

# Research Notes

## Intensive Case Management Improves Substance Abuse and Employment Outcomes of Female Welfare Recipients: Preliminary Findings

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### EXECUTIVE SUMMARY

Welfare caseloads have declined dramatically since 1996, assisted in part by a strong economy. However, many families have not made the transition to stable employment. As welfare reform reauthorization approaches, there has been an increasing discussion about welfare recipients who experience a variety of personal barriers to employment, or what have been characterized as hard-to-employ (HtE) populations (Brown, 2001). Studies have shown that a large proportion of recipients have physical and behavioral health barriers and that a greater number of barriers is associated with lower rates of employment (Chandler & Meisel, 2000; Danziger et al., 2000). States have begun to experiment with more intensive service programs to assist HtE recipients than the typical "work first" approach that emphasizes rapid labor force attachment (Brown, 2001).

Many of the families remaining on welfare caseloads face significant barriers to employability. Among the most significant of these is substance abuse. States are struggling to develop innovative strategies to effectively address substance abuse in the context of welfare reform. Some states have attempted to integrate substance abuse treatment into their welfare employment programs, yet rates of entry and retention in substance abuse treatment continue to be low. Studies have consistently demonstrated that those receiving substance abuse treatment have better employment outcomes (Nakashian & Moore, 2000), but it is necessary for clients to remain in treatment in order to achieve these effects (Wickizer et al, in press).

This report is based on a study conducted in New Jersey comparing two contrasting intervention approaches for substance abusing women on welfare: Care Coordination and Intensive Case Management. Earlier reports indicated that providing Intensive Case Management services compared to a more limited triage and referral system increased rates of entry and retention in substance abuse treatment during the first 3 months post admission. Clients referred to substance abuse treatment programs using the Intensive Case Management approach were significantly more likely to enter substance abuse treatment and were especially more likely to continue attending outpatient treatment sessions (Morgenstern, J., Riordan, A., McCrady, B.S., Blanchard, K.A. & Irwin, T.W., 2001). The purpose of this report is to present treatment entry and retention rates 9 months post admission as well as preliminary substance abuse and employment outcomes.

An initial cohort of 155 female TANF recipients screened positive for substance abuse and were determined to need treatment. These women were randomly assigned to Care Coordination (CC) or Intensive Case Management (ICM). A group of 69 non-substance abusing female welfare recipients were recruited to serve as a comparison group. Data were collected from participants in all groups for 9 months after the recruitment.

Although both CC and ICM appear to be useful strategies to integrate substance abuse treatment into welfare programming, preliminary findings indicate the benefits of providing intensive case management services over a more limited triage and referral system. Intensive case management significantly increased rates of engagement in substance abuse treatment, as well as rates of abstinence from drugs and alcohol. For example, nine months after intake into the study almost 50% of clients in ICM were completely abstinent versus about 40% for the CC clients. However, ICM did not increase rates of engagement in work and training activities, at least during the first 9 months of the program. Rates of employment and training for substance abusers in both groups were significantly lower than those of non substance abusers. Findings indicate that intensive case management interventions are more effective in increasing rates of abstinence from substances than triage and referral, although it seems to have no immediate effect on engagement in work and training. Further study is clearly needed to examine more long-term substance abuse and employment outcomes.

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## **BACKGROUND AND RATIONALE**

Studies suggest a high prevalence of substance abuse among women receiving public assistance, with some studies reporting rates as high as 27-39% (CSAT, 1996; Kline et al., 1998; Sisco & Pearson, 1994). Substance abuse among parenting women has long been identified as a major public health problem (e.g. Reed, 1985). However, as states implement welfare reform, attempts to address this problem take on greater urgency. States have adopted strict new work requirements and time limits on receipt of welfare benefits, yet substance abusers face substantial barriers to employability. Most will require effective substance abuse treatment and additional services to address associated problems such as low basic skills, housing, mental health disorders, and domestic violence before they can begin to work (Pavetti et al., 1997).

The relationship between substance abuse and employment is strong. Research has consistently shown that substance abuse impairs work performance and those receiving substance abuse treatment have better employment outcomes (Nakashian & Moore, 2000). For example, Wickizer et al. (in press) studied 5,664 substance abusing welfare recipients in Washington State. Recipients who remained in treatment were 25% to 100% more likely to become employed than those who did not receive treatment or dropped out of treatment early. Thus, research findings support the important role of substance abuse treatment in helping clients obtain employment and self-sufficiency.

