IV. OTHER ELIGIBILITY ISSUES FOR REVIEW

This chapter reviews issues concerning steps involved in developing the WIC eligibility estimates after the core income-eligibility estimates for infants and children are prepared.

Two issues are primarily methodological:

- Should estimates of pregnant women be adjusted to reflect research on how family income changes around the time of a birth?
- Should estimates of eligibles in all categories, when used for developing the program budget, be projected to the budget year?

Two issues primarily concern data:

- How should estimates of breast-feeding rates be updated, particularly as the NMIHS is not being repeated?
- How can USDA best use the opportunities provided by the new NHANES and the new national nutritional-risk standards to improve nutritional-risk estimates?

This chapter discusses these four issues in turn.

INCOME VARIABILITY AROUND A BIRTH: IMPLICATIONS FOR ESTIMATES OF PREGNANT WOMEN

Issue Summary:

Because research indicates that family income drops after birth, the income of families with an infant is likely to be lower than that of families with a pregnant woman. Thus, current estimates of the number of income-eligible pregnant women may be overstated. Further research on this could be useful, and USDA may wish to investigate estimating the incomes of eligible women more directly.

The core CPS estimates of income-eligible infants, and the estimates of pregnant and postpartum women derived from them, assume that current

family income is similar to family income in the previous calendar year. However, Gordon et al. (1997) showed that family income declines in the period right after a birth and, thus, that families are more likely to be income-eligible during their child's infancy than they were during pregnancy. Because the CPS measure of income for infants in March is for the previous calendar year, it includes, on average, data from both the pregnancy and the period after the birth. This suggests that the CPS-based income measure may understate eligibility for infants and postpartum women and overstate eligibility for pregnant women.

However, as noted in Chapter III, SIPP estimates that mimicked the CPS estimates for infants were not significantly different from average monthly eligibility estimates based only on post-birth income. This suggests that the bias caused by declining incomes at the time of birth is not a major concern for infants (or, accordingly, for postpartum women). Perhaps the effects of other changes in family composition since the previous year (such as the departure from the family of people who contributed income during the previous year) offset the effect of the birth; the Doyle and Trippe (1991) study discussed in Chapter III suggests that changes in family composition between the income year and the following March may lead the CPS to overstate poverty.

There may be more reason for concern about bias caused by drops in income after a birth in estimates of pregnant women. In particular, income-eligibility estimates for pregnant women are based on those for infants and therefore, on average, include income from both before and after a birth. Thus, family income during the pregnancy will be understated, on average, which leads to an overestimate of the number of income-eligible pregnant women. Furthermore, in this instance, the effect of other changes in family composition compounds the birth effect instead of offsetting it. It may be possible to use the SIPP data presented in Gordon et al. (1997) to develop a preliminary adjustment factor.

The panel and USDA may wish to consider another option for improving income estimates for both pregnant and postpartum women: measuring the incomes of these women directly, with either the CPS or SIPP. Postpartum women can be identified in both surveys if they are living with their infants; the relatively small group of infants not living with their mothers would be the main obstacle to direct estimates for postpartum women. The CPS and SIPP cannot directly identify pregnant women, but both surveys have longitudinal components, which would allow some pregnant women to be identified retroactively by the appearance of an infant in a subsequent interview. Using such longitudinal information would require more complex file construction than current WIC eligibility estimates and raises additional measurement issues (such as accounting for pregnancies that do not end in live births), but it may be worthy of further research.

UPDATING ESTIMATES TO THE NEXT FISCAL YEAR

Issue Summary:

The current USDA estimates of WIC eligibles are based on past information and do not attempt to extrapolate the data to take into account possible changes over time in population or economic conditions. Estimates of WIC eligibles might be more useful in developing program budgets if they incorporated estimates of changes that have occurred since the base data were collected. Currently available population projections could be taken into account in the WIC estimation process. In addition, a recent study suggested that it may be possible to predict the effects of changing economic conditions on WIC eligibility rates. However, the exact ways that updated data could be included in the WIC estimation process have not yet been worked out, nor have their likely impacts been assessed.

Should Estimates of WIC Eligibles Be Extrapolated Forward in Time?

USDA currently bases the WIC program budget on estimates of WIC eligibles from the most recent year for which the required March CPS data are available. Typically, this involves a lag of 2 to 3 years between the period covered by the data and the budget year. For instance, the estimates of WIC eligibles used in the FY 1998 budget process that took place in spring and summer 1997 were based on data from the March 1996 CPS, which obtained data on 1995 annual income and March 1996 household composition. The data are not now extrapolated to the next budget year.

