REDUCING THE WELFARE DEPENDENCE OF UNMARRIED MOTHERS:

HEALTH-RELATED EMPLOYMENT BARRIERS AND POLICY RESPONSES

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INTRODUCTION

Rising health care costs and the related problems of increased dependency on health insurance coverage has remained at the forefront of the U.S. policy agenda. However, President Clinton's 1994 health care reform proposal was unsuccessful, and current Legislative proposals to cut the rate of growth of Medicare and Medicaid spending while the eligible population and costs both continue to grow fails to address the problem of coverage. In fact, one likely side effect of shifting the burden of coverage to private insurance carriers will be to increase the ranks of the uninsured. This paper addresses one aspect of this problem: specifically, how the competing interests of public and private coverage for single mothers affect their willingness to participate in the labor market, particularly when considered in conjunction with recent legislation eliminating the Federal entitlement to welfare.

THE LINKS BETWEEN HEALTH INSURANCE COVERAGE, EMPLOYMENT, AND POLICY REFORM

The significant increases in health care costs during the 1980s, accompanied by the decline of relative earnings (and total compensation) of less-educated individuals, has nurtured an increasing realization of the importance of health insurance coverage to individuals' work choices. While most single mothers could be expected to earn enough money through labor force participation to replace forgone AFDC (Aid to Families with Dependent Children) benefits, it is far less likely that they could replace forgone Medicaid benefits.[1] According to Kronick [1991], the probability of receiving employer-provided health insurance coverage declined for low-income workers during the 1980s, and the fastest growing group of the uninsured are poor children. Moreover, poor health is more prevalent among lower income individuals, and so serves as an additional impediment to employment. Comprehensive welfare reform plus health care reform that involves significant cuts in the rate of growth of Medicaid expenditures will dramatically alter the incentive structure facing single mothers. This paper examines the likely approximate impacts of these changes on employment behavior.

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The current approach to welfare reform is best characterized as the devolution of support programs to the states. One standard not left to the states is the maximum duration of eligibility for AFDC benefits: the most recent Federal legislation imposes a five-year limit on the total number of years of eligibility per person. Considered in conjunction with Medicaid cuts (or caps on the rate of growth of Medicaid spending), this could leave significant numbers of poor single mothers and their children without a safety net, and unable to procure regular health care. Because these legislative changes have yet to be implemented at the state level, it is not known at this time what sorts of Medicaid eligibility restrictions the states will impose to control expenditures, but one possibility is to subject Medicaid eligibility to the same five-year time limit as AFDC coverage. Current welfare provisions link Medicaid eligibility directly to AFDC eligibility for most single mothers.

The policy changes included in this paper's simulations include a five-year total time limit for AFDC (and Medicaid) coverage, and mandated employer-provided coverage for full-time workers. The simulations reflect approximations of the full economy-wide effects of these policy changes.[2] In addition, potential policy changes not considered explicitly here come into play, the most important of which are the proposed significant cuts in the rate of growth of Medicaid expenditures. Once hospitals and providers are pushed to their budgetary limits with regard to the percentage of full costs reimbursed by Medicaid, cost-shifting to private insurance plans might occur. That is, prices charged to those privately insured might be inflated to compensate for some portion of the Medicaid shortfall. However, as these private costs rise, private health insurance coverage rates will also fall, leaving a larger percentage of the population uninsured.

REVIEW OF LITERATURE

The literature relating health insurance benefits to employment behavior is focused, in the main, on employer-provided coverage, without consideration of the importance of publicly-provided coverage. There are some notable exceptions, however. Moffitt and Wolfe [1992] estimate the effect of the Medicaid program on employment behavior. They find that mandating employer coverage would increase the probability of labor force participation (LFP) of single mothers by 8 percent, and that improving the expected benefits of Medicaid would decrease that probability, though by a smaller magnitude.

