NBER WORKING PAPER SERIES

WELFARE REFORM, WORK REQUIREMENTS, AND EMPLOYMENT BARRIERS

Ellen Meara
Richard G. Frank

Working Paper 12480
http://www.nber.org/papers/w12480

NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
August 2006

We are grateful to Shelly Greenfield, Steven Haider, Tom McGuire, and Harold Pollack for helpful discussions and comments on earlier drafts of the paper. The authors gratefully acknowledge funding from the MacArthur Network on Mental Health Policy and the National Institute on Drug Abuse grants DA 10233-06 and DA019485-01. The views expressed herein are those of the author(s) and do not necessarily reflect the views of the National Bureau of Economic Research.

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August 2006
JEL No. I3, J08

ABSTRACT

The Personal Responsibility and Work Opportunity Reconciliation Act imposed work requirements on welfare recipients. Using 1999-2001 data from Boston, Chicago, and San Antonio, we compared the labor market and welfare experience of women with four employment barriers: poor mental health, moderate to heavy drug and alcohol use, a child with a behavior problem, and a child under the age of 3. Women with poor mental health and drug and alcohol users were much less likely to move into work than other groups, and more likely to be sanctioned for noncompliance with welfare requirements in 2000-2001 as federal work participation requirements increased.

Ellen Meara
Department of Health Care Policy
Harvard Medical School
180 Longwood Avenue
Boston, MA 02115-5899
and NBER
meara@hcp.med.harvard.edu

Richard G. Frank
Department of Health Care Policy
Harvard Medical School
180 Longwood Avenue
Boston, MA 02115
and NBER
frank@hcp.med.harvard.edu

I. Introduction

It has been about ten years since Congress passed landmark legislation altering the landscape of income assistance in the United States. The Personal Responsibility, and Work Opportunity Reconciliation Act of 1996 (PRWORA) replaced the entitlement program, Aid to Families with Dependent Children, with Temporary Assistance to Needy Families (TANF), financed by block grants to the states, with the goals of increasing self-sufficiency, reducing public program participation, and increasing incentives to work. Key features of PRWORA toward those goals included: a 60-month lifetime limit on receiving TANF benefits, work requirements for welfare recipients, and a federal requirement that states impose sanctions (partial or full reduction of cash and in-kind benefits for several months, or termination of benefits) for recipients who do not comply with program requirements.[1] States have had the latitude to exempt up to 20 percent of the pre-legislation caseload from requirements by deeming them unable to work. Typical reasons for exemptions include caregiver responsibilities for young or disabled children, for example, or health problems.

In the early years after PRWORA, a consensus emerged among policy makers and researchers that the legislation was a success based on an extensive literature demonstrating reduced caseloads, more work among income support recipients, and declines in the public program participation rate of single mothers (Blank 2002; Moffitt

[1] Under PRWORA, states are permitted to impose shorter lifetime limits, and stricter sanctions than those described in the legislation, and some do. By 2002, states were required to meet 50% work participation requirements. That is, 50% of the 1995 welfare caseload had to be engaged in work activity.

2003) . Caseloads dropped by nearly 60 percent between 1996 and 2005 (U.S. Department of Health and Human Services 2006). Employment among single mothers grew and poverty rates did not rise (Blank 2002). The economic expansion of the late 1990s played a role in this early success, but most agree that the reform had few if any of the disastrous consequences feared by advocates for low-income families.

The literature to date focuses on the average impact of welfare reform, though recent work acknowledges that the mean impact likely misses variation in welfare outcomes (Bitler, Gelbach and Hoynes 2005). The population receiving welfare is heterogeneous and changing. Several studies from the mid-1990s document a wide range of employment barriers among this population. These barriers include caregiver responsibilities for family members (i.e. children or disabled), poor health, including mental illness and substance abuse, and low human capital that hinder employment. Also important are barriers such as a lack of transportation or child care that impede women from maintaining employment (Danziger, Corcoran, Danziger and al. 2000; Gutman, McKay, Ketterlinus and McLellan 2003; Zedlewski and Loprest 2001). Only a handful of these barriers, such as caring for an infant, received explicit attention in PRWORA. Despite the lack of federal attention to employment barriers, the presence of work barriers has been widely discussed by state policy makers, welfare program administrators, and advocates for low-income families. Many have predicted that over time the TANF caseload would become increasingly disadvantaged as the most work-ready recipients leave welfare, but research does support that prediction (Zedlewski 2003). In this paper, we focus on the response to PRWORA of two important groups of recipients that carry work barriers related to mental illness and substance use disorders.

It is estimated that these groups represent 30 percent and 20 percent of TANF recipients, respectively (Metsch and Pollack 2005; Zedlewski 1999).

Most states recognize that some TANF recipients face substantial barriers to employment, but states take dramatically different approaches to addressing these issues depending on the nature of employment barriers. For example, federal legislation exempts women from work requirements to care for an infant, and some states exempt caregivers of older children. Some states screen for mental health disorders and substance use disorders (SUDs) and allow treatment activity to count towards work requirements. In some cases, work requirements are suspended completely while recipients seek treatment. In other states, there is neither screening nor exemption from work requirements for individuals with mental disorders or SUDs.

There are several reasons why the states' approaches to employment barriers in TANF have attained additional policy salience recently. First, economic conditions and the job opportunities for low skilled workers are not as favorable as they were following the enactment of PRWORA in the late 1990s. Second, states will be under much greater pressure to reduce caseloads and increase work among TANF recipients when work participation targets are established based on 2005 caseloads, which are a fraction of the 1995 caseloads used in the early years of TANF. Third, the June 2006 interim final rules and regulations for TANF reauthorization explicitly limit states' flexibility to address employment barriers in the TANF population by defining work activities more narrowly than the original PRWORA legislation. For example, if a state allows mental health or addiction treatment to count towards work activity, as some do now, the new regulations

would limit this exemption to a four week consecutive period, or six weeks out of a fiscal year, defining this as job readiness and not work activity.

In this paper, we ask, did the successes claimed for PRWORA extend to women with groups that may have been disadvantaged by work barriers that received little attention in the PRWORA legislation? Specifically, the goal of the paper is to: describe the transitions into/out of work and income assistance for women with the following employment barriers: mental health problems, moderate to heavy drug or alcohol use, a child with a behavior problem, or a children under age 3 at home. We compare women facing these barriers to women without any of these barriers, and we compare the work and income assistance patterns of women across barrier groups. To make these comparisons we examine several questions. Do women with these barriers respond to work incentives during a period of increasingly binding work requirements, and an improving economy? Do women with these barriers who use TANF get sanctioned for noncompliance with welfare requirements more than other TANF recipients? We also compare the barriers, since of those mentioned previously, only the presence of a young child at home receives special attention in PRWORA, which allows states to exempt recipients from work requirements when they are caring for an infant.

Using longitudinal data on low-income women in Boston, Chicago, and San Antonio in the 3-Cities study, we document several important patterns. First, women with children under age three and women with a child who has a behavior problem resemble other low-income women in terms of work status, welfare use, and the rate of being sanctioned for noncompliance with welfare requirements. They work and use

TANF at rates that mirror women without these particular barriers. Second, women with mental health problems and those who are moderate to heavy drug and alcohol users are unlikely to move into work compared with other low-income women. They experience greater rates of TANF use, lower rates of work, and are less likely to move out of a "detached" state of neither work nor aid. Finally, though women with mental health problems and drug and alcohol users appear to have been protected from sanctions in the earlier time period, 1999, these women were much more likely than other groups to be sanctioned, compared with other women on TANF, 12 to 18 months later. We consider the implications of our findings for welfare program design.

II. Background

Policies aimed at increasing work and reducing public income support have particular importance for women with mental health problems and those who are moderate to heavy users of drugs and alcohol since these women have a lower probability of finding work, lower earnings conditional on working, and in same cases, they may need additional time to obtain mental health or substance abuse treatment (Ettner, Frank and Kessler 1997; Frank and Koss 2005). Women with mental health and substance abuse problems have conflicting factors pushing them into work and aid. Because of the lower likelihood of finding work, and because they earn less when working, compared to similar women (Ettner, Frank and Kessler 1997; Frank and Koss 2005), they have fewer incentives to work. However, because women with mental health and substance abuse problems have historically had longer welfare spells (Loprest and Zedlewski 1999) they are more likely to hit TANF time limits, and be pushed off of welfare sooner. If women

with employment barriers mirror the typical welfare recipient and act rationally by leaving welfare in anticipation of time limits (Grogger 2003), we could expect looming time limits to push women with employment barriers into work sooner.