Greater accuracy in WIC estimates might be achieved if changes over time were taken into account. In particular, two types of extrapolation are relevant. First, the estimates of the categorically eligible population could be projected forward to reflect the Census Bureau's estimates of changes in the population by age and gender over time. Second, the estimates of income eligibility could be adjusted to account for anticipated changes in economic conditions. Many parts of the federal budget are explicitly based on projections of changes in unemployment and other macroeconomic variables. The number of people eligible for WIC might well rise during a downturn in the economy and decrease in an upturn, as more households enter or leave the lower income brackets.[1]

[1]Timeliness is also a concern in developing state estimates for fund allocation purposes, as the distribution of eligibles among the states also changes as population grows and economic conditions change. One option for making state estimates more up-to-date that requires no changes in the estimates themselves would be to delay the announcement of growth funding until at least one quarter after the start of the fiscal

Existing Research

Demographic Changes. Adjusting estimates of WIC eligibles for demographic projections would probably be feasible. The CBO used demographic projections in its estimates of the costs of fully funding WIC (U.S. Congressional Budget Office 1990 and 1993). However, no research has been done regarding such questions as (1) How exactly should the adjustments be made? (2) What is the likely effect on the overall numbers of eligibles? (3) If more than one type of adjustment is feasible, how sensitive are the results to the methodology used? A modest amount of research in these areas would help to assess this possible change in methodology and its impact on estimates of WIC eligibles.

Economic Changes. A 1996 study for FNS examined whether it is feasible to use time series data to predict changes in WIC income eligibility rates based on changes in economic conditions (Nicholson 1996). Nicholson used March CPS data for the period 1972 to 1994 to develop a model of WIC income eligibility rates for infants and children. His preferred model was a simple time series econometric model in which the income eligibility rate was predicted as a function of the unemployment rate, a 1-year lag of the unemployment rate, and a linear time trend. He judged that this model fit the data well in that it had an R-squared of 0.95 and an overall F-statistic of 84.1; furthermore, the coefficients on all the explanatory variables were statistically significant at the .01 level. The preferred model fit better than models with other explanatory variables and better than pure time series models that use only the information contained in the historical pattern of the eligibility rates. Furthermore, when Nicholson reestimated the model over the period 1972 to 1990 and used the results to predict eligibility rates from 1991 to 1994, he judged that the predictions tracked the historical rates reasonably well.

Nicholson's research suggests that the WIC eligibility rate and the unemployment rate are strongly related in a way that current estimates do not capture. However, the research did not explicitly examine how the forecasting model could be linked to the current process of estimating WIC eligibles.

Issues for Further Review

The available evidence suggests that it would be feasible to extrapolate the most recent estimates of WIC eligibles to the next budget year to account for anticipated demographic and economic changes. This would

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year. Since the March CPS is released around the start of the fiscal year, the estimates could then be one year more current.

be desirable if it improves the accuracy of the budget estimates, but further research is needed to assess this issue.[2] In addition, details of how the adjustments to the WIC estimates would be made have not been assessed, and the likely magnitude of such adjustments is not known. More research in these areas may be warranted.

The types of extrapolations discussed here account for only *some* of the changes that are external to the WIC program but affect the number eligible. They would not, for instance, provide the capacity to project the effects of changes in the Medicaid program or in other federal transfer programs. Any analysis of such variables would require more major changes in estimation procedures than those discussed in this section.

ESTIMATING BREAST-FEEDING RATES

Issue Summary:

As there are no plans to update the NMIHS, the data source for updating estimates of breast-feeding rates will have to be changed. Although minor in their impact on overall eligibility estimates, these estimates are already 10 years old. This section reviews some of the possible data sources for updating the estimates.

Duration of WIC eligibility is expressly linked to the infant-feeding practices of postpartum mothers: women who breast-feed their infants are WIC-eligible for 12 months, whereas non-breast-feeding women are WIC-eligible for only 6 months. As noted in Chapter II, USDA currently relies on data from the 1988 NMIHS to estimate the number of WIC eligibles that breast-feed their infants. The NMIHS data are now 10 years old. There are no plans to update the survey in its current form; instead, the National Center for Education Statistics and the National Center for Health Statistics, in a joint effort, will conduct the Early Childhood Longitudinal Survey-Birth Cohort 2000 Study (ECLS-B). The ECLS-B will include an infant-feeding module, funded by USDA, containing questions related to the extent, initiation, and duration of breast-feeding. The ECLS-B will also provide detailed information on children's health, early care, and education, including participation in WIC--outcomes that were previously measured by the NMIHS. The ECLS-B is a strong candidate to replace the NMIHS as the data source for estimates of breast-feeding rates among WIC eligibles. It will include a large, nationally representative sample of 12,000 children born in the year 2000, who will be followed longitudinally from birth through the end of first grade. The first two data collection points will occur when infants are 9

[2]An intermediate option, updating estimates for demographic changes but not economic changes, may also be worth considering.

and 18 months old. The only concern is that these data will not be available for several years.