Wolfe and Hill [1995] examine the effect of maternal and children's health on the work effort of low-income single mothers and conclude that "extending health insurance coverage to all children of single mothers without respect to the mothers' AFDC status would induce a large percentage of these mothers to seek and accept employment..." Winkler [1991] models Medicaid explicitly as an in-kind benefit and considers its effects on labor supply behavior jointly with the AFDC program. She finds that Medicaid has a small but significant negative impact on the decision to work.[3] A drawback to Winkler's empirical analyses [*ibid.*, 313] is the fact that the availability of employer-provided health insurance coverage, an obvious alternative to public health coverage, is not considered. McCool and Monheit [1991] find that increased Medicaid eligibility for nonworkers increases the probability that single mothers will not participate in the labor market or work part-time, and Montgomery and Navin [1996] find that Medicaid expenditures reduce female labor supply. Yelowitz [1995] finds that increasing the income limit for Medicaid eligibility has a positive effect on labor force participation, but more so for ever-married women than for never-married women. And finally, Dor, Hunt-McCool and Johnson [1992] examine the effect of employer-provided health insurance coverage on the employment behavior of married women. They show that an increase in the probability of receiving employer-provided health insurance coverage significantly increases the probability of labor force participation for married women whose husbands do not currently possess such coverage.

The recent literature also addresses the possibility that the availability of public health coverage crowds out private coverage. That is, having access to public coverage might motivate some individuals to decline participation in employer-provided plans, or employers might drop coverage, knowing that many of their workers could procure public coverage. Cutler and Gruber [1996] find evidence that some employees declined employer coverage when the availability of public coverage was extended in the late 1980s, but find no evidence of employers dropping coverage. Despite this empirical evidence regarding health coverage and employment, no one has examined the types of policy changes addressed in this paper, namely increasing the availability of employer-provided coverage and imposing a five-year limit on Medicaid eligibility.

THEORETICAL FRAMEWORK AND ECONOMETRIC ISSUES

The fundamental research objective is to examine how single mothers' employment decisions are affected by health insurance coverage and health status. The primary employment barriers addressed here include the relatively low probability of receiving health insurance coverage from the employer, and the higher probability of Medicaid eligibility if the mother does not work. Additionally, the independent effect of maternal and child health on employment is examined.

The underlying utility-maximizing model has the same origin as those used by McCool and Monheit [1991] and Moffitt and Wolfe [1992]. It is drawn from Becker's [1965] household production model, extended to the demand for good health by Grossman [1972]. The mother is assumed to maximize utility, expressed as a function of work hours, nonlabor income, and family health. The mother maximizes this utility function subject to standard budget and time constraints, as well as a health production function. In the budget constraint, total market expenditures (including any out-of-pocket medical care expenditures or health insurance premium payments) equal total unearned income (excluding transfers), labor income, plus transfer income (including cash and in-kind transfers).

Ideally, total time would be expressed as the sum of market work, home-production time (including health production), and leisure.[4] Data limitations restrict the components of total time to market time and nonmarket time, the latter including home production time and leisure. In the health production function, health status is

determined by the consumption of market-based and home-produced health services; the mother's time is a primary factor in the latter.

Theoretically, an additional constraint should be an equation expressing the fact that total compensation is comprised of both wage and nonwage benefits, where the latter includes the value of health insurance coverage. While theory tells us that employees must give up wages to get nonwage compensation, this tradeoff is nearly unobservable empirically.[5] The problems are a lack of sufficient data to explain fully the structure of compensation and the prevalence of a two-tier compensation structure, in which high-wage workers receive health coverage and low-wage workers do not.

The maximization of this utility function subject to the three constraints yields demand equations, including the demand for leisure (usually shown as its corresponding labor supply measure), and the demand for good family health. The key estimating equation, derived from the leisure demand equation, is a structural LFP probit, in which the discrete choice to participate in the labor force is expressed as a function of the mother's personal and family characteristics, her potential market wage, measures of the value of public and private health insurance coverage, and controls for current local labor market conditions. A complete variable list and reasons for including these variables are discussed later in this section.