In 1999, approximately 28 percent of adult TANF recipients had poor mental health status (Zedlewski 1999) and an estimated 20 percent of adult TANF recipients reported recent use of illicit drugs, though less than 5 percent met criteria for drug dependence, and about 9 percent met criteria for alcohol dependence (Metsch and Pollack 2005). Cross-sectional evidence from the National Survey of Drug Abuse in the mid 1990s showed that psychiatric disorders and cocaine use increased the likelihood of welfare participation by 6 to 8 percentage points (Jayakody, Danziger and Pollack 2000). Recent work based on the National Survey of Drug Abuse suggests that the rate of welfare participation declined faster among users of illicit drugs compared to other low-income women between 1996 and 2001 (Pollack and Reuter 2006), but this provides limited evidence demonstrating how women with mental health problems and drug and alcohol users have fared in the post-welfare reform era.

Much of the extant evidence on women with employment barriers in the post-PRWORA period comes from community-based samples of women. A rich source of information on employment barriers is the Women's Employment Study (WES), a longitudinal survey of women residing in one Michigan county (Danziger, Corcoran, Danziger and al. 2000; Danziger 2004; Jayakody, Danziger and Pollack 2000; Pollack, Danziger, Jayakody and Seefeldt 2002). The WES provides cross sectional evidence that women with depression and drug dependence are less likely to work 20 or more hours per week (Danziger, Corcoran, Danziger and al. 2000) compared with otherwise similar

women. The longitudinal experience of these same women in Michigan shows that women with mental health problems were no more likely to be disconnected from income assistance and work compared with other women. In contrast, women in the study who used heroin or cocaine were more likely to be disconnected from work and aid (Danziger et al., forthcoming).

A second community-based study sampled TANF recipients in Houston, Texas (Montoya, Atkinson and Streuse 2001; Montoya, Bell, Atkinson, Nagy and Whitsett 2002; Montoya, Atkinson, Lichtiger and Whitsett 2003). This study of about 500 welfare recipients reported that drug users and psychologically distressed recipients were slower to move into work and their earnings profiles grow more slowly than other welfare recipients in the post-PRWORA era (Montoya, Bell, Atkinson, Nagy and Whitsett 2002). An important limitation of the study is that it observed only those women who applied for TANF in the post-PRWORA period. Researchers have been quick to point out the importance of changes in welfare entry to changing caseloads and labor market outcomes (Grogger, Haider and Klerman 2003; Haider and Klerman 2005; Klerman and Haider 2004; Pollack and Reuter 2006), but most studies of employment barriers, like those in Houston have focused on welfare exit only. To the extent that women do not apply for welfare or are discouraged from completing the application process due to an environment with stringent work requirements, time limits, sanctions, and policies designed to exclude heavy drug and alcohol users from receiving cash benefits, we know little about this important group of women.

A series of studies on the CASAWORKS program, a multi-service intervention for TANF recipients in 11 sites around the country provides additional evidence on work

barriers of recipients, and evidence regarding outcomes of women receiving a specific intensive assessment and case management intervention (Gutman, Ketterlinus and McLellan 2003; McLellan, Gutman, Lynch, McKay, Ketterlinus, Morgenstern and Woolis 2003). It confirms that a diverse set of barriers to work are highly prevalent among the welfare population, and the literature shows some improvement in work outcomes among women receiving intensive case management. However, this work has no control group, making comparisons of these women to other potential welfare recipients around the country difficult.

Another survey of low-income families in Boston, Chicago, and San Antonio, the Welfare of Children and Families, or 3-Cities, provides rich information about women living in poor neighborhoods in these cities in 1999-2001. An early study from the survey described characteristics of women who were sanctioned in 1999 (Cherlin, Bogen, Quane and Burton 2002), and later work examined the relationship between recipient characteristics and work requirements, and whether these or other non-financial factors in TANF affected TANF exit (Moffit 2003). Though work requirements had an important affect on women's work activity, Moffit (2003) demonstrated little relationship between recipient characteristics and being subject to a work requirement. Like other literature after PRWORA, this work tends to focus on the welfare population overall, though Moffit (2003) demonstrated that those who were exempt from work requirements tended to be exempt for health-related reasons. There is little evidence since PRWORA about the role of employment barriers that received less attention in federal law, such as mental

health problems or substance abuse,[2] even though they are commonly cited barriers to self-sufficiency in the welfare population and a focus of attention in recent Federal regulations.

Because state TANF programs vary greatly in approach to employment barriers such as mental health and substance abuse, in contrast to the relatively uniform agreement that mothers of infants should be exempt from work requirements, and because of the attention to these barriers by both interest groups and policy makers, we use data on welfare recipients from Boston, Chicago, and San Antonio to augment our understanding of how women with different types of employment barriers respond to work incentives after PROWRA.

III. Description of the data and sample characteristics

We use panel data for 1999-2001 from the 3-Cities describing the circumstances of low-income women living in Boston, Chicago and San Antonio (Winston, Angel, Burton, Chase-Landsdale, Cherlin, Moffitt and Wilson 1999). The 3-Cities surveyed nearly 2,400 families with children aged 0-4 or 10-14 in 1999 in low- and moderate-income neighborhoods in Boston, Chicago, and San Antonio. The survey deliberately over-sampled blacks and Hispanics, yielding roughly equal numbers of blacks and

[2] Women who use illicit drugs are of particular interest because many aspects of PRWORA and related legislation of the mid 1990s targeted them. For example, PRWORA allows states to deny benefits to convicted felons, the legislation allows state programs to test recipients for the presence of illicit drugs and deny benefits on the basis of such tests (though few states perform suspicionless drug testing), and related legislation abolished drug and alcohol disorders as qualifying disabilities for the receipt of SSI, eliminating other potential sources of income assistance among women with SUDs.

Hispanics with the remaining 10 percent of respondents reporting white non-Hispanic race and ethnicity. For each "focal" child, the child's female caregiver, usually the mother, provided information on work, public program participation, mental health, alcohol and drug use, child behavior and other information about work patterns, incomes, and a rich set of outcomes. Each family's income was below 200 percent of the federal poverty level at the time of the Wave 1 interview, conducted between March and December 1999. Wave 2 interviews were conducted with the same focal children and caregivers between September 2000 and June 2001.

Because many states did not fully implement welfare reform in 1997 and 1998, we view the period between 1999 and 2001 as reflecting a period of tightening constraints in the states as the first women reached lifetime limits and states simultaneously began to feel the fiscal pressure of the recession that began in 2001. [3] We compare how different women fared during a time of increasingly binding work requirements and time limits. Specifically, we adopt a framework that compares changes over time among women with and without various types of baseline employment barriers. We interpret differences by barrier group over time as the differential response to welfare reform by women with a particular employment barrier, such as poor mental health, compared with other women likely to use welfare. We use the timing of the presence of a barrier at the initial interview to explain subsequent work and program participation outcomes, at the second interview.

[3] Ideally one would like data from before and after PRWORA, but similarly rich longitudinal data spanning the 1990s do not exist.

For our analyses, we restrict the sample to women present in both waves, excluding 348 female caregivers from our sample because the caregivers (n=152) or someone else in their household (n=196) received Supplemental Security Income (SSI) in Wave 1. Once on SSI, which provides income assistance for poor disabled individuals, recipients typically do not transition out of it, since strict eligibility requirements for SSI stipulate that a recipient's disability must prevent her from working (or performing usual activities in the case of children) for at least 12 months or until death. We further restricted the sample to the 1,637 female caregivers present in both waves.

Employment barriers

The literature on welfare use and work documents a long list of possible barriers to employment among likely recipients of welfare ranging from physical health problems, mental health problems, problems with substance abuse, transportation, child care, low levels of work experience and education, the need to care for young children or disabled family members, to the presence of domestic violence in one's household. We do not consider the full range of possible employment barriers. Instead we focus on a set of potentially important barriers that receive widely varying treatment across state TANF programs. With these goals in mind, we chose to examine four barriers: the presence of children under age 3, the presence of a child with a behavioral problem, the presence of symptoms indicating poor mental health, and moderate to heavy drug and/or alcohol use in the past 12 months.

