results of the study it is possible to suggest some alternative strategies for siting new mental health facilities, such as co-locating them with other human-service agencies or locating them within larger facilities.

Smith, E. M., North, C. S., & Fox, L. W. (1995). Eighteen-month follow-up data on a treatment program for homeless substance abusing mothers. *J Addict Dis*, 14, 57-72.

Abstract: In response to the dearth of data on substance abuse treatment among homeless mothers, this study breaks new ground in presenting 18-month follow-up data on 149 homeless mothers with young children enlisted in a substance abuse treatment program. The effects of residential compared to nonresidential services were evaluated over the follow-up period. Although dropout rates were high, predictors of dropout were identified, and the residential had a lower dropout rate compared to the nonresidential comparison group. Members of both residential and nonresidential groups evidenced improvement in alcohol and drug problems and in housing stability, regardless of the amount of time they spent in the program. This project demonstrated that homeless mothers can be more successfully engaged in substance abuse programs with provisions of residential placement in addition to participation in a therapeutic community. Future interventions can take advantage of this knowledge in designing more effective programs

Sowers, W. (2005). Transforming systems of care: The American Association of Community Psychiatrists Guidelines for Recovery Oriented Services. *Community Mental Health Journal*. Vol.41(6)(pp 757-774), 2005., 757-774.

Abstract: Thinking about recovery has grown significantly over the last 70 years, and particularly in the past fifteen. Promotion of recovery has recently been recognized as an organizing principle for the transformation of behavioral health services. Recovery is a personal process of growth and change which typically embraces hope, autonomy and affiliation as elements of establishing satisfying and productive lives in spite of disabling conditions or experiences. Recovery oriented services replace paternalistic, illness oriented perspectives with collaborative, autonomy enhancing approaches and represent a major cultural shift in service delivery. Recovery oriented services replace the myth of chronicity and dependence with a message of individualism, empowerment and choice in the context of collaborative relationships with service providers. The American Association of Community Psychiatrists has developed Guidelines for Recovery Oriented Services to facilitate the transformation of services to this new paradigm. The guidelines are divided into three domains: administration, treatment, and supports, each consisting of several elements for which recovery enhancing characteristics are defined. Several example indicators are also provided for each element. This paper presents these guidelines and discusses their application. copyright 2005 Springer Science+Business Media, Inc

Stitzer, M. L. (2006). Contingent Incentives: Utility and Efficacy in Drug Abuse Treatment. Johns Hopkins University School of Medicine [On-line]. Available: http://www.governorsinstitute.org/index.php?option=com_docman&task=doc_download&gid=111&Itemid=65.

Abstract: PowerPoint presentation on use of incentives in drug abuse treatment.

Torrey, W. C., Drake, R. E., Cohen, M., Fox, L. B., Lynde, D., Gorman, P. et al. (2002). The challenge of implementing and sustaining integrated dual disorders treatment programs. *Community Ment Health J*, 38, 507-521.

Abstract: Integrated dual disorders treatment programs for people with severe mental illness and co-occurring substance use disorder have been implemented in a variety of community mental health center sites across the U.S. and in several other countries over the past 15 years. Consumers who receive services from programs that offer integrated dual diagnosis treatments that are faithful to evidence-based principles achieve significant improvements in their outcomes. Unfortunately, not all programs that attempt implementation are successful, and the quality of high-fidelity programs sometimes erodes over time. This article outlines implementation strategies that have been used by successful programs. As a general rule, success is achieved by involving all major participants (consumers, family members, clinicians, program

leaders, and state or county mental health authorities) in the process and attending to the three phases of change: motivating, enacting, and sustaining implementation

Trow, J. E. (1922). Techniques to initiate positive community response. 1973, *Selected papers delivered at The Ninth Annual West Virginia School on Alcohol and Drug Abuse Studies, June 17-22, 1973*. Oxford, England: West Virginia University. 165 pp., -22, 1973.