Breast-Feeding Data Sources

Other data sources that contain information related to breast-feeding include the National Survey of Family Growth, the Ross Laboratories Mothers' Survey, the FDA and WIC Infant Feeding Practices Surveys, NHANES, and the Continuing Survey of Food Intakes by Individuals. Such surveys might be used to update the WIC breast-feeding estimates, particularly before data from the ECLS-B are available. However, most are limited by small sample sizes, particularly among low-income mothers. The purpose and design, as well as the limitations, of each survey are briefly described next.[3]

a. National Survey of Family Growth (NSFG)

The main function of the NSFG is to collect data on factors affecting pregnancy and women's health in the United States. Data are based on personal interviews with civilian, noninstitutionalized women aged 15 to 44. This survey, which collects data on sociodemographics and a wide range of health behaviors, including breast-feeding, was conducted in 1973, 1976, 1982, 1988, 1990, and 1995. In addition, a survey is planned for the year 2000. Although the NSFG sample sizes have ranged from 5,686 in 1990 to 10,847 in 1995, response rates have typically been about 80 percent. Breast-feeding data, which are based on recall by the mother, reveal the percentage of women that ever breast-fed, the duration of breast-feeding, and the mean duration of breast-feeding (in weeks). For example, in 1988, the following questions were included in the NSFG:

- When (child) was an infant, did you breast-feed (him/her) at all?
- How many weeks old was (s/he) when (s/he) took milk or formula from a bottle or cup?
- How many weeks old was (s/he) when you stopped breast-feeding altogether?

Limitations are that these data provide small sample sizes for breast-feeding rates for recent years and involve a long recall period for older children.

[3]Much of this information was derived from Interagency Board for Nutrition Monitoring and Related Research (1998).

b. Ross Laboratories Mothers' Survey (RLMS)

The RLMS is a continuing survey conducted each month (formerly each quarter) by a private infant formula company to determine patterns of infant feeding during the first 6 months of life. Through a mail survey, mothers are asked to recall the type of milk fed to their infants immediately following birth, in the hospital, and during each month throughout the first 6 months of the child's life. The data are not publicly available, but Ross Laboratories staff publish results periodically. The data have been used to track breast-feeding rates since the late 1950s (Ryan et al. 1991). A recent update of the results to 1995 may provide a useful benchmark for assessing how overall levels of breast-feeding have changed since 1988 (Ryan 1997).

The RLMS sample is drawn from a list of births that represent 80 to 85 percent of all new mothers in the United States. The response rate has been about 50 percent, on average. The data are reweighted to match national totals for subgroups based on age, race, education, and other factors; however, despite this precaution, the RLMS is probably not fully representative of low-income women. Still, both the RLMS and the NSFG documented similar breast-feeding rates and trends (Ryan et al. 1991).

c. Infant Feeding Practices Survey (FDA-IFPS)

The FDA-IFPS (sponsored by the Food and Drug Administration) was conducted between 1993 and 1994 to obtain detailed information about infant feeding practices during the first 12 months of life. The ultimate goal of the FDA-IFPS was to understand better the protective factors that have been attributed to breast-feeding. The sample included 1,200 new mothers of healthy full-term infants born between March and October 1993, and an attempt was made to weight the sample to keep geographic region, income, population density, household size, and age representative.

The study involved a series of 11 questionnaires administered by mail, beginning when the mother was about 6 months pregnant and continuing until the infant was 1 year old. Each month postpartum, mothers reported the number of times over the past 7 days that their infants received breast milk, formula, or both. In addition to the data related to infant feeding (breast-feeding extent, initiation, and duration, as well as characteristics associated with breast-feeding versus formula- feeding), sociodemographic data were collected. The high frequency of data

collection minimizes recall error, but at the possible cost of increasing nonresponse.

For better understanding of the characteristics of this cohort of mothers, they were compared to the nationally representative sample of the NMIHS (Scanlan et al. 1997). The FDA-IFPS sample was found to be more likely to belong to middle- and upper-income groups; to be older, white, and married; and to have taken a prenatal class. These mothers were also less likely to drink or smoke. Thus, mothers income-eligible for WIC are probably a small part of this sample and may not be representative of WIC-eligible postpartum mothers nationally.

d. WIC Infant Feeding Practices Survey

FNS conducted a study similar to the FDA-IFPS to describe specifically the infant feeding practices of WIC participants (Baydar et al. 1997). A nationally representative sample of about 900 WIC mothers were interviewed 10 times from August 1994 through December 1995 to assess breast-feeding initiation and duration, formula-feeding, and the introduction of supplementary foods. Sociodemographic data such as income, age, race, and ethnicity, as well as health status indicators such as birthweight, health problems, and breast-feeding problems, were also collected. Additional variables addressed the mothers' attitudes and beliefs about infant feeding. The data are limited by the small sample size, and, as only WIC participants were surveyed, the findings may not be generalizable to the population of WIC eligibles. However, these data are relatively recent.

e. NHANES III

NHANES III was designed (1) to assess the health and nutritional status of the population and to monitor changes over time, and (2) to provide information to study the relationship between diet, nutritional status, and health. The study was conducted from 1988 through 1994 on a nationally representative sample of over 30,000 civilian, noninstitutionalized people 2 months and older (see Appendix A for further information).