Regarding young children, there is a relatively clear consensus that welfare recipients should receive exceptions from certain requirements when an infant is present in the household. We contrast this barrier with poor mental health and heavy substance

use because there is widespread evidence that both reduce productivity, because state welfare programs address these barriers very differently, and because these barriers have received relatively little attention in academic studies despite debate between PRWORA's advocates and critics about the possible adverse consequences of PRWORA for women with mental health problems and SUDs.[4] Furthermore, in light of recently proposed regulations, states will soon lose the ability to exempt women with mental health or substance use issues from work requirements, with the exception of a brief period of treatment, not to exceed 4 weeks. States also provide exemptions to families caring for disabled children, though it is less clear how states might deal with women caring for a child with a behavior problem as opposed to a physical disability. The child behavior barrier incorporates the widespread desire to link work exemptions to the care of children, with the more ambiguous treatment of mental health problems across state programs. Although we will refer to the group without the four barriers described here as "barrier-free," we realize that the women in our sample can and do experience any number of other barriers.

One strength of the 3-Cities data set is its rich information on public program use, demographics, and living arrangements combined with rigorous measures of mental health symptoms. Using the Brief Symptom Inventory, or BSI (Derogatis and Derogatis 1996), female caregivers are surveyed about 18 items relating to anxiety, depression, and somatization. These items are converted into an overall measure of poor mental health,

[4] For an example of the discussion surrounding these barriers, see Legal Action Center. 1995. "State, local welfare officials see important role for drugs and treatment in welfare reform." Unpublished, Zedlewski, Sheila R., and Pamela Loprest. 2001. "Will TANF Work fo the Most Disadvantaged Families?"

which is highly correlated with the existence of a diagnosable mental health disorder. The cutoff measure of poor mental health, or "caseness" represents a fairly stringent measure of poor mental health, and thus excludes many women with moderate mental health issues. We use one, general, dichotomous measure of poor mental health in most analyses, but we also show results with a continuous mental health measure. Other studies have reported that 28 percent of the welfare population suffer from mental health problems (Zedlewski and Loprest 2001), but the measure used here applies to less than 10 percent of the welfare caseload, a stringent cutoff for mental health problems. One way to increase the precision of our estimates, and to provide information more generally about the impact of mental health status is to use a continuous measure of mental health as described above. For each analysis, we present the change in probability of an outcome implied by moving from the mean natural log-transformed BSI score to one standard deviation above the mean (something akin to the 28 percent estimate of mental health problems in the welfare population).

To measure child behavior problems, we use caregiver responses to a multi-item Child Behavior Checklist (Achenbach and Edlebroch 1979, 1978). This validated instrument can be used to form a measure of whether children likely fall within the clinical range for serious behavior problems.

To develop a measure of moderate to heavy substance use, we use questions about caregiver use of alcohol, marijuana, and other illicit drugs in last 12 months. Women were asked, "In the last 12 months, how often were you drunk?" Possible responses include "never", "once or twice", "several times", or "often". Women were asked, separately for marijuana and other illicit substances, "In the last 12 months, how often did

you use marijuana/other illicit drugs?" Possible responses were the same as those for alcohol. Moderate to heavy use of alcohol and drugs equals 1 when respondents respond "several times" or "often" to any of the three questions on alcohol, marijuana, and other illicit drugs. We distinguish moderate to heavy use of alcohol and drugs from any use because previous research suggests that only moderate to heavy substance use is disruptive to labor market activities (Kaestner 1999). Furthermore, evidence suggests self-reported moderate to heavy substance use is correlated with diagnoses of substance use disorders (Epstein and Gfroerer 1994), something we confirmed in a national population-based survey of drug use.[5]

Descriptive characteristics of women

Table 1 describes basic characteristics of 3-Cities respondents both unweighted and weighted to make respondents representative of the sample frame of women in low-income neighborhoods in Boston, Chicago, and San Antonio. For the remainder of the paper, all analyses presented are weighted. Work status changed markedly over the brief period between Wave 1 when 42.7 percent of the sample was working and Wave 2, when 55.3 percent of the weighted sample worked. At the same time, TANF receipt in this sample nearly halved, from 25.8 percent to 14.7 percent. Among our sample, 23.9 percent were sanctioned in Wave 1 and 21.1 percent were sanctioned in Wave 2. Nearly 63 percent of women reported the most common employment barrier, having a child

[5] Among low-income women (those with under $20,000 in household income) in the 2002 National Survey of Drug Use and Health, the authors' calculations indicate that use measures similar to those described here have a correlation coefficient of .45 with diagnostic measures of abuse or dependence of alcohol, drugs, or both.

under age 3 in the household, and 17.5 percent had a child with a behavior problem. Less common barriers were mental health problems, 7.8 percent, and moderate to heavy use of marijuana, drugs, or alcohol, about 9.4 percent. By Wave 2, 5.4 percent of women in our sample reported that they, or someone in the household, received SSI.

Table 2 shows information on TANF use, work, and income by survey Wave and contemporaneous employment barrier status. In 1999, the barrier groups look relatively similar on TANF use (about 14-17 months in last 2 years), but they have used TANF more than their barrier-free counterparts, who used an average of 10.3 months of TANF in the last 2 years. Respondent income from all sources differs little in Wave 1, though women with young children, mental health, or drug/alcohol use have the lowest income. What is striking in Table 2 is the difference in sanction rates both across employment barriers and between waves. In Wave 1, women with Mental Health Problems appear to be protected from sanctions relative to other groups, with sanction rates of 15 percent compared with 27 percent among women with children under age 3. In Wave 2 however, 61 percent of women with a mental health problem report being sanctioned. A similar, but less striking pattern is observed among women who used drugs and/or alcohol. Similar to national trends, household income, respondent earned income, and work rose in the 18 months after 1999, within each barrier group.

Welfare Environment in Boston, Chicago and San Antonio

The 3 cities were chosen deliberately to differ from each other in terms of the environment and implementation of welfare reform. For example, Massachusetts obtained a waiver for its welfare program in 1995, and the waiver only recently expired

in September, 2005. On paper, Massachusetts' waiver imposed stringent work requirements, requiring work activity within 60 days of welfare receipt. It further restricted welfare receipt to 24 months out any 5-year period. Massachusetts imposed sanctions for failure to comply with work requirements, failure to cooperate with child support enforcement, or failure to meet child immunization schedules. In practice, however, the Massachusetts waiver exempts much of the caseload, including caregivers of children up to age 6, from work requirements and time limits (Kirby, Pavetti, Maguire and Clark 1997). In 2004, 74 percent of the Massachusetts caseload was exempt from both time limits and work requirements (Joblessness and Urban Poverty Research Program 2004). Because of high exemption rates, Boston can be thought of as an example of a city that has not yet fully weathered welfare reform.

Chicago has more stringent requirements for its TANF recipients. Illinois requires work activity at some point within 2 years of receiving benefits. It enforces the 60-month time limit on benefits, but work and school activities do not count against lifetime limit. Important features of the Illinois TANF program include: families with children under age 1 and caregivers of disabled children or other disabled family members are exempt from work requirements, and, in contrast to the other cities, mental health and substance abuse treatment count as allowable work activity for up to 24 months (Administration for Children & Families 2002).

San Antonio has the most stringent welfare climate. Texas is a work first state that requires immediate work activity. Like most states, Texas has a 60-month lifetime limit on benefits, but Texas imposes the most stringent time limits of the 3 cities. Time limits on continuous benefits are 12, 24, or 36 months depending on the age of children in

the family and other household characteristics. After continuous benefit time limits are reached, there is a 5-year "freeze out" period when individuals may not access TANF (Rowe and Roberts 2004). There are some exemptions for caregivers with children up to age 4. In Texas, drug felons can be denied benefits, as stipulated by PRWORA, and there is no screening for mental health or substance use disorders (Legal Action Center 2002). During the study period, Texas imposed sanctions on adult caregivers only, for a period of at least 6 months. Recently Texas has imposed more stringent full-family sanctions, including the temporary termination of in-kind benefits such as Medicaid.

