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December 28, 2007

Governor Blagojevich and Honorable Members of the General Assembly:

I am pleased to announce the release of the updated (January 2008) Perinatal Report in response to Public Act 93-0536. The original "Report to the General Assembly, Public Act 93-0536" was presented to the General Assembly in 2004. The first update to the report was submitted in 2006. All of the reports are available on our Web site at:

<http://www.hfs.illinois.gov/mch/report.html>

Over the past four years, Healthcare and Family Services (HFS) has used the original report as a guide in implementing initiatives aimed at improving birth outcomes in Illinois. Since the original report was issued many new initiatives have been implemented. Other initiatives will be implemented over the next two years.

This report identifies the steps HFS has taken with its partners (other state agencies, advocacy groups, maternal and child health experts, health care providers specializing in maternal and child health, including high-risk obstetricians, family practice providers, pediatricians, nurse midwives, community health centers and others) to address the perinatal health care needs and racial health disparities in Illinois. The report details the progress made on addressing the priority recommendations as outlined in the 2004 report; reviews the available trend data on infant mortality, low birth weight and very low birth weight outcomes; and identifies the progress made to address poor birth outcomes through analysis of trend data. This updated report was completed with significant input from other state agencies involved with maternal and child health.

The information presented in this report shows that we have made progress in a number of areas. We continue to pursue opportunities to improve birth outcomes in Illinois in collaboration with others.

You may request a copy of the updated 2008 report on compact disk by calling HFS' Office of Legislative Affairs at 217-782-1212.

Sincerely,

Barry S. Maram
Director



Report to the General Assembly

January 2008

Public Act 93-0536

State of Illinois
Rod R. Blagojevich, Governor
Illinois Department of Healthcare
and Family Services
201 South Grand Avenue East
Springfield, Illinois 62763-0001

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Executive Summary

Over the past four years, Healthcare and Family Services has used the Report to the General Assembly, Public Act 93-0536, initially issued in 2004, as a guide in implementing initiatives aimed at improving birth outcomes in Illinois. Since the original report was issued, many new initiatives have been implemented and Illinois has seen some improvement in outcomes. Other initiatives will be implemented over the next two years. The status of the priority recommendations from the initial report are summarized below.

Planned Pregnancies

- Two amendments to expand the *Illinois Healthy Women* (IHW) family planning waiver have been approved by the Centers for Medicare and Medicaid Services and have been implemented.
- FamilyCare has been expanded incrementally to 185 percent of federal poverty on January 1, 2006, and most recently, in December 2007, to 400 percent of poverty.
- A new care management model, “Interconceptional Care,” which targets women who have experienced a fetal or neonatal loss, or had a premature or low birth weight infant, is being piloted in the Austin and North Lawndale communities in Chicago. These two communities are high risk for poor birth outcomes.
- Interconception care guidelines consistent with the Centers for Disease Control and Prevention’s guidelines are being developed for release in early 2008, which will promote increased pregnancy spacing and address chronic conditions to optimize the women’s healthy birth, if and when she wishes to again become pregnant.
- HFS began reimbursing for adult preventive visits in July 2007. Preconception care risk assessment is being tested by selected providers before being evaluated. If the evaluation shows positive results, it will be implemented in 2008, in conjunction with HFS’ planned reimbursement for a preconception visit.
- HFS implemented a Primary Care Case Management (PCCM) program during 2006 and 2007. The PCCM program ensures that participants have a “medical home” and receive comprehensive preventive and primary care services, with direct access to HFS providers for family planning and obstetrical care.

Mental Health During the Perinatal Period

- A statewide Perinatal Depression Consultation Service has been operating since December 2004. The Consultation Service provides access to psychiatrists for consultation and technical assistance to physicians serving HFS-enrolled women on screening, assessment and treatment of perinatal depression.
- HFS reimbursement for perinatal depression screening of HFS-enrolled women has been in place since December 2004, for prenatal screening up to one year after birth.
- Local health departments and many other providers have been trained on how to use the perinatal depression screening tool. Training continues on perinatal depression screening, assessment, treatment and referral resources.
- A client brochure was developed and distributed to raise awareness of perinatal depression. The brochure remains on the HFS Web site and a client notice will be developed and sent during 2008.
- The HFS Web site includes treatment and referral resources for clients and providers.
- The State’s toll-free hotlines have been provided with information on perinatal depression, including referral resources.

- A Perinatal Depression Coordination project is in place with the objective of coordinating perinatal depression services statewide.
- HFS, with grant funds from Michael Reese Health Trust, is funding the operation of a statewide 24-hour crisis hotline for HFS-enrolled women experiencing perinatal depression. This effort helps to assure that HFS women experiencing perinatal depression are appropriately referred.
- HFS is working to develop and maintain statewide viable treatment and referral resources for HFS-enrolled women experiencing perinatal depression.
- Public Act 95-0469, the Perinatal Mental Health Disorders Prevention and Treatment Act, becomes effective January 1, 2008. The purpose of the Act is to increase awareness and to promote early detection and treatment of perinatal depression. The Departments of Human Services, Healthcare and Family Services, Public Health, Financial and Professional Regulation and the Medical Licensing Board are working together to develop policy, procedures and educational materials to assist providers in meeting requirements.

Smoking Cessation

- HFS has partnered with the Illinois Department of Public Health's (IDPH) Illinois Tobacco Quitline to provide counseling, support and motivational materials to pregnant women (and others) who are interested in quitting smoking.
- In February 2005, HFS enlisted the help of the Illinois Department of Human Services (IDHS) and its contracted Family Case Management (FCM) and Special Supplemental Nutrition for Women Infants and Children (WIC) agencies to encourage HFS-enrolled pregnant women to quit smoking.
- In October 2005, a client notice was mailed to all individuals enrolled in HFS' medical programs providing information about the Illinois Tobacco Quitline and encouraging smokers to quit. Another client notice is scheduled for mailing in February 2008.
- In December 2005, a provider notice was mailed to all enrolled HFS providers informing them about the Illinois Tobacco Quitline and providing a fax referral form for providers to refer patients to the Illinois Tobacco Quitline, providing information on pharmacological products to aid in smoking cessation, and encouraging providers to screen HFS-enrolled patients for smoking and encourage them to quit. Another provider notice is being developed for mailing in 2008.
- HFS is working in partnership with the Illinois Tobacco Quitline and the IDPH to develop smoking cessation resources for the HFS Web site and to develop and implement additional activities that result in screening, counseling and referral to the Illinois Tobacco Quitline.
- HFS, through the Illinois Maternal and Child Health Coalition, with Michael Reese Health Trust Grant funds, is providing training to Federally Qualified Health Centers and case managers in certain high risk communities in Chicago on smoking cessation risk assessment, counseling and referral to the Illinois Tobacco Quitline for ongoing follow-up. In addition, the Illinois Maternal and Child Health Coalition will train outreach workers to be peer smoking cessation counselors for HFS-enrolled smokers in these communities to provide ongoing technical assistance, training and guidance.

HIV Counseling

- HIV testing and counseling is covered by HFS.
- Pregnant women who test positive for HIV are routinely referred to one of the high-risk prenatal case management programs.
- Provider information and resources on perinatal HIV are available on HFS' Web site.

- A provider notice regarding perinatal HIV testing and counseling was mailed to HFS providers in August 2006 to inform providers about reimbursement for rapid testing, encourage providers to perform HIV testing and counseling and to document results, and encourage providers to make results available to the labor and delivery hospital. A subsequent notice was mailed in December 2006 that replaced the original notice and provided additional information as a result of a 2006 amendment to the Illinois Perinatal Prevention Act to further reduce the risk of transmitting HIV to infants. Another provider notice will be sent to providers in 2008 to remind them of the requirements of PA 95-007. PA 95-007, effective July 1, 2008, expands voluntary HIV testing and preserves patient rights.

Nurse Midwifery

Certified Nurse Midwives are one of the four advance practice nurse (APN) specialties recognized under HFS' medical programs, which were previously eligible for reimbursement at 70 percent of the physician rate. Effective January 1, 2006, APNs (except psychiatric APNs) are reimbursed at 100 percent of the physician rate and are eligible to receive the enhanced rate for MCH services. This policy change has resulted in increased access to health care services statewide. In addition, approved APNs are available for selection in HFS' PCCM program as a medical home. Other APNs provide services in collaboration with the Primary Care Physician (PCP). As of December 2007, there are 2,198 APNs enrolled throughout the State to serve HFS participants.

Lactation Counseling

- A client notice was mailed in February 2006, to inform women of the benefits of breastfeeding, breastfeeding education, counseling and support services available from WIC, the availability of breast pumps, and a toll-free hotline number for peer-to-peer breastfeeding support and counseling. Another notice is planned to be mailed in 2008.
- An informational provider notice was mailed in December 2005, to encourage providers to promote breastfeeding, including information on benefits of breastfeeding, discussion points, information on HFS reimbursement for breast pumps, services provided by WIC and a hotline number for peer counseling and advice.

Case Management

- Additional Targeted Intensive Prenatal Case Management sites have been funded and existing sites have been expanded based on data generated by this report.
- HFS and IDHS are partnering with private funders and are currently operating a pilot in certain Chicago communities to test a more intensive, performance-based outreach and case finding approach for hard-to-reach women to assure compliance with prenatal care. Risk appropriate services are provided based on an assessment of needs and barriers removed, to the extent feasible.

Data Highlights

- HFS provides coverage for 51 percent of Illinois' births and 95 percent of all teen births (2005).
- Unintended pregnancies continue to be a problem for low-income women, with an estimated 58 percent of HFS births unintended (2005). However, this is a decrease from 66 percent in 2003.
- Births paid for by HFS have increased by 28 percent, from 2000 to 2006.

- The racial and ethnic distribution of HFS births is changing, with a decrease in African American births (29 percent to 26 percent), and a slight increase in Caucasian births (32 percent to 33 percent) between 2000 and 2006.
- Sixty-three percent of births paid for by HFS were subsequent births (2nd or higher) in 2005 and 17 percent had an interpregnancy interval of less than 18 months.
- The percentage of women receiving less than 21 percent of recommended prenatal care services decreased between 2004 and 2006 from 28 percent to 11 percent. The percentage of pregnant HFS women receiving more than 81 percent of recommended prenatal care visits has significantly improved between 2004 and 2006, from 24 percent to almost 52 percent.
- Timeliness of prenatal care for HFS-enrolled women is improving, with an increase from 76 percent to 78 percent in women receiving prenatal care in the first trimester from 2004 to 2005; a slight decrease in the percent of HFS-enrolled women receiving no prenatal care from 2000 to 2004; and an increase in women receiving 14 or more prenatal services.
- There has been an increase in the percentage of HFS-enrolled women receiving postpartum care from 2000 to 2006, with the largest increase in the age groups of 31-35 and 35 and over, with 7 percent and 8 percent increases, respectively.
- The infant mortality rate for HFS-enrolled infants dropped significantly between 2000 and 2004, from 9.3 to 6.9.
- HFS-enrolled women who receive WIC and FCM services have better birth outcomes (VLBW, LBW and infant mortality), than women who do not receive the intervention of WIC and FCM services, according to analysis performed by IDHS.
- Preliminary data for the HFS family planning waiver (*Illinois Healthy Women*) during waiver years 1 and 2 indicate a significant reduction in fertility rates among those women utilizing family planning services through the waiver, therefore, impacting the reduction in unintended pregnancies.
- Over 78 percent of women eligible for HFS' medical programs enter prenatal care in the first trimester. This is up from 73 percent in 2001.

Introduction

The Illinois Department of Healthcare and Family Services (HFS) is the largest insurer in Illinois, providing health insurance for over two million Illinoisans through Medicaid, the State Children's Health Insurance Program (SCHIP) and state-funded health care programs. The HFS medical assistance program, established in 1965 under Title XIX of the Social Security Act, provides health and long term care coverage to low-income families, the aged, blind and disabled and pregnant women. The SCHIP program, Title XXI of the Social Security Act, is a children's health insurance program that provides health insurance for children, up to age 19, who are not already insured. SCHIP is a state administered program and each state sets its own guidelines regarding eligibility and services. Illinois employs a "Medicaid look-alike program" for its SCHIP benefit package. It is almost identical to the comprehensive benefit package provided to children under Title XIX, Medicaid. Additionally, under Governor Blagojevich's administration, children's health care programs, now known as All Kids, have been significantly expanded to provide affordable health insurance to all of Illinois uninsured children, regardless of family income. In Illinois, SCHIP and state-only funds have also been used to expand access to working parents. In December 2007, Governor Blagojevich raised the FamilyCare program to provide affordable health insurance to parents and caretaker relatives with family income up to 400 percent of poverty.

HFS is the single state agency responsible for the administration of Title XIX and Title XXI of the Social Security Act and the state-funded programs, including portions of All Kids and FamilyCare that are state-only supported. In calendar year 2005, HFS covered 51 percent of the State's births and 95 percent of the teen births¹.

Governor Rod R. Blagojevich's administration has focused on giving Illinois families the tools to prosper - building the economy, expanding health care and improving the quality of life. With health care as a priority of his administration, the number of Illinoisans who are enrolled in government health plans has nearly doubled, growing by almost 730,000 persons, to a total of approximately 2.4 million Illinoisans having coverage in December 2007, as compared to December 2002. This accounts for health care coverage for nearly 400,000 more children, 250,000 more parents and 80,000 more seniors and others. Approximately 85 percent of the parents are women: 48 percent are ages 15-44, and 38 percent are ages 19-44.

Reducing infant mortality (death during the first year of life), low birth weight (infants born less than 2500 grams), and very low birth weight (infants born less than 1500 grams) are health priorities in the United States, as well as in Illinois. Progress has been made in health care and medical technology that has contributed to steady overall declines in infant mortality in the United States.^{2, 3} The proportion of mothers getting early prenatal care is at

¹ Department of Human Services, Birth File Match, 2005

² 2002 data from the Centers for Disease Control National Center for Health Statistics show the first rise in the overall infant mortality rate in the United States in the last 45 years (from 6.8 to 7.0 infant deaths per 1,000 live births)

³ 2004 data from the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Vital Statistics Reports, "Infant Mortality Statistics from the 2004 Period Linked Birth/Infant Death Data Set, Volume 55, Number 14, Revised as of June 13, 2007, shows that in 2004, infant mortality was at the lowest rate ever reported (6.78), slightly lower than the 2003 rate (6.84)

a record high. However, even with this being a priority, in 2000, the United States was ranked 27th out of 28 leading industrialized nations in terms of infant mortality.⁴

In the United States, perinatal health disparities persist and are widening for African Americans.⁵ The infant mortality rate among African American children is more than double that for white children (13.25 for African American children compared to 5.66 for white children). African American infants also have the highest preterm birth rates (17.8 percent compared to 11.6 percent for whites), are more likely than all other racial and ethnic groups in the U.S. to be born low birth weight (13.7 percent compared to 7.1 percent for white neonates), and three times as likely to be born at very low birth weight compared to white neonates – conditions that place them at higher risk for multiple health problems, disability and death. As a result, prematurity and low birth weight are the leading causes of death among African American infants, occurring at almost four times the rate of whites. Pre-term related infant deaths were 3.5 times higher for African American (6.29) than for white mothers (1.82). The rate of low birth weight related deaths was almost 4 times higher for African American mothers than for white mothers.⁶ While maternal mortality rates have decreased dramatically over the past several decades, the rate has not declined significantly since 1982. The maternal death rate is more than four times higher among African American women compared to white women, and is often preventable.^{7, 8} Illinois mirrors the nation with its experience in perinatal disparities among African Americans. In Illinois, the infant mortality rate among African American children is more than double that for white children (15.4 for African American children compared to 5.7 for white children). The maternal death rate is more than five times higher among African American women in Illinois compared to Caucasian women (2.29 for African American women compared to .43 for Caucasian women).