For children in the sample, the Household Youth Questionnaire portion of NHANES III was administered to a proxy respondent, usually the parent or guardian. Questions relevant to estimating breast-feeding among WIC eligibles include the following:

- Was [sample person] ever breast-fed or fed breast milk?
- What type of milk was [sample person] first fed daily?

- Age first fed formula, juice, etc., in days
- Age when first fed formula daily, in days
- Age when stopped breast milk, in days

The Household Youth Questionnaire was completed for 13,944 children and youths age 2 months to 16 years during the 6 years of NHANES III; however, the sample included only 3,467 children under 6. As a consequence, sample sizes for breast-feeding rates in more recent years are quite small, much as in the NSFG.

f. Continuing Survey of Food Intakes by Individuals (CSFII)

The USDA's CSFII is used to monitor the nutritional adequacy of American diets by measuring the food and drink intake of a sample of people residing in households, with an oversampling of the low-income population. For the most recent round of the CSFII (1994 to 1996), 16,000 people of all ages were asked to provide food intake data for 2 nonconsecutive days, with both days of intake collected by the 24-hour recall method. The 1994-to-1996 CSFII included dietary intakes for 4,250 children age 0 to 9 years. The Supplemental Children's Survey of 1997 to 1998 was expected to collect dietary intakes for an additional 5,000 children age 0 to 9, using methods similar to those of the main CSFII. However, even if both these rounds of data are combined, the sample of infants may still too small for the CSFII to be useful in estimating the incidence of breast-feeding among WIC-eligible mothers.

Recent Data on Breast-Feeding Trends and Issues for Further Research

The urgency of updating the estimates of breast-feeding rates among WIC participants depends on at least two factors: (1) the importance of the estimates in overall program planning, and (2) the likelihood that breast-feeding rates have changed.

The breast-feeding estimates play a small role in overall estimates of eligibility. Improving them may be useful, however, particularly given the program's emphasis on encouraging mothers to breast-feed. Because all postpartum women are eligible for 6 months, the estimates affect only the estimated number of eligible women who are more than 6 months postpartum, a small part of the overall WIC population. Still, estimated coverage rates among the combined postpartum/breast-feeding category of eligibles have exceeded 100 percent for the past several years, and an increase in breast-feeding past 6 months postpartum may be one factor explaining this.

Available data suggest that breast-feeding rates have changed substantially over time. These changes may argue for updating the rates more frequently. In particular, a study that compared many years of data from both the RLMS and the NSFG found that breast-feeding initiation rates increased substantially during the 1970s, reached a peak in 1982 at 62 percent (based on the RLMS), and then declined gradually from 1982 to 1987, when the rate was estimated at 56 percent (Ryan et al. 1991). However, breast-feeding rates among low-income mothers are generally much lower and may not have followed these trends. A recent update of the RLMS analysis to 1995 found that breast-feeding initiation rates increased again in the 1990s (from 52 percent in 1989 to 60 percent in 1995) and that the increase was proportionately larger among low-income women and WIC participants, although their rates remained low (Ryan 1997). It would be useful if the RLMS analysis could again be validated by comparison to data from the NSFG or other sources. The WIC Infant Feeding Practices Survey also found higher rates of breast-feeding initiation and of breast-feeding 6 months or more among WIC participants in 1994 than in the 1988 NMIHS (Baydar et al. 1997).

In sum, it may be worth considering whether some combination of these studies or additional data analysis could be used to update the breast-feeding rates estimated from the NMIHS until the ECLS-B data become available.

ESTIMATING RATES OF NUTRITIONAL RISK

Issue Summary:

USDA's estimates of nutritional-risk rates have been criticized because they did not account for all the nutritional-risk factors that the states recognize. They have also been subject to limitations in the data available. New data sources and changes in the nutritional-risk regulations may make it possible to develop better estimates soon. However, to ensure that estimates from survey data are as close as possible to how nutritional risk is assessed in actual WIC eligibility determinations, more research may be useful on how nutritional risks are applied in practice.