An important data measurement problem inherent in analyses of health insurance issues is the difficulty of measuring (or calculating) the individual's valuation of health coverage. As explained by Moffitt and Wolfe [1992], there is more than one way to impute the value of noncash benefits. Winkler [1991] relies on the government-cost approach, incorporating the government's total expenditures on Medicaid for a specific geographic area, divided by the total number of individuals eligible for this benefit. Winkler does not address the issue of employer-provided coverage, nor does she model the probability of public coverage. Moffitt and Wolfe develop a family-specific proxy measuring the family's valuation of both Medicaid and private coverage by incorporating "out-of sample" health care expenditure information (from the 1980 National Medical Care Utilization and Expenditure Survey, or NMCUES), and "matching" these data to the primary data by average utilization patterns. Like Winkler, Moffitt and Wolfe do not address the endogeneity (and thus uncertainty) of Medicaid coverage.[6] The reliability of their heterogeneity index is limited by the ability of that index to predict actual medical care expenditures accurately for their Survey of Income and Program Participation (SIPP) estimating sample, and equation identification in a complicated system of equations.

This paper extends the focus of Winkler and Moffitt and Wolfe, and using simulations, updates the policy discussion to reflect the current debate. The goal is to identify a more straightforward estimation technique to facilitate the evaluation of a broader array of policy proposals.

A structural labor force participation probit is used to estimate the marginal impact of several explanatory variables on the probability of working. The two key regressors in this labor force participation probit reflect the valuation of public and private health insurance coverage. (See the Technical Appendix for a description of the full estimation procedure.) They are weighted measures of the predicted probabilities of public and private insurance coverage. The predicted probabilities are used in place of actual coverage values because the latter would be endogenous (given the jointness of health coverage and employment choices and opportunities). For public coverage, the weighting variable is the state's average Medicaid expenditure per eligible resident. For private coverage, the weighting variable is a normalized private fee index that indicates how private physician fees vary across states.[7] These two weighting variables adjust the predicted probabilities of coverage to reflect the dollar valuation of that coverage across states.

Predictions of the probability of public and private health insurance coverage are calculated using results from a multinomial logit model, where zero equals no coverage, one equals Medicaid coverage, and two equals employer-provided coverage. These three health coverage states are estimated jointly because it is likely that an unobserved variable affects all three states. Also, as discussed in Cutler and Gruber, crowding out might produce a correlation between the choice between public and private coverage [Moffitt and Wolfe, 1992]. The resulting parameter estimates are used to construct the predicted probabilities of private and public coverage. Then, these predicted probabilities of private and public coverage for each individual are multiplied by the corresponding weighting variables to create the insurance coverage valuation variables.

Health status affects the single mother's wage level and employment choice directly. An unhealthy mother is more likely to be out of the labor force, and having ill children is likely to have the same effect. Consequently, dummy variables for the mother's and children's health status are included in the structural labor force participation probit. The mother is considered to be unhealthy if she reports fair or poor health.[8] And poor child health is indicated when the mother reports that any of her children suffers from any sort of long-lasting physical, mental, or emotional condition that limits the ability to run, work, or play. As will be seen in the data section, poor maternal health is much more prevalent in the data, and so likely to be more important in the labor force participation decision.

A predicted wage measure is also included in the labor force participation probit, constructed by estimating a sample-selection corrected wage equation for those with positive wages, and then predicting wages for all observations in the sample.[11] Other variables included in the labor force participation probit are age and years of education, nonlabor income (total family income less own earned income and work-tied transfers), dummy variables indicating the presence of infant and preschool children, the state's average AFDC benefit for a family of three, plus two more dummy variables to control for residence in the South and in a metropolitan area.[10] The labor force participation probit is written out in summary form below.

$$LFP = \text{fn}(\text{predicted value of public coverage; predicted value of private coverage; maternal health; child health; predicted wage; age; years of education; infant in family; preschool child in family; nonlabor income; state maximum AFDC benefit by family size; residence in the South; residence in a metropolitan area}).$$

Results from the above probit are used to describe the relationships among the various regressors and the probability of being employed. The results are used in policy simulations.