This report will identify the steps HFS has taken with its partners (other State agencies, advocate groups, maternal and child health experts, local funding resources and others) to address the perinatal health care needs and racial health disparities in Illinois; detail the progress made on addressing the priority recommendations as outlined in the 2004 Report to the General Assembly as a result of Public Act 93-0536; review the available trend data on infant mortality, low birth weight and very low birth weight outcomes; and identify the progress made to address poor birth outcomes through analysis of trend data.

⁴ U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *Child Health USA 2004*. Rockville, Maryland: U. S. Department of Health and Human Services, 2004.

⁵ Association of Maternal and Child Health Programs, Building State Partnerships to Improve Birth Outcomes, January 2005

⁶ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention National Vital Statistics Reports, “Infant Mortality Statistics from the 2004 Period Linked Birth/Infant Death Data Set”, Volume 55, Number 14, Revised as of June 13, 2007.

⁷ U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *Child Health USA 2004*. Rockville, Maryland: U. S. Department of Health and Human Services, 2004.

⁸ U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Child Health and Human Development, “Health Disparities – Bridging the Gap,” September 2000

Legislative Mandate

Public Act 93-0536 (305 ILCS 5/5 – 5.23) was passed with the goal of improving birth outcomes for over 80,000 babies whose births are covered by HFS every year. The law states that HFS may provide reimbursement for all prenatal and perinatal health care services that are provided for the purpose of preventing low birth weight infants, reducing the need for neonatal intensive care hospital services and promoting perinatal health. Additionally, HFS was required to develop a plan for prenatal and perinatal health care for presentation to the General Assembly by January 1, 2004. HFS is required to report to the General Assembly on or before January 1, 2006, and every 2 years thereafter, on the effectiveness of prenatal and perinatal health care services.

As required, this document is presented to the General Assembly in compliance with Public Act 93-0536 (305 ILCS 5/5 – 5/23) to report on the effectiveness of prenatal and perinatal health care services reimbursed by HFS in improving birth outcomes. This document, as well as the two previous reports from 2004 and 2006, are available on the HFS Web site at: < http://www.hfs.illinois.gov/assets/041504pa93_0536.pdf >.

HFS' Implementation of the Legislative Charge

HFS developed a strategic planning process to identify and develop strategies to promote “healthy births,” based on data analysis and review of evidence-based practices. HFS performed extensive work through the HFS Perinatal Health Care Task Force to analyze opportunities to improve birth outcomes. Extensive literature reviews in areas believed to impact birth outcomes were performed. National and State birth outcome and health indices data, including HFS-specific data (eligibility and paid claims) were analyzed. “Best practice strategies” for promoting a “healthy birth” were investigated. Medicaid agencies in other States were contacted for information about their initiatives, costs savings and improved health outcomes.

As previously reported, from the extensive reviews, expertise and vast experience of the participants, the task force made a variety of recommendations and also identified several interventions that showed promise in reducing poor birth outcomes. In some instances, there was a preponderance of evidence suggesting efficacy of these interventions. However, in many cases caveats were also present or there was a need to test the interventions in a setting similar to the medical settings utilized by HFS beneficiaries. Therefore, the development of research pilots to test some of the interventions with the most promise was deemed to be appropriate. Priority recommendations were established to improve birth outcomes.

This 2008 follow-up report outlines the progress made with implementation of the priority recommendations and discusses further plans and continued efforts to improve birth outcomes.

Planned Pregnancies

2004 Recommendations:

- Provide coverage for family planning to the Title XXI 19-year old population who are leaving the program due to age or female parents/relative caretakers under Illinois Family Care who no longer meet the income requirements for that program (high priority) **COMPLETED**
- Include folic acid and vitamin supplementation in the package of covered services under *Illinois Healthy Women* (high priority) **COMPLETED**
- Expand coverage under the *Illinois Healthy Women* program to women who would otherwise be eligible for HFS maternity coverage if pregnant, and whose income is below 200 percent of the federal poverty level, irrespective of whether they were previously enrolled in HFS or SCHIP (high priority) **COMPLETED**
- Add coverage for a preconception visit and interconception care (between pregnancies) to address health issues and plan a healthy birth (high priority) **IN PROGRESS**

Current Status:

On March 27, 2006, HFS received approval from the Centers for Medicare & Medicaid Services (CMS) to expand the *Illinois Healthy Women* (IHW) family planning waiver coverage to women leaving the State's Title XXI program, All Kids, and women who are losing eligibility from the State's Section 1115 Health Insurance Flexibility and Accountability (HIFA) demonstration, Family Care, with incomes up to 200 percent of the Federal Poverty Level (poverty). In addition, HFS was granted approval to include additional service codes for HIV and sexually transmitted infections (STI) testing for participants in the waiver. This expansion to the existing waiver was implemented April 1, 2006.

The amendment also requested approval to include coverage for multivitamins and folic acid. Folic acid is a B vitamin that has been shown to prevent neural tube defects. Folic acid is only beneficial in preventing birth defects if taken before pregnancy and during the first few weeks following conception. This request was denied by the Centers for Medicare and Medicaid Services. However, HFS decided to provide coverage under the waiver with state-only funds since providing coverage for multivitamins and folic acid would reach a significant number of high-risk women, is in concert with the preventive nature of the waiver, and will potentially reduce the long term cost associated with birth defects as further detailed below.

A second amendment was submitted to CMS on July 13, 2005, to expand coverage to uninsured women with incomes up to 200 percent of poverty, ages 19 through 44, and who are not otherwise eligible for other HFS programs. These women will be determined eligible through an application process. This amendment was approved on December 21, 2006, and implemented in May 2007. An easy to complete application is available for downloading at the point of service from IHW Web site at <www.illinoishealthywomen.com>. We also plan to develop a web-based application, similar to the current All Kids/FamilyCare web-based application. Women may now enroll in the IHW program two ways: 1) through an automatic enrollment process, as originally approved by the Centers for Medicare and Medicaid Services, and 2) through an application process.

Extensive outreach efforts to announce the IHW waiver expansion were conducted to increase awareness and improve access to family planning services. A press event was held, statewide training sessions to providers were provided, and large mailings of promotional and education material were sent to clinics, providers, referral and resource agencies, local health departments, Illinois colleges and universities and advocate agencies announcing the program expansion.

Since the inception of the U.S. folic acid fortification program in 1992, the number of babies born with neural tube defects decreased significantly from 4,000 in 1995-1996 to 3,000 in 1999-2000. It is estimated that there are currently about 2,200 babies born with neural tube defects each year in the U.S.⁹ The average lifetime cost of caring for a child born with spina bifida is about \$636,000 per child, with some cases exceeding \$1,000,000. In addition to the high cost of health care, the physical and emotional tolls on families are high. Research suggests that folic acid may also prevent other birth defects, such as cleft lip and palate and

⁹ Centers for Disease Control and Prevention, "Spina Bifida and Anencephaly Before and After Folic Acid Mandate – United States, 1995-1996 and 1999-2000, Morbidity and Mortality Weekly Report, 53(17); 362-365, May 7, 2004.

some heart defects.¹⁰ Fifty to seventy percent of these birth defects are preventable with adequate intake of folic acid **before** and during pregnancy.¹¹ The cost of multivitamins and folic acid are insignificant compared to the tremendous costs associated with caring for individuals with neural tube defects.

HFS has expanded health care coverage to low-income populations: FamilyCare, which provides comprehensive coverage including family planning services, expanded from 49 percent of poverty to 90 percent of poverty in July 2003; expanded to 133 percent of poverty in September 2004; and expanded again to 185 percent of poverty in January 2006. In December 2007, FamilyCare expanded to uninsured parents and caretaker relatives, with incomes up to 400 percent of poverty. This means that more women will have comprehensive health insurance coverage.

According to the Association of State and Territorial Health Officials in its report on State Policy to Improve Birth Outcomes: “Access to health insurance coverage is a critical component of assuring healthy birth outcomes for women and infants. A lack of health insurance often means late or no entry into prenatal care for women, which can lead to a host of pregnancy complications and delayed diagnosis of treatable conditions. Specifically, uninsured pregnant women are less likely to initiate prenatal care in their first trimester and are more likely to report receiving less than 80 percent of the number of recommended prenatal visits than insured women.”¹² A 2007 study by Rosenenberg, et al., suggests that pre-pregnancy Medicaid coverage is associated with early entry into prenatal care. Results reveal that 70 percent of women with Medicaid at the onset of pregnancy enter prenatal care during the first trimester of pregnancy compared to only 47.3 percent of those who are eligible but without insurance at the onset of pregnancy.¹³

HFS has conducted research relative to preconception coverage throughout the country. Materials on preconception care from thirteen states have been extensively reviewed. A panel of perinatal experts was convened to further recommend components necessary to address preconception care. The panel recommended that the content of a preconception visit and risk assessment be in accordance with the American College of Obstetricians and Gynecologists’ (ACOG) “Guidelines for Perinatal Care.” Preconception care allows for the identification of conditions that could affect a future pregnancy or fetus and that may be amenable to intervention.¹⁴ It includes a wide range of screening; assessments, including risk assessment; and counseling and educational interventions to assure better birth outcomes.

HFS partnered with the State’s Title X Family Planning Program administered by the IDHS to develop a risk assessment tool for preconception care for women contemplating

¹⁰ Centers for Disease Control and Prevention, Folic Acid,.: Frequently Asked Questions. Updated 11/16/05. <http://www.cdc.gov/ncbddd/folicacid/faqs.htm>

¹¹ Centers for Disease Control and Prevention, Folic Acid,.: Frequently Asked Questions. Updated 11/16/05. <http://www.cdc.gov/ncbddd/folicacid/faqs.htm>

¹² Association of State and Territorial Health Officials, Issue Report, State Policy to Improve Birth Outcomes, October 2003

¹³Rosenberg, D, et al. Prenatal Care Initiation Among Very Low-Income Women in the Aftermath of Welfare Reform: Does Pre-Pregnancy Medicaid Coverage Make a Difference? *Maternal and Child Health Journal*, 11(1): 11-17,2007

¹⁴American College of Obstetricians and Gynecologists and American Academy of Pediatrics, “Guidelines for Perinatal Care”, 2002

pregnancy. The evaluation of medical conditions that may affect or be affected by pregnancy should be considered. Education and anticipatory guidance will be provided as part of the risk assessment. Lifestyle or social behaviors such as use of tobacco and alcohol or other substance abuse, which will adversely affect the pregnancy, can be evaluated and recommendations made or treatment initiated prior to attempting pregnancy. In January 2007, HFS received a grant from the Michael Reese Health Trust (MRHT) to pilot strategies designed to improve maternal and child health outcomes. HFS is using a portion of these funds to test a preconception care screening tool. In June 2007, HFS secured an Interagency Agreement with IDHS to contract with six IDHS-funded agencies in Chicago and the surrounding area to test the preconception care screening tool and provide feedback on the efficacy and relevance in identifying risks and thus, directing appropriate follow up or referral. Upon completion of the pilot project, HFS expects to provide reimbursement to providers for preconception/interconception risk assessment.

HFS is working in partnership with IDHS and private funders¹⁵ to test an interconceptional care model, Healthy Births for Healthy Communities (HBHC), in the North Lawndale and Austin communities in Chicago. The goal of the HBHC initiative is to improve birth outcomes. Approximately 63 percent of HFS births in Illinois are subsequent (second or higher) births, with 17 percent having intervals of less than 18 months between births.¹⁶ This means that the mothers were most likely previously known to HFS, and thus their health problems were known. This data illustrates why it is so important for women in the target communities to plan their pregnancies. Lengthening the time between pregnancies allows a woman's body to recover from the previous pregnancy and permits her to address health and social risks before another pregnancy occurs. Often, when a woman experiences a fetal or infant death, she loses eligibility for continuing medical and case management services because she does not have a child. In other instances where a woman's eligibility may continue because she does have other children, she still may not access health care services. Such women often next present to the health care system when subsequently pregnant. Those women who have had a poor birth outcome are at significantly higher risk with respect to subsequent pregnancies. However, because such women are in fact known to the HFS health care system, there are opportunities for intervention and risk reduction during the interconceptional period in part, by using data sets to drive interventions.

Of the women who delivered in calendar year 2005, 47.2 percent were eligible at least one year prior to delivery. This indicates that these women are known to HFS prior to the pregnancy, and with appropriate interventions, as would be provided with preconception/interconception care, the number of non-normal births may be reduced. HFS is in the process of analyzing data to assess conditions prior to pregnancy; however, it is incomplete without the vital records information related to HFS births. HFS has executed a data sharing agreement with IDPH and IDHS, and is awaiting these files from IDPH.

HBHC targets women with a previous fetal or neonatal death or a low birth weight and/or premature baby. Interventions are being provided based on recommendations of the March of Dimes, the American Academy of Obstetricians and Gynecologists and preconceptional/interconceptional care research and literature. These interventions and other health promotion strategies are designed to help reduce the risk of future adverse

¹⁵ Private funders contributing to the Healthy Births for Healthy Communities initiative are the Steans Family Foundation, the Harris Foundation, the Illinois Children's Healthcare Foundation and the Michael Reese Health Trust.

¹⁶ Illinois Department of Human Services, Birth File Match, 2005

pregnancy outcomes. The model assures that women have a medical home, provides family planning services, promotes birth spacing of 18-24 months, and focuses on management of chronic disease or conditions adversely impacting on health, including educating women on healthy lifestyle practices and counseling on risk-taking behaviors.