Abstract: Discusses aspects of a statewide, community-based alcohol and drug-abuse program in New Hampshire. The program aims specifically to work with at least 1 medical doctor in each of the larger communities to motivate and encourage him to participate actively in working with alcoholics and drug-dependent people. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Tsemberis, S. & Eisenberg, R. F. (2000). Pathways to housing: supported housing for street-dwelling homeless individuals with psychiatric disabilities. *Psychiatr Serv*, 51, 487-493.

Abstract: OBJECTIVE: This study examined the effectiveness of the Pathways to Housing supported housing program over a five-year period. Unlike most housing programs that offer services in a linear, step-by-step continuum, the Pathways program in New York City provides immediate access to independent scatter-site apartments for individuals with psychiatric disabilities who are homeless and living on the street. Support services are provided by a team that uses a modified assertive community treatment model. METHODS: Housing tenure for the Pathways sample of 242 individuals housed between January 1993 and September 1997 was compared with tenure for a citywide sample of 1, 600 persons who were housed through a linear residential treatment approach during the same period. Survival analyses examined housing tenure and controlled for differences in client characteristics before program entry. RESULTS: After five years, 88 percent of the program's tenants remained housed, whereas only 47 percent of the residents in the city's residential treatment system remained housed. When the analysis controlled for the effects of client characteristics, it showed that the supported housing program achieved better housing tenure than did the comparison group. CONCLUSIONS: The Pathways supported housing program provides a model for effectively housing individuals who are homeless and living on the streets. The program's housing retention rate over a five-year period challenges many widely held clinical assumptions about the relationship between the symptoms and the functional ability of an individual. Clients with severe psychiatric disabilities and addictions are capable of obtaining and maintaining independent housing when provided with the opportunity and necessary supports

Tsemberis, S., Gulcur, L., & Nakae, M. (2004). Housing First, Consumer Choice, and Harm Reduction for Homeless Individuals with a Dual Diagnosis. *American Journal of Public Health*. Vol.94(4)(pp 651-656), 2004., 651-656.

Abstract: Objectives. We examined the longitudinal effects of a Housing First program for homeless, mentally ill individuals' on those individuals' consumer choice, housing stability, substance use, treatment utilization, and psychiatric symptoms. Methods. Two hundred twenty-five participants were randomly assigned to receive housing contingent on treatment and sobriety (control) or to receive immediate housing without treatment prerequisites (experimental). Interviews were conducted every 6 months for 24 months. Results. The experimental group obtained housing earlier, remained stably housed, and reported higher perceived choice. Utilization of substance abuse treatment was significantly higher for the control group, but no differences were found in substance use or psychiatric symptoms. Conclusions. Participants in the Housing First program were able to obtain and maintain independent housing without compromising psychiatric or substance abuse symptoms

Van Dorn, R. A., Elbogen, E. B., Redlich, A. D., Swanson, J. W., Swartz, M. S., & Mustillo, S. (2006). The relationship between mandated community treatment and perceived barriers to care in persons with severe mental illness. *Int J Law Psychiatry*.

Abstract: OBJECTIVE: In recent decades debate has intensified over both the ethics and effectiveness of mandated mental health treatment for persons residing in the community. Perceived barriers to care among persons subjected to mandated community treatment, and the possibility that fear of involuntary treatment may actually create or strengthen such barriers rather than dissolve them, are key issues relevant to this debate but have been little studied. This article explores the link between receipt of mandated (or "leveraged") community treatment and reasons for avoiding or delaying treatment reported by persons with severe mental illness. It also examines the potential moderating effect of social support on the association

between mandated treatment experiences and barriers attributable to fear of involuntary commitment or forced treatment. **METHOD:** Data are presented from a survey of 1011 persons with psychiatric disorders being treated in public-sector mental health service systems in five U.S. cities. Logistic and negative binomial regression analyses were used to examine the association between mandated community treatment and perceptions of barriers to care, controlling for demographic and clinical characteristics. **RESULTS:** Across sites, 32.4% to 46.3% of respondents reported barriers attributed to fear of forced treatment. Whereas 63.7% to 76.1% reported at least one non-mandate-related barrier to care; the mean number of non-mandated barriers to care ranged from 1.6 to 2.3 (range 0-7). Between 44.1% and 59.0% of participants had experienced at least one type of leveraged treatment. Persons experiencing multiple forms of mandated treatment were more likely to report barriers to care in comparison to those not reporting mandated treatment. Findings also indicated that social support moderates the relationship between multiple leverages (three or four forms) and mandate-related barriers to care. **CONCLUSIONS:** Perceived barriers to care associated with mandated treatment experience have the potential to adversely affect both treatment adherence and therapeutic alliance. Awareness of potential barriers to care and how they interact with patients' perceived social support may lead to improved outcomes associated with mandated treatment

Wahl, O. F. (1993). Community impact of group homes for mentally ill adults. *Community Mental Health Journal*, *V29*, 247-259.

