Your selected document

▶ Toward cost-effective initial care for substance-abusing homeless.

Milby J.B., Schumacher J.E., Vuchinich R.E. et al. Request reprint

Journal of Substance Abuse Treatment: 2008, 34(2), p. 180–191.

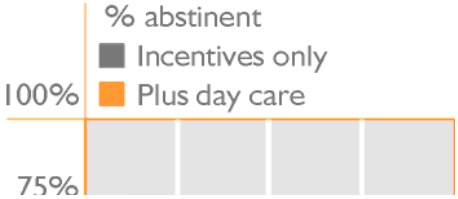
Offering homeless, unemployed people seeking treatment for cocaine dependence access to housing and paid employment if they stay drug-free is a powerful incentive, but adding intensive counselling helps maintain abstinence once the incentives end.

Abstract This US trial was one of a series conducted in Birmingham, Alabama with a consistent methodology, each involving homeless men and women generally dependent on cocaine and suffering severe distress but not psychotic, and prepared to enter treatment for their drug problems. The series aimed to disentangle the active ingredients of aiding this difficult-to-treat population to resolve their drug problems and get back on their feet in terms of housing and employment.

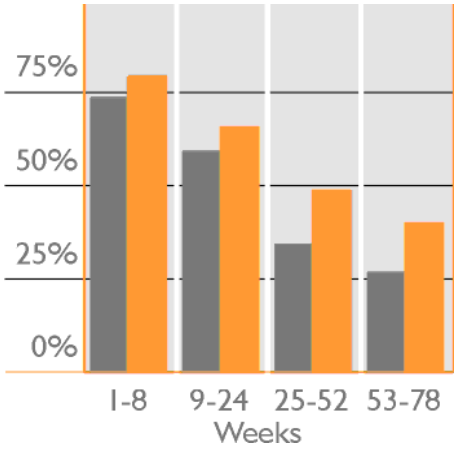
In the current study participants were identified at a medical facility serving homeless patients and invited to participate in the study. It entailed them being given a furnished flat with food from week two of the study up to 24 weeks, as long as frequent urine tests showed they had not used alcohol or other drugs. Earnings (explained next) paid the study housing's modest rents in weeks nine to 24, before which it was free. From weeks one to 24 participants also had access to vocational training and employment with pay rates dependent on abstinence. Sustained abstinence qualified participants for follow-on public housing.

Additionally, a randomly selected half of the participants were allocated to an intensive day care programme aiming to help them set and achieve objectives to improve their lives in ways which could be expected to buttress their recovery. Attainment of milestones was rewarded with shopping vouchers. Further counselling helped them resolve personal and emotional problems and develop coping skills.

The main issue was whether adding day care could further improve outcomes when the participants were already subject to powerful employment/housing incentives. During the 24 weeks these incentives were applied, day care



participants were only slightly and non-significantly more likely to be abstinent at any point or to sustain abstinence. But after incentives ended, their abstinence rate declined more slowly than that of incentives-only participants. The result was that on both measures, day care resulted in significantly higher abstinence rates in last year of the study. The authors concluded that for this caseload, employment/housing rewards and punishments on their own were a viable initial intervention, and that intensive day care might be reserved for participants who did not respond well to these contingencies or with co-morbidities such as serious mental illness.



FINDINGS The key finding that combining day care with incentives improved abstinence outcomes had previously been confirmed in reverse – by adding incentives to day care, rather than day care to incentives. Adding incentives substantially improved retention and abstinence outcomes and led to smaller but still worthwhile gains in housing and employment rates. An important difference is that in the earlier study, once the added incentives had been withdrawn, associated abstinence, housing and employment gains eroded until one year after treatment entry there was little difference between the groups. In contrast, in the featured study abstinence gains from adding day care became *more* apparent after incentives ended.

Both studies left open the possibility that simply providing housing and employment assistance, but without abstinence requirements attached, might have been just as effective. For the housing component, this was tested by the same research team in a study which supplemented day care and paid employment opportunities with housing which was either dependent on abstinence, or provided regardless of the participant's substance use. Even while this was in place, requiring abstinence to qualify for housing increased abstinence rates consistently but only slightly. Neither did it further improve housing or employment outcomes compared to day care only, or to this plus no-strings housing.

Another US research team has investigated the impact of making employment dependent on abstinence, but among a different population – unemployed patients living in poverty in Baltimore who despite being maintained on methadone continued to inject and used cocaine/crack. They volunteered for a data-entry and keypad skills training/work programme remunerated by shopping vouchers. Half were randomly allocated to have access to the workplace (and therefore to pay) only if they submitted a cocaine-negative urine test. The other half were also tested, but the results made no difference to their access to work. This regimen lasted six months. During that time patients required to be abstinent were less likely to use cocaine or to inject, but non-users were still in the minority. Most continued to use cocaine and probably as a result, they spent far fewer days at work and earned less money than patients not required to be abstinent, who also tended to make greater progress in their training. Also the abstinence gains were transitory. Six months after the programme ended, if anything it was the patients who had *not* been required to be abstinent who were more likely to be cocaine-free. They were also less likely to be trading sex, sharing injecting equipment, or patronising

shooting galleries, though by his stage nearly all the diffidence between the two groups were minor and all were statistically insignificant.