HFS receives grant funds from the private funders and passes them to the IDHS through an Interagency Grant Agreement. IDHS contracts with PCC Community Wellness and Access Community Health Network for interconceptional care services. HFS has a separate Interagency Grant Agreement with the University of Illinois at Chicago (UIC) to evaluate the interconceptional care initiative to determine if the interventions are effective in reducing poor birth outcomes in the two communities. HFS claims federal match on the expenditures, as appropriate, and the resulting match is included in the project funding, as allowed for the efficient management of the Medicaid program.

In October 2007, UIC made a presentation at the 2nd Annual Preconception Conference held in Oakland, California on the HBHC interconceptional care model. HFS also participated on a panel discussion on “Using Medicaid to Improve Preconception Care”. HFS’ presentation focused on creative strategies and policy changes that HFS has or will employ to promote interconceptional/preconception care and thereby contribute to improved health and birth outcomes of HFS participants.

Illinois has implemented a statewide Primary Care Case Management (PCCM) program to ensure that participants (including adults) have a “medical home” and receive comprehensive preventive and primary care services. The PCCM program holds providers accountable for quality care and improving health outcomes. Adult preventive care is a covered service, promoting preconception/interconception care.

Update on Illinois Healthy Women:

The IHW family planning program began operation in April 2004, with the goal of offering family planning services to over 96,000 women during the first year of the five (5) year federal waiver. This program provides family planning services to women who lose eligibility for HFS’ medical programs and other eligible women who enroll through an application process, ensuring access to services that allow women to make personal choices about the number and spacing of their pregnancies.

The IHW program is currently in its fourth year of operation. Since the program’s start in April 1, 2004, the following represents the program’s volume through November 30, 2007:

Through the automatic enrollment process (began April 2004):

- 330,338 women were sent a 3-month IHW card, with approximately 8 to 10 percent of the cards being undeliverable.
- 75,039 women have enrolled for an additional 9 months of coverage
- 27,395 women have enrolled for a 2nd year of IHW coverage
- 4,708 women have enrolled for a 3rd year of IHW coverage
- 1,383 women have enrolled for a 4th year of IHW coverage
- 21 women have enrolled for a 5th year of IHW coverage
- 44,678 women served throughout the waiver period
- 42,288 women are currently covered under the waiver

Through the application enrollment process (began May 2007):

- 3,455 women have submitted an IHW application
- 553 women have received services claimed and paid by HFS
- HFS is conducting an evaluation to assess the impact that expanding eligibility for family planning services has on increasing usage of family planning services and thus reduce State costs by decreasing the number of unplanned pregnancies and increasing the birth spacing interval. Preliminary data for waiver years 1 and 2 indicate a significant reduction in fertility rates among those women utilizing family planning services through the waiver, therefore, impacting the reduction in unintended pregnancies. The preliminary data shows that the fertility rate for waiver participants is 1.2 percent for waiver year 1, and 1.4 percent for waiver year 2, as compared to the overall HFS population of 22 percent in 2002.
- HFS has executed an Interagency Agreement with UIC to evaluate the effectiveness of the waiver in: 1) reducing unplanned pregnancies; 2) expanding access to and utilization of birth control services by low-income women; 3) reducing the fertility rate of low-income women; and 4) increasing the interpregnancy spacing intervals for HFS-enrolled women.

Mental Health During the Perinatal Period

2004 Recommendations:

- Create a statewide Perinatal Mental Health Consultation Service for providers that includes a university-based Perinatal Mental Health Consultation Team charged with developing a model program template for addressing the specific needs of HFS-enrolled women of reproductive age, providing assistance to prenatal and primary care providers to help the clinics adapt and implement the model at their sites, and maintaining an ongoing telephone, fax or e-mail consultation service for HFS primary care providers (high priority) **COMPLETED**
- Allow HFS reimbursement for screening for depression, such as for the Edinburgh Postnatal Depression Scale during the prenatal and postpartum period (high priority) **COMPLETED**
- Provide information and training to HFS providers on how to use the depression screening tool (medium priority) **IN PROGRESS**
- Identify a mechanism to provide mental health screening and treatment to women beyond the current 60 days postpartum eligibility period and work with other agencies, (e.g., Illinois Department of Human Services, Division of Mental Health) to provide mental health services to these women (requires further study) **NOT YET INITIATED**

Current Status:

Governor Rod R. Blagojevich and the Conference of Women Legislators (COWL) in the Illinois General Assembly organized a Perinatal Depression Initiative in 2004. The initiative included efforts to increase awareness and assure women receive the services they need. The efforts in Illinois included the implementation of a Peripartum Depression Awareness Campaign, and:

- HFS reimbursement for screening for perinatal depression
- The establishment of a Peripartum Mental Health Consultation Service to raise awareness about peripartum depression, train HFS-enrolled primary care providers, help them establish screening programs and provide ongoing expert assistance in managing women who are experiencing peripartum depression
- Distribution of a client brochure directed at women experiencing peripartum depression and others to raise awareness
- Increasing awareness of the availability of perinatal depression crisis intervention hotlines, such as the one operated by Evanston Northwestern Healthcare and the Postpartum Depression Illinois Alliance
- Training of local public health departments to screen for peripartum depression. These local health departments are required to identify community resources appropriate for referral and follow-up
- Providing the State's toll-free hotlines with information on referral resources for women's health care, including mental health issues, such as peripartum depression. Customer information lines to assist callers exist at HFS, IDPH and IDHS
- Providing information on HFS' Web site including treatment and referral resources, links for providers and customers; educational materials; HFS billing and reimbursement instruction; and the client brochure available for downloading and printing
- Community mental health providers throughout the State will have the opportunity to attend regional training sessions through mid-2008. In addition, training has been arranged for federally qualified health centers and is offered on an ongoing basis for private providers through the UIC and the Enhancing Developmentally Oriented Primary Care (EDOPC) project, which includes the Illinois Chapter of the American Academy of Pediatrics and the Illinois Academy of Family Physicians.

UIC's Peripartum Mental Health Consultation Service and the Evanston Northwestern Healthcare Perinatal Depression Program are currently operating in part with grant funding awarded to HFS from the Michael Reese Health Trust to address perinatal depression so as to improve birth outcomes. An evaluation of the effectiveness of the strategy is planned. Using paid claims data, HFS will evaluate if there is an increase in the percentage of women being screened, diagnosed and treated for perinatal depression. Trend data is being analyzed over a number of fiscal years to further assess the impact. Between 2004 and 2006, the number of unique peripartum (pregnant and postpartum) women being screened for perinatal depression has more than doubled. The number of screenings increased from 14,091 in 2004, to 40,040 in 2006.

Through an Interagency Agreement with HFS, the University of Illinois at Chicago trains HFS-enrolled medical providers to identify, assess, treat and refer for perinatal depression. HFS also assists in funding the Consultation Service, which provides free psychiatrist to physician consultation on treating perinatal depression. As of September 2007, the UIC Peripartum Mental Health Consultation Service has trained more than 3,700 providers at workshops and presentations. The participants included: family medicine physicians (12.7 percent), obstetrician/gynecologists (10.6 percent), pediatricians (8.4 percent), nurses (40.8 percent) and other (27.5 percent). Evaluation of the effectiveness of the workshops shows a significant increase in provider knowledge of antenatal risks, screening tools, FDA categories and medication information. In addition, HFS has identified high-volume provider clinics statewide that are not yet billing for depression screening and UIC is targeting those sites for training.

As of September 2007, the UIC Consultation Service has completed about 660 consults since the implementation of the Consultation Service in December 2004. Calls come from primary care physicians (11.3 percent), primary care nurses (40 percent) and mental health professionals (48.3 percent), and others. The questions asked concern medication (43.1 percent), screening/assessment (45.7 percent), requests for tools and resources (10.1 percent), and mother-infant issues (1.1 percent).

UIC continues to establish linkages on a statewide and national basis with other perinatal depression initiatives and serves as a national model providing information and consultation to other states and organizations on perinatal depression through its funding from the Department of Health and Human Services, Health Resources and Services Administration (HRSA). UIC has developed a wealth of educational and training materials for HFS' Web site, including a list of prescription products to treat perinatal depression. The UIC Perinatal Depression Awareness Campaign Web site is available at:

<http://www.psych.uic.edu/research/perinatalmentalhealth>

UIC executed a subcontract with Evanston Northwestern Healthcare (ENH) Perinatal Depression Program to operate a statewide 24-hour hotline for women experiencing perinatal depression and develop reliable perinatal depression referral resources on a statewide basis. Developing the resources is an important first step to assure that treatment will be available for women who call the hotline. To this end, ENH has surveyed over 290 mental health service sites statewide on topics such as basic information about each agency, capacity to be listed as a referral for HFS-enrolled women, barriers identified in treating perinatal mood disorders and possible training interests. ENH developed materials for a follow-up mailing to the mental health service sites that included a letter about the perinatal depression program, the antidepressant medication management chart, UIC training and consultation information, perinatal depression resources, a provider information sheet, English and Spanish flyers for the ENH crisis hotline and a flyer for the EDOPC program. ENH and UIC has been working with IDHS/Division of Mental Health and Developmental Disabilities (DMHDD) to train providers statewide. A series of training sessions started in Fall 2007 and will continue through early Summer 2008. In addition to the mental health service sites, Federally Qualified Health Centers have also been invited to participate in the training. ENH designed a certification program for all providers who complete trainings conducted by UIC. UIC issues certificates and maintains a database documenting the recipients.

In December 2007, ENH and HFS announced the statewide expansion of the crisis hotline. HFS also sent a provider notice on perinatal depression which included information on the new Public Act 95-0469 and the availability of the statewide crisis hotline.

HFS began reimbursement for screening for depression during the prenatal and postpartum period in December 2004. Billed as a "risk assessment", providers may submit a claim to HFS for a screening for depression using an instrument recognized by the industry as valid, reliable and appropriate for the prenatal and post partum period. HFS reimbursement is available for covered pregnant and post partum women, up to a year after the infant's birth. HFS encourages providers to screen pregnant women during the prenatal visit, at the post partum visit, and at the well-child visit or episodic care, for up to a year after the infant's birth.

HFS is involved with several initiatives to improve birth outcomes and assure the healthy mental development of young children. As part of those initiatives, HFS is partnering with provider groups, advocate groups and others to provide information and training to providers on how to use the depression screening tool, and make appropriate referrals. An Informational Notice to participating HFS providers, with the endorsement of American College of Obstetricians and Gynecologists, the Illinois Chapter of the American Academy of Pediatrics, and the Illinois Academy of Family Physicians, was distributed in November 2004, providing information on reimbursement, risk factors, prescription products to treat perinatal depression and instructions on completion of the Edinburgh Postnatal Depression Scale. This information is also available on HFS' Web site. The HFS Web site also contains referral information to assist providers in locating mental health services for patients experiencing perinatal depression.

Professional education with general Continuing Education Units (CEUs) was provided by satellite teleconference through IDHS. The training, "Perinatal Depression: Beyond the Blues", was presented in November 2004 and featured specialists in the field of perinatal depression and provided an overview of the illness; identified individuals most at risk; the signs and symptoms; current medications; available screening tools; and what health care providers can do to help someone experiencing depression.

Local health departments throughout the State have received information through satellite training on use of the Edinburgh Postnatal Depression Scale. In addition, many other physicians and federally qualified health centers have been trained to screen for perinatal depression. The UIC Women's Mental Health Program and other provider organizations will continue to provide training on how to use the depression screening tool on an ongoing basis in 2008. The Illinois Academy of Family Physicians also offers web-based training on perinatal depression with available CEUs. The Illinois Health Connect program also hosted a provider web cast training on perinatal depression with training materials posted to HFS' and the Illinois Health Connect web sites.

With the increase in eligibility for enrollment in the FamilyCare Program, many more mothers will receive ongoing health benefits after 60 days of post partum coverage. However, there will be some women who will not qualify after delivery. HFS implemented policy in December 2004, to allow for screening for maternal depression for up to one year after delivery, during a covered or enrolled infant's well child or episodic care visit. Providing mental health treatment services for the mother who does not qualify for ongoing benefits remains under study. There are efforts within Illinois, such as the Children's Mental Health Partnership, that has been charged with recommending strategies to increase needed mental health resources for children and to increase awareness and response to maternal depression with attention to prevention and early intervention efforts, and necessary follow-up assessment and treatment services. The Children's Mental Health Partnership organized and held a Summit on Maternal Depression on November 13, 2007, to identify the strengths, weaknesses, barriers and opportunities to advancing a coordinated system that responds to the needs of mothers and their children. The summit gathered professionals from the adult mental health system and systems to support healthy child development to provide information and networking opportunities.

Oral Health

2004 Recommendation:

- Expand HFS coverage for prevention and treatment of oral disease in pregnant women, including measures to reduce colonization of *S. mutans* and to control periodontal infections (high priority) **NOT COMPLETED**

Current Status:

HFS studied the feasibility of implementing a pilot project to determine the efficacy of providing preventive periodontal services to pregnant women and its impact on improving birth outcomes. After conducting an extensive literature review and consulting with experts in dentistry, HFS was unable to determine the prevalence of periodontal disease in pregnant women. The only reference to prevalence found is in the article, “Measures for NCS Core Hypotheses.” This article states that there is no true value for the prevalence of periodontal disease in pregnant women as of 2004, but it is presumed to be very low.¹⁷

After carefully considering implementation of the periodontal pilot project, HFS determined that it would have been very difficult to locate sufficient pregnant women with periodontal disease to participate in the study. Dentists would be the likely source of locating and referring pregnant women with periodontal disease to the project. Since HFS does not cover preventive dental care for adults, HFS had no feasible means of identifying appropriate subjects. In order to determine “power” sufficient for a statistically valid study (e.g., size of the intervention and control groups) to determine the effectiveness of the intervention, the current prevalence, as well as the desired or anticipated results from the intervention, must first be determined. Additionally, a federal waiver allowing piloting this project would be required as without one, the State would be required to provide comparable services to all pregnant women. No specific appropriation has been received allowing the expansion of coverage to include periodontal and preventive dental care for pregnant women.

HFS staff continue to research the literature to document periodontal services as an evidence-based strategy that will result in improved birth outcomes. The most recent study published in the *New England Journal of Medicine* in November 2006, concludes that, “Treatment of periodontitis in pregnant women . . . does not significantly alter rates of preterm birth, low birth weight, or fetal growth restriction”¹⁸. Based on this finding, HFS has decided not to implement this recommendation at this time or until evidence is presented to substantiate the efficacy of this coverage.

¹⁷ Reiches, N.; Thomas, A.; Menkedick, J. and Strauss, W. “White Paper on Measures for NCS Core Hypotheses; Commissioned by the National Children’s Study Program Office, National Institute for Child Health and Human Development, 2004.

¹⁸ Michalowicz b, Hodges J, et al. , “Treatment of Periodontal Disease and the Risk of Preterm Birth”, *New England Journal of Medicine*, 355:18, November 2, 2006.