DESCRIPTION OF THE DATA

These analyses rely on data drawn from the sixth interview of the 1987 Panel of the Survey of Income and Program Participation (SIPP). The interview month varies across individuals in the SIPP, but ranges from July to December 1988. The SIPP is a nationally representative sample and is comprised of a series of panel surveys initiated in 1983.

The estimating sample consists of single (unmarried) females, ages 18 through 55, who are mothers or guardians of children under the age of 18. Sample means are given in Table 1. The sample includes 872 single women, of whom 531 (or 61 percent) participate in the labor force, and 423 (79.7 percent) of these work full time. The average age is 33.6, with a mean of 12 years of education. Forty percent have a preschool-aged child, while nearly 20 percent have an infant. Fourteen percent report being in fair or poor health, and 3.7 percent report having a child with a health problem. Thirty-two percent of the sample is nonwhite. In addition, 25 percent of the sample currently receives AFDC support, while 35 percent (including the previous 25 percent) report having received AFDC at least once during their lifetimes.[11]

Approximately 33 percent of the mothers are covered by Medicaid, but only 8 percent of working mothers have such coverage. And 61 percent of the workers are covered by employer-provided health insurance coverage, compared to Swartz' [1989] estimate of 64 percent for all U.S. workers. Consistent with high fixed costs of work (leading to high average weekly hours), the average hours worked per week equals 38, and the average hourly wage equals $8.23. These figures represent the "creaming" of the current welfare system: those mothers with sufficient qualifications to command a wage well above the legal minimum wage are most likely to seek market work.

Approximately 40 percent of the sample have incomes below the poverty threshold, while 25.7 percent earn incomes between one and two times the poverty line. Now, combining these two groups into a single low income sample of 576 mothers produces a more targeted group for the policy simulations. Means for this low income sample are also given in Table 1. Forty-six percent of this sample participates in the labor force (68.3 percent fulltime), earning an average wage of $5.61, with 49 percent receiving employer-provided coverage. Forty-four percent of these mothers in the broad low income sample are covered by Medicaid, 36 percent receive AFDC, and 51 percent report at least one episode of AFDC receipt during their lifetimes. (For mothers in this low income sample who are in the labor force, the corresponding percentages are 14.0 percent, 8.3 percent, and 28.3 percent.) This subgroup is a little younger and less educated than the full sample (at 32.8 years of age and 11.4 years of education), and fewer have children under the age of six. Nearly 18 percent of this sample reports being in fair or poor health. Twelve percent of the full sample and 18 percent of the low income sample report having received AFDC for at least five years and so face the loss of AFDC benefits in light of the 1996 Federal welfare reform.

TABLE 1
Variable Means
(Standard deviations in parentheses)

	Full Sample		Low-Income Sample	
	All observations n=872	LFP=L n=531	All observations n=576	LFP= 1 n=265
Age	33.59	34.84	32.81	33.92
	(8.31)	(7.78)	(8.29)	(7.73)
Years of education	12.00	12.62	11.41	11.95
	(2.47)	(2.39)	(2.32)	(2.31)
Nonwhite	0.32	0.27	0.36	0.32
	(0.47)	(0.45)	(0.48)	(0.47)
Infant child	0.18	0.12	0.20	0.12
	(0.39)	(0.32)	(0.40)	(0.33)
Preschool child	0.27	0.21	0.32	0.27
	(0.45)	(0.41)	(0.47)	(0.44)
Poor maternal health	0.14	0.08	0.18	0.09
	(0.35)	(0.26)	(0.38)	(0.28)
Poor child health	0.04	0.03	0.04	0.03
	(0.19)	(0.17)	(0.20)	(0.18)
AFDC recipiency	0.25	0.05	0.36	0.08
	(0.44)	(0.21)	(0.48)	(0.28)
Ever AFDC recipiency	0.39	0.21	0.51	0.28
	(0.49)	(0.41)	(0.50)	(0.45)
LF participation	0.61	1.00	0.46	1.00
	(0.49)	(0)	(0.50)	(0)
Part-time	0.12	0.20	0.16	0.32
	(0.33)	(0.40)	(0.35)	(0.47)
Wage	5.01	8.23	2.58	5.61
	(5.93)	(5.59)	(3.11)	(1.98)
Weighted public coverage	625.02	484.84	753.98	602.84
	(510.13)	(395.25)	(534.58)	(412.40)
Weighted private coverage	0.43	0.49	0.36	0.42
	(0.21)	(0.19)	(0.18)	(0.18)
Metro residence	0.75	0.76	0.73	0.73
	(0.43)	(0.43)	(0.44)	(0.45)
South residence	0.33	0.35	0.36	0.40
	(0.47)	(0.48)	(0.48)	(0.49)

