I. Overview

The purpose of this initiative is to create a national database containing information regarding WIC participant health outcomes and participation in the Medicaid program by encouraging State WIC agencies to link WIC, Medicaid, and vital records data. The initiative proposes to take advantage of advances made by States in conducting and using linked WIC, Medicaid, and vital record data for program planning and evaluation. This initiative is designed to identify potential experts in record linkage, create models by which record linkages can take place, and provide technical assistance and support to interested States to facilitate the process of linking these data sets. The long-term goal is to have in place a nationally representative database of linked WIC, Medicaid, and vital record data that can be accessed by both researchers and program administrators.

This report is a follow-up to Wittenburg, et al. (2001), which included a summary of ten data collection/enhancement initiatives that have the potential to improve the utility and cost-effectiveness of research on federal food assistance and nutrition programs. Economic Research Service (ERS) selected three initiatives from that report for further development. This report, along with Wittenberg, et. al (2002) and Kenyon, et al. (2002), provide a specific implementation plan, including potential costs, benefits, and alternative options, for the three initiatives selected by ERS.

Data currently collected by WIC, Medicaid and vital records would be linked and aggregated to create a nationally representative database containing information on the demographic characteristics, services provided to, and health outcomes of WIC participants. State-level merged data sets of this sort would be combined into a single federal-level database enabling both state program administrators and program researchers to do a much better job of monitoring outcomes for WIC clients, identifying gaps in program participation and services, and helping to better direct resources to improve health outcomes.

USDA places a high priority on well-designed outcome studies for the WIC program, focusing on the program’s health outcomes. In the past, the Food and Nutrition Service (FNS) has funded several important studies using linked WIC and health records at the individual level, and FNS officials continue to regard well-designed outcome studies using this approach as an important evaluation tool. In addition, individual States have increasingly recognized the importance of conducting outcome studies of WIC participants linking WIC data with Medicaid and vital records data, both to identify health outcomes related to WIC participation, and to assess program participation dynamics and targeting of high-risk clients.

In the past, the costs of producing a new record linkage from scratch for each evaluation effort have been substantial. To overcome this shortcoming, this initiative proposes to begin regular and more widespread development of a type of data resource whose value has been well demonstrated. This initiative is consistent with information obtained through key informant interviews with State WIC officials and FNS staff, both
of which indicated that future WIC research will need to focus on developing appropriate outcome measures that describe the effectiveness of WIC program participation.

The initiative proposes to create a nationally representative database composed of WIC client demographic, nutritional risk, birth outcome, and health services data obtained from the States’ WIC program files; vital records data obtained through state birth registries; and data on Medicaid participation accessed through the state’s Medicaid agency. By linking WIC and vital records data, one can establish a database containing pregnancy and birth outcome information not available on the WIC record alone (such as APGAR, complications of delivery, etc). In addition, by linking the WIC record with vital records, the database can then be used to link the mother’s record with the child’s. Because the WIC program enrolls children separately from their mom, this link cannot often be established from the WIC record alone. Linking WIC and vital records data has become easier as State vital records programs begin implementing the new national model birth certificate, which has a field for capturing WIC participation. By adding Medicaid participation to the database, the potential exists to examine both WIC participant access to health care and health status information of children through data obtained from Medicaid services files, such as those contained in the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program.

These data can be used by program administrators at the federal and state level, as well as independent researchers, to examine a number of factors related to program participation and dynamics. For example, the proposed database could be used to examine trends in birth outcomes of WIC mothers, assessments of the impact of WIC participation on Medicaid births, and to identify target populations that are likely to be eligible for WIC services but not being reached by the WIC program.