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HEALH INSURANCE COVERAGE AND ACCESS TO CARE AMONG FORMER WELFARE RECIPIENTS

Harold A. Pollack, MPP PhD
Associate Professor
Department of Health Management and Policy
University of Michigan

Matthew M. Davis, MD, MAPP
Assistant Professor of Pediatrics and Internal Medicine
University of Michigan

Sheldon Danziger, PhD
Henry J. Meyer Collegiate Professor and
Co-Director, National Poverty Research Center
Gerald R. Ford School of Public Policy
University of Michigan

Sean Orzol
Department of Health Management and Policy
University of Michigan

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Economic Research Initiative on the Uninsured
University of Michigan
555 South Forest Street, 3rd Floor
Ann Arbor, MI 49104-2531

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Health Insurance Coverage and Access to Care Among Former Welfare Recipients

Welfare reform in 1996 transformed the nature and purpose of public aid. From a political perspective, welfare reform is one of the most successful legislative initiatives in recent decades. From a policy perspective, the late 1990s were marked not only by welfare reform, but by real economic gains for low income workers and families. Child poverty rates declined, while labor force participation increased among unmarried mothers. Concomitant changes occurred in health insurance coverage for women and their children, although the cumulative effects of these economic and public policy changes have not been explored in depth.[1]

This paper examines the health insurance status of "welfare-leavers" female heads of household who left the TANF rolls following the 1996 reform. We document the proportion of former TANF recipients, both adults and children, who lack health insurance coverage. We also explore more direct access measures, such as whether a respondent has encountered financial difficulties in obtaining needed care or medications for themselves or for their children.

Roadmap of the paper

Part I describes the role of health coverage in advancing the health and well-being of low-income families. It describes the clinical implications of delaying needed medical care, as well as some of the major policy instruments that provide coverage to families that would otherwise not be likely to afford to purchase insurance.

Part II describes the two datasets we analyze, including their different sampling methodologies and their strengths and weaknesses. It also describes our analytic methods. Part III provides descriptive information on the group of welfare-leavers included in our statistical analysis, and presents key findings. Part IV concludes.

I. Background

The most immediate effect of welfare reform has been to reduce the number of recipients of federally-funded cash aid. Between August 1996 and December 2001, the number of Temporary Assistance to Needy Families (TANF) recipients declined by 56 percent, from 12.2 to 5.3 million.[2, 3] Some of this caseload decline accrued through the reduced flow of new entrants into the TANF program; however much of the decline is attributable to the large numbers of recipients who left the TANF rolls. These "welfare-leavers" are of special concern to policymakers, policy researchers, and the public and are the focus of our analysis.

Steep declines in welfare caseloads are widely viewed as evidence of policy success. The steady decoupling of Medicaid eligibility rules and income thresholds from cash assistance since the mid-1980s--a trend finalized with the 1996 reform--might conceivably have shielded welfare-leavers from the loss of Medicaid coverage. However, welfare reform brought pronounced drops in Medicaid enrollment in 1997 that mirrored changes in theTANF caseload.

This decline suggests that former TANF enrollees might not have understood the decoupling of these programs, and might not have known that they could still qualify for Medicaid after leaving welfare.[4-6] For example, some states closed a client's entire case upon termination from cash assistance, requiring the client to re-apply for food stamps and Medicaid In addition, state-level agencies that had previously worked together may not have effectively coordinated their efforts after welfare reform. For these reasons, declining TANF enrollment complicates the pre-1996 entitlement to health coverage that was provided to poor mothers and their children, and declining welfare caseloads create new concerns for health policy.

Medicaid eligibility requirements for both mothers and children are more generous than the stringent requirements associated with cash aid. However, former welfare recipients are

entitled to transitional Medicaid assistance for twelve months after exiting welfare. While this encourages their initial movement towards economic self-sufficiency, many former recipients reach the end of this transitional period without obtaining private or other public coverage.[7] Some welfare-leavers face special problems if they exited due to sanctions or if they fail to become self-sufficient within state or federal time-limits for the receipt of cash aid.[8-10]

The 1980s Medicaid expansions, and the 1997 enactment of the state Child Health Insurance Program (CHIP), represent dramatic expansions of health care entitlements for low-income children.[11, 12] Despite policy debates over crowd-out and the costs of expanded coverage, many states have established Medicaid and CHIP policies that achieve a nearly universal entitlement to health coverage among poor and near-poor children. Such coverage is striking when one considers the absence of policy consensus in covering low-income, non-elderly adults--adults who often live in the same households as the children newly-eligible for public insurance.

Even when both children and their mothers are eligible for public coverage, administrative features of Medicaid and CHIP may create barriers to entitlement security. A large literature documents obstacles to takeup within both programs.[13-21] According to one study of families with uninsured, Medicaid-eligible children, two-thirds of parents reported at least one previous attempt to enroll their children. Problems completing the Medicaid application and denial of coverage were the two most common reasons for failure to obtain coverage.[22, 23] Many TANF-ineligible families do not know that they are eligible for public health insurance. In the absence of cash assistance, parents of healthy children may also perceive lessened incentive to confront the administrative barriers associated with program enrollment.

Recent studies documenting unintended declines in Medicaid enrollment underscore these concerns.[4, 24] To the extent that welfare reform seeks to encourage work through positive inducement rather than through time-limits or sanctions, poor insurance coverage reduces the economic incentive at the margin for TANF recipients to seek employment. Poor insurance coverage among welfare-leavers may also be a barrier to receipt of needed medical care.[5, 6]

For these reasons, lack of health insurance is both an economic and a public health problem. Approximately 9.2 million children lacked health insurance in 2000. The ranks of the uninsured include 26 percent of children living below the poverty line, 16 percent of children living between 100 percent and 200 percent of the poverty line, and 12 percent of children overall.[25] At the same time, approximately one-third of parents with incomes below 200 percent of the federal poverty line were uninsured.[25] The rate of uninsurance may be even higher among welfare leavers. Data from the National Survey of America's Families indicated that 25 percent of children previously on welfare were uninsured in 1997, as were 41 percent of their mothers.[6]

Several studies indicate that non-coverage influences the health care provided to both children and adults. Uninsured children are less likely than insured children to have a usual source of health care, and less likely to have had contact with a physician within the last 12 months, and are more likely to report not being able to access needed medical care and pharmaceuticals.[26, 27] Examining the experience of new enrollees in New York State's CHIP program—most of whom were previously uninsured--Holl and colleagues reported that enrollment was associated with increased access to and use of primary care, improved continuity and quality of pediatric care.[28]

Given the linkage between Medicaid eligibility and takeup with cash aid, children living in working poor families are more likely than those living in non-working poor families to be uninsured and to have delayed or missed care in the previous year because of financial constraints.[29] Disparities in access to routine physician care between uninsured and insured children differ among states, reflecting the diversity of state "safety nets" and other factors.[30]

Among adults, the uninsured are less likely to have received medical care for symptoms judged to require care,[31] are more likely to have foregone medical care, and are more likely to have experienced difficulty paying medical bills even if they were uninsured for only a brief period and were otherwise insured.[32] Uninsured adults are also less likely to use preventive or early-detection medical services,[33] though the causal impact of coverage on preventive care is unclear from such observational studies. Postponement of needed medical care among the uninsured is most pronounced among adults in fair or poor health, whose medical needs are greatest.[34]

II. Data and Methodology

This analysis uses two datasets to explore coverage issues among welfare-leavers. We use panel data from the Women's Employment Survey (WES) to explore the influence of family circumstances on health insurance coverage and health care utilization among former TANF recipients in one Michigan county. To draw national comparisons using less detailed, but nationally-representative data, we perform a similar analysis using the National Survey of American Families (NSAF).

Women's Employment Survey (WES)

WES is a longitudinal study of current and former TANF recipients in one urban Michigan county. The high WES response rates at each wave (about 90 percent) and its comprehensive survey instrument make it well-suited for our analysis. Although WES includes data from only one state, its relatively large sample size in a common economic and policy environment allows us to explore how variations in individual circumstances are associated with differences in maternal and child coverage.

WES respondents were selected with equal probability from an ordered list of single mothers with children who received TANF assistance in February 1997.[35] All respondents were U.S. citizens between age 18 and 54, and were either Caucasian or African-American. The initial WES sample consisted of 874 eligible respondents, more than 86 percent of whom (753) participated in the initial survey. 77 percent of WES respondents who participated in wave 1 remained in the survey for the subsequent three waves analyzed in this paper. The respondents were interviewed annually between Fall 1997 and Fall 1999 and again in Fall 2001--753 women were interviewed in 1997, 693 in 1998, 632 in 1999, and 577 in 2001 (577/753=77

percent). All WES data analyzed here are drawn from the fourth wave, conducted in Fall 2001, about 57 months after the sample was drawn.

