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**INCOME VARIABILITY AMONG  
FAMILIES WITH PREGNANT  
WOMEN, INFANTS, OR  
YOUNG CHILDREN**

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## KEY FINDINGS

### BACKGROUND

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides supplemental food, nutrition education, and referrals to health care to eligible pregnant and postpartum women, infants, and children. To be eligible for WIC, participants must be categorically eligible (that is, they must be pregnant women, breastfeeding women up to 12 months postpartum, nonbreastfeeding women up to 6 months postpartum, infants up to 12 months of age, or children up to the fifth birthday). Participants also must be income eligible (defined as having family income below 185 percent of the poverty level) and at nutritional risk. The Food and Consumer Service (FCS) of the U.S. Department of Agriculture, which administers WIC, annually estimates the numbers of infants and children who are both categorically eligible and income eligible for WIC on the basis of the March Current Population Survey (CPS). These estimates are used in developing the program budget and in estimating program coverage.

FCS asked Mathematica Policy Research, Inc., (MPR) to assess the CPS estimates in relation to alternative estimates from the Survey of Income and Program Participation (SIPP), which collects longitudinal monthly income data. FCS wished to examine the following issues pertinent to income eligibility estimates:

- ***Annual Versus Monthly Income Measures:*** The CPS estimates must use annual income to assess eligibility, although WIC program staff members in general use monthly income to evaluate eligibility.<sup>1</sup> On the basis of previous literature on income variation around the poverty level, it seemed likely that monthly eligibility rates would be higher than annual rates. This could have implications for estimates of WIC participation rates that compare the number of participants from administrative data with estimates of the number of eligible people. Estimates using data from the CPS sometimes have indicated a participation rate for infants that is more than 100 percent.
- ***Changes in Income, Program Participation, and Other Characteristics Around a Birth:*** It seemed likely that the rate of income eligibility increases around the time of the birth (and for

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<sup>1</sup>Because the WIC program does not specify a definite income period for eligibility determinations, states have broad flexibility in measures used. However, according to FCS, states most often use monthly income in determining eligibility.

some period thereafter), as working women withdraw from the labor force at least temporarily. This could have implications for estimates of eligible pregnant women, which are based on the number of eligible infants. Trends in program participation and other characteristics associated with WIC eligibility and participation were also of interest.

## **COMPARISON OF ANNUAL AND MONTHLY MEASURES OF INCOME ELIGIBILITY FOR WIC**

Key findings from the first phase of the analysis include:

- The proportion of infants and children income eligible for WIC was about 42 percent during the period 1990 to 1992, both when measured with the CPS and when measured with SIPP using annual-income methods that mimic the CPS estimates.
- Estimates of income eligibility in SIPP based on annual income were not significantly different from estimates based on monthly income, when estimates were based on the sample for whom annual income could be computed. For children ages 1 to 4, alternate monthly income estimates from the broadest possible SIPP samples were slightly but significantly higher (by 1 to 2 percentage points) than estimates from the restricted sample, but they are not directly comparable to the annual income estimates. Even using the broader estimates, the differences between the annual and monthly estimates were not substantial relative to what had been expected on the basis of the poverty literature.
- Estimated participation rates for infants were close to 100 percent regardless of whether annual or monthly measures of income eligibility were used.
- About 25 to 30 percent more infants and children are income eligible for WIC in *some* month of the calendar year than are income eligible on average. Since individuals are certified for WIC for up to 12 months, the proportion eligible in any month of the past year is an upper-bound estimate of those who could potentially be on WIC.

**TRENDS IN  
INCOME  
ELIGIBILITY  
AND OTHER  
CHARACTERISTICS  
DURING  
PREGNANCY AND  
THE YEAR AFTER  
BIRTH**

Key findings from the second phase of the analysis, which examined data on mothers and infants over the year before and the year after a birth, are as follows:

- Holding family size constant, the proportion of women income eligible for WIC increases gradually during pregnancy, takes an abrupt jump at birth, and then declines gradually during the year after birth (see Figure 1). The increase in the proportion of women who were income eligible for WIC (from 32 percent in the quarter before pregnancy to 46 percent in the quarter after birth) was due roughly equally to the increase in family size and the decline in family income.
- The characteristics of women income eligible before a birth are different than those of women income eligible after a birth. In particular, women who were income eligible after the birth, on average, were more educated, were more likely to live with the father, were more likely to be white, and had fewer children than those who were income eligible during pregnancy.

