
Medicaid, Welfare Dependency, and Work: Is There a Causal Link?

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Medicaid exerts a strong "pull" on potential welfare recipients, increasing the probability that a number of single mothers will apply for and stay on welfare in order to be covered by Medicaid. However, the availability of private health insurance coverage exerts a strong positive influence on women's decisions to work and a strong negative effect on welfare participation rates. If private insurance coverage were as comprehensive as Medicaid and readily available at all jobs, its impact on promoting work would be substantially greater than is the impact of Medicaid in promoting the use of welfare.

INTRODUCTION

The Medicaid program is the major source of health insurance coverage for the poor population in the United States. With few exceptions, eligibility for this program is tied to participation in welfare programs. This article provides evidence that the availability of Medicaid plays an important role among the female-headed portion of the potentially eligible population in their choice between work and welfare dependency. Similarly, private insurance plays a significant role. The interesting question for us is what the value, both relative and absolute, of these insur-

ance programs is in determining choices between work and welfare.

For several reasons, the Medicaid program has increased in importance during the past few years. First, the exploding cost of health care in the general population has caused Medicaid expenditures to mushroom. Second, the decline in the real value of cash benefits to the poor, especially in the Aid to Families with Dependent Children (AFDC) program, has increased the relative importance of Medicaid and other such in-kind transfers in the total welfare package. In 1988, 53 percent of all means-tested transfers to the poverty population were in kind, and Medicaid accounted for 70 percent of them. Third, and less recognized, the number of uninsured in the United States has been growing for some time. The number of persons with no insurance coverage now hovers around 31 to 38 million, up from approximately 25 million in the 1970s and 26 to 35 million in the early 1980s. In this deteriorating situation, Medicaid is the primary program financing health services for the low-income population.

We expect that Medicaid plays a role among the potentially eligible population in the choice between welfare dependency and work, which have historically been and continue to be mutually exclusive alternatives for most persons. We have gathered evidence concerning whether the Medicaid program induces poor female-headed families to go onto

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the welfare rolls. Our study puts the role of the Medicaid program into its proper context in two ways:

- We identify which families, because they are in poor health, place a high value on medical care and determine whether their choices regarding welfare dependency are different from those in good health, as one should expect; and
- We assess the relative availability of private health insurance for those who choose work instead of welfare, and we show the relative importance of the pull of Medicaid and the push of inadequate private health insurance toward AFDC reciprocity. Our evidence indicates that the latter is considerably more important than the former.

These issues are of great importance in current policy debates over the role of Medicaid in the welfare system. The Family Support Act of 1988 (Public Law 100-485), termed the most important piece of welfare legislation in 20 years, requires States to permit AFDC families who leave the rolls through employment to retain their Medicaid benefits for up to 12 months. In the few years before its implementation, families could keep their benefits for 4 months after leaving the rolls and, in certain restricted circumstances, for 9 months. However, few persons have taken up the extended benefits thus far (Ellwood and Adams, 1990). Whether transitional Medicaid benefits of this kind will have a significant effect in lowering welfare dependency and increasing work remains to be seen by the results of the legislation, but the evidence we give provides important background to that assessment as well as clues to its outcome.

MEDICAID-WELFARE LINK

Authorized under title XIX of the Social Security Act, Medicaid provides health care benefits to the low income aged, blind, disabled, families with dependent children, and pregnant women and children who meet certain requirements. The most important characteristic of the program is that eligibility is closely tied to the actual or potential receipt of cash transfers (AFDC or Supplemental Security Income), except for pregnant women and young children, as noted later. Families enrolled in the AFDC program are automatically eligible (“categorically eligible,” in the language of the program) for Medicaid benefits, and can retain their Medicaid card as long as they are on AFDC. The AFDC program, in turn, provides benefits primarily to female heads of family—those without an able-bodied male present in the household and with children present who are under 18 years of age. All States now offer AFDC under restrictive conditions to families with an unemployed male present, but relatively few such families receive such benefits. As a consequence, Medicaid receipt, at least among the non-aged and non-disabled, is heavily concentrated among poor women who head families, the group we will examine here.