WES includes detailed information regarding the health, mental health, economic, and psychosocial well-being of respondents, including health insurance coverage. We begin our analysis with standard socio-demographic and human capital factors--maternal age, race, educational attainment, and household composition. We include a series of dummy variables to capture mothers' marital and cohabitation status, as divorced or separated mothers (and their children) may obtain health insurance coverage through an absent spouse. Cohabitation may also affect health insurance coverage. Because cohabitating women may have access to additional household income, they may be more likely to exit welfare without obtaining employment accompanied by insurance coverage.

We also examine the presence of young children, as child age is an important criterion for CHIP coverage in some states (but not in Michigan). Parents of preschool children face greater employment barriers due to childcare needs. These adults also face more generous treatment under TANF work requirements. In addition, younger children require more frequent contact with health care providers for routine primary care needs.

We consider a detailed set of job skills, physical illnesses, whether respondents meet the diagnostic screening criteria for some psychiatric disorders, and other employment barriers that have been closely studied in previous WES analyses. Mothers who experience reading difficulties, who have learning disabilities or who are high school dropouts face barriers to employment.[8] These mothers may also face higher barriers to navigating public insurance systems and may be less knowledgeable about available insurance coverage.

We also consider the presence of physical illnesses and mental health problems among both adults and children. These barriers may have an ambiguous impact on insurance coverage. Illness increases demand for health services and increases parents' incentives to seek public coverage. However, such conditions are also barriers to economic self-sufficiency and may hinder recipients in their efforts to obtain available coverage. For example, women experiencing major depression may be less aggressive in pursuing CHIP enrollment; while some women experiencing domestic violence may avoid contact with health care providers.

Family attitudes about illness and medical care may also influence the demand for health coverage. We therefore include two variables that seek to capture respondents' belief in the value and importance of medical services. We include dummy variables to mark respondents who disagree with either of the two below statements: "Regular contact with a physician is the best way to avoid illness," and "whenever I don't feel well, I should consult a medical professional."

The physical and mental health status of children is also important for health care coverage and for services utilization. We therefore created composite variables regarding specific chronic physical and behavioral/emotional health problems. If a respondent reported that any of her children "have a physical, learning or mental health condition that limits their regular activities," she was further asked if a doctor or health professional had told her that one of her children had some common physical diagnoses (e.g., asthma, speech impairment or delay), or some common behavioral/emotional disorders (e.g., attention-deficit disorder, developmental delay, or a learning disability). Women who responded affirmatively to any of these specific problems are classified as having a child with a chronic physical or mental health condition, respectively. Respondents report whether any adult or child lacks insurance coverage, and whether mothers or children faced unmet medical needs due to financial factors.

Respondents were also asked about their experiences of material hardship and their subjective well-being. One category of hardship concerns delays in receiving needed medical care or medications.

National Survey of America's Families

This paper also analyzes data from the Urban Institute's 1999 National Survey of America's Families (NSAF), a household survey of over 109,000 adults and children living in over 42,000 households who represent the noninstitutionalized civilian population under age 65 years.[36] The NSAF was designed to provide reliable national-level estimates, as well as state-representative estimates in 13 states (Alabama, California, Colorado, Florida, Massachusetts, Michigan, Minnesota, Mississippi, New Jersey, New York, Texas, Washington, and Wisconsin) that collectively comprise over half of the US population living in states with a broad range of government programs and policies. Families with incomes below 200 percent of the federal poverty level were oversampled. The overall response rate was approximately 70 percent.

In families with children, the NSAF respondent was the adult who knew the most about children's education and health care. A respondent (more than 80 percent female) was asked whether she had received AFDC/TANF in her name, or in the name of any of her children, and whether she and/or her children were still receiving TANF at the time of the interview in February to October 1999. Respondents also indicated the month and year in which they last received AFDC/TANF. For this study, "NSAF welfare-leavers" were defined as those women and children previously on AFDC/TANF who last received welfare benefits in August 1996 or later. Although NSAF is a very large national sample, our state-identified sample of welfare-leavers (N=992) includes only about twice the number of welfare-leavers in WES (N=432).

NSAF also examines changes in family health insurance, access, and health status; family employment and economic well-being; and family environment and child well-being. For welfare-leavers, we examine child and maternal health insurance status, postponement of medical care, and postponement of pharmaceutical therapy, and the presence of a usual source of health care. Explanatory variables included child age and race/ethnicity; maternal education, marital status, and work status; and maternal and child health status and/or presence of disabling medical condition. In addition, regional differences were examined by assigning respondents to one of the four census regions (Northeast, Midwest, South, West).

Because WES data come from one county, we cannot examine the importance of state policies for health care coverage and utilization. NSAF design does allow such an analysis. The differential implementation of state welfare reforms may create important compositional effects across the states. States that aggressively encouraged or required families to leave the TANF rolls may be more likely than other states to remove recipients with significant employment barriers from the welfare rolls, and hence from the Medicaid rolls. Because we lack large enough state-specific samples to perform detailed analysis of individual state policies, we use the rapidity of TANF caseload declines by state as a crude instrument for the stringency of welfare reform. State-specific rates of welfare caseload decline from 1997 to 1999 were calculated and ranked in quintiles, then coded as low (1st quintile), moderate (2nd and 3rd quintiles), or high (4th and 5th quintiles) for each respondent.

We analyze the NSAF data with sample weights provided by the Urban Institute. The weights reflect the design features of the sample, including the over-sampling of low-income households, and adjust for nonresponse and under-coverage. Jackknife repeated replication techniques, using subsample weights provided by the Urban Institute, were conducted to estimate

our regression standard errors.[1] Separate weights are provided for adults and children; weights were used to correspond to the unit of analysis of the outcome variable. In models where the unit of analysis was the family, child weights were used.

Statistical Methodology

We use a common set of statistical methods for each dataset. We begin by constructing a sample of "welfare-leavers" who had received AFDC or TANF in the recent past, but who were not receiving TANF at the time of the interview. In WES, we include all respondents who did not receive cash assistance in the Fall 2001 survey month. We then use multiple logistic regressions to describe health insurance coverage and utilization among welfare-leavers.

Maternal and child insurance coverage reflect unobserved attitudes, resources, and circumstances facing specific families. Public coverage of children (or adults) also brings families in contact with the state insurance programs, and therefore may facilitate enrollment of other family members into other public programs. As in our WES analysis, we therefore expect some correlation in insurance coverage between unmarried mothers and their children. Bivariate probit analysis parallel to our WES analysis yields similar results and will be reported in a subsequent draft.

Because eligibility and enrollment in public programs reflects many factors, we include a rich array of independent variables. We estimate regressions with and without family income, to examine the economic gradient in health insurance coverage among welfare-leavers. In examining health care utilization, we estimate specifications with and without insurance status. Because insurance status reflects unobserved family characteristics that are correlated with health care receipt, we exclude these variables from our baseline regression specifications.

[1] We thank Adam Safir of the Urban Institute for providing analytic software.

However, to capture the correlation between lack of coverage and delayed care, we estimated a specification that includes insurance coverage as an explanatory variable. This is not reported here but is available from the authors.

III. Results

Descriptive Statistics

Table 1 shows descriptive statistics for the WES sample of welfare leavers and stayers. Although all respondents received TANF in February 1997, at the Fall 2001 interview, 433 out of 577 respondents (75 percent) were no longer receiving cash assistance. Among leavers, 70 percent were employed for at least 20 hours per week at the time of the interview (302/403), with the remainder, representing 30 percent of leavers and 22.7 percent of all respondents, neither working 20 hours per week nor receiving cash assistance. About one-third of welfare stayers (n=49) were combining work of more than 20 hours per week and cash assistance. Thus, among all respondents about 60 percent were working more than 20 hours (49+302 out of 577).

Previous WES analyses have identified many barriers to employment as significantly associated with continued welfare receipt.[8] Women with less than high school education, women with many children, limited work experience, those in fair or poor health, and those with children experiencing developmental or mental health difficulties were more likely than others to remain on the TANF rolls.

Although validated income data are not yet available for wave 4, results from previous waves indicate that many welfare-leavers experienced economic disadvantage. Among wave 3 welfare leavers, half had annual incomes below the poverty line in the prior 12 months, and 77 percent had incomes below 150 percent of the poverty line. Among women who lacked health insurance coverage, 52 percent had incomes below the poverty line, and 81 percent were below 150 percent of poverty. Most of the uninsured children in wave 3 (89 percent) had incomes below 185 percent of the poverty line—Michigan's eligibility threshold for CHIP coverage.