**PARTICIPATION  
IN WIC AND  
OTHER PROGRAMS**

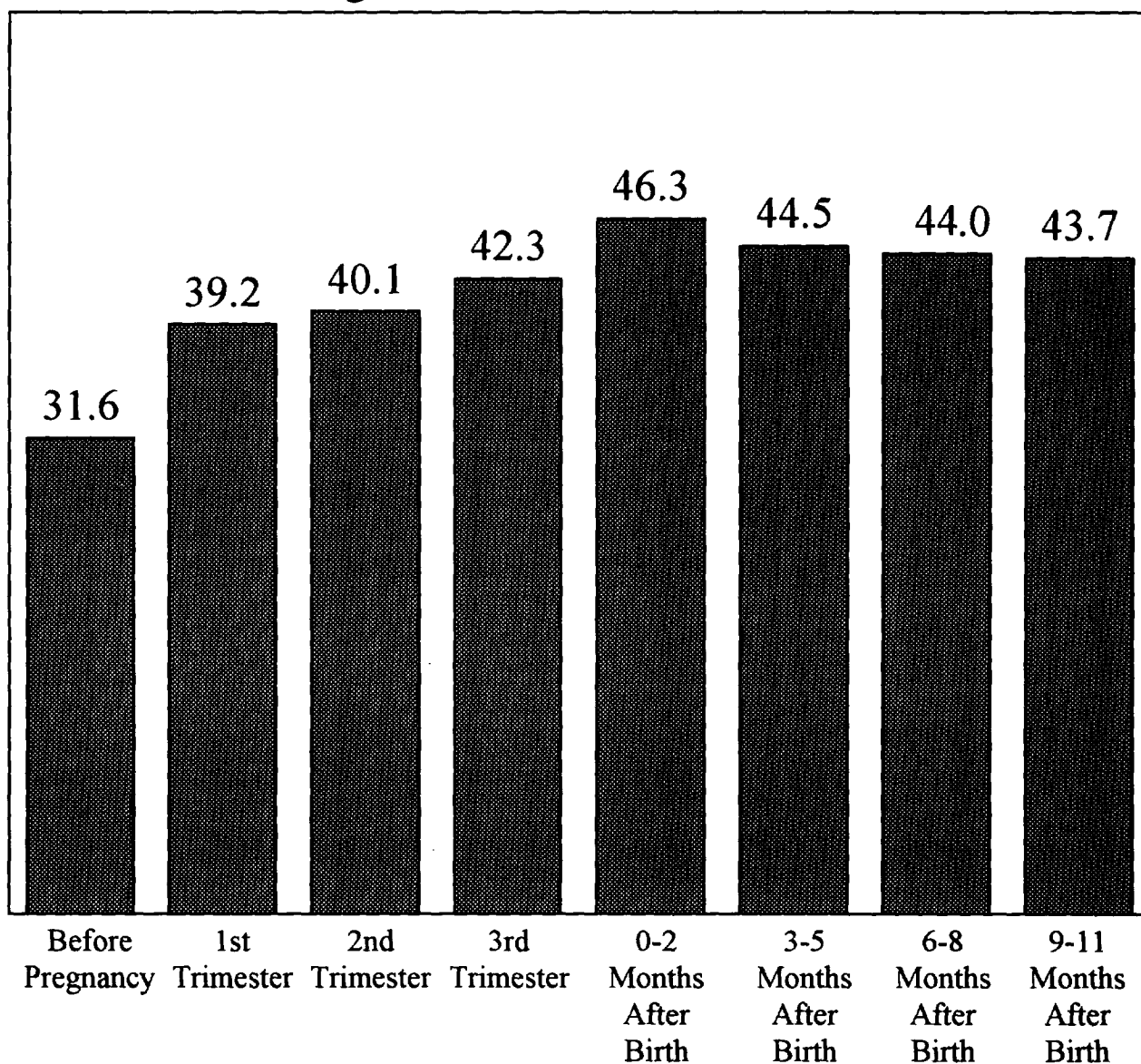
The reported rates of WIC participation among income-eligible pregnant women and infants are much lower than participation rates typically estimated from administrative data. Reported participation rates for children are closer to the administrative data. Underreporting of participation in WIC and other programs implies that the following findings concerning reported patterns of program participation and characteristics of participants may not generalize to the full population of participants:

- Infants and children who were intermittently eligible for WIC but not eligible on an annual basis were less likely to participate in WIC and other assistance programs than those annually eligible.
  - Among those eligible in all months, three-quarters report Medicaid and about half report WIC.
  - Among those annually eligible but not eligible in all months, about 30 percent report WIC and Medicaid.

# FIGURE 1

## TRENDS IN INCOME ELIGIBILITY FOR WOMEN BEFORE AND AFTER BIRTH

Percent Income Eligible



SOURCE: 1990 and 1991 SIPP panels.