Economically, the poverty rates in the three cities do not differ as much as one might think. Poverty rates ranged from 15 percent in Chicago to 19 percent in San Antonio, and child poverty was 26 to 30 percent in the three cities (Winston, Angel, Burton, Chase-Landsdale, Cherlin, Moffitt and Wilson 1999). Chicago and Boston were similar, with the lowest poverty rates, and San Antonio had slightly higher poverty rates of the three cities. During the 1990s, Massachusetts showed the strongest employment growth among the three states (Joblessness and Urban Poverty Research Program 2004).

Figures 1-3 depict welfare use in each city with Kaplan-Meier survival curves of TANF spell length by employment barrier group. The figure shows continuous months on TANF during the first TANF spell respondents' experienced after welfare reform.[6] The figures show the heterogeneity in the welfare response across the three cities. In Boston, for example, women with young children resemble other groups in the first 12

[6] We measure this period as June 1996, or 12 months before the first Texas families hit Texas' 12 month time limit under its state waiver, December 1996, or 24 months before the first Massachusetts families hit the 24 month time limit, and 60 months before the first Illinois families hit time the lifetime limit, as reported by the Administration on Children and Families.

months of TANF receipt, but they are more likely to remain on TANF in later months. This stands in contrast to San Antonio, where women with children under 3 move quickly off of welfare, similar in nature to work showing that women with young children respond most to time limits (Grogger 2003). In Chicago, women with children under age 3 differ little from other low-income women in their welfare use.

In Boston and San Antonio, women who have children with behavior problems exit TANF more rapidly than other groups. The other pattern that stands out is the lack of movement off TANF among women with mental health or substance use barriers in Chicago. Chicago seems to have longer continuous spells of TANF compared with the other cities. Next we describe our analyses that consider TANF use, work, and the likelihood of being detached from work and aid among all women in our sample, and not just those using TANF.

IV. Work, income support, and being detached

Ideally, we would specify a model of four work-income support states (work only, work and income assistance, income assistance only, or none of the above) as a function of all employment barriers simultaneously. A complete model would include effects for employment barriers entered alone and interacted with each other to reflect the common situation of multiple barriers. In practice, the limited sample size will not yield precise estimates using this strategy. We take two steps to address this problem. First, we collapse the two "work" categories into one category indicating that respondents are working now. In practice, only about 3-5 percent of respondents report working and receiving TANF simultaneously. Second, we estimate a separate model for each

employment barrier. We estimate multinomial logit models of work and income assistance of the following form:

$$(1) \qquad \ln \Omega_{m|work}(X) = \ln\left(\frac{\Pr(y_{W2} = m \mid employment\_barrier_{W1}, x_{W1})}{\Pr(y_{W2} = work \mid employment\_barrier_{W1}, x_{W1})}\right) = x\beta_{m|work}$$

The relative likelihood (compared with working) of receiving income assistance or neither working nor receiving income assistance in Wave 2 is specified to be a function of the following non-mutually exclusive respondent employment barriers in Wave 1:

- Respondent has poor mental health (n=124),
- Respondent is moderate to heavy use of alcohol and/or drugs (n=153),
- Respondent has a child under the age of 3 in the household (n=904),
- Respondent has a child with a serious behavior problem in the household (n=352), or
- Respondent has none of the above barriers, or is "barrier-free" (n=468).

We estimate separate specifications for each employment barrier to increase the precision of our estimates. One should note several characteristics of this approach. First, the reference group differs for each employment barrier. For example, the reference group in a model of the impact of poor total mental health is everyone without a mental health barrier. This includes women with no barriers and women with one or more of the remaining three barriers.[7] Second, because many women have more than one barrier, the coefficient estimates on a barrier such as mental health reflect both that the direct effect of a mental health problem on work and aid, and the impact of having

[7] We also estimated models with a constant reference group, those women with no barriers. We found similar results qualitatively and quantitatively, but the standard errors are much larger in these results.

other barriers in addition to a mental health problem. From the standpoint of a welfare administrator who seeks to efficiently target clients least able to fulfill work requirements, the interpretation of effects may not pose any problem. Instead of identifying multiple barriers, they might simply identify the single barrier that is most indicative of an employment problem. We also estimated models including all four barriers simultaneously, and find qualitatively similar patterns to those presented here, with larger standard errors.

We deliberately estimate models with parsimonious sets of covariates, depicted in the vector X in equation 1, because some cell sizes are very small and thus we have relatively few degrees of freedom. The covariates in X included: marital status (yes, no), race and ethnicity (black non-Hispanic or Hispanic of any race, with white non-Hispanic omitted), whether a respondent had a high school degree, city dummies (Boston omitted), whether or not the respondent is a U.S. citizen, and the presence of preschool-aged kids, or children under age 5, in the household (this covariate was omitted in models of the effect of having a child under age 3 in the household). By conditioning our labor market outcomes in Wave 2 on employment barriers and other Wave 1 characteristics, we mitigate the potential for reverse causation, or the possibility that a respondent's movements in or out of work and TANF/SSI caused employment barriers such as poor mental health, alcohol and drug use, or child behavior problems. To aid interpretation of our results, we report results by transforming the model's estimated coefficients into the average predicted probability of work, aid, or neither (being detached) implied by a given barrier, using the actual sample covariates.

In some specifications, we explicitly estimate the transition from Wave 1 work, TANF or neither to work, TANF/SSI or the detached state in Wave 2. To accomplish this, we add terms to equation 1 for whether a respondent collected TANF in Wave 1, whether a respondent was detached from work and aid in Wave 1, and interactions between these variables and the barrier group of interest in equation 1. Each specification is used to derive a transition matrix, or the predicted probability of transitioning into work, aid, or neither in Wave 2, given Wave 1 work, aid, or detached status. We show the implied transition probabilities both with and without each employment barrier, adjusting for the covariates described earlier.

Results on Wave 2 work and income assistance

Tables 3 and 4 show coefficients from the multinomial logit models of TANF/SSI receipt or being detached compared with the probability of working, with and without covariates. Each pair of columns comes from a different model comparing a different barrier group to the rest of the sample. Women in the barrier-free group are slightly less likely to be on TANF or SSI in Wave 2, but overall, this group does not differ significantly from the remaining women in the sample. Women with mental health or substance use problems, in contrast, are much more likely to be on TANF in Wave 2 relative to work, and these differences are statistically significant at conventional levels. Women with either young children, or children with behavioral problems do not differ significantly from other women in the sample with respect to their use of income assistance or the likelihood that they will be detached from work or welfare in Wave 2.

Table 5 summarizes the magnitude of these differences across barrier groups by presenting the predicted probabilities of work, TANF/SSI, or being detached based on the multinomial logit models with covariates shown in Table 4. Women with mental health problems are least likely to be working in Wave 2, when 27 percent of them work and 54 percent collect income assistance, compared with 59 percent of the barrier-free women who work in Wave 2. Women who use alcohol and/or drugs are also relatively likely to be on TANF and less likely to be working. About 39 percent of these women work in Wave 2, when 34 percent receive TANF or SSI. There is no difference in the work patterns between barrier-free women and women with child-related barriers. This result is interesting in light of the fact that women with young children are most likely to receive exemptions from work requirements. Based on similar models using the continuous BSI measure described earlier, a one standard deviation increase in the Wave 1 mental health scale (a deterioration in mental health), coincides with a 10.2 percentage point increase in the use of TANF or SSI in Wave 2. The continuous mental health scale is highly significant in the multinomial models predicting income support or no support relative to work.

Transitions between work, aid, and being detached from work and income assistance

Table 6 presents the coefficient of interest on multinomial models used to estimate the adjusted transition matrix by barrier group. The signs of the coefficients suggest that women experience a high degree of inertia during the period between waves. That is, the most significant predictor of where women will end up in Wave 2 is where they started in Wave 1. Two other results stand out. The interaction of Wave 1 TANF

and a mental health problem suggests that these women are much more likely to remain on TANF compared with other women. In contrast, women with a drug or alcohol barrier who start out in the detached state are significantly less likely to move onto TANF than other women.