Currently, states are struggling to develop innovative strategies to effectively address substance abuse in the context of welfare reform. A few states have implemented systems to integrate substance abuse treatment into welfare-to-work programs. Typically these systems involve an expansion of funding for substance abuse treatment, screening for substance abuse within welfare contexts, triage and referral of recipients with problems to substance abuse

treatment, and coordination of treatment with employment programming. While these approaches represent great strides in reducing the fragmentation that has existed between welfare and substance abuse treatment services, the literature is consistent in suggesting that the current structure of substance abuse treatment is poorly matched to the needs of disadvantaged, parenting women (e.g. Brindis, C.D., Berkowitz, G., Clayson, Z. & Lamb, B., 1997; Gustavson & Rycraft, 1993). A primary concern has focused on issues of treatment engagement and retention. Parenting women experience tangible (e.g., lack of child care) and psychological (e.g. denial of problems) barriers to entering into and staying in treatment. In addition, parenting women present with an array of problems not addressed by substance abuse treatment programs. Recommendations for improving outcomes have focused on lowering treatment barriers and providing more comprehensive and coordinated care. Studies have suggested that augmenting existing substance abuse treatment with intensive case management services might improve treatment engagement and outcome (Laken & Ager, 1996). In addition, contingency management such as providing incentives to reinforce treatment tasks has improved outcomes over usual care (Iguchi et al., 1997).

Overall, the literature suggests that implementing a triage and referral system to coordinate care across welfare and treatment might not be sufficient to effectively address substance abuse among women on welfare and that a more comprehensive and intensive set of services may be needed. However, no studies have examined which approach would be most effective or determined their relative costs. In order to address this issue, officials at the New Jersey (NJ) Department of Human Services partnered with scientists from The National Center on Addiction and Substance Abuse (CASA) and Rutgers University to design and implement a welfare demonstration project. The primary aim of this project is to evaluate the effectiveness and cost of two contrasting approaches to address substance abuse problems among women on welfare. One approach, Care Coordination (CC), represents the standard of care typically available to address substance abuse in welfare settings. The alternative approach, Intensive Case Management (ICM), augments standard care by adding intensive case management services and contingency interventions.

Earlier reports indicated that providing intensive case management services compared to a more limited triage and referral system increased rates of entry and retention in substance abuse treatment during the first 3 months post admission. ICM was significantly more effective than CC in facilitating treatment entry, with 88% of clients in ICM attending at least one day of substance abuse treatment versus 67% of clients in CC ( $p < .001$ ). All participants were assigned to outpatient treatment either directly or following inpatient care, yet 83% of clients in ICM attended outpatient care during the 3 months post admission, versus 51% of CC clients ( $p < .001$ ). In addition, ICM was significantly more effective in retaining participants in treatment. Clients in ICM attended 43% of the days they were assigned versus 24% for CC clients ( $p < .001$ ). And on average, ICM clients attended about five times more outpatient sessions in the first three months (30 sessions for ICM; 7 for CC). The purpose of this report is to present treatment entry and retention rates 9 months post admission as well as preliminary substance abuse and employment outcomes.

## **METHODS**

The following section provides a brief description of study methods described in more detail in earlier reports (Morgenstern, J., Riordan, A., McCrady, B.S. et al., 2001; Morgenstern,

J., Riordan, A., DePhillipis, D. et al., 2001). Additional details are available from the study authors.

### Sample

The sample was a preliminary cohort of 155 substance dependent women who were recruited into the study between September 1999 and October 2000. Selection criteria were designed to identify a sample of women receiving TANF benefits who were required to engage in employment activities and met criteria for a substance dependence disorder. Women seeking methadone maintenance treatment were excluded. A preliminary descriptive profile indicated that on average women were in their mid-thirties, were mothers to about 3 children, a little less than half had completed high school, and most were African-American. More than half reported a primary problem with either opiates or cocaine, most had been using substances regularly for several years, and about half had received prior substance abuse treatment.

A second sample of 69 women receiving TANF benefits not meeting criteria for a substance use disorder were recruited for comparison purposes.

### Procedures

Women were screened by caseworkers at local welfare offices using a brief nine item screening measure that assesses the presence of alcohol and other drug use problems, the CAGE-AID (Brown, 1992). Those whose screening results suggested a substance use disorder (screened positive) were referred to specially trained addiction counselors who completed a comprehensive assessment using a standardized battery of measures. Constructs assessed included substance use diagnoses, the American Society of Addiction Medicine (ASAM) Patient Placement Criteria, and need for services in a variety of domains. Women who met study criteria were then randomly assigned to one of two intervention conditions: CC or ICM. Very few women (less than 5%) refused study participation. Thus, it appears that the sample is representative of women on welfare who screen positive for substance abuse in a welfare setting and require, although not necessarily request, substance abuse treatment. Treatment programs provided attendance data on participants at least every other week.