EMPIRICAL RESULTS

Coefficient estimates from the LFP probit for the full sample and the low income sample are given in Table 2. The weighted public health insurance coverage variable is significantly negative for both samples, although the relative magnitude of this variable is quite small in both cases.[12] This implies that increases in the probability of public coverage tend to reduce the probability of labor force participation. The private

TABLE 2
Structural LFP Probit Coefficients
(t-statistics in parentheses)

Variable	Full Sample	Low Income Sample
Weighted probability of Medicaid coverage	-0.0003[b]	-0.0004[c]
	(2.13)	(-2.33)
Weighted probability of employer coverage	1.09[a]	0.41
	(1.66)	(0.49)
Poor maternal health	-0.88[c]	-0.96[c]
	(-6.12)	(-5.62)
Poor child health	-0.03	-0.02
	(-0.13)	(-0.05)
Predicted wage	2.42[c]	1.67[c]
[wage elasticity]	(4.65)	(2.68)
	[1.51]	[1.44]
Age	-0.02[a]	-0.01
	(-1.78)	(-0.42)
Years of education	-0.15[c]	-0.10
	(-2.63)	(-1.41)
Nonlabor income	-0.00003	-0.0006[c]
	(-0.88)	(-4.83)
Presence of an infant child	-0.37[c]	-0.34[b]
	(-2.62)	(-2.02)
Presence of a preschool child	-0.19	-0.13
	(-1.58)	(-0.96)
Residence in metropolitan area	-0.22[b]	-0.16
	(-1.81)	(-1.16)
Residence in the South	0.25[a]	0.17
	(1.71)	(0.97)
Maximum state AFDC expenditure by family size	-0.001[b]	-0.001[b]
	(2.12)	(-1.98)
Intercept	-1.40[b]	-0.83
	(-2.16)	(-1.02)
Log-likelihood	-467.63	-328.56

a , b, and c indicate significance at 10 percent, 5 percent, and 1 percent levels of significance.

health insurance coverage variable is significantly positive for the full sample, but positive and insignificant for the low-income sample. And the impact is twice is big in the full sample. This is somewhat discouraging, given that the low-income sample is a subgroup that would have been expected to respond strongly, in its average *LFP*, to an increase in the probability of receiving employer-provided coverage. For both samples, the relative marginal impact of private coverage far exceeds that of the public coverage. These findings imply that Medicaid serves as a small disincentive to work for both samples, but that the availability of employer coverage more than makes up for this in the full sample.

Poor maternal health has a significant negative impact on the probability of *LFP* (more so for the low-income sample), and the total magnitude of this effect in the economy is likely to grow if recent budget cuts do indeed reduce coverage, and therefore health, for poor single mothers. Poor child health has a small negative but not statistically significant impact on *LFP*, consistent with Salkever [1990]. The wage coefficient is significantly positive, with a corresponding elasticity equal to 1.51 for the full sample and 1.44 for the low income sample. This estimate is consistent with previous findings in the literature, which tend to show large participation elasticities but small hours elasticities for single mothers. Having more nonlabor income decreases the probability of employment for the low-income sample, but only by a very small magnitude. The income effect of employment is not significant for the full sample.