As described in Chapter II, for the past 10 years, USDA has relied on estimates of nutritional- risk rates published in 1987, which were based on data from the 1976-80 NHANES II. However, the agency expects to publish estimates based on more recent data shortly. This section reviews some criticisms of the 1987 USDA estimates, describes how upcoming policy changes and changes in data availability may improve nutritional-risk estimates, and highlights areas in which additional research may be needed.

As noted in Chapter II, the 1987 estimates that FNS still uses were designed to be conservative, and they have been criticized for not capturing all nutritional risks measured by WIC clinics. The estimates are conservative with respect to (1) choices made in deciding what is to be measured, (2) limitations in the available data, and (3) choices concerning how estimates from different data sets were combined. First, FNS decided to measure the modal nutritional-risk set, since this risk set was believed to be the most appropriate way to cope with the wide range of state-level variation in nutritional-risk factors used and thresholds applied. FNS made this decision because of a lack of state-level data. However, using the modal risk set implies that not all risks that WIC clinics use are measured. Second, the available data do not include measures of all the risks in the modal set, so only those that are measured are included. Third, when reconciling medical-risk estimates for women from the two data sets used, the NNS and NHANES II, FNS decided to average the estimates of the percentage of women with any medical risks, although each data set measured some risks the other did not.

The estimates of dietary risk from NHANES II looked at numbers of servings per day from different food groups reported in a weekly food frequency. The new round of estimates from NHANES III will be based on one 24-hour dietary recall. Measures based on only 1 day are not good indicators of usual intake for individuals, nor are they good ways to measure anything but average intakes for groups. Dietary intake varies considerably from day to day, so daily variance is much greater than

variance in usual dietary intake. Thus, 24-hour recalls are generally not used to measure the percentage of a group with intakes below specific cutoffs, such as the RDA. However, nutritionists in the WIC program at the local level often rely on a 24-hour dietary recall to do dietary risk assessments, so such data may be appropriate in that they reflect common clinic practice. In 1996, 80 percent of state WIC agencies reported routinely using 24-hour recalls, and 80 percent also reported routinely using food frequency measures (Randall et al. 1998).

Forthcoming updated estimates of nutritional risks will be based on the 1988 NMIHS and the 1988 to 1994 NHANES III. Although this research was not available for review, FNS staff report that it is generally similar in methodology to the previous study, other than the difference in type of dietary data mentioned above.

Changes in nutritional-risk policies and in data availability will soon make it possible to improve estimates of nutritional-risk prevalences for the WIC population. In particular, for nutritional risks other than dietary risks, FNS is implementing new national standards, which take effect in April 1999. These standards will clarify what risks need to be measured, and they are expected to eliminate most cross-state equity issues related to medical risks. However, there is still likely to be substantial variation both in dietary-risk criteria and methods of assessment. USDA is working to develop better methods of dietary-risk assessment. In the meantime, more research on how dietary- risk assessment is currently done could help in determining how best to proxy it in national survey data.

The data available for nutritional-risk estimates probably will become more timely and may improve in other respects. The National Center for Health Statistics is planning to convert NHANES into a continuing annual survey that will collect data on a nationally representative sample of 5,000 people each year. Starting in 2000, NCHS plans to combine NHANES with the CSFII. Doing so may improve the quality of dietary data available, since the CSFII has generally included at least 2 days of dietary intake data along with other nutrition-related questions.

V. WIC PARTICIPATION RATES UNDER FULL FUNDING

In recent years, the policy process has moved toward the goal of funding WIC at a level sufficient to serve all who are eligible for WIC and wish to participate. For planning and budgeting, it is important to estimate as precisely as possible the number of people who would participate under full funding.

The number of people who would participate under full funding can be estimated as the product of (1) the number of eligibles, and (2) the full-funding participation rate among those who are eligible. So far, this report has focused on the number of eligibles. In this chapter, the focus shifts to examining the available information with which to estimate the percentage of WIC eligibles who would participate, if no one were turned away for lack of resources. The first section highlights a conceptual issue that must be addressed in making such estimates--the need to make explicit assumptions about administrative spending and the levels of administrative services provided. The next section reviews current estimates of national-level WIC "coverage rates," which are defined as the number of persons actually participating divided by the estimated number eligible.[1] The third section considers coverage rates for selected states where the WIC program is particularly well funded. The final section assesses what evidence about potential WIC participation rates can be obtained by examining participation rates in other means-tested programs.

[1]FNS uses the term "coverage rate," rather than "participation rate," to highlight the fact that in a nonentitlement program such as WIC, it may not be possible for all the eligibles who want to participate to do so.

ADMINISTRATIVE FACTORS

As discussed in Chapter I, the number of participants under full funding is to some extent a political decision, since additional funding for administrative expansion and outreach may be an important factor in determining participation rates. A recent GAO report, for instance, suggested that some states have unspent WIC food funds at the end of the fiscal year in part because they do not have enough nutrition services and administration funding to support program expansion, including costs for staff and space (U.S. General Accounting Office 1997).