Abstract: The phenomenon of resistance to the establishment of group homes for mentally ill adults is well-documented. The extent to which such homes, once established, do or do not create problems for communities is less clear. The current study examined the impressions of residents of a group home neighborhood one year or more after the establishment of the home. Forty-one residents of group home neighborhoods and thirty-nine residents of control (non-home) neighborhoods responded to a survey about their impressions of how a group home had affected or (for controls) would affect their neighborhoods. More than one fourth of the group home neighbors did not even know that they were living near a home. Those who did know tended to report a negligible impact of the group homes on things such as property values, neighborhood crime, resident safety, and distressing incidents in the community. Most of these residents also indicated that they were satisfied with the group home in their neighborhoods. The actual experience of group home neighbors was far more favorable than what residents of the control neighborhood anticipated, despite lack of differences in demographic characteristics or overall attitudes toward community care of mentally ill persons. Results support the view that the feared consequences of group home establishment in residential neighborhoods do not occur and that such homes may gain reasonable acceptance after they are established.

Walker, R. & Seasons, M. (2002). Planning Supported Housing: A New Orientation in Housing for People with Serious Mental Illness. *Journal of Planning Education and Research*, *21*, 313-319.

Abstract: There is a new role for planning in housing for people with serious mental illness. It involves the development of partnerships and protocols between mental health agencies and housing providers. This new role is not concerned with zoning and mitigating not-in-my-backyard responses. Supported housing is the newest and most popular model of housing and support for people with serious mental illness. It involves affordable integrated housing paired with flexible individualized mental health support services. Focusing on the Canadian experience, the authors review where past research on housing for people with serious mental illness has taken us. Supported housing and the new roles that planners can play in implementing this model are discussed

Wallace, B. C. (2007). Making mandated addiction treatment work. *Lanham, MD, US: Jason Aronson*.

Abstract: (From the preface) Community-based addiction treatment represents a national frontier for pioneering the adaptation of evidence-based addiction-treatment interventions with some of the most challenging, multi-problem clients who also bring a high risk of recidivism and relapse. In light of the contemporary challenge, the nature of the social context, and the reality that the new majority of clients in addiction treatment are mandated, there is a tremendous need for a book about making mandated addiction treatment work. The kind of book needed at this time of national crisis must be a practical guide for how to adapt evidence-based addiction treatment interventions, how to integrate them within a unified treatment model, and how to tailor treatment to individual client needs. Practitioners need a book that goes so far as to articulate what those working with contemporary clients in addiction treatment should say and do in their

consultation rooms across the United States. This book serves as such a guide. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Wallace, C., Mullen, P. E., & Burgess, P. (2004). Criminal offending in schizophrenia over a 25-year period marked by deinstitutionalization and increasing prevalence of comorbid substance use disorders. *Am J Psychiatry*, *161*, 716-727.