Each of the remaining significant coefficients except residence in the South reveal a negative relationship to employment. In particular, being older and having more education have negative impacts on employment, but are only significant for the full sample. These findings are consistent with the literature on single mothers which reveals a negative relationship between both age and education and employment outcomes. And, as expected, the presence of an infant or preschool child in the single mother family has a negative impact on employment, but for both samples, only the presence of the infant is statistically significant. This is due to the high cost of child care for very young children, as well as the greater "psychic" cost associated with leaving very young children in non-maternal care. Residing in a metropolitan area decreases the probability of employment for the full sample, possibly due to the greater access to welfare benefits. And residing in the South increases the probability of employment for the full sample. Finally, the probability of employment is lower for those single mothers residing in states with higher monthly maximum AFDC payments, with the magnitude of this effect equal across the two samples.

In addition to the probit regression model, four different policy simulations were implemented: 1) elimination of Medicaid coverage for single mothers with five or more total years of AFDC recipiency; 2) total elimination of Medicaid coverage; 3) employer-mandated health insurance coverage for all fulltime workers; and 4) a combination of 1) and 3). While only the first simulation relates directly to legislation currently under debate, each of the scenarios considered in the simulations has been discussed, and given the budget crises likely to overtake many state budgets, the removal of large numbers of single mothers from Medicaid coverage is not far-fetched. Finally, while mandated employer-provided coverage is inconsistent with current political leanings, it is interesting to show the relative responsiveness of employment behavior of such a policy move.

The resulting mean predicted probabilities of employment resulting from each policy simulation for both the full sample and the low income sample are shown in Table 3. The extension of the five-year AFDC recipiency limit to Medicaid coverage has a small impact on the average predicted participation probability for both samples, but the increase for the low income sample is nearly three times that for the full sample. Totally eliminating Medicaid coverage causes a 9.8 percent increase in the probability of participation for the full sample, and a 23.9 percent increase for the low-income sample. Of course, this simulation is an over-statement, because elimi-

TABLE 3
Policy Simulations: Mean Predicted Probabilities of Labor Force Participation

	Full Sample	Low Income Sample
Actual LFP	0.61	0.46
Predicted LFP	0.61	0.46
Simulation 1: Medicaid w/5-year limit	0.62	0.48
	(1.6%)	(4.3%)
Simulation 2: Elimination of Medicaid	0.67	0.57
	(9.8%)	(23.9%)
Simulation 3: Mandated coverage — FT	0.68	0.49
	(11.5%)	(6.5%)
Simulation 4: Combination of I and 3	0.69	0.51
	(13.1%)	(10.9%)

Percentage changes shown in parentheses.

nating access to care for many individuals would affect maternal and child health, thereby negatively influencing participation.

Mandating employer coverage for all full-time workers has the largest impact on employment behavior for the full sample, causing an 11.5 percent increase.[13] The increase for the low income sample is 6.5 percent. Again, this is merely an approximation to the full effect of such a policy change, because one would expect overall labor demand to fall, and maternal and child health to improve. Thus, if the impending significant cuts in the rate of growth of Medicaid and Medicare cause cost-shifting to private insurance plans that ultimately result in declining private coverage and reduced health, efforts to reduce the welfare rolls will be hindered. Finally, the last simulation shows the combined impacts of welfare and health care reform undertaken jointly. For both samples, the implications of considering these two policy revisions in combination does not produce substantively different results from these obtained when instituting either change by itself.

This paper shows the importance of health insurance coverage and health status in the employment decision. Single mothers are quite responsive to issues of coverage when making their participation decisions, and coverage is even more important to low income single mothers. However, poor maternal health status is also a barrier to employment. A primary recommendation for policy-makers is to proceed with caution when considering dramatic health care and welfare reform. While AFDC and Medicaid might serve as strong disincentives to work, dramatically reducing expenditures for such support might also hinder employment as a consequence of worsening maternal and child health and declining private coverage.

TECHNICAL APPENDIX: OUTLINE OF ESTIMATION STRATEGY

A. Construction of predicted wage measure
   1. Estimate reduced form labor force participation probit model to construct the sample-selection correction term for use in the wage equation.
   2. Estimate the wage equation with the Mills included and use the resulting estimated coefficients to predict a potential market wage for each individual in the sample.