Turning to wave 4 results, 27 percent of welfare-leavers (117/433) lacked health coverage for themselves, compared with less than 3 percent of those who continued to receive TANF. Among the 387 welfare-leavers with a child under 18 in the household, 35 (9 percent) included an uninsured child. Only one child in a household receiving TANF was uninsured.

The linkage between TANF and health coverage carried over to measures of financial barriers to care. Among adults, 26 percent of welfare-leavers reported that they could not afford to fill a prescription for themselves in the past year; 39 percent reported that they had foregone needed medical or dental care. Among TANF recipients, 16 percent reported that they could not afford a prescription for themselves, and 14 percent reported that they had foregone needed care.

We found much lower reported barriers for children. Among welfare-leavers, only 3 percent reported delayed care of a child for financial reasons, compared to 1.4 percent among the children of TANF recipients.

Table 2 shows comparisons in the NSAF between all welfare stayers and all welfare leavers . In contrast to WES, welfare stayers and leavers were present in equal numbers: Out of 1979 respondents, 992 (50.1 percent) who had received AFDC/TANF at one point were no longer receiving cash assistance in Fall 1999. Non-Hispanic whites were more likely than African-Americans or Hispanic/Latinos to leave the TANF program, as were residents of western states. Residence in a state with rapid caseload decline is associated with reduced probability of welfare receipt. Welfare-leavers were less likely than those still receiving cash assistance to have maternal or child health problems, as defined by functional limitations or self-described fair or poor health.

[2] We had hoped to examine specific state policies associated with health coverage among welfare-leavers. However, the sample of NSAF welfare-leavers from identified states (992 families, 883 from states with more than 30 respondents) was not substantially larger than the comparable WES sample and spread over many spread over many states, which prevented separate state evaluations.

Although welfare-leavers are more advantaged than current recipients, they remain a disadvantaged group. Among NSAF welfare-leavers, 60 percent had incomes below the federal poverty line, and 76 percent had incomes below 150 percent of the poverty line. If one considers uninsured adult leavers, 64 percent were below the poverty line, and 74 percent had incomes below 150 percent of the poverty line. Among families with an uninsured child, 61 percent had incomes below the poverty line; 73 percent had incomes below 150 percent of the poverty line.

We found broadly similar bivariate patterns within the NSAF data as those reported in WES. Among welfare-leavers, 34.1 percent of mothers (and 21.7 percent of children) reported that they lacked insurance coverage. In contrast, among those who had received cash aid in 1999, only 7.8 percent of mothers were uninsured and all children were covered.

WES and NSAF used different measures to explore the prevalence of delayed care associated with economic need. In NSAF, welfare leavers were more likely than welfare stayers to report delayed care on every measure. 21.8 percent of welfare-leaver families reported delay in seeking medical care in the past year, compared to only 12.6 percent of families still receiving TANF. Among welfare leavers, six to seven percent of families reported delayed medical care or postponed prescription medication for a child due to economic reasons.

Multivariate Results

We now present multivariate analysis of women's and children's health insurance coverage. Table 3 shows our WES results. The first two columns show multiple logistic regressions; the last two columns, bivariate probit specifications. In all tables with logistic regression results, we present logit coefficients and accompanying 95 percent confidence intervals.

The first column shows our analysis of maternal health coverage. Because TANF and SSI receipt bring accompanying Medicaid coverage, we restrict our analysis to respondents who do not receive such cash assistance. We obtained only a few statistically significant coefficients. The strongest predictive factor was the length of time a woman had been off the TANF program. Women who had received TANF within the previous year were much more likely than other women (87 percent compared with 68 percent) to hold insurance coverage. We found no statistically or substantively significant variation in coverage after this one-year threshold.

Respondents over the age of 35, non-Hispanic whites, and women with physical health barriers were less likely to obtain health insurance than were other respondents. Mental health problems such as generalized anxiety disorder, depression, and drug or alcohol dependence were not statistically significant predictors of health coverage. Larger families were also associated with increased coverage, presumably reflecting increased eligibility for public coverage.

Occupation was a significant predictor of health insurance status. Individuals in managerial or operator jobs were more likely to be insured than those in the service or "other" categories, traditionally associated with fewer fringe benefits.

High school dropouts were somewhat less likely to obtain coverage. Women with a child with physical health concerns were also less likely (and those with children with developmental or mental health concerns more likely) to obtain coverage, though these effects were marginally significant.

Child health coverage

The second column of Table 3 shows results for WES child coverage. Because so few children lacked coverage, our analysis lacked statistical power to scrutinize many plausible risk-factors. Several variables were close to statistically significant; however only 3 out of 31 were

statistically significant at the 0.05 level or greater. (All coefficients were, however, jointly significant, $p<0.02$.)

Maternal occupation was the most powerful predictor of child coverage. About two-fifths of all working respondents were listed in service occupations, making this the single largest category. Among service workers, 13.9 percent had children lacking health insurance coverage, and 34.6 percent were uninsured themselves. Among other workers, only 4.5 percent had an uninsured child, and 22 percent reported themselves as uninsured. Perhaps surprisingly, full-time work was not significantly associated with increased adult or child coverage.

The last two columns show bivariate probit results--30 out of 35 families with uninsured children were headed by an uninsured adult. In families headed by an uninsured adult, 33 percent of children lacked coverage. In families headed by an insured adult, less than 2 percent included a child who lacked health coverage.

Table 4 then shows the analogous results for the NSAF. We show results for a specification that includes family income. We obtained quite similar results if income is excluded. Although the variables differ between the two datasets, we again found that our multivariate analysis performed poorly in predicting which welfare-leavers lack maternal health insurance. No variables were statistically significant in either regression specification, and one could not reject the hypothesis that all coefficients were zero ($p=0.82$).

As in WES, maternal coverage and child coverage were tightly coupled among welfare-leavers. In households with mother lacking health coverage, 38 percent of children lacked coverage. In households with insured mothers, less than 3 percent of children also lacked coverage. Compared to children of unmarried working mothers, children of married non-

working mothers were more likely to be uninsured. Children living in Northeast, Midwest, and West regions were more likely than children in the South to be uninsured.

Delayed care

We then examined risk-factors associated with delayed care and with delays in filling prescriptions for needed medications. Table 5 shows results for WES welfare leavers The first column shows whether mothers delayed care for themselves due to financial factors. About one quarter of welfare-leavers reported that they could not afford to fill a prescription for themselves in the past year, and 39 percent reported that they had foregone needed medical or dental care.

Non-Hispanic whites and those with physical and mental health barriers were the most likely to report delayed care. Many of the same factors influenced delayed care as influenced health insurance coverage--50 percent of uninsured women reported delayed prescriptions, and 76 percent reported delayed receipt of doctors' care. In contrast, 16 percent of insured women reported delayed prescriptions, and 24 percent reported delayed care. Controlling for maternal health insurance status, maternal physical and mental health problems were both associated with higher probability of delayed care.

Table 6 shows analogous results for the NSAF. Variables were defined somewhat differently in these data. The survey specifies whether someone in the family delayed medical care for economic reasons, or whether someone in the family delayed filling a prescription. NSAF also asks whether pediatric care has been delayed, or whether a child's prescription had been delayed.

In Table 6 we present findings at the family level regarding delayed care among welfare-leavers. Mothers who had completed high school were more likely to report delays in filling

prescriptions than mothers who had not completed high school, and families in the Northeast were less likely than families in the South to report medication delays. Hispanic/Latino families were less likely than non-Hispanic white families to report prescription delays, whereas mothers with depressive symptoms were more likely to report delays in prescription medications. Mothers with general health problems (functional disability and fair/poor health) and mothers without insurance coverage were more likely to have experienced a delay in medical care. In addition, non-Hispanic African-American respondents were less likely than non-Hispanic white families to report delayed care, as were families with unmarried nonworking mothers compared to families with unmarried working mothers.

Table 6 also shows results for our analyses of children's delays in medical care and prescription medication, and also whether children used emergency departments for primary care or lacked a regular source of care. Delays in children's care among welfare leavers were associated with region, mothers' marital and employment status, and family's race/ethnicity, similar to patterns described for families overall. Lack of a usual source of care and use of the emergency room for primary care was associated strongly with lack of insurance coverage for children, and was inversely related to annual income. In addition, older mothers were less likely to report lack of a usual source of care, and non-Hispanic African-American families were more likely than non-Hispanic white families to lack a usual source of care. Older children were less likely to have a usual source of care. Children whose mothers reported mental health concerns, and children in states that had rapid caseload declines were also significantly less likely to have a usual source of care.