Medicaid benefits are sometimes made available to non-AFDC recipients. In 39 States, female-headed families whose incomes are low but exceed AFDC eligibility are covered by the medically needy program, which provides Medicaid coverage when those families incur heavy medical expense. All States also cover some female heads who meet the income eligibility requirements for AFDC but are not, for one reason or another, on the program

Table 1
Insurance Coverage for Female-Headed Families with Children Under 18 Years of Age:
Calendar Year 1986

Type of Coverage	All	Status of AFDC Female Recipients		Employment Status	
		Not Receiving	Receiving	Working	Not Working
			Percent		
Private Health Insurance	47.0	66.0	10.0	73.0	15.0
Medicaid	42.0	14.0	100.0	11.0	82.0
Fraction on AFDC	34.0	0	100.0	6.0	69.0

NOTE: AFDC is Aid to Families with Dependent Children.

SOURCE: Survey of Income and Program Participation (SIPP) data for the month preceding the Wave 9 SIPP interview, 1986.

("categorically needy without cash assistance"). In addition, recent Federal legislation has extended Medicaid eligibility to pregnant women and children in certain non-female-headed families, and in some States to female-headed families with incomes above the AFDC standard but below 185 percent of the poverty level.

Despite these expansions of eligibility, Medicaid coverage is almost exclusively tied to AFDC reciprocity among female heads. Using the Survey of Income and Program Participation (SIPP) data described later, we found that although all AFDC recipients are covered by Medicaid, only 14 percent of those female-headed families not receiving AFDC are covered (Table 1). The flip side of this coin pertains to private health insurance: Only 10 percent of those receiving AFDC have private coverage, no doubt in part because there is little incentive to obtain such coverage, but 66 percent of those not receiving AFDC are covered.

We also found a close connection between welfare receipt, insurance coverage, and work. Of those females heading families that are on AFDC, only 10 percent work; 80 percent of those not on AFDC do so. Among workers, 73 percent are covered by private health insurance and 11 percent by Medicaid, whereas at least 16 percent of workers are not insured. Of those not working, 15 percent

have private coverage, and 82 percent have Medicaid. Thus, the proportion that is uninsured among workers is greater than that among non-workers, leaving workers worse off in this respect than non-workers.

MEDICAID BENEFITS VARY

Medicaid benefit levels are set by the States under regulation by the Federal Government. Each State must offer a basic set of mandated services, but can also offer extra services of its own choosing. As a consequence, the types and generosity of coverage vary substantially from State to State. Even within a State, different families can be expected to value the offered services differently: Families with one or more members in poor health and facing high medical expenditures should value health insurance more highly than other families. Health status is likely to be correlated with age, education, and marital status, and it is therefore likely that Medicaid valuations will follow this pattern. The valuation of the health insurance is also likely to vary with the supply of physicians and the quality of care provided in the area of residence.

To obtain some idea of the way in which family valuations of Medicaid benefits vary, we have conducted a detailed statistical study, and have constructed a

measure of such valuations for female heads in the United States. One of our data sources is a nationally representative sample of the population for which several thousand households were interviewed every 4 months from 1983 to 1986. The interviews included questions regarding insurance coverage, labor force attachment, welfare participation, and health status, among others. In one interview (the third), questions regarding medical care utilization during the past 12 months were asked, permitting us to gauge each family's utilization of the health care system. Because the data have information on private health insurance coverage as well as on Medicaid coverage, we can construct a measure of each family's valuation of private health insurance as well as Medicaid.

Estimated values of Medicaid and private insurance are based on indexes that we created using information on current insurance coverage, medical utilization during the year prior to the interview, expenditures on medical care, personal characteristics such as age, health status, race, education, marital status, child characteristics, and 1984 income, as well as characteristics of the State of residence. A separate index was created for each family member for each type of coverage (Medicaid or private insurance). These indexes were then aggregated over family members to obtain two indexes for each family—one for the value of Medicaid and one for the value of private coverage. The dollar or expenditure values were based on data from National Medical Care Utilization and Expenditure Survey (NMCUES) (National Center for Health Statistics and Health Care Financing Administration, 1980). Each of the two indexes for each family represents the ex-

pected medical expenditure (net of out-of-pocket costs) if it were covered by Medicaid, or private insurance.