Abstract: OBJECTIVE: This study examined the pattern of criminal convictions in persons with schizophrenia over a 25-year period marked by both radical deinstitutionalization and increasing rates of substance abuse problems among persons with schizophrenia in the community. METHOD: The criminal records of 2,861 patients (1,689 of whom were male) who had a first admission for schizophrenia in the Australian state of Victoria in 1975, 1980, 1985, 1990, and 1995 were compared for the period from 1975 to 2000 with those of an equal number of community comparison subjects matched for age, gender, and neighborhood of residence. RESULTS: Relative to the comparison subjects, the patients with schizophrenia accumulated a greater total number of criminal convictions (8,791 versus 1,119) and were significantly more likely to have been convicted of a criminal offense (21.6% versus 7.8%) and of an offense involving violence (8.2% versus 1.8%). The proportion of patients who had a conviction increased from 14.8% of the 1975 cohort to 25.0% of the 1995 cohort, but a proportionately similar increase from 5.1% to 9.6% occurred among the comparison subjects. Rates of known substance abuse problems among the schizophrenia patients increased from 8.3% in 1975 to 26.1% in 1995. Significantly higher rates of criminal conviction were found for patients with substance abuse problems than for those without substance abuse problems (68.1% versus 11.7%). CONCLUSIONS: A significant association was demonstrated between having schizophrenia and a higher rate of criminal convictions, particularly for violent offenses. However, the rate of increase in the frequency of convictions over the 25-year study period was similar among schizophrenia patients and comparison subjects, despite a change from predominantly institutional to community care and a dramatic escalation in the frequency of substance abuse problems among persons with schizophrenia. The results do not support theories that attempt to explain the mediation of offending behaviors in schizophrenia by single factors, such as substance abuse, active symptoms, or characteristics of systems of care, but suggest that offending reflects a range of factors that are operative before, during, and after periods of active illness

Wenocur, S. & Belcher, J. R. (1990). Strategies for overcoming barriers to community-based housing for the chronically mentally ill. *Community Mental Health Journal*, *V26*, 319-333.

Abstract: This paper reports the results of a study of community acceptance of housing for the mentally ill in Maryland. The findings indicate that community opposition is less likely to occur (1) when establishing apartmental living arrangements rather than group homes, (2) in less organized neighborhoods, (3) where other housing for specialized populations has not been previously developed, and (4) by using a low profile strategy which avoids informing community members in advance of start-up.

Wright, A., Mora, J., & Hughes, L. (1990). The Sober Transitional Housing and Employment Project (STHEP): Strategies for long-term sobriety, employment and housing. *Alcoholism Treatment Quarterly, Special Issue: Treating alcoholism and drug abuse among homeless men and women: Nine community demonstration grants*. *7*, 47-56.

Abstract: Describes a federally funded community demonstration project in Los Angeles, California, which provides alcoholism recovery, vocational rehabilitation, and housing services to homeless alcoholics. The project involves a 2-phase recovery program. In Phase 1, clients participate in a 90-day, 20-bed residential primary alcohol recovery and preemployment program in Acton, California. In Phase 2, clients enter a 120-day, 20-bed, transitional recovery, employment, and housing program at an Alcohol Recovery Center of the Mary Lind Foundation, located in Central Los Angeles. Preliminary evaluation results and major barriers to carrying out the project are described. (PsycINFO Database Record (c) 2006 APA, all rights reserved)

Xie, H., McHugo, G. J., Fox, M. B., & Drake, R. E. (2005). Special section on relapse prevention: Substance abuse relapse in a ten-year prospective follow-up of clients with mental and substance use disorders. *Psychiatric Services*, *56*, 1282-1287.

Abstract: Objectives: This study addressed the rate and predictors of substance abuse relapse among clients with severe mental illness who had attained full remission from substance abuse. Methods: In a ten-year prospective follow-up study of clients with co-occurring severe mental and substance use disorders, 169

clients who had attained full remission, defined according to DSM-III-R as at least six months without evidence of abuse or dependence, were identified. The Kaplan-Meier survival curve was developed to show the pattern of relapse, and a discrete-time survival analysis was used to identify predictors of relapse. Results: Approximately one-third of clients who were in full remission relapsed in the first year, and two-thirds relapsed over the full follow-up period. Predictors of relapse included male sex, less than a high school education, living independently, and lack of continued substance abuse treatment. Conclusions: After attaining full remission, clients with severe mental disorders continue to be at risk of substance abuse relapse for many years. Relapse prevention efforts should concentrate on helping clients to continue with substance abuse treatment as well as on developing housing programs that promote recovery. (PsycINFO Database Record (c) 2006 APA, all rights reserved) (journal abstract)

Yedidia, M. J., Gillespie, C. C., & Bernstein, C. A. (2006). A survey of psychiatric residency directors on current priorities and preparation for public-sector care. *Psychiatric Services*. Vol.57(2)(pp 238-243), 2006., 238-243.