Smoking Cessation

2004 Recommendations:

- Encourage providers to assess smoking status and update smoking status at each visit, providing advice to quit (high priority) **COMPLETED**
- Provide a booklet, which is motivational and includes self-help skills for quitting to providers for distribution (high priority) **COMPLETED**
- Provide reimbursement for a more intensive smoking cessation program that includes one-to-one counseling, telephone support and cessation classes or support groups for pregnant women who smoke (high priority) **IN PROGRESS**
- Provide smoking cessation intervention with women in the public delivery of care system who are not currently pregnant as quitting during pregnancy is often temporary (requires further study) **IN PROGRESS**

Current Status:

HFS has partnered with the IDPH, the IDHS and the American Lung Association to promote the use of the Illinois Tobacco Quitline. The Illinois Tobacco Quitline is supported by Tobacco Settlement Funds and is a help line that offers free, confidential counseling provided to tobacco users through all stages of the quitting process including nutrition and weight management, information about cessation medications and management skills for dealing with withdrawal symptoms. The Illinois Tobacco Quitline is staffed by Addiction Specialists, Respiratory Therapists and Registered Nurses trained at the Mayo Clinic. These specially trained staff can make appointments with callers for follow-up and provide ongoing support through the process of quitting. The Illinois Tobacco Quitline hours are Monday through Friday, from 7 a.m. to 9 p.m., and translation services are available in 150 languages.

All individuals who call the Quitline are counseled and sent a packet of information tailored to each individual circumstance, e.g., teen, pregnant women. Each packet contains educational materials and individuals may choose whether they wish to call the hotline or be called by the Illinois Tobacco Quitline staff for smoking cessation counseling and support services.

Based on a comprehensive literature review, a survey of 22 state Medicaid programs and discussions with local stakeholders, HFS has initiated a smoking cessation awareness campaign targeted to agencies providing Family Case Management (FCM) and WIC services, HFS enrollees and HFS providers.

In February 2005, HFS sent a letter on smoking cessation to all FCM and WIC agencies in collaboration with IDHS and IDPH. The letter includes information on the health risks of smoking, how to use the Five A's smoking cessation program, encourages referral to the Illinois Tobacco Quitline, identifies appropriate motivational/educational materials for use with HFS enrolled women, and informs the agencies of the pharmacological smoking cessation products reimbursed by HFS. It also provides HFS policy clarification for the local health departments in relation to prescribing over-the-counter covered pharmacy products,

allowed with standing medical orders, health department policies and protocols and physician oversight.

In October 2005, HFS sent a client information notice to all enrollees encouraging them to use the Illinois Tobacco Quitline, if they smoke and want to quit. It included information on the dangers of smoking while pregnant, and second hand smoke. It recommended the use of the Illinois Tobacco Quitline for help in quitting. Calls to the Illinois Tobacco Quitline more than doubled during October and November 2005, as a result of this notice, from 25-50 calls a day to over 100 calls a day. Another client notice is planned for February 2008.

An informational notice was sent to HFS providers in December 2005. The provider notice contained information similar to that previously sent to the FCM and WIC agencies. It also included a fax referral form that can be used, with the patient's permission, to refer the patient to the Illinois Tobacco Quitline for services. Another provider notice is planned for 2008.

The Illinois Tobacco Quitline provides a wide array of smoking cessation services, including motivational booklets, education, one-to-one counseling, telephone support and referral to smoking cessation classes or support groups. These services, coupled with HFS' reimbursement of pharmacological smoking cessation products and smoking cessation information to be available on the HFS Web site in the near future, provide a comprehensive package of smoking cessation services to enrollees in HFS' medical programs.

In July 2007, HFS began reimbursing for adult preventive services. HFS is currently researching risk screening tools for smoking and is exploring strategies, including reimbursement, to promote risk assessment and referral.

Perinatal Addiction

2004 Recommendations:

- Provide training for physicians and other health care professionals on the signs, symptoms and screenings for addictions (high priority) **IN PROGRESS**
- Convene a subcommittee on data and evaluation to recommend strategies to improve capturing birth outcomes of addicted women (high priority) **NOT YET INITIATED**
- Include a substance abuse specialist in the Targeted Intensive Prenatal Case Management and Healthy Start programs (high priority) **NOT YET INITIATED**
- Establish a formal network for consultation as needed by primary care providers (high priority) **NOT YET INITIATED**
- Identify existing resources needed to establish a Maternal Child Health team with a substance abuse treatment specialist (requires further study) **NOT YET INITIATED**
- Increase the number of outreach workers and treatment slots for pregnant women (requires further study) **NOT YET INITIATED**

- Fund a smoking cessation specialist position in DASA to review and recommend smoking cessation programs and provide smoking cessation training (requires further study) **NOT YET INITIATED**

Current Status:

IDHS administers services for alcoholism and substance abuse through the Division of Alcoholism and Substance Abuse (DASA). DASA also functions as the federal single state authority for the Substance Abuse Prevention and Treatment Block Grant (SAPT). DASA licenses all non-hospital based treatment and intervention services and purchases services for individuals using federal SAPT block grant, HFS, general revenue and discretionary grant funds. Services include intervention, outpatient, intensive outpatient, residential rehabilitation, residential extended care, recovery home and residential child care for children whose mother or father are in treatment. Pregnant and parenting women are given priority in admission to treatment and services providers are required to make available prenatal care for women in need of such services (directly or through referral agreements). The SAPT block grant mandates that a minimum of \$11,362,643 be spent each year on pregnant and parenting women. In state fiscal year 2007, DASA estimated expenditures for pregnant and parent women and their children at \$65,981,766. In FY’07, 140 children were reported born drug free to women in treatment. This is an increase from 89, in FY’05.

Women Served in DASA Supported Treatment and Recovery Services

FY02	FY03	FY04	FY05	FY06
26,679	31,330	32,300	33,043	32,443

Table 1: Illinois Department of Human Services, Division of Alcoholism and Substance Abuse, FY 2002 – FY 2006

Children born drug free can result in significant savings for the State. According to a 1997 national study on recidivism of participants involved in drug courts, over 300 drug-free babies were born to women participating in drug court programs. The estimated savings attributable to the 300 drug-free babies is a minimum of \$250,000 per child during the first few years of life, and more than \$750,000 by age 18, including costs associated with hospital care, foster care and special education.¹⁹ A study on drug exposed infants in 1998 shows that these infants cost an additional \$7,700 in medical care before leaving the hospital and that women in residential substance abuse treatment had reduced rates of low birth weight, premature delivery and infant mortality rates.²⁰ Another study found that the hospital bills of babies born addicted to cocaine are 10 times higher than those born without cocaine.²¹ Societal costs of drug addicted infants include infants abandoned at birth or placed in foster care, child abuse and neglect and special education. National child welfare spending attributable to substance abuse is estimated to be \$10 billion a year or 70 percent of child welfare spending.²²

¹⁹ American University’s Drug Court Clearinghouse and Technical Assistance Project, sponsored by the Office of Justice Programs, U.S. Department of Justice at: <http://www.ojp.usdoj.gov/ocom/Annual/97annual.txt>

²⁰ Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Substance Abuse Treatment (CSAT) “1993-2000 Residential Treatment Programs for Pregnant and Parenting Women”

²¹ Harwood, H., Fountain, D., Livermore, G., & The Lewin Group. (1998). *The economic costs of alcohol and drug abuse in the United States, 1992*. Washington, DC: U.S. Department of Health and Human Services.

²² National Center on Addiction and Substance Abuse at Columbia University (CASA), No Safe Haven: Children of Substance-Abusing Parents, January 1999.

Even with the funds currently being expended for addiction services, there continue to be gaps in the alcohol and substance abuse service system, including:

- Some services are not available in all areas of the State
- Additional residential services for pregnant women and women with children are needed
- A need for improved and expanded training of health care providers and other professionals regarding the signs and symptoms of substance use and addiction including screening and referral to treatment as appropriate
- Expanded public education, prevention and intervention regarding the potential effects of use of substances while pregnant are needed
- A need for studies to identify outcomes of prevention, intervention and treatment

The effects of prenatal alcohol and drug exposure have been studied since the 1980's. Prenatal alcohol exposure is one of the leading causes of birth defects and developmental disabilities. Every year about 40,000 babies are born in the United States with symptoms of prenatal alcohol exposure. In Illinois, use of alcohol by women of reproductive age is common. Using 2006 data from Behavioral Risk Factor Surveillance System (BRFSS) sponsored by the Centers for Disease Control and Prevention, 52.5 percent of Illinois women drank alcohol in the past month, up from 47.2 percent in 1997.²³ According to data from the Pregnancy Risk Assessment Monitoring System (PRAMS) in 2005, 49 percent of women in Illinois drank alcohol in the three months before they became pregnant; 46.2 percent of women reported this behavior in 1998.²⁴ Symptoms associated with prenatal alcohol exposure vary in severity and may include physical defects, cognitive deficits and behavior problems. Many with prenatal alcohol exposure need special education services and many cannot live independently as adults. Some become involved with criminal activity and are incarcerated. It is estimated 12 percent of the HFS-enrolled population in Illinois may be in need of some type of treatment for alcohol or drug abuse.²⁵ In a study by Harwood and Napolitano,²⁶ estimated lifetime costs for an individual with Fetal Alcohol Syndrome (FAS) were \$596,000. Adjusted for inflation and medical care increases, these costs are estimated in 2002 to be \$2.0 million for services with \$1.6 for medical treatment, special education and residential care and \$0.4 million for lost productivity²⁷ for an individual with FAS. These cost estimates demonstrate the importance of education, prevention, intervention and treatment services.

HFS has received grant funding from the March of Dimes to implement a program to screen pregnant women for behavioral health risks, including perinatal addictions (tobacco, alcohol and illicit drugs). HFS is working closely with the Children's Mental Health Partnership and will work with IDHS/DASA on this initiative. The challenge is to assure that treatment and referral resources are available before starting a screening program to identify individuals with perinatal addictions. Provider education on identification, assessment, treatment and referral of women with perinatal addictions will also be a focus of this initiative.

²³ Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006

²⁴ Illinois Department of Public Health, Pregnancy Risk Assessment Monitoring System, 2005

²⁵ Alcohol, Tobacco, and Other Drug Use by Medicaid Recipients in Illinois: Prevalence and Treatment Need, 1999 Cho et al, Illinois Department of Human Services, Division of Alcoholism and Substance Abuse, Survey Research Laboratory University of Illinois at Chicago

²⁶ The Financial Impact of Fetal Alcohol Syndrome SAMHSA Fetal Alcohol Spectrum Disorders Center for Excellence

²⁷ The Financial Impact of Fetal Alcohol Syndrome SAMHSA Fetal Alcohol Spectrum Disorders Center for Excellence

HIV Counseling

2004 Recommendations:

- Cover HIV counseling and testing under *Illinois Healthy Women* (family planning waiver) (high priority) **COMPLETED**
- Implement strategies (e.g., outreach and case finding of pregnant women) to ensure that pregnant women receive prenatal care and Family Case Management services (high priority) **PILOT COMPLETED**
- Refer pregnant women who are HIV-positive to Targeted Intensive Prenatal Case Management (high priority) **IN PROGRESS**
- Look for ways to assure compliance with the requirement that providers of prenatal health care services routinely provide HIV counseling to all pregnant women; routinely discuss the importance of HIV testing; and routinely offer HIV testing on a voluntary basis, as well as compliance with the requirement that every health care professional or facility that cares for a newborn, upon delivery or within 48 hours after the infant's birth, provide counseling and automatically perform HIV testing when the HIV status of the infant's mother is unknown, if the parent or guardian does not refuse (high priority) **IN PROGRESS**
- Collaborate and work in concert with other State agencies and provider groups to encourage providers to document HIV testing results and ensure that such documentation is available at the labor and delivery hospital (high priority) **IN PROGRESS**
- Educate providers on reimbursement for perinatal rapid testing, allowing payment for this laboratory procedure and office visit, which includes counseling (high priority) **COMPLETED**
- Provide separate HFS reimbursement for HIV counseling as a means to help reduce the transmission of HIV infection (medium priority) **NOT YET INITIATED**

Current Status:

Pregnant women who are positive for the HIV virus are automatically referred to one of the high-risk prenatal case management programs. HFS continues to participate in the Perinatal HIV Committee and with IDHS' Family Case Management initiative.

HIV testing and counseling is covered under all of HFS' medical programs, including *Illinois Healthy Women*. Counseling is included in the office visit and is not separately billable. An informational notice about rapid HIV testing was sent to HFS providers in December 2006. The notice informs providers about the requirements of the Illinois Perinatal Prevention Act of 2003 (PA 93-0566) and the 2006 amendment to the Act (PA 94-0919). The notice encourages HIV testing, documentation of test results in the medical record with provision of test results to the labor and delivery hospital, provides requirements for informed consent and counseling before administering an HIV test, requirements for counseling and testing during labor and delivery, requirements for testing of newborns, information about HFS

reimbursement and phone numbers for Perinatal HIV hotlines. Internet links to the hotlines and rapid HIV testing information are also provided in the notice.

The number of infants infected with HIV dropped dramatically from 2004 to 2006 (from 22 percent to 5 percent of infants exposed to HIV and those infected).

Infants Infected with HIV			
Birth Year	Infants Exposed	Infants Infected	Percent
2000	99	15	15%
2001	104	8	8%
2002	100	5	5%
2003	66	11	17%
2004	49	11	22%
2005	54	2	4%
2006	78	4	5%

Table 2: Illinois Department of Public Health, HIV and Aids Reporting System,2000-2006

In September 2006, the United States Centers for Disease Control and Prevention’s (CDC) released revisions to previously published guidelines on HIV screening. On June 27, 2007, PA 95-0007 was enacted which allows for an expansion of voluntary HIV testing and preserved the patient rights to testing with informed consent. The Act fulfills the CDC’s revised guidelines calling for a more streamlined approach to HIV testing in medical settings. The Act, which is effective July 1, 2008, preserves important patient protections, including testing only with informed consent, critical pre-test information, as well as the right to refuse testing. The bill allows patients to consent to testing either verbally or in writing. Previously, providers could test patients for HIV only with their written consent. HFS plans to send a provider notice to inform HFS providers of these changes before the effective date of July 1, 2008.

Provider-oriented materials on perinatal HIV are available on HFS’ Web site. Information for HFS beneficiaries is being developed.