To obtain these indexes, we predicted utilization, inpatient days, and outpatient visits from the SIPP data, using methods in which insurance coverage was treated as an endogenous variable. (See the Technical Note for more detail.) We then converted these to dollar values using NMCUES, which has data on both expenditure and utilization, by relating expenditure to utilization by type of insurance coverage and region of country. Individual values for private and Medicaid coverage differ because utilization (i.e., visits to physicians) and value (price of care) differ by type of coverage. Value of coverage was defined as expected charges minus expected out-of-pocket costs. The estimates differ across women owing to differences in their individual characteristics, such as health and age, and differences in State characteristics.

For children, these estimates were performed directly with NMCUES data because utilization information is not available for them in SIPP. Children's values differ because of their own characteristics, their mothers' characteristics, and locational differences. A separate value was calculated for Medicaid and private coverage, which again should reflect both differences in utilization and the value of coverage.

The results of our calculations are shown in Table 2. On average, the valuation of Medicaid benefits by female heads in the United States is estimated at \$147 per month, a sizable amount. The valuation is considerably higher for those in poor health than for those in good health, as expected. The valuation of private health insurance for female-headed fami-

Table 2

Average Valuations of Monthly Medicaid and Private Health Insurance Benefits for Female Family Heads with Children: Calendar Year 1986

Category	Medicaid	Private Health Insurance		
		Amount if Covered	Probability of Coverage	Expected Mean Value ¹
All Female Heads	\$147	\$113	0.38	\$43
In Good Health	126	82	0.43	35
In Poor Health	173	147	0.33	48

¹Product of prior two columns.

SOURCE: Authors' calculations, using data sets from the Survey of Income and Program Participation, and the National Medical Care Utilization and Expenditure Survey.

lies averages \$113 per month, somewhat less than the valuation of Medicaid. Once again, the value of private insurance is considerably greater for those in poor health than for those in good health. However, not all families receive coverage from private health insurance. The next-to-last column in Table 2 shows the probability (estimated from SIPP) that a family has private coverage. Only 38 percent on average have such coverage, and the proportion is even lower among those in poor health. In the last column, the expected value of private coverage—the probability of receiving it times the value of the coverage, if received—is shown. The expected value is only \$43 per month, and is only slightly greater for those in poor health than for others. Thus, once again, we see that for female heads of families, the expected value of Medicaid is considerably greater than the expected value of private health insurance coverage.

MEDICAID, WELFARE, AND WORK

To examine the link between Medicaid benefits, welfare dependency, and work, we again utilized the SIPP data. Taking information from the ninth, most recent wave of the survey (1986) we determined whether each female-headed family in the survey who was eligible for AFDC was or

was not on the rolls, and whether the head was working at the time of the interview.

Some of the results are apparent in Table 3. Separating families into low, medium, and high Medicaid valuation levels, we see in the first panel that the estimated level of Medicaid benefits is strongly and positively correlated with the likelihood of being on AFDC, and that the benefit level is strongly and negatively correlated with the percentage of women in each strata who work. Thus, there is evidence at this simply tabular level of women with high estimated values for Medicaid being pulled to Medicaid and, because of the link between AFDC and Medicaid, being pulled by Medicaid into the AFDC program and out of the work force.

One of the problems with this simple two-way tabulation is that other circumstances are not held constant. For example, States that offer generous Medicaid programs are usually States that also offer relatively high AFDC benefits. Therefore, it may be the AFDC benefits, not the Medicaid benefits, that pull families onto the rolls. As shown in the last column (Table 3), AFDC benefits are indeed positively correlated with Medicaid benefits.