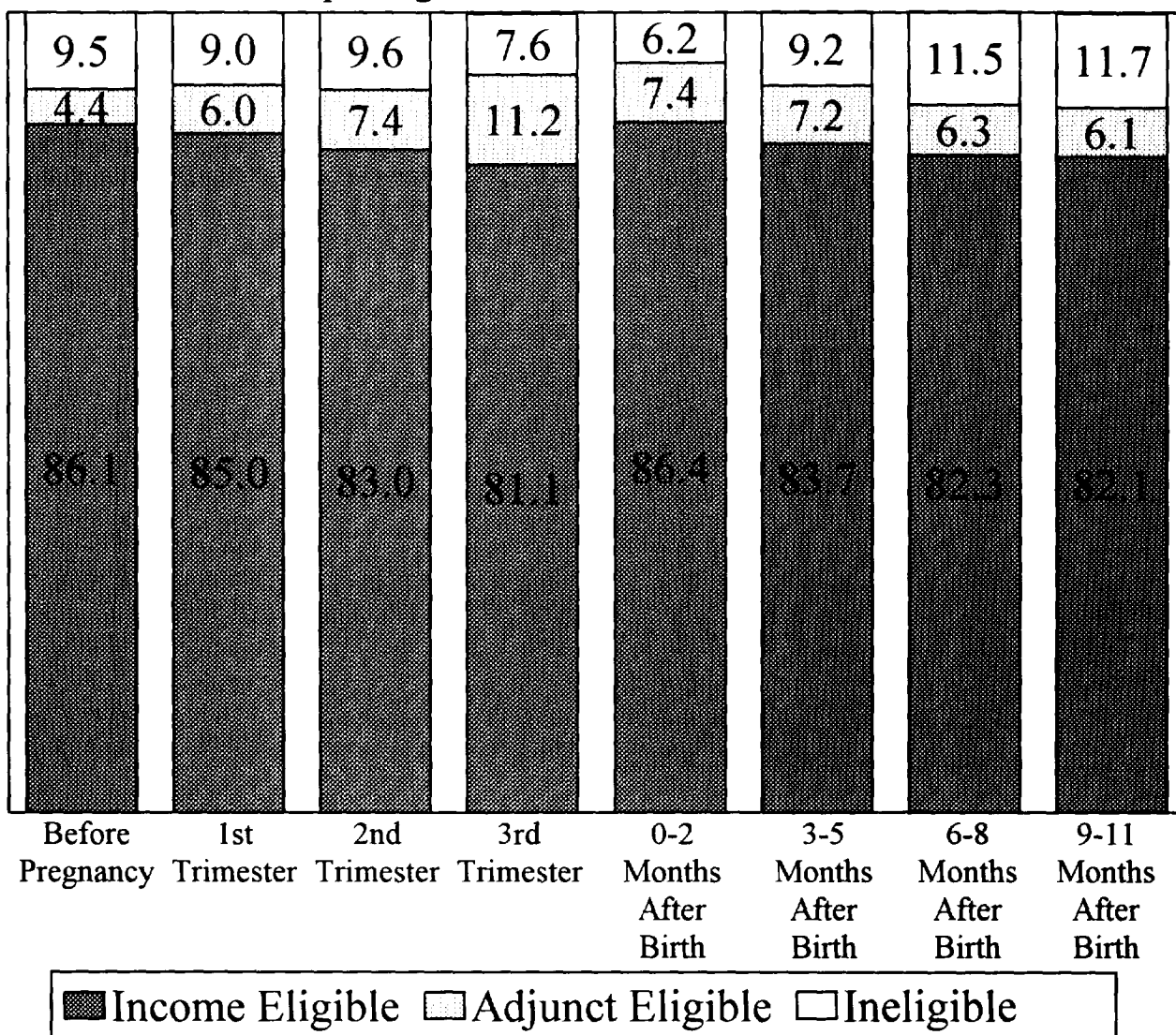
NOTES: In each quarter all women with data for that quarter were included. Income eligibility is defined as family income less than 185 percent of the WIC poverty guideline. Pregnant women were counted as two in determining the applicable threshold, as is current WIC policy.

- Among those eligible in some months but not on an annual basis, about 10 percent report WIC and Medicaid.
- Throughout the period around the birth, about 15 percent reported of WIC participants were not income eligible in the quarter in which their participation was measured. About one-third to one-half of this group were eligible on the basis of Medicaid or other program participation; others may have been income eligible when certified but were not any longer (see Figure 2).

## FIGURE 2

### ELIGIBILITY STATUS OF FAMILIES OF REPORTED WIC PARTICIPANTS BEFORE AND AFTER BIRTH

Percent of Participating Families



SOURCE: 1990 and 1991 SIPP panels.

NOTES: The sample in each quarter is all women who report that they or a family member participated in WIC in that quarter. WIC participation is substantially underreported in SIPP; thus, results should be interpreted with caution. Income eligibility is assessed on the basis of quarterly income.

Adjunct eligible here indicates families who were not income eligible but who participated in AFDC, Food Stamps, or Medicaid (usually Medicaid). At the time these data were collected, pregnant women were counted as one family member in the WIC program, but as two family members in the Medicaid program. Ineligible participants may have been eligible at the time of certification.