Nurse Midwifery

2004 Recommendations:

- Increase the use of Certified Nurse Midwives as a cost-effective group of perinatal providers (medium priority) **COMPLETED**
- Base reimbursement rates on the services provided, rather than whether a physician or Certified Nurse Midwives provided the services (medium priority) **COMPLETED**
- Allow Certified Nurse Midwives to have MCH (enhanced rate) status (requires further study) **COMPLETED**

Current Status:

Certified Nurse Midwives are one of the four advance practice nurse (APN) specialties recognized under HFS' medical programs. Prior to January 1, 2006, APNs were eligible for reimbursement at 70 percent of the physician rate. Since January 1, 2006, all APNs (except psychiatric APNs) are reimbursed at 100 percent of the physician rate and are eligible to receive the enhanced rate for MCH services.

HFS does not track Certified Nurse Midwives separately, but does track APNs. During calendar year 2006, the number of:

- billings for APN services increased by 172 percent
- patients served by APNs increased 34 percent
- services per patient rendered by APNs doubled between calendar year 2005 and 2006

There are currently 2,198 APNs enrolled with HFS. Many APNs are not separately enrolled with HFS, but render services to HFS patients in collaboration with physicians. There are currently 21 APNs available for selection in HFS' PCCM program as a medical home, with a total capacity of 15,144 patients. For services rendered in state fiscal year 2007, 1,389 unique APNs billed for over 126,000 services rendered to nearly 60,000 HFS patients amounting to approximately \$7.2 million.

Further data analysis is needed to determine whether access to care increased in rural areas or whether the increased service provision is due to the increasing population covered by HFS' medical programs. It is likely to be a combination of the two.

Lactation Counseling

2004 Recommendations:

- Use the task force model to develop an awareness and outreach campaign to more effectively utilize services across agencies (high priority) **NOT YET INITIATED**
- Provide updated breastfeeding information to physicians who serve HFS participants (requires further study) **COMPLETED**
- Provide reimbursement for lactation counseling/support for breastfeeding women during the first weeks after birth (requires further study) **NOT YET INITIATED**

Current Status:

HFS worked with IDHS' WIC program to educate HFS enrollees and providers on the breastfeeding and lactation counseling services available and to coordinate service utilization. A client notice was mailed to enrolled women in February 2006. The notice informs women of the benefits of breastfeeding for both the mother and the baby. The notice also includes information about breastfeeding education, counseling and support services available from WIC and the availability of breast pumps for women who return to work or school. A toll-free hotline number is provided for peer-to-peer breastfeeding support and counseling provided by the National Women's Health Information Center. An additional

client notice will be mailed in 2008. In addition, HFS sends an annual WIC notice to HFS enrollees to inform them of the services offered by WIC.

An informational notice was mailed to HFS providers in December 2005 encouraging them to promote breastfeeding with HFS-enrolled women. The notice includes breastfeeding recommendations from ACOG, AAP and AAFP, provides information on the benefits of breastfeeding, includes discussion points for encouraging women to breastfeed, provides information on reimbursement for breast pumps, encourages providers to refer pregnant, postpartum and breastfeeding women to WIC for breastfeeding education, counseling and support and identifies a number of breastfeeding resources, including a toll-free hotline for breastfeeding women to obtain peer counseling and advice. Effective January 1, 2006, HFS removed the prior approval requirement for electric breast pumps, making them more accessible to breastfeeding women.

The WIC program promotes breastfeeding and provides education, classes, counseling and direct support for low-income pregnant and breastfeeding women. Lactation consultants who are trained in lactation management are available to help mothers achieve their breastfeeding goals. Lactation consultants provide education and support in both the prenatal and postpartum periods. These services, coupled with HFS reimbursement for breast pumps, provide a comprehensive package of lactation services to HFS enrollees. Information and links that encourage breastfeeding are maintained on HFS' Web site.

The WIC program works to positively impact attitudes and behaviors toward breastfeeding and is successful in promoting breastfeeding for low-income women. The most current information available shows that in 2006, over 64.2 percent of Illinois WIC mothers initiated breastfeeding and 28 percent of women continued breastfeeding at six months.

Labor Support During the Perinatal Period

2004 Recommendation:

- Conduct research to determine the cost and benefits associated with continuous labor support provided through a doula or monitrice (low priority) **NOT YET INITIATED**

Current Status:

The availability of doula services has grown from three to twenty-two communities since the original Chicago Doula Project began as a pilot in 1996. According to the Ounce of Prevention, as of fiscal year 2007, Illinois may have the most extensively available publicly-funded doula services in the nation. This program is funded and administered by IDHS.

Numbers Served in Fiscal Year 2007

There were 268 participants served and 207 births in fiscal year 2007 in the five programs. These numbers exceed contractual obligations for yet another year.

Site	Location	# Served by Doulas ^a	# of Newborns Benefiting from Doula Support**
Alivio Medical Center	Chicago	29	23
Christopher House	Chicago	48	30
Easter Seals Children's Development Center	Rockford	91	66
Kankakee Community College	Kankakee	40	32
Marillac Social Center	Chicago	60	56
Total in FY '07		268	207

Table 3: Illinois Department of Human Services, Doula Program Data, State Fiscal Year 2007

* Any participant who received a home visit, individual contact or group service by a doula.

** Actual number of births within the fiscal year. Include mothers who delivered in FY 06 but received postpartum doula services in FY 07. Also, includes mothers who received prenatal doula services in FY 07 but will deliver in FY 08.

Programmatic Emphasis

There are two areas to that the Doula program is examining – breastfeeding initiation and postpartum depression.

The program is closely observing rates of initiation and periods of sustained breastfeeding. In FY 05 and FY06 service data indicated a 57 percent rate of initiation and a slight increase to this rate in FY07 (FY07 data is incomplete at this time). This rate is above the national norm for teenagers. The Ounce and site staff decided to rededicate efforts to strengthening this outcome. Methods to effect a rate increase include direct training work with doulas, peer networking with supervisors, and discussions in ongoing site contact.

The second area of emphasis is to examine the impact of doula services on rates of suspected postpartum depression. Smaller studies done with two doula programs (part of the Ounce's wider doula network), demonstrated significant decreases in suspected rates of depression in comparison to a control group at the same site.

HFS is also working with the community to explore alternative models of prenatal care services to pregnant women who are not medically high-risk, such as the Centering Pregnancy model. These services consist of prenatal care services and support and education in a group setting. The group session offers women the opportunity to focus on various aspects of pregnancy and prenatal care, childbirth, parenting and nutrition, and experiences. Women involved in Centering Pregnancy groups learn how to take their own blood pressure, weigh themselves and complete health assessments. Women who participate in Centering Pregnancy have been shown to have higher birth weight infants than women who receive traditional individual prenatal care.²⁸

²⁸ Rising, S., Obstetrics and Gynecology, November 2003

Case Management and Home Visiting

2004 Recommendations:

- Expand the existing case management program to target high-risk areas, which is supported by HFS (high priority) **IN PROGRESS**
- Expand outreach efforts (especially in Chicago) to locate “hard-to-reach” pregnant women and get them into care (high priority) **IN PROGRESS**
- Pilot more intensive models of case management such as a program that covers six home visits during the prenatal period and 21 follow-up visits during the first 2 years of life (low priority) **NOT YET INITIATED**

Current Status:

Through an Interagency Agreement with HFS, IDHS administers the Family Case Management Program, with HFS claiming federal matching funds for this administrative service. Case management has been designed to improve birth outcomes and thereby reduce infant mortality of births to HFS-enrolled pregnant women. Through integration of the FCM program and the WIC program, resources are maximized for case management services. Collaboratively these programs target services to women who have a greater chance of giving birth prematurely and infants who have a greater chance of dying before their first birthday. IDHS also operates three targeted case management programs to reduce the infant mortality rate in high-risk communities. These programs are the Chicago Healthy Start program, Targeted Intensive Prenatal Case Management program and Closing the Gap.

The FCM program and the WIC program’s integrated delivery system is helping to reduce the State’s infant mortality rate. While some studies are inconclusive with respect to the efficacy of case management for improving birth outcomes, several studies have demonstrated the effectiveness of Illinois’ case management with respect to birth outcomes. The Reduction in Infant Mortality in Illinois FY 2006 Report illustrates that for nine consecutive years, infants born to HFS-enrolled pregnant women who participated in WIC or FCM demonstrated better birth outcomes than those born to HFS-enrolled women who did not participate in either program. The evaluation of these programs has yielded impressive data to support that the integrated delivery of these programs has resulted in a positive effect on improving birth outcomes among the HFS-enrolled population.²⁹ The rate of premature birth was 60 to 70 percent lower than that among non-participants, and the rate of infant mortality was 50 to 70 percent lower. IDHS estimates that participation in WIC and FCM saves Illinois an average of \$200 million each year in HFS expenses. Those expenses for health care in the first year of life were 30 to 50 percent lower among dual program participants than among non-participants in 2007.

In calendar year 2005, the WIC and FCM programs served over 84 percent of the eligible births and/or pregnant women enrolled in HFS’ medical programs that occurred in the State. In 2005, there were 89,057 HFS births (2005 Birth File Match), of which WIC and FCM served more than 75,000 of those families (IDHS, 2005).

²⁹ Illinois Department of Human Services, “The Reduction in Infant Mortality in Illinois”, Annual Report for Fiscal Year 2007

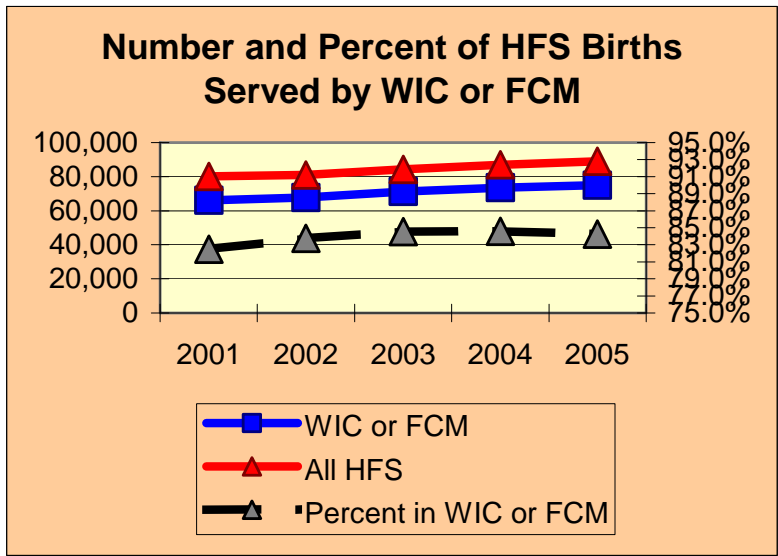


Table 4: Illinois Department of Human Services, Cornerstone System and HFS Eligibility Data, 2001-2005

The tables below depict the impact that enrollment in FCM and WIC have on assisting in improving birth outcomes. A recent in-depth analysis of HFS-eligible WIC and FCM participants showed that these programs reduce very low birth weight among program participants by 24 percent - a statistically significant reduction – after controlling for differences in demographic and behavioral characteristics.

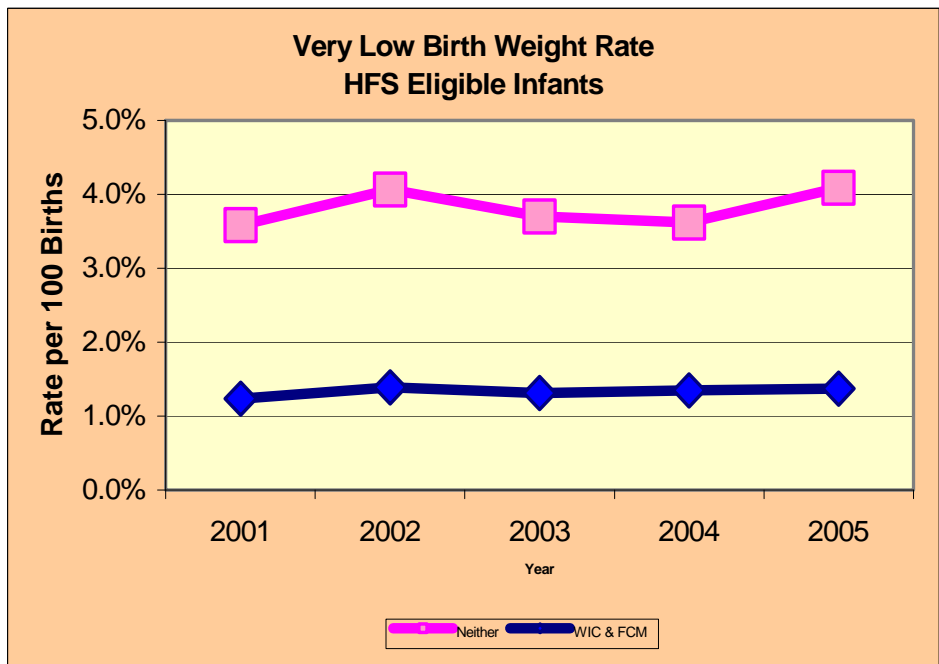


Table 5: Illinois Department of Human Services, Birth File Match, 2001-2005

WIC and FCM, through the reduction in very low birth weight, contribute to a significant reduction in HFS expenditures during the first year of life.

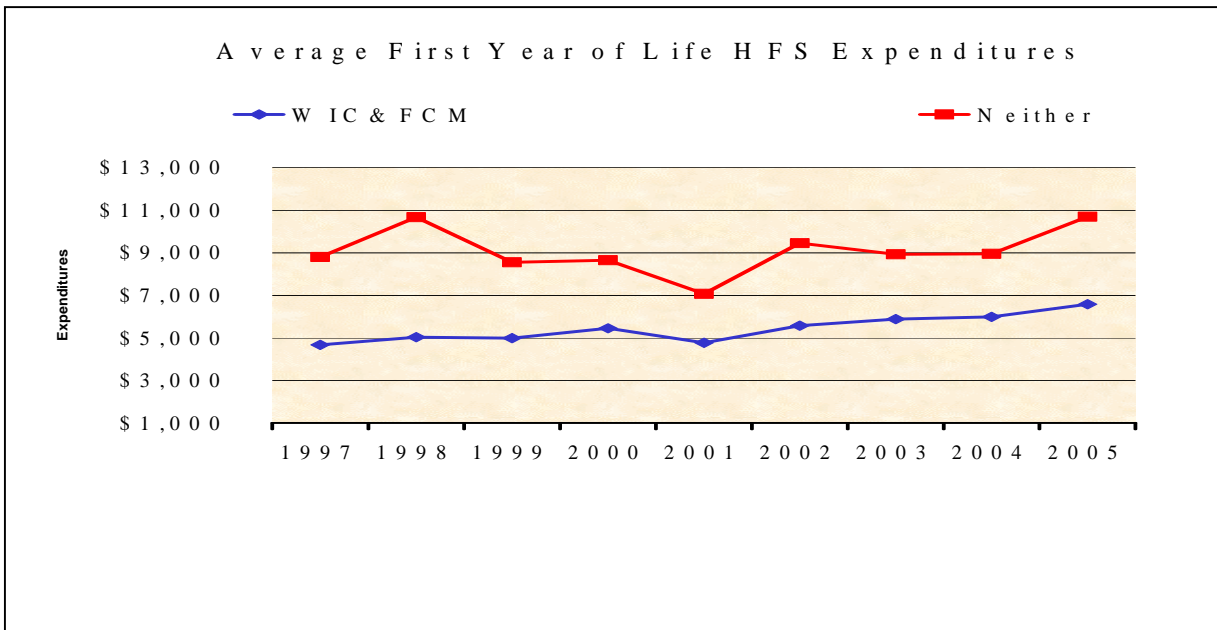


Table 6: Illinois Department of Human Services, “The Reduction of Infant Mortality in Illinois”, Annual Report for Fiscal Year 2007

In calendar year 2005, the WIC and FCM programs served over 84 percent of the HFS-enrolled births/pregnant women in the State. In 2005, there were 89,057 HFS births (based on 2005 Birth File Match); WIC and FCM served over 75,000 of those families.