Table 3 also examines the association between Medicaid benefits, welfare de-

Table 3

Welfare Participation and Work Among Female Heads with Different Medicaid Valuations

Level of Medicaid Valuation ¹	Percent Receiving AFDC	Percent Working	Average Monthly AFDC Benefits
All States			
Low	26	63	\$264
Medium	34	59	351
High	42	46	407
Low AFDC-Benefit States²			
Low	26	62	193
Medium	28	64	201
High	31	48	215
High AFDC-Benefit States			
Low	26	63	385
Medium	39	54	401
High	49	44	422

¹Low = lowest 25 percent; High = highest 25 percent; Medium = all others.

²Low AFDC benefit = lowest 50 percent; High AFDC benefit = all others.

NOTE: AFDC is Aid to Families with Dependent Children.

SOURCE: Authors' calculations, using data sets from the Survey of Income and Program Participation, and the National Medical Care Utilization and Expenditure Survey.

pendency, and work, after stratifying by three levels of Medicaid benefits, in which those families in high-AFDC-benefit areas and those in low-AFDC-benefit areas are considered separately. This table shows that for females with a medium Medicaid valuation, 54 percent of those in a high-AFDC-benefit State work, and 64 percent of those in low-benefit States work. The positive correlation between Medicaid benefits and welfare participation and the negative correlation between such benefits and labor force attachment remain, even within AFDC-benefit strata. It also can be seen from the table that AFDC benefits themselves seem to exert a pull onto the AFDC rolls and out of the labor force, because AFDC participation rates are higher and work levels lower at higher-AFDC-benefit levels for all families except those with the lowest Medicaid evaluations.

Unfortunately, although it is possible to control for AFDC benefits in this tabular fashion, there are still many other confounding influences that we have left out. For example, families with high Medicaid

benefits may also be those with less education and, therefore, with poor job market opportunities. They also may be older women who have fewer opportunities in the labor market. More importantly, they may be those in poor health, and it may be poor health rather than Medicaid alone that keeps women out of the labor market and on the AFDC rolls. Perhaps most importantly, those with high Medicaid benefits may have low potential private health insurance benefits.

To control for all these influences, we have conducted a multivariate econometric analysis (Moffitt and Wolfe, 1992). We tested the determinants of both welfare participation rates and employment rates in our SIPP sample, examining the simultaneous influence not only of Medicaid and AFDC benefits, but also the influence of private health insurance benefits, food stamp benefit levels, other private income of the family, labor market opportunities in the form of potential earnings, education, family size, health status, and other variables of this type.

Table 4

Simulated Effects of Increases in Medical Benefits on Aid to Families with Dependent Children (AFDC) Reciprocity and Employment of Poor Single Mothers

Simulated Changes	Change in:		Absolute Change in Employment Rate ²
	AFDC Participation Rate ¹	AFDC Caseload	
	Percentage Points		Percent
Increase in Medicaid of \$50 per Month ³	2.0	5.9	-5.5
Increase in Private Health Insurance of \$50 per Month: ⁴			
Assuming Current Coverage Levels	-5.3	-15.6	11.7
Assuming Coverage for All Workers	-7.3	-21.5	16.0
Private Insurance for All Workers	-3.5	-10.7	7.6
Increase in Private Health Insurance up to Medicaid Level: ⁵			
Assuming Current Coverage Levels	-6.0	-17.61	3.3
Assuming Coverage for All Workers	-8.3	-24.4	18.1

¹Base is 34 percentage points.

²Base is 56 percentage points.

³Represents 34.5-percent increase in Medicaid index.

⁴Represents 56.5-percent increase in private health insurance if covered.

⁵Represents 64.2-percent increase in private health insurance if covered.

SOURCE: Based on equation reported in Moffitt and Wolfe, 1992.

Push and Pull Are Evident

The major finding is that the positive and negative correlations observed in Table 3 remain, even after controlling for these other forces. However, we also find that many of those forces have a significant effect on welfare participation and employment rates. The availability and generosity of private health insurance, for example, exerts a strong positive effect on employment rates and a strong negative effect on welfare participation rates. Correspondingly, low private health insurance benefits exert a push toward AFDC that complements the pull of high Medicaid benefits.