Table 7 presents the adjusted transition probabilities by barrier group based on the results in table 6, and it reports implied probabilities based on models using the continuous mental health measure. Among those on TANF, 81 percent of women with mental health problems stayed on TANF, compared with 38 percent in the barrier-free group. A one standard deviation increase in the BSI score coincided with a statistically significant 13.5 percentage point increase in the likelihood of remaining on TANF among those on TANF in Wave 1. Among women using drugs and alcohol, 51 percent of those on TANF in Wave 1 remained there. For women in the mental health and drug/alcohol groups, there is very little movement out of the detached state. Among women starting out in the detached state, 71 percent of women with mental health problems and 64 percent of women with drug and alcohol problems remain detached compared with 42 percent in the barrier-free group. The women with child-related barriers show remarkably little difference from the barrier-free group since 37 percent of women with children who have behavior problems and 35 percent of women with children under age 3 remained on TANF in both waves.

V. Employment barriers and sanctions

A cornerstone of PRWORA is that state welfare programs must impose sanctions on recipients who do not comply with program requirements. One might expect higher

rates of sanctions among women in all of the employment barrier groups examined here, particularly those that are not explicitly exempt from certain program requirements by state TANF rules. We examined whether the probability of sanction differs by type of employment barrier. Earlier evidence from the 3-Cities study documents that nearly one fifth of respondents receiving TANF after Wave 1 were sanctioned (Moffit 2003). Cherlin et al. (2002) studied sanctions during the Wave 1 interview in some detail, determining that women with health problems, more children in the household, and spousal interference in the household experienced greater rates of sanctions than other women. The study examined use of marijuana and other illicit drugs, finding that individuals reporting any marijuana use were also more likely to be sanctioned. This work did not distinguish between light and moderate to heavy use of illicit drugs, nor did it examine how sanctions related to alcohol use. Some evidence suggests that women who use illicit drugs or alcohol are more likely to be sanctioned than other welfare recipients (Metsch and Pollack 2005), and mental health advocates fear the same is true for women with mental health disorders, but much of the evidence to date is anecdotal. This debate would be enhanced by considering how rates of sanction, and the relationship of sanctions to employment barriers, change over time.

We computed the probability of being sanctioned, given recent welfare use in each wave, as a function of Wave 1 employment barriers. To address the fact that fewer women were using TANF by Wave 2, and thus the caseload differed between waves, we restricted the sample to women who used TANF sometime since Wave 1 (n=548). This approach allowed us to describe how the sanction environment changed over the study

period for women with a given employment barrier. We estimated the probability of a full or partial-sanction (SANCTION) using the equation:

(2) $\Pr(SANCTION)_{Wt} = f(employment\_barrier, X, months\_on\_welfare)_{W1}$,

where the specification and covariates in X match those in equation 1, and *months_on_welfare* measures the months a respondent was on welfare beginning 24 months prior to the Wave 1 interview and ending with the Wave 2 interview, and f(.) is a logit function. We estimated this separately for Waves 1 and 2, using the covariates measured at Wave 1, and limiting the sample to 548 women present in both waves with any TANF use after Wave 1.

Sanction results

Recall from Table 2 that the rate of sanctions among women with mental health or drug and alcohol problems increased dramatically between waves. Based on logit models of whether women were sanctioned in Wave 1 or Wave 2 as a function of Wave 1 work barriers, Table 8 reports the coefficient, standard error, and the predicted probability of being sanctioned by barrier group. These results were estimated somewhat imprecisely, but confirm the broad pattern shown in Table 2. Although women with mental health and drug and alcohol users were less likely to be sanctioned in Wave 1 relative to other groups, the rates of sanctioning increased substantially in Wave 2. Women with a mental health problem had only a 3.8 percent chance of being sanctioned in Wave 1, but a 26.4 percent chance in Wave 2. Based on the continuous BSI measure, a one standard deviation rise in the BSI accompanied an 8.5 percentage point increase in the probability of being sanctioned compared with women at the mean BSI measure. Women who use

drugs and alcohol faced an adjusted probability of sanction of 13.3 percent in Wave 1 and 28.6 percent in Wave 2. This pattern of increasing sanctions between Waves 1 and 2 was reversed among the barrier-free group, and among women with children who have behavior problems.

Although our models can describe the rate of sanctions as a function of employment barriers, the results do not yield information on the magnitude of deleterious effects of the sanctions, and the relatively small cell sizes for some barrier groups preclude a detailed analysis of how subgroups of women fare. Prior work based on about 100 women in Wave 1 of the 3 Cities study who did not recover benefits after being sanctioned revealed that caregivers handled this loss of income by either obtaining a job or cutting down on necessities (Cherlin, Bogen, Quane and Burton 2002). For women with mental health and substance use barriers, few transitioned from TANF into work, and thus the latter approach seems more likely.

Multiple barriers

In many settings women on welfare have been shown to have multiple employment barriers.[8] In fact, the vast majority of women in our sample have more than one barrier. We have estimated most of our specifications with interaction terms between mental health problems and each of the remaining three barriers. We included similar interaction terms for substance use problems and other barriers. From these models, one can compare women who have no barriers, women with either a MH or SA problem only, women with MH and SA (which commonly occur together) and women who have MH or SA combined with each of the remaining barriers. However, a notable drawback to this

[8] See for example Zedlewski and Loprest 2001, Zedlewski 1999 or Gutman et al. 2003.

approach is that individual cell sizes (i.e. substance use barrier alone, or substance abuse and mental health) are small, with 20 or fewer women in some cases. Though the overall patterns support what we find elsewhere, the results are highly sensitive to our choice of specification and unstable, so we omit the results here.

VI. Conclusions and Implications

Our findings on welfare reform and employment barriers document several important patterns. Women with child-related barriers transition into work in ways that differ little from women without child, mental health, or drug use barriers. Federal legislation provides exemptions from work requirements for the parents of infants, and many state welfare programs expand this further for other young children and to care for children with health problems. In contrast, many states offer no exemptions from work requirements for mental health problems and substance abuse, and the states that do offer exemptions will be limited in their ability to make exceptions if the regulations for TANF reauthorization remain unchanged.

Our second set of results demonstrated that women with mental health problems and women who use drugs or alcohol heavily stayed on TANF longer than otherwise similar women, and in later periods were sanctioned more frequently than other groups. Women in the "detached" state who had mental health or substance use barriers transitioned slowly from this state. In the unprecedented boom economy of the late 1990s and an era when women faced many new penalties for not going to work, women with mental health and substance use barriers showed little behavioral response to those incentives. For this subgroup of women, welfare-to-work policies neither moved them

into work nor protected them from financial hardship of having TANF benefits sanctioned.

Our work raises attention to one dimension of the optimal welfare program design, sanctions of benefits for women who fail to meet program requirements. Unless states explicitly wish to punish welfare recipients, optimal work requirements and sanctions should target those groups that are most responsive to these policies. In other words, among the welfare population, incentives to work, including sanctions, are best targeted at women with relatively elastic labor supply. In an era where both policy and the economic expansion of the late 1990s combined with PRWORA's regulations created unprecedented incentives for low-skilled single mothers to work, women with mental health and substance users changed their behavior little. They continued to collect TANF and did not work, even as the probability of being sanctioned increased after 1999. Rather than creating behavioral change, sanctions imposed on unresponsive groups are punitive.

Until now, the federal government has been agnostic about recognizing "exceptional" circumstances in welfare reform. States have taken very different approaches toward granting exceptions to the work requirement features of welfare reform, and if anything, new federal regulations regarding TANF reauthorization will reduce the flexibility of states to address the needs of women with employment barriers. Our results raise questions regarding whether the program incentives can motivate the desired behaviors for important subpopulations of TANF recipients. The failure to observe the desired response raises questions about the efficiency and fairness of applying the same policy provisions to all population segments over time.