IV. Conclusions

Our analysis has several limitations. Because WES only includes data from one Michigan county, our results may not apply be other settings. However, Michigan's welfare policies and economic conditions are similar to those of many other states, and the WES results are similar to those from NSAF.

Because TANF recipients are categorically eligible for Medicaid, our paper focuses on mothers and their children who left the welfare rolls. We do not explicitly model the process by which respondents sort into current and former recipients. Our description of the contrast between welfare-stayers and welfare-leavers indicates that leavers are the more advantaged group, but that they still experience important economic difficulties.

The NSAF data also contain important limitations. Although prevalence of postponed medical care or postponed prescription drug therapy is higher for the families than for children, it is not possible to determine who in the family required such care or medication. State-specific sample size is quite small in NSAF, limiting our ability to analyze the effects of differences in state policies. We have attempted to characterize policy differences on a regional level instead.

Despite these limitations, our analysis highlights several tentative implications for public health policy. Our most favorable results concern child health insurance coverage. Nationally and in Michigan, more than 80 percent of the children of welfare-leavers have coverage. Whether this patchwork of state, federal, and private coverage constitutes a policy success is an open question. The coverage rate of the children of welfare leavers surpasses the overall rate of coverage among all poor and near poor children even though it falls short of the universal coverage provided in many industrial democracies, and falls short of the Medicaid entitlement in effect for the children of welfare-stayers.

Public policies are less successful in assuring coverage for adult welfare leavers, particularly unmarried and cohabitating women. Within the NSAF and WES respectively, 34 percent and 26 percent of welfare-leavers were uninsured. We found a negligible difference between working leavers and nonworking leavers in securing health coverage in WES and NSAF.

Our WES results underscore the importance of transitional Medicaid--among women who left the TANF rolls within the previous year, 81 percent were covered by Medicaid and another 7 percent had private health coverage. However, once they exhaust their eligibility for transitional Medicaid, most are ineligible for public insurance, and many are working in occupational categories associated with the lack of insurance coverage.

Although the animating vision of transitional Medicaid was to provide a bridge for new workers into employer-based coverage, many workers fail to obtain coverage after such benefits expire. A longer Medicaid transition period would increase the rate of coverage in this group. However, we find little evidence in our regressions that a two-year or three-year benefit would be sufficient to secure health coverage. After the first year, time since welfare exit is a small and statistically insignificant predictor of coverage in our logistic equation.

Occupational category was the most powerful predictor of health insurance coverage. Within WES, 44 percent of working leavers were employed in service occupations, where they were significantly less likely to hold health insurance than were those in other occupations. Occupational category presumably provides one proxy for hourly compensation, and may also proxy for collective bargaining arrangements.

Another finding concerns the link between maternal health barriers and lack of coverage among welfare-leavers. About one-sixth of WES welfare-leavers reported poor health or a

physical health limitation; 46 percent of them were uninsured. Among women welfare leavers in NSAF with health problems, 14% were uninsured. Given the health care needs of these women and the impact of maternal health conditions on access to care for children, adult insurance coverage within this population should be a high priority for policy innovation. Independent of health insurance coverage, respondents with health limitations were more likely to report delayed care or delayed prescriptions due to financial concerns.

Our multivariate models performed poorly in predicting which welfare-leavers would lack health insurance coverage. Such findings likely reflect heterogeneity among leavers, some of whom left because they found work and some of whom no longer qualify for benefits but are not working and a relatively small sample size.

This low rate of coverage among working poor and near-poor mothers is of special concern in light of post-reform declines in the welfare rolls. Since August 1996, AFDC/TANF caseloads have declined by more than 2 million adults and by more than 4 million children. Although our analysis does not address caseload change due to declining entrance to welfare, our mean prevalences of coverage in WES suggest that caseload decline increased the number of uninsured adults by approximately 500,000, and increased the number of uninsured children by approximately 400,000. Our NSAF analysis yielded even higher projections of increased numbers of uninsured individuals associated with caseload declines.[3] This is one unintended consequence of welfare reform. Ironically, the lack of adult eligiblity appears to be one important barrier to enrolling uninsured children who are income-eligible for Medicaid and CHIP.

These patterns inform ongoing debate concerning how public coverage can be improved. Within our Michigan sample, 89 percent of uninsured children were income-eligible for CHIP or

[3] Among WES welfare-leavers, more than 26 percent of adults and more than 9 percent of children lacked health coverage. Multiplying these prevalences by 2 million adults and 4 million children yields the figure in the text.

Medicaid. Family income was not a statistically significant predictor of child health insurance coverage. Other researchers report comparable findings in CHIP program evaluations in other states.[37] CHIP expansion at the "extensive margin" could benefit many children near the boundary of income-eligibility. However, such policies would appear to have little impact on the children of welfare leavers who are likely to derive greater benefit from program expansion at the "intensive margin" through outreach and administrative strategies that benefit those who are already eligible.

In both data sets, we found suggestive links between family psychosocial factors, child coverage, and child health care service use. Within the NSAF, maternal health status was an important risk-factor for delayed medical care among children. Women coping with daily challenges that are either causes or consequences of their chronic health conditions may have difficulty accessing health care for their children.

Although we lacked the statistical power to investigate the linkage between child health insurance and delayed child health care, we did find a strong and statistically significant association between lack of child health insurance and lack of usual source of care among welfare-leavers. Within NSAF, 10 percent of children reported no usual source, with 12 percent of uninsured children reported to have no usual source of care, compared with 8.6 percent of insured children. Uninsured children were much more likely than insured children to report use of emergency departments for primary care. These findings are consistent with national observations in the earlier 1990s.[26, 27]

Perhaps our most striking finding was the high correlation between maternal and child health coverage. In homes headed by an insured adult in WES, less than 2 percent of children (5 out of 284) lacked health coverage. Yet in homes headed by an uninsured adult 33 percent of

children (30 out of 91) were also uninsured. Similar coverage disparities were evident in our NSAF sample. Some policymakers express concern that low-income workers will insure themselves without obtaining coverage for dependents. We found very few cases, in either dataset, in which an adult reported that she herself had health coverage but that her (co-residing) children were uninsured.

Although the high correlation between adult and child coverage admits several interpretations, it is consistent with the argument that improved adult coverage may increase child coverage. Initiatives to expand adult coverage are likely to be expensive and controversial; welfare leavers are more likely than their children to be uninsured, and are more likely than their children to experience costly acute or chronic illnesses. However this debate is resolved, the high correlation between adult and child coverage suggests that Medicaid and CHIP outreach strategies are likely to be especially effective when targeted to households that include uninsured adults. Outreach programs for seasonal and service workers, or to adults who frequent safety-net medical facilities are examples of such interventions.

We also examined whether adults or children had delayed prescriptions or needed medical care for financial reasons. Many adult respondents in WES and NSAF reported that they or their families had delayed needed medical care for financial reasons. In both datasets and on diverse measures, welfare leavers were more likely than current recipients to report delays or obstacles to care.

Not surprisingly, the probability of delayed care was associated with insurance coverage. In WES, 69 percent of uninsured women, compared to 20 percent of insured women, reported that they could not afford a medical or dental visit during the previous year. In NSAF, 25% of mothers reported delayed care in their families when they themselves had no coverage, compared

to 14% of mothers in families with an insured mother. These disparities remained pronounced in multivariate analysis.

Effect sizes were smaller in the case of prescription drugs in the WES sample. However, uninsured adults were twice as likely to report difficulties affording a prescription than were their insured peers. Both of these strong associations underscore the importance of health coverage for health care utilization within low-income populations.

One pattern we do not understand is the finding that African-Americans are less likely to report delays in adult or pediatric care. It is possible that African-American welfare-leavers are more likely than non-whites to live in urban areas that are near safety-net providers. It is also possible that African-American and non-Hispanic white families may differ in their perceptions of what constitutes a need for medical care.

Our NSAF analysis allowed us to explore differences across the states in the experience of welfare leavers. Principally through the relationship between region and decline in caseloads, we found suggestive evidence that leavers were more likely to experience medical access barriers in states that experienced the most rapid decline in welfare caseloads. Specifically, over half of the respondents lived in Western states that ranked in the top 2 quintiles of caseload decline, whereas 85% of respondents lived in Northeast states that ranked in the bottom quintile of caseload decline. States that were most aggressive in reducing caseloads may have been more willing to remove marginal recipients from the TANF rolls, and may thereby have withheld aid from some recipients who have limited capacity to obtain health coverage or to access care.