The comparison sample was recruited as follows: those screening negative on the CAGE-AID were informed that they could participate in a study and were referred to research staff located at the welfare setting. Those interested and eligible were administered informed consent and interviewed in a confidential space outside the welfare office. All comparison participants were required to provide a urine sample to verify self-report of no substance use.

### Interventions

The interventions are only reviewed briefly here. See earlier reports for more information (Morgenstern, J., Riordan, A., McCrady, B.S. et al., 2001; Morgenstern, J., Riordan, A., DePhillipis, D. et al., 2001). Women randomized into CC were triaged and referred to an appropriate level of substance abuse treatment. Initial appointments were scheduled with treatment facilities, and outreach was limited to several phone calls and letters. Women randomized to ICM met with a pair of case managers where staff identified tangible barriers to treatment entry such as childcare, transportation, and housing problems and provided needed services. If needed, case managers engaged in extensive outreach efforts including home visits and contacting family members. Once clients entered treatment, case managers assisted treatment programs in coordinating needed services, met with clients regularly, and provided clients with incentives for attending treatment in the form of product vouchers.

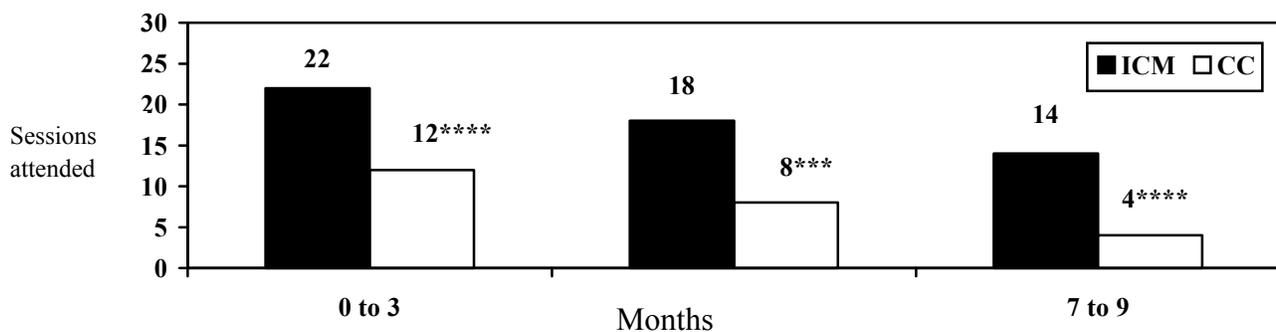
## RESULTS

Outcome data for this report include data 9 months post intake into the SARD program. *t*-tests and chi-square analyses were used to test for differences between intervention conditions.

### Treatment Engagement and Retention

Figure 1 shows engagement in substance abuse treatment during the 9 months post admission. Clients in ICM attended significantly more treatment sessions (both inpatient and outpatient combined) than did CC clients during the first 9 months of their participation in the study ( $p < .001$ ). On average, clients in ICM attended 14 treatment sessions during months 7 through 9 versus 4 sessions attended by the CC clients ( $p < .0001$ ).

**AOD Treatment Engagement 9-months**



\*  $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ , \*\*\*\* $p < .0001$

Ninety days of treatment is often considered a minimally adequate dose of treatment for those with drug dependence, and consequently Figure 2 presents the percentage of participants in ICM and CC who attended 90 sessions or more during their first 9 months in the study. Approximately 23% of ICM clients attended at least 90 days of treatment versus 5% of CC clients ( $p < .001$ ).