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Figure 1: Kaplan−Meier Survival Curves, Boston

TANF Spell Length in Months

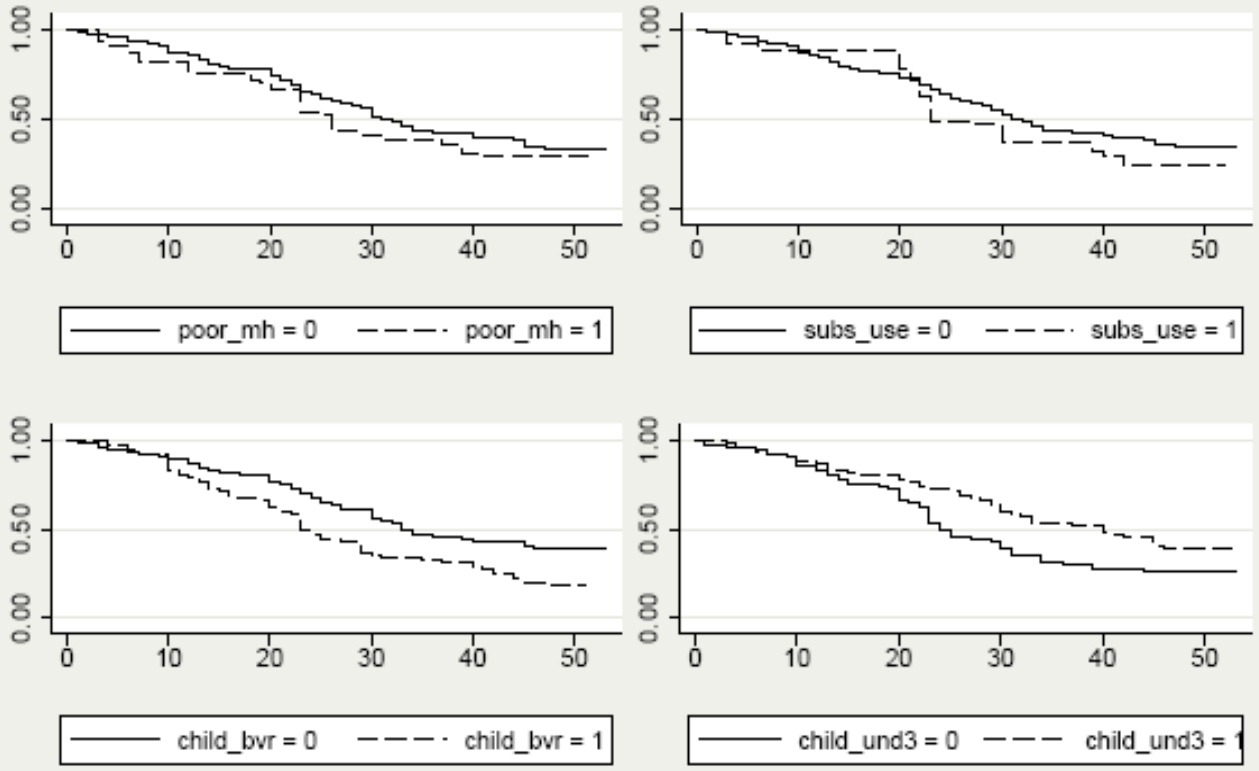

Figure 2: Kaplan−Meier Survival Curves, Chicago

TANF Spell Length in Months

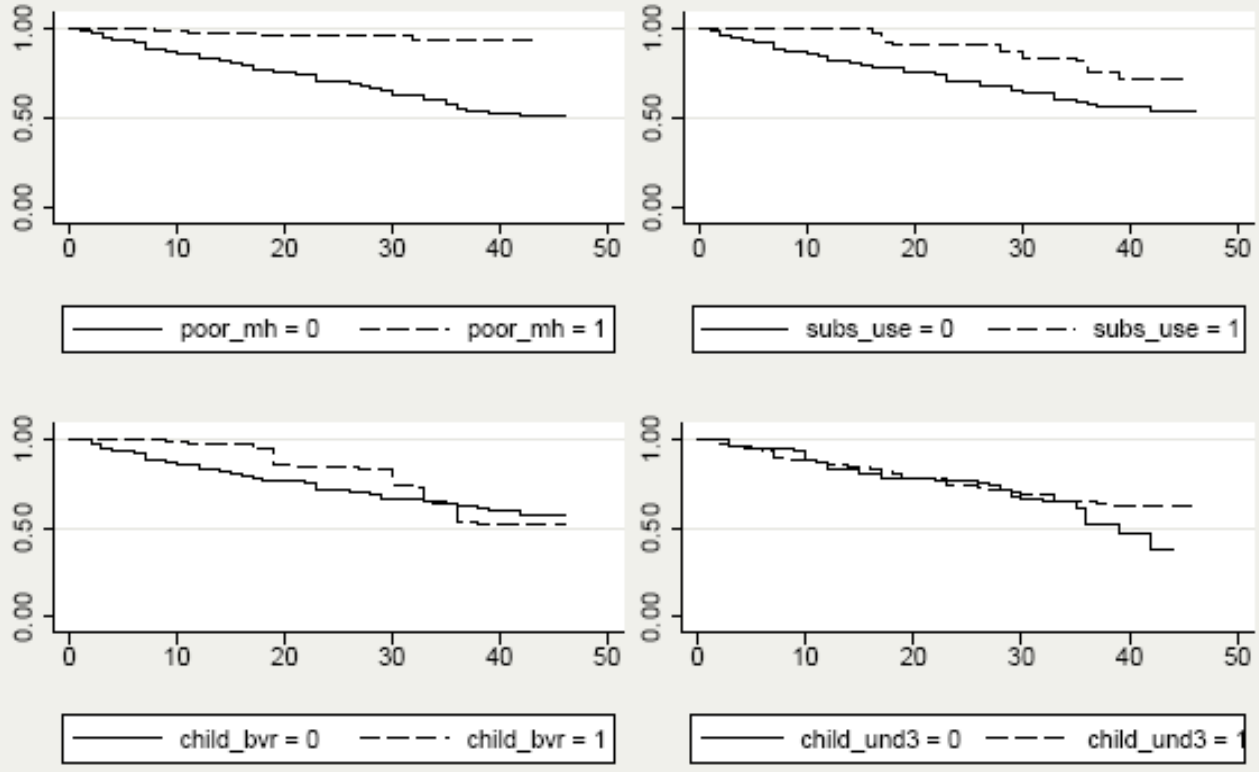

Figure 3: Kaplan−Meier Survival Curves, San Antonio

TANF Spell Length in Months

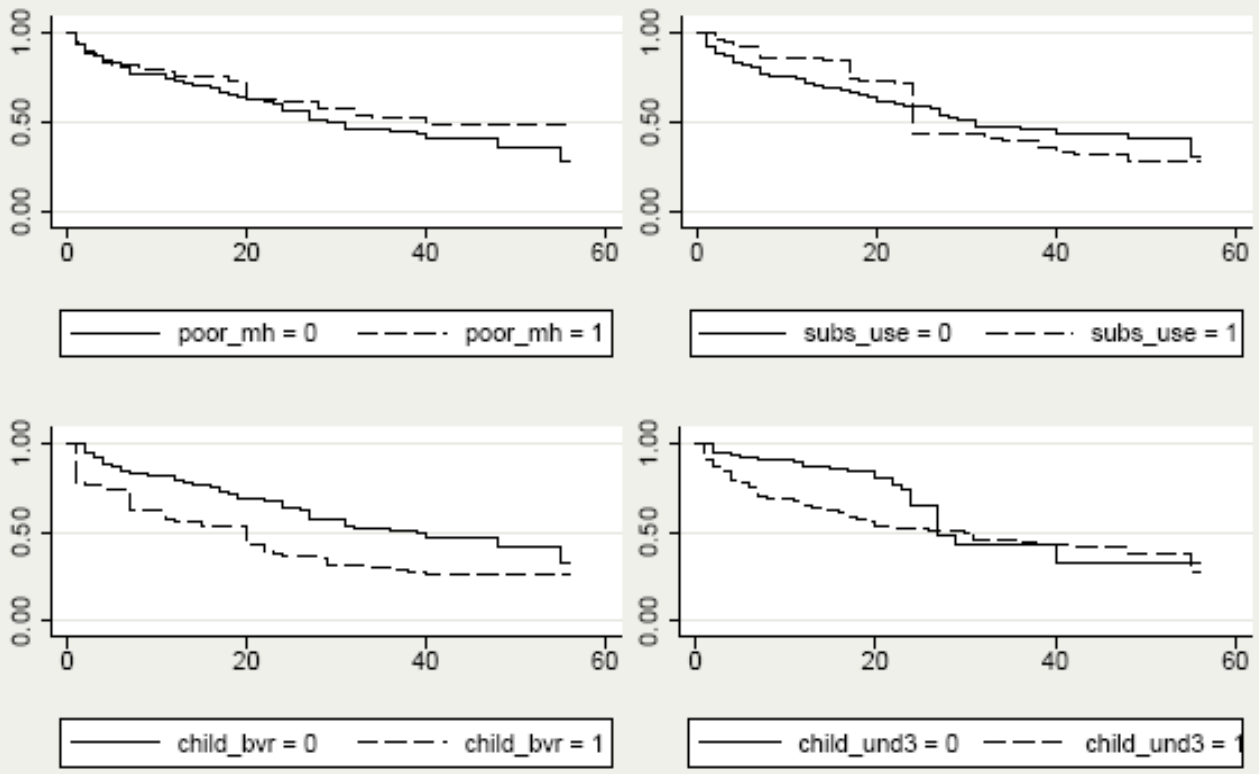

Table 1: Summary Statistics

	Unweighted %	Weighted %
Wave 1 work/aid status		
Working at time of survey	46.4	42.7
Receiving TANF, not working	26.1	25.8
Neither work nor TANF	27.5	31.5
Wave 2 work/aid status		
Working at time of survey	59.7	55.3
Receiving TANF, not working	14.2	14.7
Household receives SSI, not working	4.1	5.4
Neither work nor TANF/SSI	22.0	24.7
Sanctioned in wave 1	19.1	23.9
Sanctioned in wave 2	20.0	21.1
Employment barriers*		
Mental health problem	7.6	7.8
Marijuana use (moderate/heavy)	3.8	5.8
Other illicit drug use (moderate/heavy)	0.9	1.2
Alcohol use (moderate/heavy)	6.2	4.4
Marijuana, drug, or alcohol use (moderate/heavy)	9.4	9.4
Child with a behavioral problem	21.5	17.5
Children under age 3 in household	55.2	62.8
None of the above employment barriers	28.6	26.2
Site		
Chicago	30.6	62.6
San Antonio	32.0	28.8
Boston	37.4	8.6
Age		
< 30	45.9	46.2
30-39	34.6	34.2
40+	19.5	19.6
Married	16.7	33.2
Any kids < age 5 in household	67.8	73.7
High school degree or more education	64.6	57.8
Race/Ethnicity		
White non-Hispanic	7.5	2.5
Black non-Hispanic	42.5	54.0
Hispanic of any race	48.1	40.9
Other race/ethnicity	1.8	2.6
Not a US Citizen	16.5	14.0
Total number of observations	1,637	

* Note: Mental health problem is based on the Brief Symptom Inventory and whether respondents meet cutoff for mental health "caseness". Marijuana, drug and alcohol questions refer to moderate or heavy use in last 12 months. See text for details.

Table 2: Descriptive Statistics by Employment Barrier

	Wave 1 Barrier Group				
	No Barrier	**Mental Health**	**Drug/ alcohol**	**Child < age 3**	**Child Behavior**
Months on TANF last 2 yrs	10.3	17.7	17.5	15.0	14.6
	(14)	(16)	(15)	(15)	(15)
On TANF now	16.3%	72.8%	76.7%	45.6%	42.9%
Working now	53.9%	13.8%	21.0%	36.0%	59.8%
Respondent Income (all sources)	$657	$638	$713	$580	$701
	(628)	(560)	(589)	(522)	(610)
Earned Income	$448	$287	$336	$289	$419
	(626)	(558)	(595)	(502)	(617)
% sanctioned*	19%	15%	23%	27%	22%
N	468	124	153	904	352
	Wave 2 Barrier Group				
On TANF now	15.9%	46.2%	56.6%	31.4%	29.9%
Working now	58.7%	22.6%	34.9%	52.1%	62.3%
Respondent Income (all sources)	$990	$837	$932	$884	$954
	(745)	(637)	(711)	(680)	(716)
Earned Income	$792	$503	$666	$666	$716
	(737)	(702)	(763)	(720)	(743)
% sanctioned*	16%	61%	34%	23%	26%
N	594	127	162	756	355

* This variable refers to sub-sample of recent TANF recipients only.

Table 3: Models of likelihood of TANF/SSI or being detached in Wave 2 relative to work, by employment barriers

	Poor Mental Health		Drug/alcohol use		Child under 3		Child behavior		Barrier-free	
Wave 1 Characteristic*	TANF or SSI	Detached	TANF or SSI	Detached	TANF or SSI	Detached	TANF or SSI	Detached	TANF or SSI	Detached
Barrier group	2.400[b]	0.557	1.566[b]	0.386	0.567	0.094	-0.138	-0.444	-0.808	-0.050
	(0.780)	(0.545)	(0.790)	(0.411)	(0.405)	(0.268)	(0.437)	(0.370)	(0.453)	(0.291)