	Total Wave 4	Welfare			No Welfare	
		All	Workers	No Work	Workers	Non Workers
	(n=577)	(n=144)			(n=302)	(n= 131)
Respondent's Age: Aged 35 or older	44%	49%	43%	52%	41%	44%
African-American	55%	63%	57%	65%	52%	56%
Married at Wave 4***	23%	13%	6%	16%	23%	33%
Never married at Wave 4	51%	57%	59%	56%	51%	44%
Cohabitation at Wave 4**	40%	28%	33%	26%	42%	50%
Currently Pregnant	5%	6%	4%	6%	4%	5%
Number of care given Children	2.18	2.51	2.84	2.34	2.03	2.17
Presence of children age 0-2	19%	20%	22%	19%	17%	25%
Long term welfare receipt (1997)**	63%	76%	76%	76%	60%	56%
Less than HS Education (1997)***	30%	44%	39%	47%	23%	32%
Fewer than 4 job skills (1997)***	21%	35%	29%	38%	13%	26%
Low work experience (1997)***	15%	26%	18%	29%	8%	19%
Mother's health problem***	24%	40%	29%	46%	13%	32%
Any Mental Health Problem (of 4)***	32%	42%	33%	46%	23%	42%
Severe domestic violence	13%	14%	12%	15%	14%	11%
Drug or Alcohol dependence	4%	6%	2%	8%	3%	4%
Child with physical health concern	7%	12%	12%	12%	5%	7%
Child developmental/mental health concern***	13%	22%	14%	25%	8%	14%
"Regular contact with a physician is [not] the best way to avoid illness."	42%	38%	35%	40%	45%	42%
"Whenever I don't feel well, I should [not] consult a medical professional*	52%	43%	46%	42%	57%	47%
Work Status***						
Currently Working Full Time (35+ hours)	43%	10%	31%	0%	75%	0%
Currently Working 1 to 19 hours	3%	5%	14%	0%	4%	0%
Currently Working 19 to 34 hours	16%	19%	55%	0%	21%	0%
Currently Non Worker	37%	66%	0%	100%	0%	100%
Work Welfare Status: Welfare	25%	100%	100%	100%	0%	0%
SSI receipt	6%	13%	4%	17%	1%	12%
Occupation***						
Managerial and Professional	8%	2%	6%	0%	13%	0%
Sales and Clerical	19%	14%	41%	0%	28%	0%
Service	27%	15%	45%	0%	43%	0%
Operations	6%	2%	6%	0%	10%	0%
Other	3%	1%	2%	0%	5%	0%
Not Working - None	37%	66%	0%	100%	0%	100%
Time since last welfare receipt**						
1 year or less	39%	88%	90%	87%	18%	34%
Greater than 1 year	61%	12%	10%	13%	82%	66%
2 to 3 years	19%	3%	2%	3%	24%	22%
Greater than 3 years	33%	4%	4%	4%	47%	31%
Respondent has Health Insurance***	79%	97%	98%	97%	73%	74%
Respondent does not have Health Insurance***	21%	3%	2%	3%	27%	26%
No Health Insurance because cannot afford	6%	0%	0%	0%	10%	4%
Child has Health Insurance**	93%	99%	100%	99%	91%	90%
Child does not have Health Insurance**	7%	1%	0%	1%	9%	10%
Could not afford a prescription last year	23%	16%	14%	17%	25%	27%
Could not afford a doctor	32%	14%	14%	14%	38%	36%
Could not afford a doctor for a child	2%	1%	0%	2%	3%	3%

Year is 2001 unless indicated

Table 1: Descriptive statistics in the WES dataset
(*p<0.05 **p<0.01 ***p<0.001)

	Welfare Stayers (N=987)	Welfare Leavers (N=992)	Total Sample (N=1979)
Dependent variables			
Prescription drugs postponed last year	16.5 percent	17.1 percent	16.8 percent
Medical care postponed last year*	12.6	21.8	16.4
Prescription drugs postponed last year for a child*	3.1	7.1	4.8
Medical care postponed last year for a child***	3.9	5.9	4.7
Emergency room/ no primary care for children	8.6	12.0	10.0
Mother lacks health coverage***	7.8	34.1	19.2
Child lacks health coverage***	0	21.7	9.0
Independent variables			
Mother High School Graduate	63.4	75.7	68.8
Region**			
South	34.8	22.8	29.8
Northeast	16.5	12.8	15.0
Midwest	19.3	22.9	20.8
West	29.9	41.5	34.4
Maternal depression (in top third)	39.6	42.0	40.7
Marital Status / Work Status***			
Unmarried, working	23.9	45.2	33.1
Unmarried, not working	56.0	20.1	40.4
Married, not working	14.7	16.8	15.6
Married, working	5.5	17.8	10.8
Children > 6 years of age	63.1	58.0	61.0
Race/Ethnicity***			
Non-Hispanic White	25.6	46.4	34.2
Non-Hispanic African-American	47.7	35.6	42.7
Hispanic/Latino	22.9	15.0	19.6
Non-Hispanic Other	3.9	3.0	3.5
Identified Top two quintiles caseload decline***	13.2	26.4	18.9
Child health barrier—limitation and fair/poor health**	6.0	1.9	4.3
Mother health barrier—limitation and fair/poor health*	20.8	13.3	17.6
Maternal age (mean)	32.6	31.1	31.9

Table 2: Welfare Leavers and Stayers in the 1999 NSAF
(*p<0.05 **p<0.01 ***p<0.001)

	Multiple Logistic Regression		Bivariate probit	
	w4 No insurance--nonrecipients	**w4 No child insurance--nonrecipients**	**w4 No insurance--nonrecipients**	**w4 No child insurance--nonrecipients**
Over age 35	0.581	0.697	0.400*	0.471
	[-0.050,1.213]	[-0.308, 1.702]	[0.012,0.788]	[-0.049, 0.990]
Married at wave 4	-0.134	0.46	0.0336	0.312
	[-0.942, 0.674]	[-1.018,1.929]	[-0.489,0.557]	[-0.397, 1.020]
Cohab at wave 4	0.181	0.928	0.0032	0.482
	[-0.440, 0.803]	[-0.093, 1,949]	[-0.385, 0.392]	[-0.021, 0.984]
Never married at wave 4	0.156	1,184	0.227	0.617
	[-0.539, 0.850]	[-0.157, 2.525]	[-0.214, 0.667]	[-0.029, 1.263]
Total children	-0.268*	0.154	-0.051	0.119
	[-0.492, -0.045]	[-0.279, 0.557]	[-0.202, 0.101]	[-0.094, 0.331]
children<2	-0.335	-0.876	-0.174	-0.514
	[-1.117, 0.447]	[-2.076, 0.324]	[-0.613, 0.266]	[-1.063, 0.034]
AFDC>5 years	0.192	-0.726	-0.016	-0.417
	[-0.408, 0.791]	[-1.706, 0.253]	[-0.385, 0.354]	[-0.917, 0.082]
drug/alc dependence	0.765	0.012	0.318	0.677
	[-0.458, 1.989]	[-2.493, 2.517]	[-0.551, 1.187]	[-0.544, 1.897]
African-American	-0.583*	-0.478	-0.298	-0.107
	[-1.148, -0.019]	[-1.375, 0.420]	[0.650, 0.0536]	[-0.554, 0.339]
Skill barriers	0.234	-0.156	0.171	-0.056
	[-0.489, 0.956]	[-1.446, 1.134]	[-0.306, 0.648]	[-0.699, 0.587]
Less than High School	0.409	-0.141	0.061	-0.065
	[-0.194, 1.012]	[-1.243, 0.961]	[-0.335, 0.458]	[-0.618, 0.487]
Work experience barrier	-0.081	0.533	0.0044	0.363
	[-0.926, 0.764]	[-0.858, 1.925]	[-0.551, 0.560]	[-0.350, 1.075]
Full-time work	-0.617	0.495	0.019	0.213
	[-2.19, 0.956]	[-0.858, 1.828]	[-0.438, 0.475]	[-0.445, 0.871]
20-34 hrs/week	-0.475	2.23	0.865	1.218*
	[-2.143, 1.193]	[-0.113, 4.574]	[-0.177, 1.907]	[0.0065, 2.430]
Mother health barrier	0.704*	-2.516*	0.543*	-1.435*
	[0.034, 1.374]	[-4.872, -0.160]	[0.082, 1.003]	[-2.725, -0.146]
w4 domestic violence	0.113	0.320	0.025	-0.0024
	[-0.658, 0.883]	[-0.909, 1.550]	[-0.446, 0.496]	[-0.664, 0.659]
w4 mental health	0.366	0.141	0.267	0.092
	[-0.230, 0.962]	[-0.879, 1.161]	[-0.102, 0.636]	[-0.415, 0.599]
Contact with physician	0.333	0.230	0.232	0.197
	[-0.207, 0.874]	[-0.635, 1.095]	[-0.106, 0.570]	[-0.255, 0.649]
Consult physician	-0.452	-0.435	-0.205	-0.355
	[-0.988, 0.083]	[-1.309, 0.439]	[-0.547, 0.137]	[-0.809, 0.098]
w4 child physical barr	1.429	1.192	0.922*	0.847
	[-0.082, 2.940]	[-1.854, 4.239]	[0.0614, 1.782]	[-1.058, 2.752]
w4 child mental health	-1.374*	-1.922	-0.863*	-1.41
	[-2.672, -0.076]	[-4.951, 1.106]	[-1.605, -0.121]	[-3.117, 0.298]
w4 management occupati	-1.209*	-2.284*	-0.760*	-1.243*
	[-2.296, -0.123]	[-4.457, -0.111]	[-1.421, -0.099]	[-2.293, -0.194]
w4 sales occupation	-0.517	-1.624*	-0.359	-0.85**
	[-1.201, 0.167]	[-2.873, -0.375]	[-0.785, 0.067]	[-1.431, -0.269]
w4 operator occupation	-1.416*	-1.180	-0.750*	-0.7
	[-2.587, -0.245]	[-3.980, 0.381]	[-1.486. -0.0148]	[-1.632, 0.232]
w4 other occupation	0.178	(no variation)	-0.006	-6.27
	[-0.995, 1.351]		[-0.775, 0.763]	[-116396, 116383]
w4 no work	-0.658	0.084	-0.130	-0.276
	[-2.295, 0.978]	[-1.363, 1.530]	[-0.675, 0.416]	[-0.979, 0.427]
Off welfare<1 year	-1.504**	-1.566	-0.632*	-1.166*
	[-2.523, -0.485]	[-3.568, 0.435]	[0.015, 1.248]	[0.216, 2.116]
Off welfare 2-3 years	-0.087	0.337	0.13	0.113
	[-0.964, 0.790]	[-1.199, 1.873]	[-0.439, 0.700]	[-0.616, 0.842]
Off welfare 3+ years	-0.334	0.0222	-0.005	-0.043
	[-1.167, 0.500]	[-1.504, 1.548]	[-0.541, 0.531]	[-0.736, 0.651]
N	388	335	335	
Log Likelihood	-195.2	-84.83		
correlation coefficient	----------	----------	0.964***	