**AOD Treatment Engagement – 9 months**



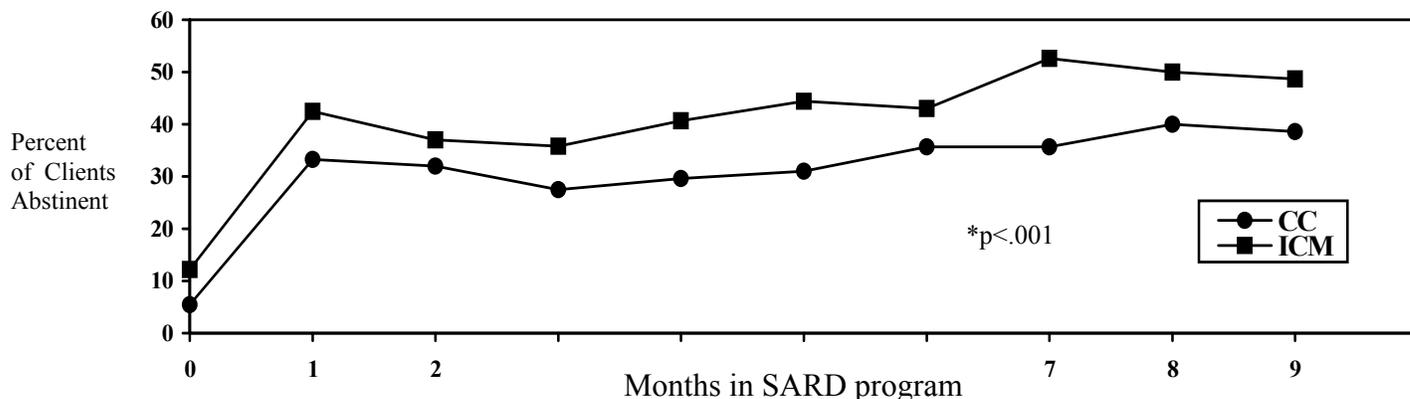
\*  $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ , \*\*\*\* $p < .0001$

### Substance Use Outcomes

**Early Substance Abuse and Employment Outcomes of Two Approaches to Engaging Welfare Recipients in Substance Abuse Treatment**

Figure 3 presents the percentage of clients who were abstinent during each of the first 9 months of the program. Significantly more clients in ICM were completely abstinent during each of the 9 months, with approximately 36% of ICM clients abstinent during month 3 versus 28% of CC clients ( $p < .001$ ). By month 9, rates of abstinence have increased with almost half of ICM clients reporting complete abstinence versus 39% of CC clients ( $p < .001$ ). Clients in ICM were also using on fewer days, with ICM reporting an average of 44% abstinent days during the last 90 days versus 30% abstinent days in CC.

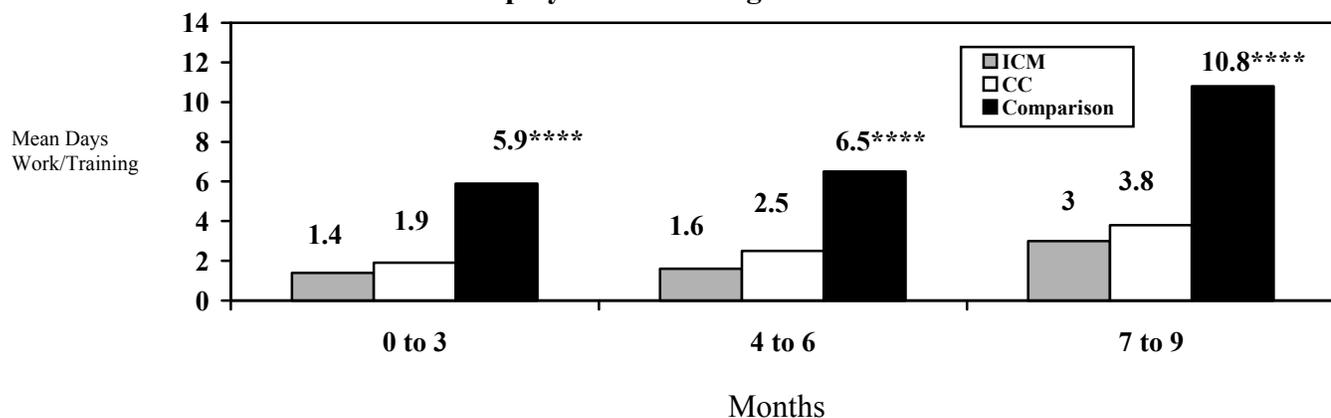
**Abstinence Per Month by Treatment Condition**