The effect of insufficient administrative funding can be mitigated to some extent. It may be possible to streamline WIC administration, for example, by improving data systems and scheduling (Ku et al. 1994) or by issuing vouchers for 3 months at a time (U.S. General Accounting Office 1997). Despite possible administrative efficiencies, however, the effects of establishing the full-funding principle of serving all eligible persons who request WIC benefits will still depend on the administrative resources available to support the program, including outreach activities to encourage low-income people to apply.

Much of the discussion of likely participation rates to date appears to have implicitly assumed that administrative services would be continued at approximately their current level of intensity. Other alternatives are possible, however, and this should be kept in mind in future policy discussions related to WIC full funding and its consequences.

CURRENT WIC COVERAGE RATES, BY CATEGORY AND INCOME LEVEL

FNS's current estimates of participation under full funding have been based in part on analysis of current coverage rates. WIC coverage rates can be used as a reality test for estimates of the full-funding participation rate. In particular, if eligibles were estimated accurately, it would be reasonable to assume that the full-funding participation rate would be greater than or equal to the current coverage rate (equal if the program is fully funded). As noted in Chapter II, however, coverage rates for 1996 (the most recent year available) exceed 100 percent for several categories of participants. In addition, the average coverage rate in 1996 was 81 percent, which is higher than the traditional USDA full-funding assumption of 80 percent.

The analysis in the previous chapters indicates that the high coverage rates almost certainly in part reflect underestimation of eligibles. If estimates of eligibles were adjusted, current coverage rates would be more useful as lower bounds for the full-funding participation rates.

It would also be of interest to estimate coverage rates by income group

and to consider their implications in forecasting future participation rates.[2] In particular, growth in the number of higher-income eligibles (because of Medicaid expansions) may reduce participation rates to some extent. On the other hand, because the "eligible only through Medicaid" group is already enrolled in Medicaid and thus linked to the health care system, its WIC participation rate may be relatively high.

CURRENT WIC COVERAGE RATES IN WELL-FUNDED STATES

Another potentially useful source of information on WIC full-funding participation rates is data on coverage rates in states that are particularly well funded (based on their funding per estimated eligible). For several reasons, including changes in the WIC funding formula, variations in nutritional-risk criteria, and variations in the availability of state funds for their WIC programs, some states have more funds available to serve WIC clients (relative to estimates of income-eligible people in that state) than do others. In an assessment of likely participation rates under full funding, participation rates in "well-funded" states may be a useful proxy. This section reviews this approach.

The Center on Budget and Policy Priorities analyzed data for the 15 states with the highest levels of funding per income-eligible person and noted that the average participation rate in these states was well over 80 percent (Greenstein et al. 1997). Table V.1 shows a similar analysis of 1995 eligibility and participation data for infants and children in the 13 states with the most generous funding for FY 1998, listed in order of the percentage of the "fair share" of funding they received.[3] As in the analysis by Greenstein et al., Table V.1 shows estimated average participation rates over 80 percent for both infants and children, on the basis of current methods for estimating eligibility. For the most part, high coverage rates in these states are driven by rates that are well over 100 percent for infants.

These estimates have many limitations and should be used with caution. First, as with the national coverage rates, they are likely to be inflated by underestimates of WIC eligibles nationally. Second, many of these states are small, and estimates of eligibles in small states are less precise, even when shrinkage methods are used. Third, the table assumes constant nutritional-risk rates in all states, when nutritional-risk policies

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[2] FNS recently conducted the National Survey of WIC Participants. The report from that study, which will be completed in late 1999, will provide better information on the income distribution of WIC participants than is currently available from administrative data.

[3] A list of the states with the highest levels of funding per income eligible in FY 1998 was provided by FNS. Data on well-funded states in 1995 were not available, but it seems likely they were largely the same.

TABLE V.1

RATES OF WIC PARTICIPATION BY INFANTS AND CHILDREN IN WELL-FUNDED STATES IN 1995

		Eligibles	Participants	Estimated Coverage Rate (Percentage)
Vermont	Infants	2,622	3,011	114.8
	Children	8,820	9,597	108.8
New Jersey	Infants	22,950	35,486	154.6
	Children	75,561	74,592	98.7
Connecticut	Infants	11,108	13,374	120.4
	Children	36,962	40,154	108.6
Washington	Infants	26,816	31,136	116.1
	Children	89,144	55,038	61.7
Alaska	Infants	4,360	4,289	98.4
	Children	14,532	10,532	72.5
North Dakota	Infants	3,311	3,382	102.2
	Children	10,733	9,397	87.6
New Hampshire	Infants	3,042	4,634	152.3
	Children	10,720	10,782	100.6
Arkansas	Infants	17,280	23,973	138.7
	Children	56,717	41,755	73.6
Kentucky	Infants	23,610	29,199	123.7
	Children	77,989	61,476	78.8
California	Infants	255,931	268,477	104.9
	Children	848,342	462,797	54.6