During fiscal year 2007, TIPS served 4,050 high-risk pregnant women. HFS works closely with IDHS to identify the highest-risk areas for additional sites and to determine whether existing sites should be expanded. The communities served by TIPS have higher-than-average HFS expenditures for health care services during the first year of life. This indicates that there was an unusually high number of infants in these communities born prematurely.

TIPS is supported by state general funds appropriated specifically for this purpose. Additionally, through an Interagency Agreement, HFS claims TIPS expenditures for federal matching purposes to the extent it provides case management to HFS-enrolled pregnant women.

In an effort to maximize funding for FCM, HFS entered into Intergovernmental Agreements with FCM agencies that are governmental entities (local health departments). The Intergovernmental Agreements allow claiming of federal match on the local tax dollars used to provide otherwise uncompensated case management services to the HFS-enrolled population. Federal match dollars received are forwarded to the respective local health department on a quarterly basis. The federal match dollars forwarded to the participating local health departments for FY 2007 was \$11.6 million, with 72 local health departments participating.

Even with the resources committed by Illinois to implement the FCM and TIPS programs, there continues to be an unmet need that requires performance-based reimbursed outreach efforts to locate hard-to-reach women and more targeted and intensive models of case

management. Incentives, if applied appropriately and cautiously, have proven to be effective in efforts such as increasing enrollment in HFS (through the All Kids Application Agents). Since approximately 16 percent of the women whose births were covered by HFS did not access either WIC or FCM in calendar year 2005,³⁰ this suggests the need for expanded outreach and case finding and the importance of interconceptional care for those second or higher level births known to HFS.

HFS and IDHS have partnered with private funders and have developed a pilot program in the North Lawndale and Austin communities in Chicago to test a performance-based approach to reimbursement for intensive outreach to engage hard to reach women. HFS, IDHS and the private funders implemented the Healthy Births for Healthy Communities initiative on July 1, 2006. The initiative is using a performance-based reimbursement strategy to pay for outreach activities in two Chicago Community Areas (Austin and North Lawndale). Two community-based organizations are conducting grassroots outreach efforts to engage multiparous women who are at increased risk of delivering a very low birth weight infant in WIC, FCM, Healthy Start or TIPCM. HFS is matching the funds and transferring these funds to IDHS for HFS-enrolled women. IDHS is managing the grants to the community-based organizations. Additional funds will be provided during the year to area hospitals to ensure that women are linked to the program by their emergency departments. The Healthy Births for Healthy Communities initiative reported 138 women participants during fiscal year 2007. The women enrolled are a high-risk group: 63 percent report having medically high-risk conditions such as chronic disease, previous pre-term birth, and less than 12-month interpregnancy intervals. The others have social risk factors such as homelessness and domestic violence. The project is measuring the effort it takes to find these high-risk women. Preliminary data suggests it is taking nearly seven hours to find and enroll one high-risk woman.

Other Priority Recommendations

2004 Recommendations:

- Disseminate information to the provider community concerning standards of care
IN PROGRESS
- Work with the provider community to educate their colleagues about the standards of care
IN PROGRESS
- Consider performing a focused quality study that assesses the extent to which providers are performing medical services according to ACOG guidelines
IN PROGRESS
- Provide an educational campaign to encourage pregnant women to be active in their reproductive health care
NOT YET INITIATED
- Compare the cost and outcomes of care provided by MCH and non-MCH enrolled physicians and also look at outcomes in different care settings, e.g., community health centers and private physician setting
NOT YET INITIATED

³⁰ Illinois Department of Human Services, Birth File Match, 2005

- Analyze birth outcomes utilizing predictive analytics to better understand factors affecting the health of births **IN PROGRESS**
- Look at the effects of nutritional support from WIC and food stamp participation on birth outcomes **NOT YET INITIATED**

Current Status:

HFS is partnering with IDHS on the “Closing the Gap in Racial Health Disparities” initiative. Closing the Gap specifically addresses racial disparities in infant mortality in four Chicago community areas (Austin, Englewood, West Englewood and Auburn-Gresham). These communities were targeted due to high numbers and rates of African American infant deaths in the State.

The purpose of the Prenatal Care Study is to study the content/quality of prenatal care provided to women in the four Chicago Community Areas to determine whether prenatal care is being delivered according to ACOG guidelines and to identify quality of care concerns and provider education needs. After the areas requiring quality improvement are identified, a plan for provider education will be developed and implemented. There are four separate components to the Closing the Gap Prenatal Care Study:

- Study design and evaluation
- Medical record review
- Provider survey
- Provider education curriculum

Study Design and Evaluation: HFS entered into an Interagency Grant Agreement with the University of Illinois at Chicago (UIC) School of Public Health to perform an evaluation of the medical record reviews. UIC is responsible for:

- Developing the medical record review evaluation design and sampling methodology
- Participating in developing recommendations for provider education, and
- Preparing a final report of the evaluation results, including recommendations for improving birth outcomes in the Closing the Gap communities

HFS and its Quality Improvement Organization (QIO) have been working closely with UIC to provide the data necessary to complete the evaluation.

Medical Record Review: HFS’ Quality Improvement Organization, HealthSystems of Illinois (HSI), is performing the Medical Record Review component. This component involves designing a medical record review abstraction tool, conducting medical record reviews, analyzing the review data, preparing a final report, and working closely with UIC and HFS to share data for the evaluation of the quality of medical care. The tool is being used to assess risk for preterm birth, and determine whether pre-existing conditions such as diabetes or hypertension, or conditions that emerge during pregnancy were managed appropriately, including whether consultation with a regional perinatal center was initiated when indicated.

HSI worked closely with HFS, IDHS, UIC and perinatal experts in developing the tool. The first draft of the tool was shared with a panel of perinatal experts in March 2005.

Recommendations made by the experts were incorporated into the abstraction tool. UIC conducted a literature review and provided valuable information in terms of similar evaluations and review criteria. The Illinois Chapter of the American College of Obstetricians and Gynecologists approved the tool on August 1, 2005. HSI piloted the abstraction tool in Fall 2005. Based on the pilot, minor revisions were made to the abstraction tool. UIC developed a sampling methodology for the medical record abstraction. HSI conducted a pilot study to verify the sampling strategy designed by UIC and to test the tool for effectiveness in allowing for comprehensive abstraction. The objective of the pilot study was to compare the risk assigned by the sampling strategy to data abstracted from the participant's prenatal record. In early 2006, fifty records were used to conduct medical record reviews to test the validity of the sample.

The pilot sample revealed variability of care but documentation of medical care reviewed that there appeared to be compliance with prenatal care guidelines in key areas. For example, most women were tested for HIV; women were being asked about risks, such as domestic violence; prenatal vitamins were being recommended (though folic acid recommendation is not universal); and, most women were asked about smoking though a referral to the Illinois Tobacco Quitline was not documented. (This could be due to a lack of knowledge about the availability of the Illinois Tobacco Quitline although HFS sent a Provider Notice about the availability of the Illinois Tobacco QuitLine in November 2005, requesting providers refer their patients who smoke to the Illinois Tobacco QuitLine, so this may be a timing issue. More effort is needed to promote the Illinois Tobacco Quitline.) The tool proved to be effective in allowing for comprehensive abstraction.

The pilot chart review revealed problems with the sample. As a result of the pilot medical chart review, the sampling methodology was modified to recognize young teens and women over 35 as high risk. The UIC revised the sampling methodology and submitted it to HFS and HSI in August 2006. The final sample included 835 women. HFS sent a request for medical records to the health care providers for the 835 women in the sample in early October 2006. As of early December 2006, approximately 240 records had been received. A second request for medical records was sent to the providers who had not yet responded in early November 2006 and HFS conducted additional follow-up with providers by phone.

In April 2007, HFS participated in a Peer Review Session hosted by Michael Reese Health Trust at which preliminary data from the sample was presented. Several recommendations were made for future medical record reviews, including:

- Promotional letters should be sent to appropriate department chairs.
- Increase the time frame for submitting records to at least 3 weeks.
- Provide prior notification to medical records supervisors.
- Reiterate that the complete prenatal record for an episode, not a date of care, is to be submitted.
- Consider doing a prospective study rather than a retrospective study.

Because the initial sample netted only 275 fully abstracted medical records, the decision was made to pull another sample of 1,000. From the 1,000 sample, 895 letters requesting medical records were sent in early July 2007. Requests were not sent to providers who had previously submitted records in response to the first request. About two weeks prior to sending the request, promotional letters were sent to the family practice, and obstetric/gynecology department chair at each hospital. Promotional letters were also sent to

the medical records supervisor at each hospital. The letters requesting medical records allowed four weeks for submittal of the records and included statements in both the letter and on the attached list of records requested that the records submitted should be for the entire prenatal episode, not a specific date of care. This sample netted only 130 fully abstracted medical records, for a total of 415 abstracted records. While this is not sufficient to assure the scientific validity of the study in each risk strata, the team decided to proceed with the evaluation because the records have revealed a great deal of good information to date and will meet a primary purpose – to develop information and education materials and identify barriers.

Provider Survey: UIC conducted the provider survey and compiled the results. The survey assesses provider perceptions of the quality of medical care in the Closing the Gap communities. The results of the survey will be considered when developing the plan for provider education. The curriculum will address quality of medical care issues that arise during the medical record reviews or from the provider survey.

Provider Education Curriculum: Information from the medical record review evaluation and the provider survey will be used to develop provider education on standards of prenatal care. The education will be developed and administered by provider organizations in partnership with IDHS and HFS.

Current Status of Perinatal Health for Illinois' Healthcare and Family Services Participants

Birth Demographics

Based on State data (HFS paid claims matched with shared data from IDHS' Cornerstone system), the data presented below shows what is currently known about HFS birth outcomes and costs of services.

HFS covers approximately 51 percent of the live births each year. HFS paid for 81,453 births in calendar year 2003, although according to the Birth File Match performed by IDHS, there were 89,057 births covered by HFS during that year. (The primary difference in the numbers is due to the difference in data sources, one derived from paid claims and Cornerstone match data and the other derived from the Birth File Match with HFS eligibility data. Paid claims information does not account for multiple births or those not claimed by hospitals for reimbursement.)

The number and percent of births covered by HFS continues to rise. In calendar year 2005, there were 178,872 live births in Illinois. There has been a steady and consistent increase in the number of HFS births since calendar year 2000. The percentage of the State's births paid by HFS has shown a steady increase from 34 percent in calendar year 2000 to 51 percent in calendar year 2005.

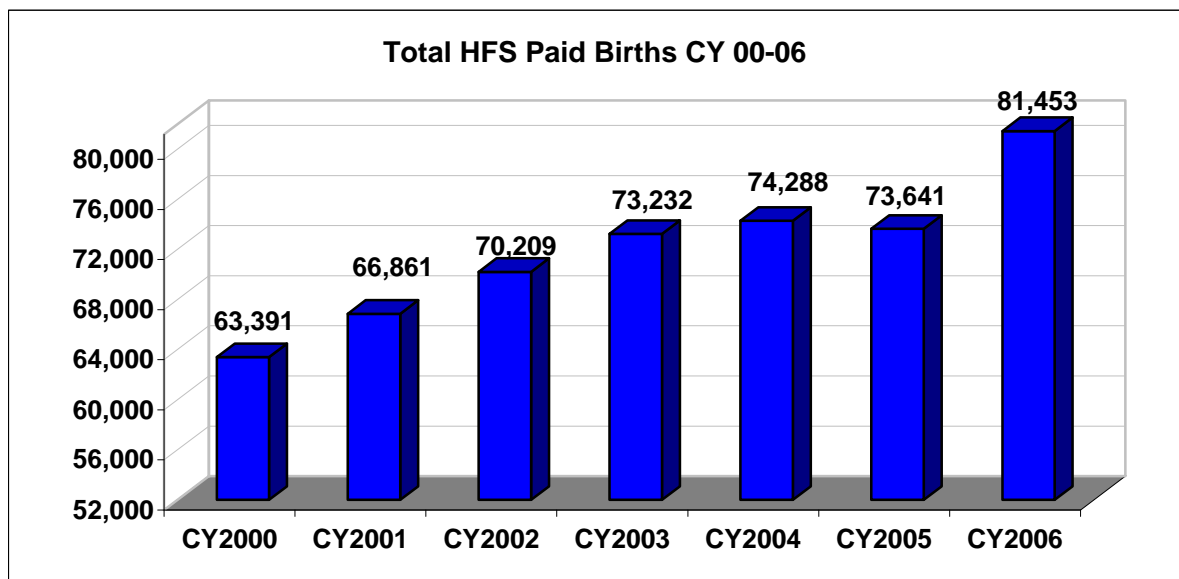


Table 7: Healthcare and Family Services, Paid Claims Data, 2000-2006

Most women eligible for HFS' medical programs who give birth each year are between 21 and 30 years of age. The overall distribution of HFS births has changed slightly between calendar year 2000 and calendar year 2006. There has been a slight decrease in the proportion of teenagers giving birth and an increase in the proportion of women over 30 years of age who are delivering babies.