The combined implication of these studies is that among these poor, unemployed, and largely black populations enmeshed in illegal drug use, work and housing incentives can help initiate and extend drug-free periods, but intensive support is needed to maximise and maintain the benefits once incentives are withdrawn. Without this, the gains from making housing and work dependent on abstinence rapidly erode, and it is unclear whether the long-term benefits justify disrupting the housing and employment stability of patients subject to the contingencies. This disruption is consequent on requiring abstinence in a population for whom this is a very high hurdle. In the featured study, even with intensive support and after a programme lasting from 7.30am to 4pm four days week plus a half day, by the end of the follow-up period most participants continued to use alcohol or other drugs. It also seems that offering decent, affordable housing, substantial employment assistance, and paid employment itself, but *without* requiring abstinence, has in the longer term been just as effective as making these benefits contingent on abstinence, though the evidence is sparse.

The featured study faced several challenges common to contingency management programmes. Most studies have only documented the limited period during which incentives were in place. Through this window, the approach seems very effective. But extending the view to the post-incentive period reveals that participants often quickly reverse towards to their previous behaviour. This may be partly because impacts are typically limited to the targeted behaviours and/or the targeted drugs. Effectively, people do what is needed to get the rewards or avoid the punishments, potentially leaving other relapse-precipitating features of their lives ready to exert their influence once the programme ends. Overcoming this by extending the intervention may be impractical, and may in any event not work; unlike other interventions, in general the longer a contingency management programme runs, the weaker its effects. Another limitation is that such programmes are most feasible and work best when they target a single drug, yet many patients use several to excess. Targeting all these risks setting the bar so high that many patients do not experience the incentives. Even with simpler regimens, patients commonly qualify for none of the rewards or are subjected to sanctions because they do not exert the required control over their behaviour. The risk is that the most vulnerable, unstable and severely dependent participants are further disadvantaged, either missing out altogether or being repeatedly 'knocked back' as they fail to sustain the required standards.

Other studies have attempted to mitigate these risks by enabling incentives to be earned through smaller steps, rewarding recovery-promoting activities rather than or as well as abstinence, and by combining contingency management with programmes which address the individual's psychological or social vulnerabilities. The featured study tried several of these tactics. Within the contingency management regimen, recovery-promoting vocational and employment-related activities were financially rewarded, while psychosocial vulnerabilities were addressed by pairing the incentives with intensive day care. Whether the more severely dependent or unstable patients were relatively disadvantaged is not reported. We know from an earlier study in the series that a quarter of the participants offered intensive day care and housing/employment incentives did not

control their substance use sufficiently to qualify for any rewards.

Based on a recommendation from the National Institute for Health and Clinical Excellence (NICE), contingency management programmes are now being trialled in British drug treatment services. Government welfare-to-work plans incorporate a 'contingency management' type element in the form of reduced benefit payments for problem drug users who do not engage with and make progress in the rehabilitation plan agreed with (or determined by) their employment adviser. These moves take Britain closer (but still quite distant) to a policy context in which the type of programme tested in the featured study might be feasible and acceptable.

If contingency management does become prevalent in Britain, much will depend on the particular form it takes. The evidence is strongest for rewarding desired behaviour and this is the approach staff and patients may be most comfortable with, but it risks a public and media backlash. Punishing undesired behaviour is less effective and risks counterproductive side effects, but may be more acceptable to the broader public. Another alternative is to reward good behaviour by removing punishments, but this has not been adequately researched.

Thanks for their comments on this entry in draft to Tim Leighton of Action on Addiction's Centre for Addiction Treatment Studies. Commentators bear no responsibility for the text including the interpretations and any remaining errors.

Last revised 24 February 2009

▶ Comment on this entry • ▶ Give us your feedback on the site (one-minute survey)

Top 10 most closely related documents on this site. For more try a subject or free text search

A practical clinical trial of coordinated care management to treat substance use disorders among public assistance beneficiaries ABSTRACT 2009

Improving 24-month abstinence and employment outcomes for substance-dependent women receiving Temporary Assistance For Needy Families with intensive case management ABSTRACT 2009

Take the network into treatment THEMATIC REVIEW 2004

Addressing medical and welfare needs improves treatment retention and outcomes NUGGET 2005

Coping skills training and contingency management treatments for marijuana dependence: exploring mechanisms of behavior change ABSTRACT 2008

Psychosocial interventions for people with both severe mental illness and substance misuse REVIEW ABSTRACT 2008

Computer-assisted delivery of cognitive-behavioral therapy for addiction: a randomized trial of CBT4CBT ABSTRACT 2008

For crack users, non-residential rehabilitation can match residential NUGGET 2002

The impact of worker values on client outcomes within a drug treatment service ABSTRACT 2008

Self-financing resident-run houses maintain recovery after treatment NUGGET 2008