		Eligibles	Participants	Estimated Coverage Rate (Percentage)
West Virginia	Infants	10,514	12,332	117.3
	Children	35,252	27,703	78.6
Tennessee	Infants	31,827	51,921	163.1
	Children	105,470	51,112	48.5
Maine	Infants	4,558	5,830	127.9
	Children	15,979	15,295	95.7
Average	**Infants**			**125.7**
	Children			**82.2**

SOURCE: Eligibility estimates for 1995 are from Schirm (1997) and are adjusted for nutritional risk using the standard USDA rates of 95 percent for infants and 75.2 percent for children. Note that nutritional-risk criteria varied substantially by state in 1995, and the prevalence of risks also varied, so the actual number of eligibles according to state policy and practice would differ from these figures.

Participation estimates are for FY 1995 and are derived from program data (U.S. Department of Agriculture 1995b).

varied substantially by state in 1995, and nutrition-related health status also varied by state. In fact, it is possible that these states would not be the most well-funded states if variations in nutritional risks at the state level could be taken into account.

PARTICIPATION RATES IN THE FSP AND AFDC

FNS used data on FSP and AFDC participation rates in the late 1980s to justify its choice of an 80 percent participation rate under full funding. Participation rates in these programs grew substantially in the early 1990s (before the 1996 welfare reform law), and FNS has cited this growth as a possible reason for increasing the WIC full-funding participation rate assumed for budget purposes. However, AFDC and FSP participation rates have limitations as proxies for WIC full-funding participation rates: in particular, trends in these rates may not be useful in predicting trends in WIC participation.

FSP Participation Rates

FSP participation rates are calculated using FSP administrative data in the numerator and an estimate of the number of eligibles in the denominator, based on SIPP or CPS data. Information on FSP participants comes from two administrative data sources: (1) FSP operations data, and (2) the Integrated Quality Control System (IQCS). Program operations data, derived from a monthly census of FSP participation and benefit issuance, provide an accurate measure of aggregate participation. However, these data do not reflect the characteristics of FSP participants--information needed to calculate participation rates for demographic and economic subgroups. This detailed information comes from the IQCS data, which are collected as part of an ongoing review of food stamp household circumstances designed to determine whether households are eligible to participate in the FSP and whether they are receiving the correct food stamp benefit amount. The IQCS data are selected from case records for a national probability sample of approximately 50,000 food stamp households and are weighted to reflect the total number of households actually participating in the FSP.

Information on FSP eligibles is not explicitly reported in any data source, as no record is kept of eligibles unless they apply for and receive food stamps. However, estimates of the size and characteristics of the eligible population are derived from a representative sample of households in the United States, using the MATH® microsimulation model, which determines whether each household in this sample is eligible to receive food stamps. The sample consists of households in either the CPS or SIPP universe.

Based on 1996 data from the CPS and FSP administrative data, the estimated average participation rate for persons eligible for the FSP was 68.1 percent. For children under age 5, however, the participation rate was much higher, at 94.5 percent.[4] The participation rates for all food stamp eligibles and for eligibles under age 5 have risen considerably in the past 10 years (Table V.2). The surge in participation rates from 1988 to 1992 was attributed to the economic recession, Medicaid expansion, increased outreach, and liberalized immigration rules. In 1993 and 1994, as economic expansion began, eligibility initially fell faster than participation, so participation rates continued to increase; in recent years, however, the number of participants has declined slightly faster than the number of eligibles, and participation rates have fallen slightly (Cody 1998b).

AFDC Participation Rates

AFDC participation rates were calculated by the Urban Institute, which used the number of families participating as the numerator and an estimate of the number of eligible families as the denominator. As in the FSP procedure, administrative data were used to determine aggregate participation, and quality control data were then used to examine participation among specific demographic or economic groups. To measure the number and characteristics of those fully eligible for AFDC, Urban Institute staff used March CPS data and the TRIM2 microsimulation model. Fully eligible families meet all the eligibility requirements, including demographic restrictions and income and asset tests.[5]

In 1995, the participation rate among families eligible for AFDC was 88 percent. For families with children age 0 to 5, the participation rate was 90 percent. AFDC cases for pregnant women without any other children are left out of the estimate because the CPS survey does not include a variable indicating pregnancy.[6] AFDC participation rates have also increased over time--participation rates were approximately 80 percent among all eligible families in the 1980s (U.S. Department of Health and Human Services 1997).