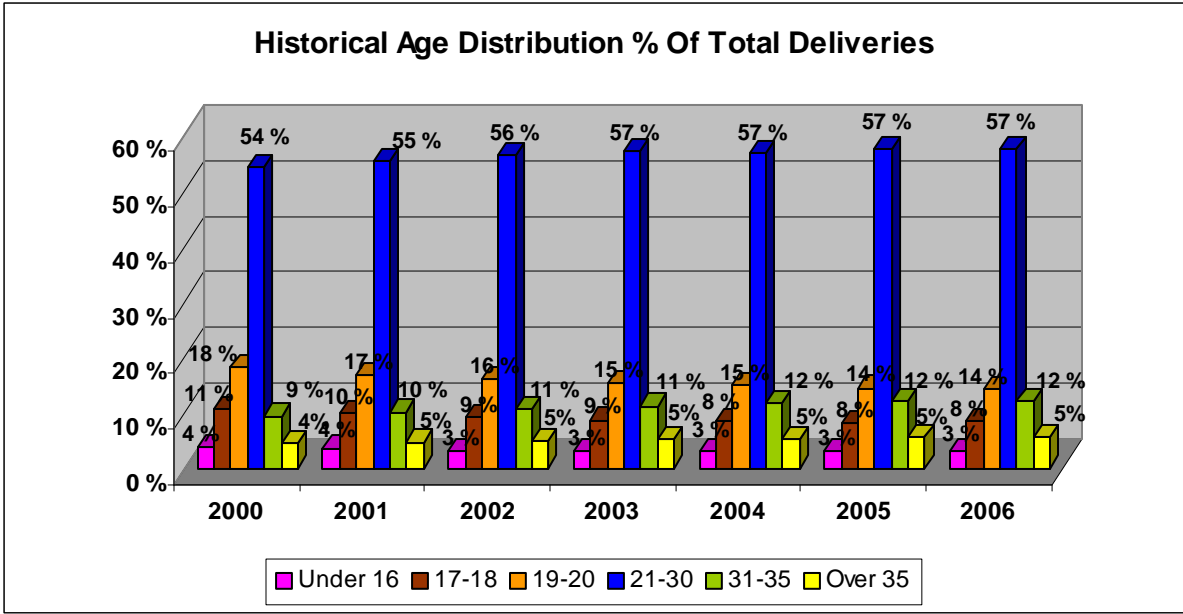


Table 8: Healthcare and Family Services, Paid Claims and Eligibility Data, 2000-2006

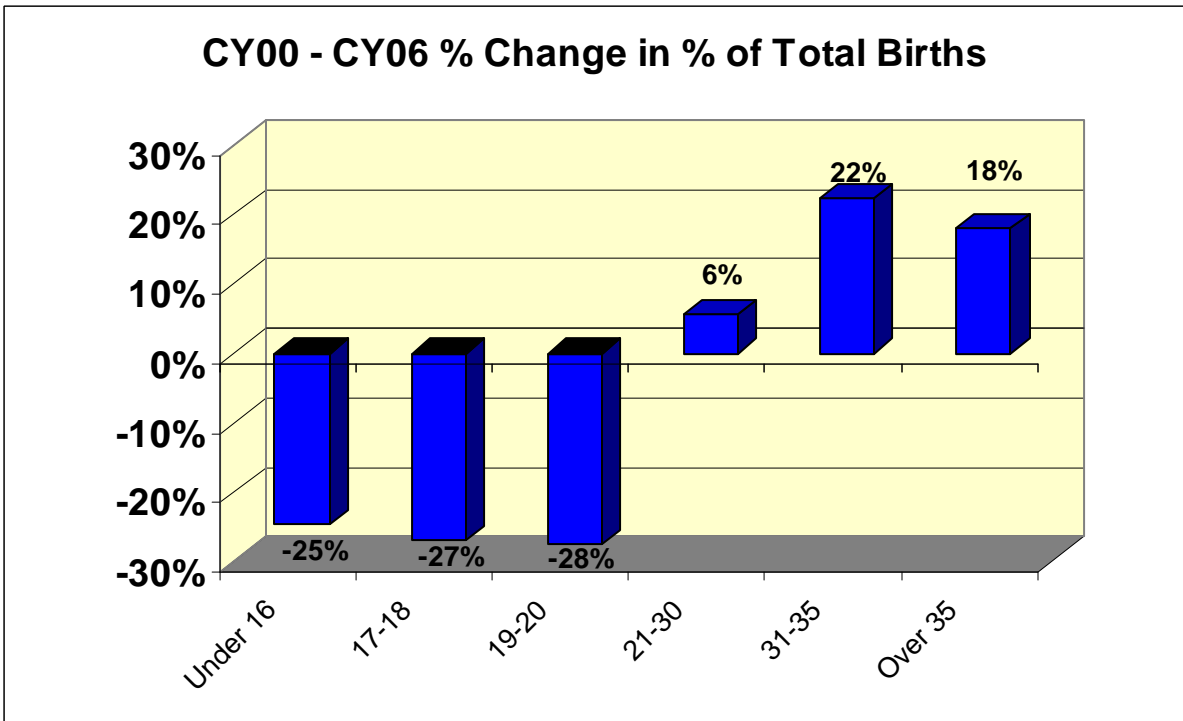


Table 9: Healthcare and Family Services, Paid Claims Data, 2000-2006

Teenagers make up almost 10 percent of all births in Illinois although the number of teenage births in the State is on the decline. From 2000 to 2006, the proportion of teen births covered by HFS as compared to all births covered by HFS decreased from 32 percent to 25 percent. HFS covers over 16,000 births to teens each year. In 2005, this number represented 95 percent of the total teen births in the State. (2005 Birth File Match Data)

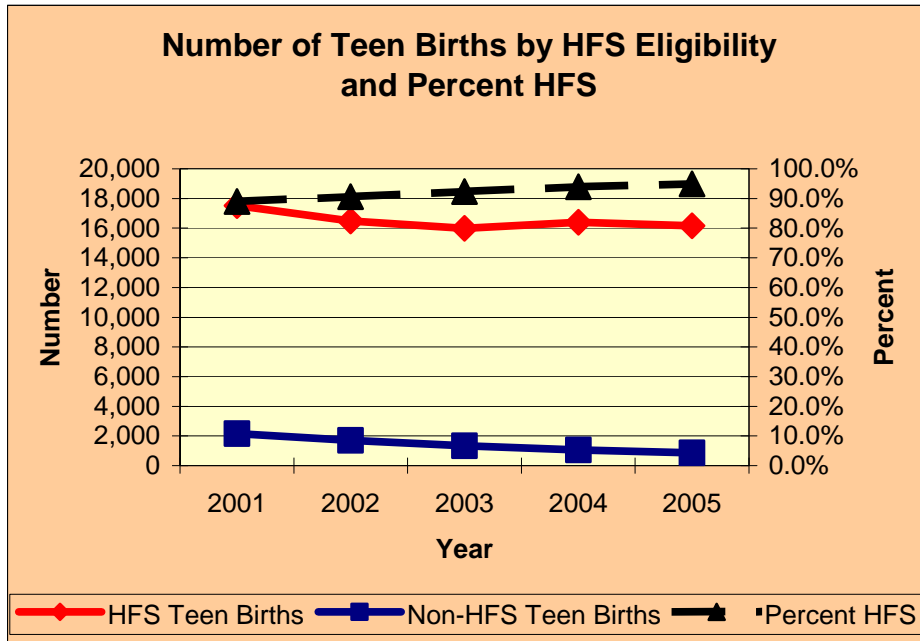


Table 10: Illinois Department of Human Services, Birth File Match, 2001-2005

According to the 2005 PRAMS data, approximately 58 percent of HFS births were unintended. This represents a decrease from 66 percent in 2003. Women eligible for HFS' medical programs are more likely to have an unintended birth than women not eligible for HFS' medical programs.

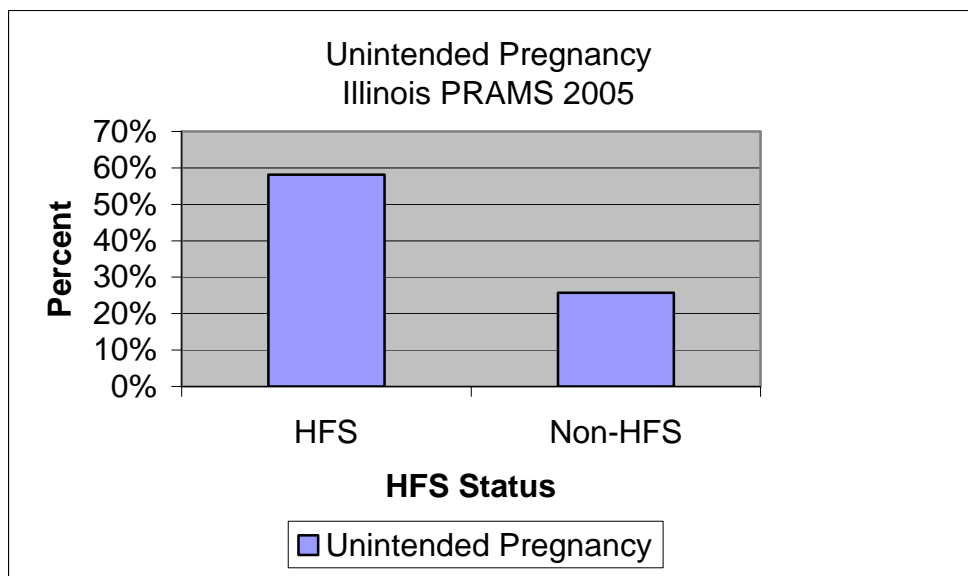


Table 11: Illinois Department of Public Health, PRAMS Data 2005

Sixty-three percent of HFS births were subsequent births (2nd or higher) and 17 percent had a birth interval of less than 18 months. (2005 Birth File Match Data)

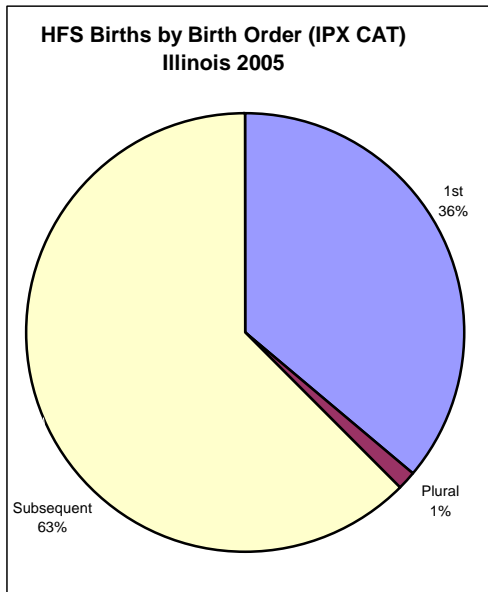


Table 12

Illinois Department of Human Services, Birth File Match, 2005

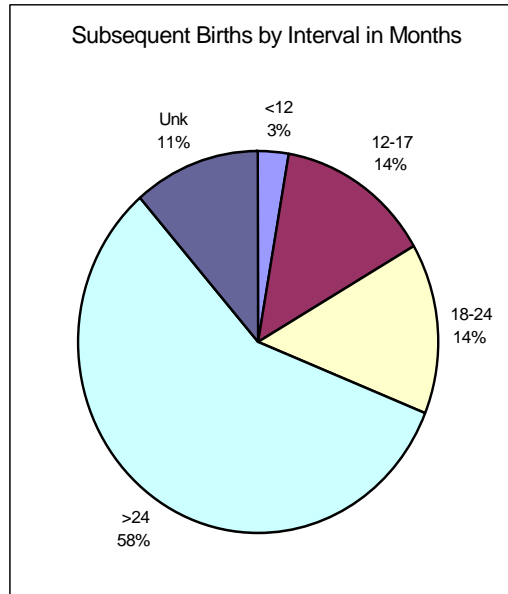


Table 13

The racial and ethnic distribution of HFS infants demonstrate a reduction of the proportion of African American births, from 29.71 percent to 26.22 percent between calendar year 2000 and calendar year 2006. The other racial distribution of HFS infants remained relatively constant.

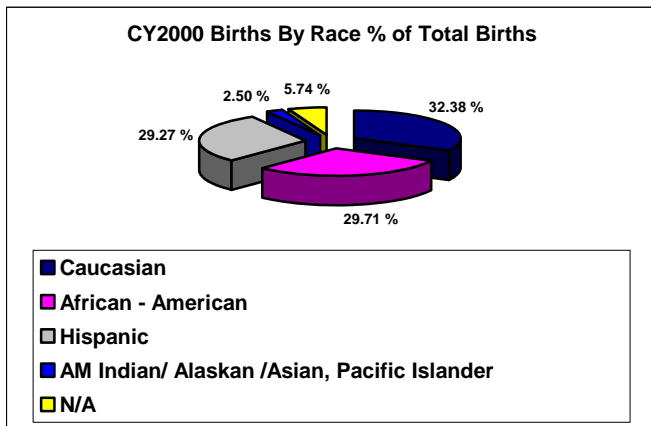


Table 14

Healthcare and Family Services, Paid Claims and Eligibility Data, 2000-2006

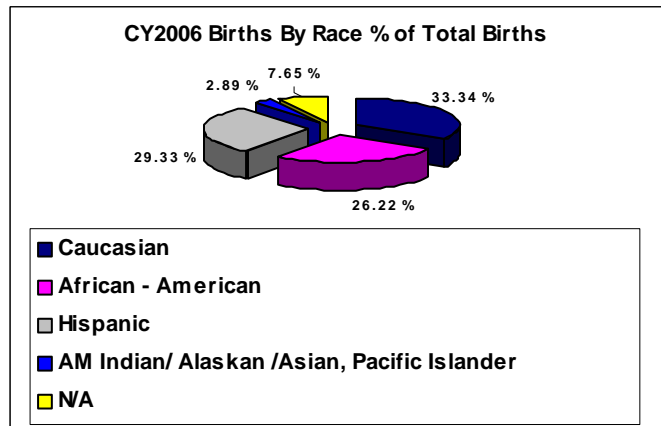


Table 15

There are differences in racial and ethnic distribution of HFS births between Cook County and Downstate. In Cook County, there was a relative increase of 31 percent in the births to Caucasians and a 22 percent increase in American Indian/Alaskan/Asian/Pacific Islander births, between calendar year 2000 and calendar year 2006, with a 15 percent decrease in births of African Americans and a 0.5 percent decrease in Hispanic births.