Constant	-1.270[b]	-0.827	-1.205[b]	-0.831[b]	-1.390	-0.862	-0.989[b]	-0.733[b]	-0.839	-0.791
	(0.202)	(0.138)	(0.204)	(0.141)	(0.269)	(0.200)	(0.268)	(0.147)	(0.265)	(0.161)
Chi-squared tests for whether transition matrix differs for barrier group compared to others in sample $\chi 2$ (p-value)										
	9.46 (0.009)		4.26 (0.119)		1.97 (0.374)		1.44 (0.486)		3.24 (0.198)	

Note: Estimates from multinomial logit models. Models estimated separately for each employment barrier group. Robust standard errors in (). a-significant at 10% level, b-significant at 5% level.

Table 4: Models of likelihood of TANF/SSI or being detached in Wave 2 relative to work, by employment barriers

	Poor Mental Health		Drug/alcohol use		Child under 3		Child behavior		Barrier-free	
Wave 1 Characteristic*	TANF or SSI	Detached	TANF or SSI	Detached	TANF or SSI	Detached	TANF or SSI	Detached	TANF or SSI	Detached
Barrier group	2.290 [b]	0.592	1.318 [b]	0.578	0.164	0.197	0.605	-0.561	-0.060	-0.032
	(0.607)	(0.586)	(0.617)	(0.441)	(0.409)	(0.329)	(0.469)	(0.357)	(0.552)	(0.354)
Chicago	-0.141	0.325	-0.127	0.327	-0.128	0.314	-0.175	0.312	-0.174	0.323
	(0.307)	(0.254)	(0.295)	(0.254)	(0.300)	(0.256)	(0.294)	(0.257)	(0.294)	(0.256)
San Antonio	0.791 [a]	0.772 [b]	0.615	0.752 [a]	0.629	0.754 [b]	0.571	0.803 [b]	0.584 [b]	0.749 [b]
	(0.458)	(0.315)	(0.443)	(0.310)	(0.443)	(0.309)	(0.434)	(0.325)	(0.438)	(0.310)
Caregiver age 30-39	-0.373	-0.393	-0.564	-0.404	-0.712	-0.379	-0.583	-0.407	-0.570	-0.394
	(0.489)	(0.342)	(0.507)	(0.342)	(0.521)	(0.355)	(0.572)	(0.348)	(0.519)	(0.358)
Caregiver age 40+	0.166	0.427	0.042	0.443	-0.337	0.426	-0.106	0.462	-0.089	0.417
	(0.406)	(0.426)	(0.415)	(0.427)	(0.442)	(0.405)	(0.441)	(0.428)	(0.436)	(0.431)
Black race	-0.004	-0.060	0.013	-0.069	0.061	-0.056	0.066	-0.001	0.823	-0.064
	(0.691)	(0.514)	(0.690)	(0.510)	(0.689)	(0.517)	(0.705)	(0.525)	(0.704)	(0.514)
Hispanic	-1.107	-0.032	-0.885	0.018	-0.962	0.008	-0.981	-0.0005	-0.970	-0.004
	(0.883)	(0.483)	(0.867)	(0.480)	(0.844)	(0.488)	(0.862)	(0.499)	(0.846)	(0.485)
Other race	2.675 [b]	-0.924	2.765 [b]	-0.903	2.957 [b]	-0.946	2.784 [b]	-0.983	2.780 [b]	-0.928
	(1.195)	(0.833)	(1.205)	(0.832)	(1.279)	(0.837)	(1.245)	(0.845)	(1.240)	(0.838)
High school grad	-0.672 [b]	-0.294	-0.749 [b]	-0.277	-0.888 [b]	-0.319	-0.893 [b]	-0.322	-0.890 [b]	-0.313
	(0.345)	(0.290)	(0.361)	(0.289)	(0.384)	(0.291)	(0.389)	(0.291)	(0.382)	(0.290)
Child under age 5 in household	0.619 [a]	-.166	0.634 [a]	0.161			0.689 [a]	0.141	0.643	0.153
	(0.375)	(0.361)	(0.379)	(0.362)			(0.395)	(0.366)	(0.527)	(0.384)
Married	0.049	0.130	0.263	0.148	0.375	0.154	0.369	0.105	0.371	0.148
	(0.439)	(0.353)	(0.473)	(0.345)	(0.600)	(0.340)	(0.602)	(0.345)	(0.606)	(0.339)
Not US citizen	-0.352	0.816 [b]	-0.483	0.807 [b]	-0.641	0.782 [b]	-0.629	0.854 [b]	-0.612	0.781 [b]
	(0.715)	(0.373)	(0.686)	(0.369)	(0.705)	(0.368)	(0.671)	(0.385)	(0.693)	(0.367)
Constant	-1.124	-1.309 [b]	-1.037	-1.350	-0.339	-1.289 [b]	-0.805	-1.208 [a]	-0.774	-1.127 [a]
	(0.906)	(0.648)	(0.914)	(0.644)	(0.827)	(0.644)	(0.921)	(0.659)	(1.001)	(0.661)
Chi-squared tests for whether transition matrix differs for barrier group compared to others in sample $\chi 2$ (p-value)	14.3 (0.0008)		5.26 (0.072)		0.42 (0.81)		2.93 (0.23)		0.02(0.99)	