Table 3: Determinants of insurance coverage in the WES dataset
(*p<0.05 **p<0.01 ***p<0.001)

	Logistic Regression Model—β Coefficients [95% Confidence Interval]	
	Mother lacks health insurance coverage	Child lacks health insurance coverage
Maternal age	-0.096	-0.108
	[-0.283, 0.092]	[-0.284, 0.068]
Maternal age^2	0.001	0.002
	[-0.001, 0.004]	[-0.001, 0.004]
Maternal Depression	-0.031	-0.211
	[-0.615, 0.552]	[-1.000, 0.578]
High School Graduate	0.250	0.393
	[-0.460, 0.960]	[-0.341, 1.126]
Northeast	-0.122	1.112*
	[-1.073, 0.830]	[0.143, 2.082]
Midwest	0.392	1.606**
	[-0.813, 1.597]	[0.517, 2.694]
West	0.447	2.294***
	[-0.549, 1.442]	[1.126, 3.462]
Unmarried, not working	0.242	0.638
	[-0.649, 1.133]	[-0.363, 1.640]
Married, not working	0.705	0.891**
	[-0.001, 1.411]	[0.229, 1.554]
Married, working	0.518	0.184
	[-0.356, 1.392]	[-0.614, 0.982]
Children > 6 years of age	0.357	0.342
	[-0.147, 0.860]	[-0.478, 1.162]
Non-Hispanic African-American	0.201	0.418
	[-0.440, 0.843]	[-0.361, 1.197]
Hispanic/Latino	0.466	0.168
	[-0.452, 1.385]	[-0.712, 1.048]
Non-Hispanic Other	-0.334	0.613
	[-1.878, 1.210]	[-0.691, 1.917]
Child health barrier	-0.212	-1.081
	[-1.802, 1.378]	[-3.329, 1.167]
Maternal health barrier	-0.032	0.168
	[-0.872, 0.808]	[-0.812, 1.149]
Income 100% to <200% FPL	-0.437	-0.057
	[-0.994, 0.119]	[-0.821, 0.706]
Income 200% to <300% FPL	-0.082	0.455
	[-0.870, 0.705]	[-0.559, 1.469]
Income ≥ 300% FPL	-0.681	-0.989
	[-2.634, 1.272]	[-3.991, 2.013]
Top quintiles caseload decline	-0.091	-1.027
	[-1.150, 0.968]	[-2.180, 0.126]
N	973	975
Log likelihood	-601.7	-437.1

Table 4: Determinants of Maternal and Child Insurance Coverage in the NSAF (*p<0.05 **p<0.01 ***p<0.001)