To obtain some feel for the magnitude of the effects shown by the data, we present in Table 4 predictions of the effects of changes in Medicaid and private health insurance on welfare participation and employment rates. As the first row shows, a simulation of an increase in monthly Medicaid benefits of \$50 suggests that such an increase is expected

to raise the AFDC participation rate by 2 percentage points (from 34 to 36 percent) among poor single mothers. The AFDC caseload would increase by 6 percent, and the employment rate would drop by more than 5 percentage points. Thus, consistent with the evidence in Table 3, Medicaid benefits appear to pull women onto the AFDC rolls and out of the labor force.

On the other hand, a simulation in which we increase private health insurance by \$50 a month suggests effects more than double in size and in the opposite direction. The AFDC participation rate would fall by more than 5 percentage points, the AFDC caseload would decrease by almost 16 percent, and the employment rate would climb by 12 percentage points. Therefore, our evidence indicates that adequate private health insurance has a greater potential for encouraging poor single mothers to work than Medicaid currently has for encouraging them to receive (or to continue to receive) welfare: Private health insurance

has the potential to be a more influential factor in decisions about welfare and work than does Medicaid.

This analysis also provides an answer to the relative importance of Medicaid incentives and private health insurance incentives. A reduction in private health insurance benefits of \$50 per month (not shown on the Table) would have effects equal in size but opposite in direction to those shown in the table. Thus, the push of low private health insurance is much more important than the pull of Medicaid in increasing AFDC participation and lowering labor force attachment among low-income female heads.

PRIVATE INSURANCE: THE SUPERIOR WORK INCENTIVE

If private coverage were increased by \$50 per month and extended to all poor single mothers who worked, the AFDC participation rate would decline by more than 7 percentage points and the AFDC caseload by more than 21 percent. This policy would also increase employment by 16 percentage points, or by more than 28 percent, among this population.

If, instead, the value of private coverage were increased to the current level of Medicaid (assuming first-dollar coverage and no cap on expenditures, with a few exceptions), then the AFDC participation rate would be reduced by 6 percentage points and the caseload by nearly 18 percent. This policy is also expected to increase participation in the work force by more than 3 percentage points.

If we took a more generous step and both increased the value of private coverage to the level of Medicaid and extended private coverage to all of these female workers, then we predict a decline of

more than 8 percentage points in the AFDC participation rate and almost a 25-percent reduction in the AFDC caseload. The labor force participation of these women is expected to increase by more than 18 percentage points, or nearly one-third. On average, this would represent a potential savings (combined AFDC and Medicaid) of more than \$4,000 per year per woman who either leaves the AFDC rolls or who is discouraged from joining AFDC, even if she were to continue to receive food stamps. If the average woman who left the rolls (or never joined) worked full-time and stopped receiving food stamp benefits, the savings from the Food Stamp program would be on the order of \$1,250 per household, a combined total savings of \$5,250.

Taking the national average monthly number of AFDC recipients in 1986 and converting this into recipient families, using the average size of AFDC families (2.93), these changes translate into a potential removal of more than 914,500 families from the AFDC rolls. This would result in a savings (based on average annual benefits) of nearly \$4.8 billion in AFDC and food stamps, which would be partly offset by any increase—above the level of Medicaid coverage—in expenditures on private insurance coverage for these women and their families. These expenditures might result from differences in administrative costs, and from additional response of both the medical profession and these women and their families to the change in coverage. The big offset, however, would be the net additional cost of coverage (and use of medical resources) of individuals and families not on AFDC who would also be eligible for this program. Setting income cutoffs or requiring

income-conditioned payments would partly reduce such costs.

CONCLUSIONS

The behavior of poor families, especially those with health needs, is influenced by the opportunities to obtain health insurance coverage that are available to them. Medicaid enhances the value of welfare, and private insurance enhances the value of work. If private insurance were as comprehensive as Medicaid and readily available at all jobs, its impact in promoting work would be substantially greater than is the impact of Medicaid in promoting the use of welfare.

What are the implications of our evidence for current policy regarding health insurance for welfare recipients? What, for example, are the implications for the 12-month extension of Medicaid benefits under the 1988 Family Support Act? Clearly, our evidence that Medicaid attracts some female-headed families onto the AFDC rolls provides support for the motivation behind the legislation, which is the presumption that Medicaid is a factor deterring families from leaving the AFDC rolls.