*See table 3 notes. Boston is the omitted city, Age <30 is the omitted age group, and Non-Hispanic White is the omitted racial/ethnic group.

Table 5: Percent Working, Receiving TANF/SSI, or Neither, by Wave 1 Barrier Group

	Working	TANF/SSI	Detached
Wave 1 barrier group			
Barrier-free	59%	17%	24%
Mental Health	27	54	19
Alcohol/Drugs	39	34	27
Child < 3	57	18	25
Child behavior	63	20	17
Effect of 1 SD rise in continuous measure of mental health*			
$\chi 2$ (p-value) = 18.2 (0.0001)			
	-3.4	10.2	-6.8

*This measures the change in predicted probability of work, aid, or being detached for a 1 SD rise in the log-transformed Brief Symptom Inventory measure compared to mean.

Percentages reported here are predicted probabilities based on multinomial logit models in table 4 of the likelihood of TANF/SSI or neither TANF/SSI nor work (being detached) relative to work. All models control for covariates in Table 3, except for Child<3 models which omit covariate for preschool aged children (under age 5).

Table 6: Multinomial logit models of likelihood of TANF/SSI or being detached in Wave 2 relative to work, conditional on wave 1 work/TANF status and employment barriers

	Poor Mental Health		Drug/alcohol use		Child under 3		Child behavior		Barrier-free	
Wave 1 work/aid status	TANF or SSI	Detached	TANF or SSI	Detached	TANF or SSI	Detached	TANF or SSI	Detached	TANF or SSI	Detached
TANF	1.64 [b]	0.87 [a]	2.05 [b]	0.74	2.87 [b]	1.34 [b]	2.28 [b]	0.69	1.92 [b]	0.47
	(0.49)	(0.41)	(0.50)	(0.43)	(0.64)	(0.57)	(0.54)	(0.48)	(0.53)	(0.41)
Detached	0.93 [a]	1.99 [b]	1.04 [b]	1.98 [b]	1.73 [b]	1.98 [b]	1.12 [b]	1.99 [b]	0.46	1.93 [b]
	(0.48)	(0.35)	(0.50)	(0.35)	(0.76)	(0.46)	(0.53)	(0.38)	(0.51)	(0.41)
Barrier group in W1	-0.02	0.91	1.78 [a]	0.62	0.60	0.03	0.70	-0.27	-0.60	-.27
	(0.70)	(0.68)	(0.97)	(0.81)	(0.72)	(0.49)	(0.87)	(0.55)	(0.73)	(0.55)
TANF*barrier group	2.45 [b]	-1.79	-1.12	-0.22	-1.10	-0.73	-0.75	0.46	0.67	0.43
	(1.16)	(1.30)	(1.23)	(1.14)	(0.88)	(0.79)	(1.14)	(0.92)	(0.96)	(0.87)
Detached*	0.19	0.48	-2.28 [a]	0.15	-1.41	0.01	-0.50	-0.22	1.39	0.23
barrier group	(1.17)	(1.07)	(1.22)	(1.01)	(0.94)	(0.67)	(1.08)	(0.83)	(1.02)	(0.69)
Chi-squared tests for whether transition matrix differs for barrier group compared to others in sample $\chi 2$ (p-value)										
	15.66	(0.02)	7.81	(0.25)	4.41	(0.62)	2.23	(0.89)	2.51	(0.88)

a=significant at 10% level, b=significant at 5% level

Note: Robust standard errors in (). Recipients of SSI in wave 1 are excluded from the sample. Each pair of columns represents a different multinomial logit model of wave 2 outcomes as a function of a single wave 1 employment barrier interacted with wave 1 status (TANF/SSI, or neither). All models include covariates in table 3. Note that "child < age 5" is not included in models of the kids < age 3 barrier.

Table 7: Probability of transitioning between states | work/TANF status in Wave 1 and Covariates

Barrier free		Wave 2 status	
Wave 1 status	Work	TANF/SSI no work	Neither aid or work
Work	81.8%	7.2%	11.0%
TANF	44.2	38.4	17.6
Neither aid or work	39.2	18.5	42.3
Mental health problem		Wave 2 status	
Wave 1 status	Work	TANF/SSI no work	Neither aid or work
Work	66.0	9.5	24.5
TANF	15.3	82.6	2.2
Neither aid or work	18.8	8.0	73.2
Marijuana, drug, alcohol use*		Wave 2 status	
Wave 1 status	Work	TANF/SSI no work	Neither aid or work
Work	53.9	30.8	15.3
TANF	35.9	47.4	16.7
Neither aid or work	29.3	6.0	64.7
Child behavior problem		Wave 2 status	
Wave 1 status	Work	TANF/SSI no work	Neither aid or work
Work	75.1	14.9	10.0
TANF	45.9	35.7	18.4
Neither aid or work	47.8	16.9	35.2
Children under 3 in household		Wave 2 status	
Wave 1 status	Work	TANF/SSI no work	Neither aid or work
Work	75.4	12.2	12.3
TANF	48.7	37.3	14.0
Neither aid or work	42.6	9.5	47.9

Effect of 1 SD rise in continuous measure of mental health*, $\chi 2$ (p-value) = 17.0 (0.0002)

		Wave 2 status	
Wave 1 status	Work	TANF/SSI no work	Neither aid or work
Work	-3.2	6.2	-2.9
TANF	-8.2	13.5	-5.3
Neither aid or work	-0.3	9.4	-9.1

*This measures the change in predicted probability of work, aid, or being detached for a 1 SD rise in the log-transformed Brief Symptom Inventory measure compared to mean.

Table shows predicted probability of work, TANF/SSI, or neither, conditional on wave 1 work/TANF status, based on multinomial logit models in Table 6.

Table 8: Probability of sanctions by barriers for those on TANF some time between Waves 1 and 2

	Wave 1 Coefficient (SE)	**Wave 2** Coefficient (SE)
Wave 1 barrier group	[predicted prob %]	[predicted prob %]
No barrier	0.424	-0.59
	(0.562)	(0.509)
	[23.8]	[14.5]
Mental health	-2.11	0.371
	(1.33)	(1.10)
	[3.8]	[26.4]
Drug/alcohol use	-0.521	0.537
	(0.867)	(0.693)
	[13.3]	[28.6]
Child < 3	-0.163	-0.106
	(0.608)	(0.490)
	[18.0]	[20.6]
Child behavior problem	0.642	-0.650
	(0.557)	(0.532)
	[26.5]	[13.8]
Continuous mental health measure*	-0.05	0.50[a]
	(0.17)	(0.27)
	[-0.7]	[8.5]
N	548	

*Continuous mental health measure is the natural log transformation of the Brief Symptom Inventory. The predicted probability in brackets for this continuous measure shows the change in the probability of sanction for a 1 SD rise in this measure compared to the mean.

Note: Sample includes women using any TANF between waves 1 and 2. Model adjusts for covariates in table 3 and months on TANF. a=significant at 10% level.