	Could not afford prescription for self	Could not afford prescription for self	Could not afford doctor visit for self	Could not afford doctor visit for self	Could not afford doctor visit for child	Could not afford doctor visit for child
Over age 35	-0.026	-0.312	-0.23	-0.519	2.84*	2.54
	[-0.666, 0.613]	[-1.040, 0.416]	[-0.806, 0.346]	[-1.208, 0.170]	[0.249, 5.423]	[-0.362, 5.442]
Married at wave 4	0.0533	-0.259	-0.259	-0.27	1.645	1.362
	[-0.770, 0.877]	[-1.210, 0.693]	[-0.993, 0.475]	[-1.185, 0.646]	[-1.180, 4.471]	[-1.905, 4.628]
Cohab at wave 4	0.0258	0.251	-0.323	-0.351	-1.092	-0.818
	[-0.597, 0.648]	[-0.447, 0.950]	[-0.890, 0.245]	[-1.044, 0.342]	[-3.650, 1.465]	[-3.716, 2.080]
Never married at wave	0.392	0.329	-0.168	-0.091	-0.215	-1.714
	[-0.311, 1.094]	[-0.471, 1.129]	[-0.79, 0.455]	[-0.847, 0.665]	[-2.617, 2.187]	[-4.786, 1.357]
Total children	-0.251*	-0.185	-0.158	-0.06	-1.536	-1.65
	[-0.480, -0.023]	[-0.471, 0.101]	[-0.354, 0.038]	[-0.305, 0.186]	[-3.219, 0.146]	[-3.544, 0.243]
children<2	0.36	0.433	0.3	0.443	4.279*	4.989*
	[-0.370, 1.090]	[-0.329, 1.195]	[-0.330, 0.929]	[-0.247, 1.133]	[0.659, 7.899]	[0.841, 9.136]
AFDC>5 years	0.690*	0.695*	0.500	0.521	-1.129	-1.292
	[0.080, 1.301]	[0.010, 1.380]	[-0.037, 1.037]	[-0.115, 1.156]	[-3.292, 1.033]	[-3.717, 1.133]
drug/alc dependence	0.559	1.119	0.868	1.442	2.324	2.064
	[-0.595, 1.713]	[-0.351, 2.589]	[-0.397, 2.132]	[-0.333, 3.216]	[-1.150, 5.798]	[-2.616, 6.744]
African-American	-0.661*	-0.544	-0.682**	-0.596	-0.185	0.612
	[-1.229, -0.093]	[-1.181, 0.092]	[-1.189, -0.176]	[-1.208, 0.0164]	[-2.216, 1.845]	[-1.858, 3.082]
Skill barriers	-0.165	-0.224	0.326	0.155	-1.327	-2.45
	[-0.919, 0.589]	[-1.116. 0.669]	[-0.335, 0.987]	[-0.654, 0.965]	[-4.208, 1.554]	[-6.03, 1.131]
<HS	-0.046	0.044	0.058	-0.15	-0.0495	0.6057
	[-0.649, 0.558]	[-0.665, 0.753]	[-0.485, 0.601]	[-0.825, 0.535]	[-3.027, 2.928]	[-2.976, 4.187]
Work experience barrier	0.202	0.281	0.022	0.311	(no cases)	(no cases)
	[-0.667, 1.071]	[-0.765, 1.326]	[-0.763, 0.807]	[-0.664, 1.287]		
Full-time work	0.332	0.544	-0.402	-0.325	2.41	2.307
	[-0.430, 1.095]	[-0.321, 1.409]	[-1.048, 0.245]	[-1.103, 0.454]	[-1.142, 5.962]	[-1.572, 6.186]
20-34 hours per week	1.629*	1.462	0.015	-0.337	3.862	2.543
	[0.0630, 3.194]	[-0.226, 3.150]	[-1.443, 1.473]	[-2.050, 1.375]	[-0.651, 8.374]	[-2.618, 7.704]
Pregnant at wave 4	-0.233	0.216	-0.699	-0.04	2.79	3.527
	[-1.639, 1.173]	[-1.207, 1.639]	[-1.981, 0.583]	[-1.345, 1.265]	[-0.611, 6.191]	[-0.766, 7.819]
Mother health barrier	1.141***	0.948*	1.177***	0.862*	0.485	0.578
	[0.486, 1.795]	[0.154, 1.741]	[0.536, 1.818]	[0.0337, 1.690]	[-2.189, 3.159]	[-2.612, 3.767]
w4 domestic violence	0.057	0.067	-0.003	0.0216	-0.709	-0.863
	[-0.693, 0.808]	[-0.753, 0.888]	[-0.697, 0.691]	[-0.793, 0.836]	[-3.844, 2.425]	[-4.675, 2.948]
w4 mental health	0.637*	0.661*	0.655*	0.701*	2.05	1.908
	[0.0529]	[0.011, 1.311]	[0.115, 1.194]	[0.0574, 1.345]	[-0.061, 4.161]	[-0.604, 4.421]
Contact with physician	0.194	0.127	0.465	0.48	-0.928	-0.695
	[-0.353, 0.740]	[-0.489, 0.743]	[-0.025, 0.955]	[-0.096, 1.056]	[-3.474, 1.617]	[-3.954, 2.565]
Consult physician	-0.197	-0.294	0.0295	0.1225	0.739	0.813
	[-0.736, 0.342]	[-0.911, 0.324]	[-0.452, 0.512]	[-0.454, 0.699]	[-1.440, 2.917]	[-1.828, 3.454]
w4 child physical barrier	-0.037	-0.437	0.0576	-0.607	(no cases)	(no cases)
	[-1.504, 1.430]	[-1.978, 1.105]	[-1.241, 1.356]	[-2.060, 0.846]		
w4 child mental health	-0.306	0.054	-0.314	0.213	(no cases)	(no cases)
	[-1.440, 0.826]	[-1.163, 1.272]	[-1.324, 0.697]	[-0.880, 1.305]		
w4 management occupati	-0.879	-0.556	-0.649	-0.407	0.887	2.191
	[-1.958, 0.200]	[-1.716, 0.604]	[-1.553, 0.254]	[-1.483, 0.670]	[-2.102, 3.876]	[-1.421, 5.802]
w4 sales occupation	-0.239	-0.124	0.207	0.479	-1.109	-1.354
	[-0.916, 0.439]	[-0.881, 0.633]	[-0.398, 0.813]	[-0.250, 1.208]	[-4.262, 2.043]	[-5.167, 2.459]
w4 operator occupation	-0.995	-0.639	-0.424	0.105	(no cases)	(no cases)
	[-2.139, .149]	[-2.015, 0.738]	[-1.385, 0.536]	[-1.081, 1.290]		
w4 other occupation	-0.229	-0.351	0.287	0.119	3.095	4.466*
	[-1.444, 0.986]	[-1.829, 1.127]	[-0.852, 1.427]	[-1.389, 1.626]	[-0.452, 6.641]	[0.266, 8.667]
w4 no work	0.007	-0.012	-0.509	-0.384	2.197	2.228
	[-0.901, 0.915]	[-1.045, 1.020]	[-1.301, 0.282]	[-1.321, 0.552]	[-1.788, 6.181]	[-2.209, 6.665]
Off welfare<1 year	-0.702	-0.243	-0.659	-0.443	-0.768	-0.245
	[-1.683, 0.279]	[-1.327, 0.839]	[-1.521, 0.203]	[-1.465, 0.578]	[-3.904, 2.368]	[-3.911, 3.422]
Off welfare 2-3 years	0.418	0.358	0.288	0.247	-0.236	-0.365
	[-0.476, 1.312]	[-0.680, 1.397]	[-0.532, 1.108]	[-0.759, 1.253]	[-3.452, 2.980]	[-4.246, 3.516]
Off welfare 3+ years	-0.118	0.043	-0.239	-0.147	-0.272	-0.939
	[-0.970, 0.735]	[-0.930, 1.017]	[-1.024, 0.547]	[-1.108, 0.815]	[-3.187, 2.643]	[-4.576, 2.699]
Mother lacks health covera	-----	1.435***	-----	2.922***	-----	1.328
		[0.750, 2.121]		[2.064, 3.782]		[-1.449, 4.104]
Child lacks health coverage	-----	-0.29	-----	-1.290*	-----	2.76
		[-1.289, 0.708]		[-2.414, -0.165]		[-0.617, 6.137]
N	406	367	407	368	276	276
Log Likelihood	-198.2	-164.13	-235.3	-176.7	-24.3	-20.97

Table 5: Insurance and delayed care in the WES dataset
(*p<0.05 **p<0.01 ***p<0.001)

	Family Delayed Filling Prescription	Family Delayed Medical Care	Delay in Filling Child Prescription	Delay in Child Medical Care	No Usual Source of Care + ER Use
Maternal age	0.126	-0.025	0.274	0.037	-0.328**
	[-0.159, 0.411]	[-0.293, 0.242]	[-0.157, 0.706]	[-0.552, 0.479]	[-0.538, -0.118]
Maternal age^2	-0.002	0.000	-0.005	0.000	0.005**
	[-0.006, 0.002]	[-0.003, 0.004]	[-0.011, 0.002]	[-0.008, 0.007]	[0.002, 0.007]
Maternal Depression	1.039*	0.314	0.627	0.714	-0.147
	[0.216, 1.861]	[-0.369, 0.997]	[-0.568, 1.822]	[-0.305, 1.734]	[-0.854, 1.147]
High School Graduate	1.138*	0.569	0.998	-0.158	-1.007
	[0.063, 2.213]	[-0.142, 1.280]	[-1.025, 3.022]	[-1.470, 1.153]	[-2.025, 0.011]
Northeast	-0.932*	-0.695	-1.649	-1.405*	-0.786
	[-2.034, 0.171]	[-1.521, 0.132]	[-3.359, 0.063]	[-2.661, -0.150]	[-2.943, 1.372]
Midwest	0.152	-0.168	1.748*	-0.477	-0.814
	[-1.064, 1.368]	[-1.283, 0.946]	[0.098, 3.397]	[-2.458, 1.503]	[-2.612, 0.983]
West	0.320	-0.424	1.236	-2.210**	-0.290
	[-0.930, 1.569]	[-1.433, 0.585]	[-0.617, 3.090]	[-3.855, -0.564]	[-2.146, 1.567]
Unmarried, not working	-0.490	-0.838*	-1.758*	-0.298	-0.297
	[-1.437, 0.456]	[-1.616, -0.060]	[-3.143, -0.373]	[-1.666, 1.069]	[-1.487, 0.893]
Married, not working	0.602	-0.776	1.669**	-0.788	0.529
	[-0.214, 1.417]	[-1.664, 0.113]	[0.491, 2.847]	[-2.248, 0.672]	[-0.453, 1.511]
Married, working	-0.023	-0.312	0.724	0.290	0.453
	[-0.992, 0.946]	[-1.150, 0.525]	[-0.248, 1.697]	[-0.831, 1.411]	[-1.310, 2.217]
Children > 6 years of age	0.398	0.304	0.508	-0.334	0.378
	[-0.412, 1.210]	[-0.387, 0.995]	[-0.441, 1.457]	[-1.660, 0.991]	[-1.433, 2.190]
African-American	0.532	-0.876*	0.723	-1.213*	0.951*
	[-1.224, 0.160]	[-1.595, -0.158]	[-0.312, 1.757]	[-2.303, -0.123]	[0.043, 1.859]
Hispanic/Latino	-1.329*	-0.730	-0.040	-0.682	0.619
	[-2.607, -0.051]	[-1.693, 0.232]	[-1.478, 1.398]	[-1.952, 0.588]	[0.983, 2.220]
Non-Hispanic Other	-1.903	-2.314*	No cases	No cases	-0.663
	[-5.393, 1.587]	[-4.145, -0.483]	---	---	[-2.113, 0.787]
Child health barrier	0.327	0.778	0.640	1.155	0.008
	[-1.220, 1.874]	[-0.514, 2.070]	[-1.595, 2.875]	[-1.606, 3.916]	[-3.270, 3.286]
Maternal health barrier	0.142	1.516**	-2.121	1.302	0.897
	[-0.632, 0.916]	[0.684, 2.348]	[-4.402, 0.161]	[0.206, 2.398]	[-0.218, 2.012]
Income 100% to <200% FPL	0.522	0.632	0.211	0.764	-0.251
	[-0.191, 1.235]	[-0.054, 1.318]	[-0.792, 1.213]	[-0.276, 1.804]	[-1.298, 0.796]
Income 200% to <300% FPL	-0.856	0.476	-3.568***	0.992	0.081
	[-2.080, 0.367]	[-0.281, 1.232]	[-5.197, -1.939]	[-0.413, 2.397]	[-2.049, 2.211]
Income ≥ 300% FPL	1.194*	2.438***	1.759*	1.140	-3.459**
	[0.069, 2.320]	[1.179, 3.697]	[0.266, 3.252]	[-0.506, 2.786]	[-5.522, -1.397]
Top two quintiles	0.294	.712	0.013	1.242*	0.137
Caseload decline	[-0.785, 1.372]	[-0.226, 1.651]	[-1.694, 1.721]	[0.006, 2.479]	[-1.535, 1.809]
Mother lacks health Coverage	0.728	0.849*	-0.362	-0.352	-1.371
	[-0.053, 1.509]	[0.189, 1.509]	[-1.493, 0.769]	[-1.538, 0.834	[-3.021, 0.278]
Child lacks health Coverage	-0.566	0.636	-0.766	0.880	2.297**
	[-1.076, 0.343]	[-1.447, 0.176]	[-2.028, 0.496]	[-0.335, 2.095]	[0.834, 3.759[
N	975	974	947	947	975
Log likelihood	-378.6	-420.6	-194.8	-174.6	-280.0