B. Construction of the two imputed measures of the value of public and private health insurance coverage.
   1. Estimate a multinomial logit model, with dependent variable values of 0 (no health coverage), 1 (public coverage), and 2 (private coverage). Results are used to construct the predicted probabilities of public and private coverage for each individual.
   2. Weight the predicted probability of public coverage by multiplying it by the state's average Medicaid expenditure per eligible resident. This produces the variable proxying for the individual's valuation of public health coverage.
   3. Weight the predicted probability of private coverage by multiplying it by the state's normalized private physician fee index. This produces the variable proxying the individual's valuation of private health coverage.

C. Estimate a structural labor force participation probit model for both samples that includes the three variables constructed in A and B above, plus other variables listed in text.

D. Use results of this structural *LFP* probit to implement the four policy simulations.

NOTES

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1. The sudden loss of all Medicaid benefits when income exceeds the AFDC break-even income level is referred to as the Medicaid notch. Other costs of working are far less likely to be offset by earned income, particularly child care costs.
2. The single-equation probit model used in this paper is not sophisticated enough to predict general equilibrium outcomes.
3. In her study of the link between AFDC recipiency and Medicaid coverage, Blank [1989] does not find that Medicaid coverage serves as a disincentive to work.
4. See Phelps [1973] for the derivation of a utility-maximization model which develops the notion that the consumption of health services takes time.
5. No researcher has successfully estimated this tradeoff empirically in any consistent manner, due to non-robustness of the empirical findings with respect to many basic model assumptions and equation specification.
6. While their employment coverage measure is weighted by a predicted probability of coverage, the Medicaid coverage variable is not.
7. This index is a proxy for health care expenditures by the privately insured. It was developed by the Urban Institute and the Center for Health Economics Research [Loprest and Gates, 1993]. One advantage of using these state-level valuation variables is their exogeneity. For consistency, weighting indices that vary by state are included for both health insurance variables. It is important to include proxies for dollar expenditures by state because health expenditures in both the public and private sectors do vary by state.
8. Moffitt and Wolfe [1992] and Wolfe and Hill [1995] use a sum of eight reported measures of Activities of Daily Living (ADL), which includes, for example, wearing glasses. The ADL questions in their 1984 SIPP data were asked of each individual in the panel, whereas the more limited five questions in the 1987 panel were only asked of those individuals reporting a serious health condition that lasted at least three months. As a consequence of this questioning scheme, the 1987 ADL's are unavailable for the bulk of the sample. Winkler [1991] does not incorporate information concerning health status.
9. The sample selection correction is necessary because the wage is only estimated for those with observed wages. Only those in the labor force report wages, and the probability of being in the labor force is correlated with the magnitude of the wage. Therefore, inclusion in the estimation of the wage equation is based, in effect, on the value of the wage itself, and estimating this wage equation without the appropriate econometric technique produces results subject to sample selection bias [Heckman, 1979]. The variables included in this wage equation but not in the structural LFP probit are: number of children (to proxy for a previously intermittent work history), age-squared, and the local unemployment rate. Identification of this wage measure is a controversial issue in labor economics. This controversy is one motivation for using three variables, not just one, to achieve identification.
10. Both of these dummies proxy for regional differences in local labor markets.
11. This percentage AFDC recipiency corresponds approximately to national figures for all unmarried mothers.
12. Although coefficients are shown in Table 2, these coefficients can be converted to derivatives by multiplying each coefficient by the regressions's probability density function (PDF) evaluated at the variable means. These PDFs for the two samples are nearly equal (0.38 for the full sample and 0.39 for the low-income sample) and so the relative magnitudes (for the two samples) of the marginal impacts of these variables can be discussed in terms of the coefficients alone.
13. This finding is larger than the 8 percent found by Moffitt and Wolfe. Their simulation mandated coverage for all workers, not just full-time workers. Also, their model treated Medicaid recipiency as certain and so did not permit examination of policy changes that would affect Medicaid coverage. Neither Moffitt and Wolfe nor Winkler examine low income single mothers.

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