Employment Outcomes

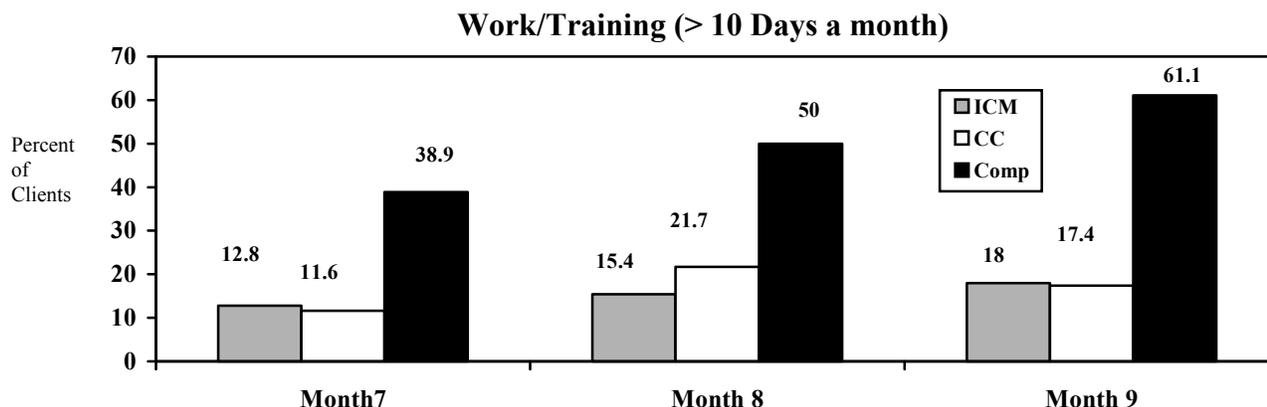
Figure 4 presents 9-month employment and training outcomes for clients in ICM and CC as compared to the group of non-substance abusing welfare recipients (Comparison group). While clients in ICM and CC did not differ on their rates of employment and training during the months of follow-up, clients in the comparison group reported significantly more work and training days. On average ICM and CC participants reported participating in work or training activities 1.5 to 2 days per month in the first 3 months versus 6 days per month for the comparison group ( $p < .0001$ ). During months 7 to 9 ICM and CC clients reported approximately 3 to 4 days per month versus about 11 days per month for the comparison group ( $p < .0001$ ).

**Employment/Training Outcomes 9-months**



\* $p < .05$ , \*\* $p < 0.1$ , \*\*\* $p < .001$ , \*\*\*\* $p < .0001$

Figure 5 presents the percentage of clients in each condition who worked or attended training at least 10 days during months 7 through 9. While approximately the same percentage of clients in ICM and CC attended 10 or more days of work and/or training during each of months 7 through 9, significantly more comparison clients attended at least 10 days. During month 9, fewer than 1 out of 5 clients in ICM or CC worked/trained for 10 days or more compared to 3 out of 5 comparison clients.



## DISCUSSION

Substance abusing TANF women experience substantial barriers to employability and are vulnerable to poor outcomes under welfare reform. The trends found during the first 3 months, for ICM to do better than CC at getting clients to enter into and stay into treatment, continued through month 9. Triage and referral systems were able to engage a majority of recipients in some treatment, but absolute levels of engagement and retention continued to be low. Intensive case management significantly increased treatment engagement and retention, but overall rates were still modest.

Preliminary findings indicated a significant decrease in substance use from baseline to 9 month follow-up for both groups. Rates of absolute abstinence during the 9 months were significantly higher for the intensive case management group. Findings offer tentative support for the use of public health approach interventions (e.g. screening and feedback, intensive case management) as a way to improve the effectiveness of the current substance abuse system.

Employment outcomes for both substance abusing groups were low. While participation in work and training activities did increase from baseline to nine month, on average, clients with substance use problems attended very little work or training activities. The non-substance abusing comparison group of women on welfare attended significantly more work and training activities than the clinical group throughout the follow-up period. Some of the substance abusers are engaged in treatment so they should spend less time in work and training activities. However the number of clients still in treatment 9 months post admission is small.

Importantly, a number of problems with implementation of ICM were encountered and improvements in implementation could lead to improved outcomes. A number of recommendations to improve implementation may increase rates of abstinence and employment. Better coordination of care between case managers and agencies such as welfare, the substance abuse treatment programs, child welfare systems, and training and employment vendors may promote better outcomes for intensive case management clients. The current system is very

difficult for clients to navigate and agencies have little, if any, communication between them. Yet coordination across agencies could enable the clients to receive the services they need in a more efficient and effective manner. Contingency management could be strengthened such that clients receive more immediate reinforcement for entering into and staying in treatment. Clients with substance abuse problems get immediate reinforcement from using substances.

Consequently, immediate reinforcement for getting clean and attending treatment may be a potent intervention. Additionally, clients with little or no work experience could benefit from increased services to transition from treatment into work. Most substance abuse treatment programs offer little if any employment counseling and/or training and clients often complete and leave treatment without a work activity scheduled.

Findings strongly support the literature indicating that standard substance abuse treatment may be poorly matched to the needs of disadvantaged parenting women, but that augmenting services through case management can substantially increase treatment engagement and perhaps treatment outcomes. Its ability to increase employment outcomes is still unclear.

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