Table 6: Insurance and Delayed Care in Families the NSAF
(*p<0.05 **p<0.01 ***p<0.001)

Sources

1. Danziger S. *Economic Conditions and Welfare Reform: What are the Early Lessons?* Kalamazoo MI: Upjohn Institute for Employment Research.; 1999.

2. Blank R, Schoeni R. What has welfare reform accomplished? Impact on welfare participation, employment, income, poverty, and family structure. *National Bureau of Economic Research*. 2000.

3. DHHS. "NO INCREASE IN NATIONAL WELFARE CASELOAD, HHS REPORTS": Department of Health and Human Services; 2002.

4. Kronebusch K. Medicaid for children: federal mandates, welfare reform, and policy backsliding. *Health Affairs*. 2001;20(1):97-111.

5. Garrett B, Holahan J. Welfare Leavers, Medicaid Coverage, and Private Health Insurance. Washington, DC: Urban Institute; 2000.

6. Garrett B, Holahan J. Health insurance coverage after welfare. *Health Affairs*. 2000;19(1):175-84.

7. Ellwood D, Adams E. Medicaid mysteries: transitional benefits, Medicaid coverage, and welfare exits. *Health Care Financ Rev*. 1990:119-31.

8. Danziger S, Corcoran M, Danziger S, et al. Barriers to the Employment of Welfare Recipients. In: Cherry R, Rogers W, eds. *Prosperity for All? The Economic Boom and African-Americans*. New York: Russell Sage Foundation; 2000.

9. Pavetti L, Bloom D. State Sanctions and Time Limits. In: Blank R, Haskins R, eds. *The New World of Welfare*. Washington, DC: Brookings Institution; 2001.

10. Zedlowski S, Loprest P. Will TANF Work for the Most Disadvantaged Recipients? In: Blank R, Haskins R, eds. *The New World of Welfare*. Washington, DC: Brookings Institution; 2001.

11. Gruber J. Health Insurance for Poor Women and Children in the U.S.: Lessons from the Past Decade. In: Poterba J, ed. *Tax Policy and the Economy*. Cambridge, MA: MIT Press; 1997.

12. Mullahy J, Wolfe B. Health Policies for the Nonelderly Poor. In: Danziger S, Haveman R, eds. *Understanding Poverty*. Cambridge, MA: Harvard University Press; 2002.

13. Ku L, Matani S. Left out: immigrants' access to health care and insurance. *Health Affairs*. 2001;20(1):247-56.

14. Carrasquillo O, Carrasquillo A, Shea S. Health Insurance Coverage of Immigrants Living in the United States: Differences by Citizenship Status and Country of Origin. *American Journal of Public Health*. 2000;90(6):917-23.

15. Davidoff A, Garrett A, Makuc D, Schirmer M. Medicaid-eligible children who don't enroll: health status, access to care, and implications for Medicaid enrollment. *Inquiry*. 2000;37(2):203-18.

16. Holahan J, Uccello C, Feder J, Kim J. Children's health insurance: the difference policy choices make. *Inquiry*. 2000;37(1):7-22.

17. Klein R, Fish-Parcham C. Losing Health Insurance: The Unintended Consequences of Welfare Reform. Washington, DC: Families USA Foundation; 1999.

18. Perry M, Kannel S, Valdez R, Chang C. Medicaid and Children: Overcoming Barriers to Enrollment, Findings from a National Survey. Washington, DC: Kaiser Commission on Medicaid and the Uninsured; 2000.

19. Remler DK, Rachlin JE, Glied SA. What can the take-up of other programs teach us about how to improve take-up of health insurance programs? Cambridge, MA: NBER; 2001.

20. Selden T, Banthin J, Cohen J. Medicaid's Problem Children: Eligible But Not Enrolled. *Health Affairs*. 1998;17(3):192-200.

21. Thamer M RC, Casebeer AW, Ray NF. Health insurance coverage among foreign-born US residents: the impact of race, ethnicity, and length of residence. *American Journal of Public Health*. 1997;87(1):12-14.

22. Greenstein R, Guyer J. Work, Medicaid, and Food Stamps. In: Blank R, Haskins R, eds. *The New World of Welfare*. Washington, DC: Brookings Institution; 2001.

23. Kaiser Family Foundation. Medicaid and children: Overcoming barriers to enrollment. Washington, DC: Kaiser Family Foundation; 2000.

24. Kronebusch K. Children's Medicaid Enrollment: The Impacts of Mandates, Welfare Reform, and Policy Delinking. *Journal of Health Politics, Policy, and Law*. 2001;forthcoming.

25. Kaiser Family Foundation. Health insurance coverage in America: 2000 data update: Kaiser Family Foundation; 2002.

26. Newacheck P, Stoddard J, Hughes D, Pearl M. Health insurance and access to primary care for children. *New England Journal of Medicine*. 1998;338:513-519.

27. Newacheck P, Brindis C, Cart C, Marchi K, Irwin C. Adolescent health insurance coverage: recent changes and access to care. *Pediatrics*. 1999;104:195-202.

28. Holl J, Szilagyi P, Rodewald L, et al. Evaluation of New York State's Child Health Plus: access, utilization, quality of health care, and health status. *Pediatrics*. 2000;105((3 Suppl E)):711-718.

29. Guendelman S, Pearl M. Access to care for children of the working poor. *Archives of Pediatric and Adolescent Medicine*. 2001;155:651-658.

30. Long S, Marquis M. Geographic variation in physician visits for uninsured children: the role of the safety net. *Journal of the American Medical Association*. 1999;281:2035-2040.

31. Baker D, Shapiro M, Schur C. Health insurance and access to care for symptomatic conditions. *Archives of Internal Medicine*. 2000;160:1269-1274.

32. Schoen C, DesRoches C. Uninsured and stably insured: the importance of continuous insurance coverage. *Health Services Research*. 2000;35(1 Pt 2):187-206.

33. Broyles R, Narine L, Brandt E. The temporarily and chronically uninsured: does their use of primary care differ? *Journal of Health Care for the Poor and Underserved*. 2002;13:95-111.

34. Ayanian J, Weissman J, Schneider E, Ginsburg J, Zaslavsky A. Unmet health needs of uninsured adults in the United States. *Journal of the American Medical Association*. 2000;284:2061-2069.

35. Danziger S, Heflin C, Corcoran M. Does it pay to move from welfare to work? *Journal of Policy Analysis and Management*. 2002;21(4): 671-692.

36. Safir A, Scheuren F, Wang K. National Survey of America's Families: Survey methods and data reliability, 1997 and 1999.: Kaiser Family Foundation; 2002.

37. Halfon N, Inkelas M, DuPlessis H, Newacheck P. Challenges in securing access to care for children. *Health Affairs*. 1999;18(2):48-63.