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[4]These data are from Cody (1998b). Rate estimates are based on counts of participants from August FSP operations data and July and August IQCS data. The number of eligibles is estimated by applying August rules to the March CPS data.

[5]Personal communication with Linda Giannarelli, November 17, 1998.

[6]Personal communication with Linda Giannarelli, November 17, 1998.

has a simpler eligibility determination process. Furthermore, WIC is often available at health clinics that mothers with young children may already be visiting, which would make participation relatively easy. In addition, as long as participants remain below the eligibility threshold, WIC benefits do not decline as income increases, in contrast to AFDC or FSP benefits.

Data are not currently available for the period occurring after the passage of the 1996 welfare reform law that transformed AFDC into TANF. The participation rates in TANF probably will be less useful as a proxy for full-funding WIC participation rates, because there is a time limit on TANF eligibility, and estimating TANF eligibility and participation rates from survey data will become more difficult. In addition, trends in participation rates in the FSP and TANF may not pick up the effects on WIC participation rates of factors such as changes in Medicaid eligibility rules.

SUMMARY AND OUTSTANDING ISSUES

The most important step toward improving estimates of the full-funding WIC participation rate is to improve eligibility estimates, as discussed in previous chapters. Once this is done, analysis of coverage rates (defined as participants divided by eligibles) may be a useful tool in estimating the likely participation rate for WIC under full funding. Even then, however, the assumptions being made about administrative expenditures and program service levels must be taken into account. Further examination of relationships between administration and participation at the state level could help in predicting full-funding participation rates.

Data from the AFDC program and the FSP provide information relevant to predicting WIC participation. They suggest that participation rates well over 80 percent for families with children are plausible. However, factors exist that could place the WIC full-funding participation rate either higher or lower.

Limitations of AFDC and FSP Participation Rates

The relatively high estimated participation rates in AFDC and the FSP for households with children appear to make high-participation assumptions possible for WIC as well, since AFDC and the FSP are entitlement programs that serve low-income women and children. Thus, FNS has relied on information from these programs to make estimates of WIC participation under full funding. Although this is a reasonable approximation, these rates may overstate or understate WIC participation under full funding. In addition, trends in these rates are driven by factors that are likely to differ from those affecting WIC participation.

FSP participation rates among children under age 5 may exceed the full-funding participation rate for WIC, for several reasons. First, WIC eligibles with family incomes between 130 and 185 percent of poverty are generally not eligible for the FSP and are known to participate in WIC at lower rates than lower-income eligibles. Essentially, FSP eligibles are more needy on average than WIC eligibles and thus may be more likely to seek assistance. Second, at a given income level, families eligible for both WIC and the FSP may be less motivated to participate in WIC than in the FSP, because WIC may offer lower benefit levels. In 1996, average WIC food package costs (before rebates) varied regionally from $41.92 to $48.41 per month (Randall et al. 1998). WIC households often have two or more participants, however, which increases the value of WIC participation accordingly. The average monthly food stamp benefit per household in FY 1996, however, was $174 for all households and $237 for households with children (Cody 1998a).

Using estimates of AFDC participation rates as a proxy for WIC participation rates poses similar problems. Income limits for AFDC were even lower than for the FSP. On average in 1995, families remained eligible for AFDC after 1 year of working if their household income did not exceed 67.4 percent of the federal poverty level (Zedlewski and Giannarelli 1998).[7] Therefore, AFDC participation rates are also likely to exceed the participation rates for WIC eligibles, many of whom have higher incomes. Furthermore, for those who qualified for both programs, AFDC benefits were typically larger than WIC benefits. The average AFDC benefit was $377 for all families enrolled in 1995 (U.S. House of Representatives 1996).

However, there are also reasons that FSP and AFDC participation rates may be lower than WIC participation rates. Because WIC is frequently offered through health care providers, it may have less stigma than AFDC or the FSP and thus may be more attractive to eligible families. WIC also

[7]Eligibility varies widely by state. In Alabama, a family remained eligible for AFDC with a maximum income of 24.1 percent of the federal poverty level. In Iowa, a family remained eligible for the program with an income of up to 136.9 percent of the federal poverty level.

TABLE V.2

FOOD STAMP PROGRAM PARTICIPATION RATES:
AUGUST 1986 TO AUGUST 1996

	All Eligible Persons	Children Under Age 5
August 1986	47.6	62.3
August 1988	48.1	60.0
August 1989	54.2	65.3
August 1990	57.0	78.6
August 1991	59.3	82.7
August 1992	60.3	86.6
August 1993	61.4	89.7
August 1994	72.1	97.5
August 1995	70.9	94.7
August 1996	68.1	94.5

SOURCE: Cody (1998b), Table 5. Data are from the FSP operations data, special tabulations from IQCS data, and FSP eligibility files created from March CPS data for the years shown using the MATH®-CPS model.