

II. Background

Since its inception, the WIC program has been viewed as a nutritional program designed to be an adjunct to the health care delivery system. The WIC program is the only food assistance program administered by State health departments. Over the years, local WIC programs have been encouraged (and in some cases, required) to refer low-income women and children to health care services. Among the types of services to which WIC clients have been historically referred are prenatal care, well baby checks, the Medicaid program, and immunization services.

Data from the WIC program have been linked to data from the Medicaid program in the past. For example, in 1986 the State of Missouri became one of the first States to examine the effect of WIC participation on the Medicaid costs related to the delivery and care of newborns by matching Medicaid claims records with WIC administrative records (Schramm, 1986). In addition, the Missouri WIC Program has continued to use linked WIC, Medicaid, and vital records data to produce annual reports on the status of WIC participants participation in Medicaid, examine prenatal pregnancy outcomes of WIC participants, and examine the extent to which WIC has provided coverage to high-risk infants (Stockbauer, 1996). The linkage of WIC program data with Medicaid and vital records information has proven so valuable to Missouri officials, they continue to link these records to produce annual reports from these linked data. Sample reports provided to HSR by Missouri officials reflecting data analyzed from 1997-2000 are included in Appendix B.

Additional research conducted in 1999 by the North Carolina Department of Health, examined how WIC and Medicaid data could be linked to examine birth outcomes of Medicaid clients on WIC as compared to those not enrolled in WIC (Center for Infomatics and Health Statistics, 1999). In another use of this type of linkage, data have been linked between the WIC program and vital records in Washington State to check for the possibility of dual participation by WIC clients (Bell, et. al. 2001)

A variety of other researchers have used WIC, Medicaid, and vital records data to conduct both state-level research and research in local WIC programs in order to examine outcomes. Researchers have found that by linking WIC records with vital records data, mothers can be linked with their children to examine birth outcomes based on such variables as number of prenatal care visits, demographic data, income data, and pregnancy weight gain. For example, the 1987 national WIC evaluation linked WIC records with birth outcomes in order to determine the impact of WIC participation on birth outcomes (U.S. Department of Agriculture, Food and Nutrition Service, 1987). However, in each case, individual researchers were required to negotiate with individual state programs to access data from these three sources. These researchers were then responsible for linking the files, and creating a usable database. Currently, there is no single representative database that researchers can access to conduct research on WIC outcomes, program participation, and program dynamics using data from these three sources.

Additional research conducted using linked WIC, Medicaid, and vital records data include:

- Utilizing WIC, Medicaid, and vital records data from 1985 to 1997, the Illinois Department of Human Services conducted a study of the effect of multiple program participation on birth outcomes (Durkee, 1999)
- In 2000, the South Carolina Department of Health and Environment conducted a study of immunization coverage using linked WIC, Medicaid, and vital records data (South Carolina Department of Health and Environment, 2000)
- A study published in the March 2002 American Journal of Public Health used linked WIC, Medicaid, and vital records data to examine improved health of children at Medicaid managed care sites with WIC providers on location (Kendal, et.al. 2002)

Because all three files are rich in client-level data, such a database would allow for better descriptions of WIC participants and provide an ongoing capability to evaluate WIC in relation to various prenatal, post-partum, and child health program objectives. By developing and updating a database that is readily available to researchers, USDA can create a data file that can be used to examine client demographic contributions (age of mother, weight gain, use of prenatal care, breastfeeding status, race and ethnicity, etc.) to a number of health outcomes, such as mother's weight gain, birth weight of children, pregnancy complications, APGAR scores, and nutritional risks of the pregnant woman and child. In addition, participation in the Medicaid program will help to examine such issues as access to preventative health services, immunization status, and ongoing utilization of health care services. Further, since nutrition and health services are complementary services that work together to improve health outcomes for infants and children, these linked data will be very useful in better understanding the relationships between maternal and child health and nutrition services, food assistance, and health outcomes.