On the other hand, our evidence on the importance of private health insurance—indeed, of its greater importance than Medicaid—suggests that the impact of the transitional benefits may be limited. In the absence of significant increases in health insurance coverage levels among working non-AFDC families, the same forces that encourage welfare dependency will continue to be present at the end of 12 months. The poor health conditions that are so important in making Medicaid attractive to some families are not likely to subside within this time period.

TECHNICAL NOTE

Indexes of Health Insurance Values

Creating indexes of the value of Medicaid and of private insurance is a multistep process. The first step is to estimate a multinomial logit equation on type of insurance among single females with children 18 years of age or under. The dependent variable can take on three values: A woman either has Medicaid coverage, has private coverage, or has no coverage. Those with both types of coverage, 33 women, are omitted from this equation. Included as independent variables are personal characteristics (age, race, education, health status indicators, prior marital status, etc.), child characteristics, several measures of income (mean, share contributed by single mother, coefficient of variation, home ownership, etc.), and State characteristics (average health expenditures, AFDC benefit for family of four, etc.) The results of this logit equation are used to create predicted probabilities for whether the woman has Medicaid coverage, private coverage, or no coverage.

In the second stage, two utilization equations are estimated—one for number of outpatient visits and one for number of inpatient nights. The included independent variables are a subset of the personal characteristics, State and income variables, the child characteristics; predicted values form the first stage for the probability the woman has Medicaid or private coverage. These equations are used to create estimates of outpatient and inpatient utilization under Medicaid coverage, private coverage, and no coverage.

In the third stage, the NMCUES data are used to convert the predicted measures of utilization into dollar values. The dollar value is defined as total charges minus out-of-pocket costs. Three separate equations are estimated—one each for visits, hospital care, and other medical care. The dependent variable in each case is actual charges minus out-of-pocket payments for the type of care specified over a sample of single women with children under 18 years of age. The variables on the right-hand side are a set of linear spline variables measuring utilization (visits in the visit expenditure equation, hospital nights in the hospital expenditure equation, and both in the other medical care equation), region of the country, and type of coverage. These coefficients are then used, along with the predicted utilization from stage two, to calculate a predicted dollar value of Medicaid and of private coverage for each woman in the SIPP sample.

For children, a simplified procedure is used employing only NMCUES data—dollar value of utilization as the dependent variable, and child characteristics and mother's characteristics as well as region as the independent variables. The values for the mother and her children are then summed to get family values under each type of coverage. For private insurance, one more step is undertaken—an adjustment for the probability of being offered insurance, were the mother to work. The dependent variable can take on three values: having employer-based coverage that includes dependents, having employer-based coverage that only includes the employee, and having no coverage. The equation is run over only those single women who are employed with children in SIPP. Again, a multinomial lo-

git estimate is run including personal, State, and child characteristics. Also included are employment characteristics. The probabilities of being offered individual or family coverage or no coverage are then used in conjunction with the individual predicted values of private coverage to get a final "value" of private insurance. Wolfe and Moffitt (1991) provide more detail.

Behavioral Model

Using the indexes for Medicaid and for private insurance, we estimated a set of probit equations in which the dependent variables were either a dummy variable for AFDC participation of the family or for labor force participation of the female head. AFDC and labor force participation were measured in the month of the ninth SIPP interview, which took place in the spring of 1986. There were 545 female-headed families in the sample. Included in the right-hand column were the family-specific Medicaid value, the family-specific private health insurance value, and a set of personal and family characteristics (age, race, education, health status, region of the country, etc.). Also included were the AFDC guarantee, the food stamp guarantee, non-labor income, and potential earnings (estimated from a first-stage wage equation) net of taxes. A variety of sensitivity tests were conducted and alternative specifications estimated. (Moffitt and Wolfe [1992] provide more detail.) The results reported in Table 4 of this article were obtained by using our basic and most preferred specification to predict AFDC participation rates and employment rates at different levels of the Medicaid and private insurance variables.

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