Abstract: Objective: This study assessed how resident psychiatrists are being prepared to deliver effective public-sector care. Methods: Ten leaders in psychiatric education and practice were interviewed about which tasks they consider to be essential for effective public-sector care. The leaders identified 16 tasks. Directors of all general psychiatry residency programs in the United States were then surveyed to determine how they rate the importance of these tasks for delivery of care and how their training program prepares residents to perform each task. Results: A total of 114 of 150 residency directors (76 percent) responded to the survey. Factor analysis divided 14 of the tasks into three categories characterized by the extent to which their performance requires integration of services: within the mental health system (for example, lead a multidisciplinary team), across social service systems (for example, interact with staff of supportive housing programs), and across institutions with different missions (for example, distinguish behavioral problems from underlying psychiatric disorders among prisoners). Preparation for tasks that involved integration of services across institutions was rated as least important, was least likely to be required, and was covered by less intensive teaching modalities. Tasks entailing integration within the mental health system were rated as most important, preparation was most likely to be required, and they were covered most intensively. Midway between these two categories, but significantly different from each, were tasks relying on integration across social service systems. Conclusions: Tasks that involved integrating services across institutions with different missions were consistently downplayed in training. Yet the importance of such tasks is underscored by the assessments of the psychiatric leaders who were interviewed, the high valuation placed on this type of integration by a substantial subset of training directors, and the extent of mental illness among populations who are institutionalized in nonpsychiatric settings. <3>

Zerger, S. (2002). SUBSTANCE ABUSE TREATMENT: WHAT WORKS FOR HOMELESS PEOPLE? A REVIEW OF THE LITERATURE. National Health Care for the Homeless Council [Online]. Available: <http://www.nhchc.org/Publications/SubstanceAbuseTreatmentLitReview.pdf>

Ziedonis, D. M., Smelson, D., Rosenthal, R. N., Batki, S. L., Green, A. I., Henry, R. J. et al. (2005). Improving the care of individuals with schizophrenia and substance use disorders: consensus recommendations. *J Psychiatr Pract*, 11, 315-339.

Abstract: National attention continues to focus on the need to improve care for individuals with co-occurring mental illnesses and substance use disorders, as emphasized in the 2003 President's New Freedom Commission Report on Mental Health and recent publications from the Substance Abuse and Mental Health Services Administration (SAMHSA). These reports document the need for best practice recommendations that can be translated into routine clinical care. Although efforts are underway to synthesize literature in this area, few focused recommendations are available that include expert opinion and evidence-based findings on the management of specific co-occurring disorders, such as schizophrenia and addiction. In response to the need for user-friendly recommendations on the treatment of schizophrenia and addiction, a consensus conference of experts from academic institutions and state mental health systems was organized to 1) frame the problem from clinical and systems-level perspectives; 2) identify effective and problematic psychosocial, pharmacological, and systems practices; and 3) develop a summary publication with recommendations for improving current practice. The results of the consensus meeting served as the foundation for this publication, which presents a broad set of recommendations for clinicians who treat individuals with schizophrenia. "Integrated treatment" is the new standard for evidence-based

treatment for this population and recommendations are given to help clinicians implement such integrated treatment. Specific recommendations are provided concerning screening for substance use disorders in patients with schizophrenia, assessing motivation for change, managing medical conditions that commonly occur in patients with dual diagnoses (e.g., cardiovascular disease, liver complications, lung cancer, HIV, and hepatitis B or C infections) and selecting the most appropriate medications for such patients to maximize safety and minimize drug interactions, use of evidence-based psychosocial interventions for patients with dual diagnoses (e.g., Dual Recovery Therapy, modified cognitive-behavioral therapy, modified motivational enhancement therapy, and the Substance Abuse Management Module), and key pharmacotherapy principles for treating schizophrenia, substance use disorders, and comorbid anxiety, depression, and sleep problems in this population. Finally the article reviews programmatic and systemic changes needed to overcome treatment barriers and promote the best outcomes for this patient population. An algorithm summarizing the consensus recommendations is provided in an appendix.