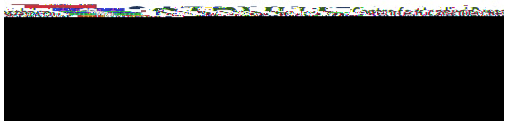

Housing for People with Substance Use and Concurrent Disorders: Summary of Literature and Annotated Bibliography

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

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Reviewers and Contributors

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

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Housing for People with Substance Use and Concurrent Disorders:

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

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

Reviewers' Summary

1. **Title of Paper**
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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

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

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

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.

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),*

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., Kasprow, 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 subs

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 hos

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 va(9l)8.7(eu)9(l tD-.0e0001 T0001u( )Tj/TT4 1 Tf)0J17vior(9alishexic54 -i(a)-.1a]y (

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

1.1.

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

Reviewers' Summary

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, finders 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:**
   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)**

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 meth waycojorg p,s wtaincilitiy): R&(o).soward a matii(Evanosed

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

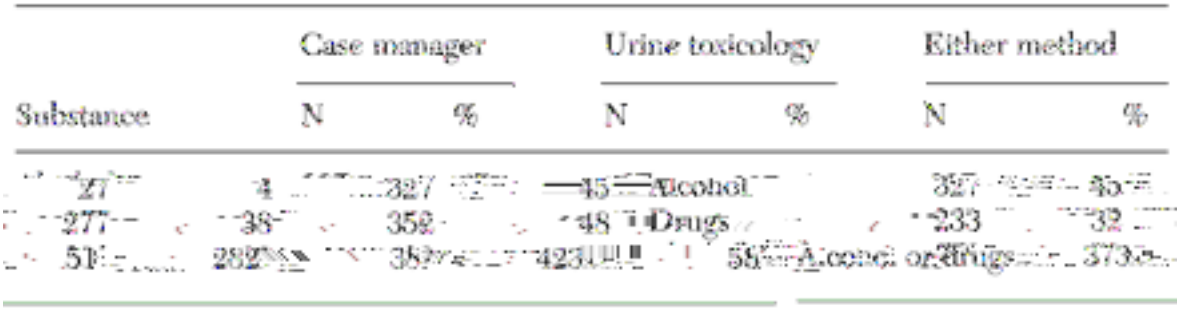
Reviewers' Summary

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)



	Case manager		Urine toxicology		Either method	
Substance	N	%	N	%	N	%
[illegible]	[illegible]	[illegible]	[illegible]	Alcohol	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	Drugs	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	Alcohol or drugs	[illegible]	[illegible]

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

Appendix 1: Research Methodology

An initial search was conducted of a number of

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") KW=Housing AND (KW="Dual diagnosis" OR KW="Drug abuse") – reviewed	1047	Results too broad to be efficient use of database/researcher's time ousi3ig AD (K3Kw=Housing AND (KW="Dual diagnosis" OR KW="Drug abuse") – reviewed

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			

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

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

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.

substance abuse treatment; (2) a co

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

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 fTJ13.e4WMbstiis6(1)-t co OR=1elatedxpanpo3.5(=1)4.2

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

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 w

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 an trying to attain or maintain abstinence, family interventions, housing, rehabilitation, and psychopharmacology. Further research is

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 high5 -1.1497 TDG(n)-1.9(tfi6adl(n)s(andaF1e)6(key)5.6(AOR)4.2()-1.3(e)6(9

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 drag 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 drag 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 drag 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

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

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

symptoms during treatment only, and fewer hospitalizations and legal problems during follow-up. CONCLUSIONS: Combining CRA with vouchers had

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

Iutcovich, M., Iutcovich, 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, re

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)

Kasprow, 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.

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,

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, E

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

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

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

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 r

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:

O'Connell, M., Rosenheck, R., Kasprow, 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

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

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 mainte

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

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

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 grou

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.

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

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

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 fl

consultation rooms across the United States. This book serves as such

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 psychi

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