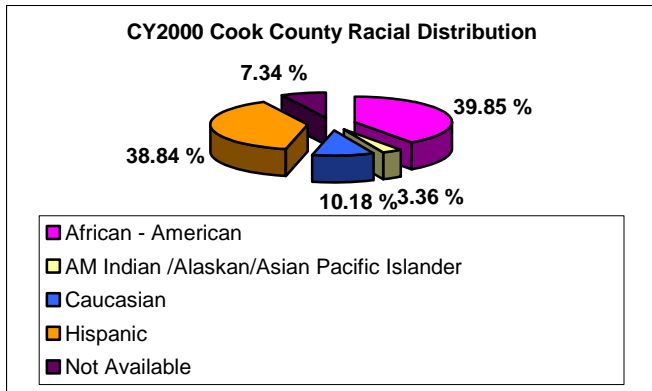


Table 16

Healthcare and Family Services, Eligibility Data, 2000-2006

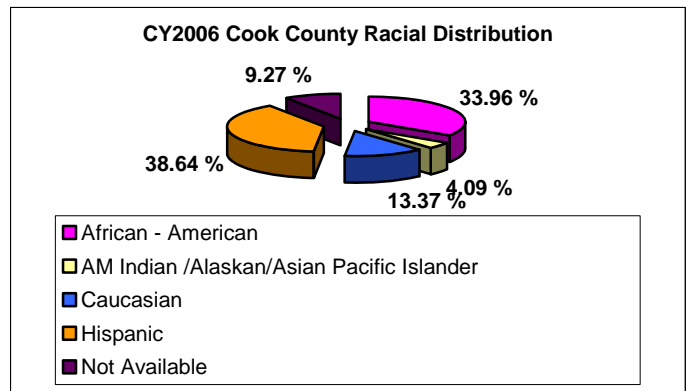


Table 17

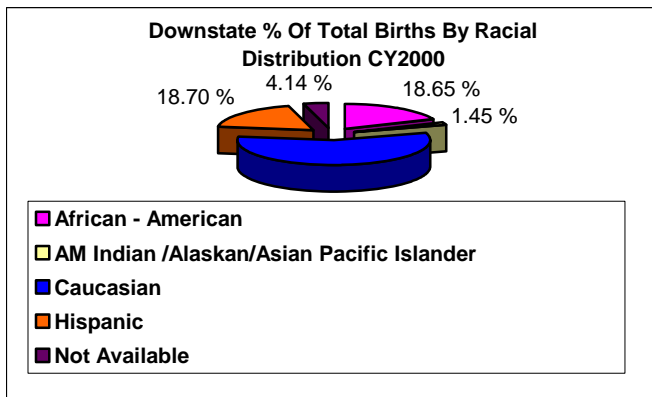


Table 18

Healthcare and Family Services, Eligibility Data, 2000-2006

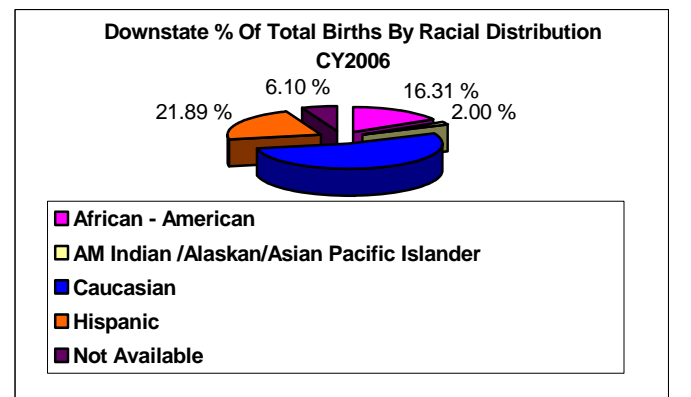


Table 19

Delivery Type and Costs

Seventy-three (73) percent of the HFS births were delivered vaginally, while 27 percent were delivered by a cesarean section in calendar year 2006. This represents a relative 24 percent increase in cesarean section deliveries since calendar year 2000.

Vaginal deliveries decreased from 79 percent to 73 percent and cesarean section deliveries increased from 21 percent to 27 percent from 2000 to 2006.

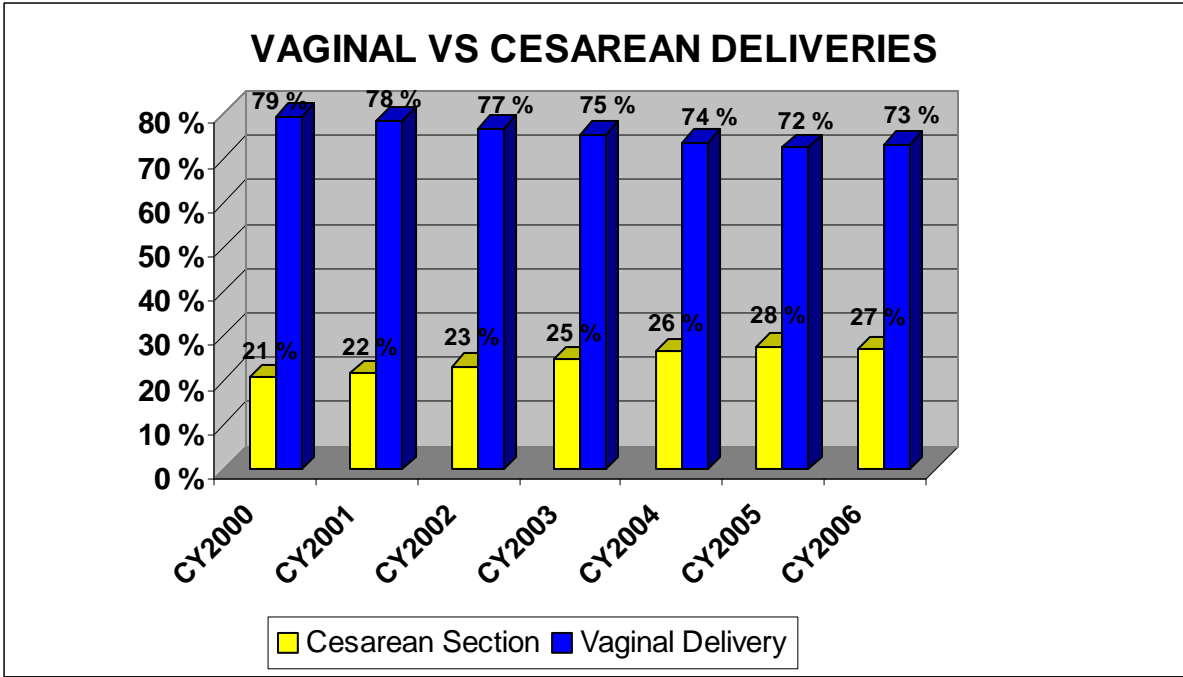


Table 20: Healthcare and Family Services, Paid Claims Data, 2000-2006

The rate of HFS vaginal and cesarean section deliveries is consistent with the rate of the overall population in Illinois and nationally.

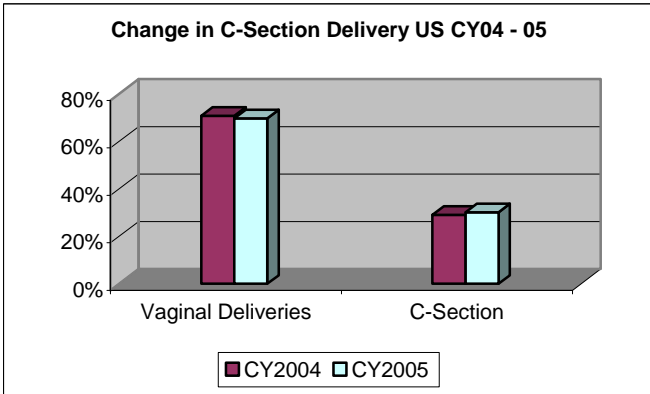


Table 21: Centers for Disease Control and Prevention, National Center for Health Statistics, Final Birth Data 2004, Preliminary Birth Data, 2005

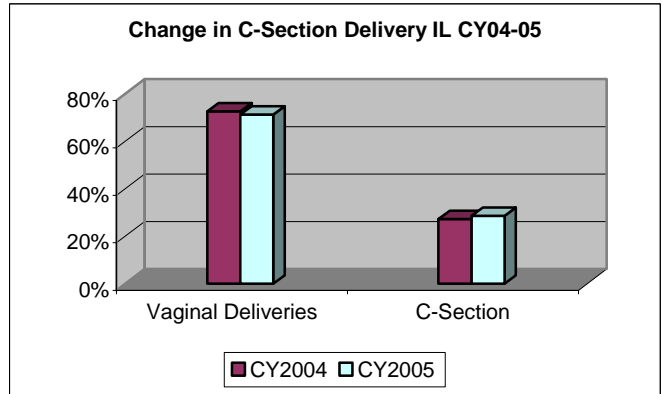


Table 22: Illinois Center for Health Statistics, IDPH, Vital Statistics, Illinois Birth Statistics, 2004-2005

Prenatal Care

One factor influencing birth outcomes is believed to be prenatal care, the comprehensive health care received during pregnancy. “Early, high-quality prenatal care is one of the cornerstones of a safe motherhood program, which begins before conception, continues with appropriate prenatal care and protection from pregnancy complications, and maximizes healthy outcomes for women, infants and families.”³¹

Healthy People 2010³² is a set of health objectives for the Nation to achieve over the first decade of a new century. It was developed by the federal Department of Health and Human Services in consultation with experts from across the country.

The Healthy People 2010 Objective (16-6a) has as its goal that at least 90 percent of pregnant women would begin prenatal care in the first trimester. In 2005, 86 percent of pregnant women in Illinois began prenatal care in the first trimester. This is up from 83.8 percent in 2001.

While women eligible for HFS’ medical programs initiate prenatal care later than non-eligible women, the gap continues to narrow. Over 78 percent of women eligible for HFS’ medical programs enter prenatal care in the first trimester. (2005 Birth File Match Data) This is up from 73 percent in 2001.

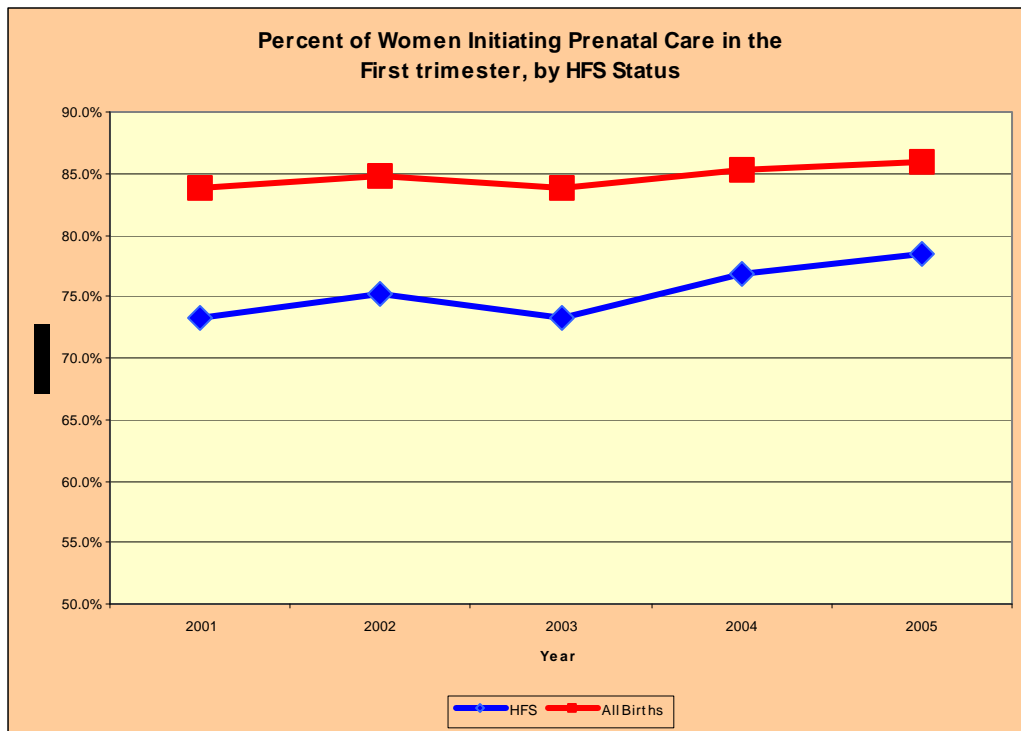


Table 23: Illinois Department of Human Services, Birth File Match, 2001-2005

³¹ United States Department of Health and Human Services, Centers for Disease Control and Prevention, “Entry Into Prenatal Care – United States, 1989-1997,” *Morbidity and Mortality Weekly Report*, May 12, 2000

³² U.S. Department of Health and Human Services, Healthy People 2010, November 2000

From calendar year 2000 to calendar year 2006, there was a slight increase in the percent of HFS women receiving prenatal care.

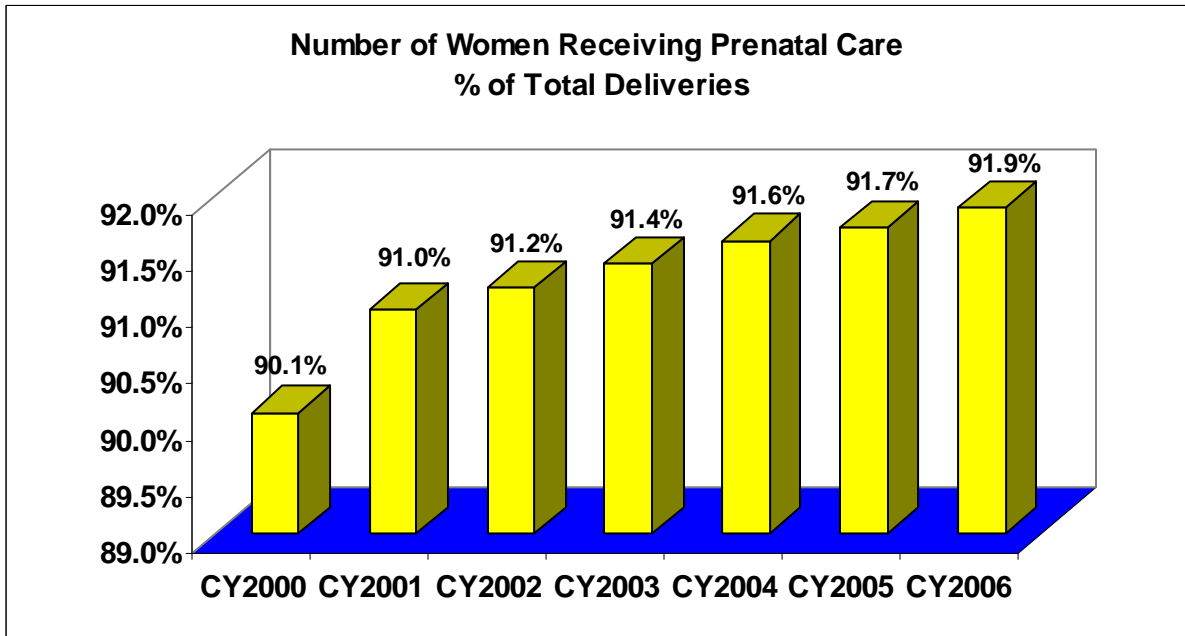


Table 24: Healthcare and Family Services, Paid Claims Data, 2000-2006

When analyzing the frequency distribution of the percentage of women receiving prenatal care services, the largest increase from calendar year 2000 to calendar year 2006 was in women receiving 14 or more prenatal services, with a slight decrease in women receiving no prenatal care services. Further study is needed to determine whether the increase in prenatal visits in the 14 and over services category relates to more complications.

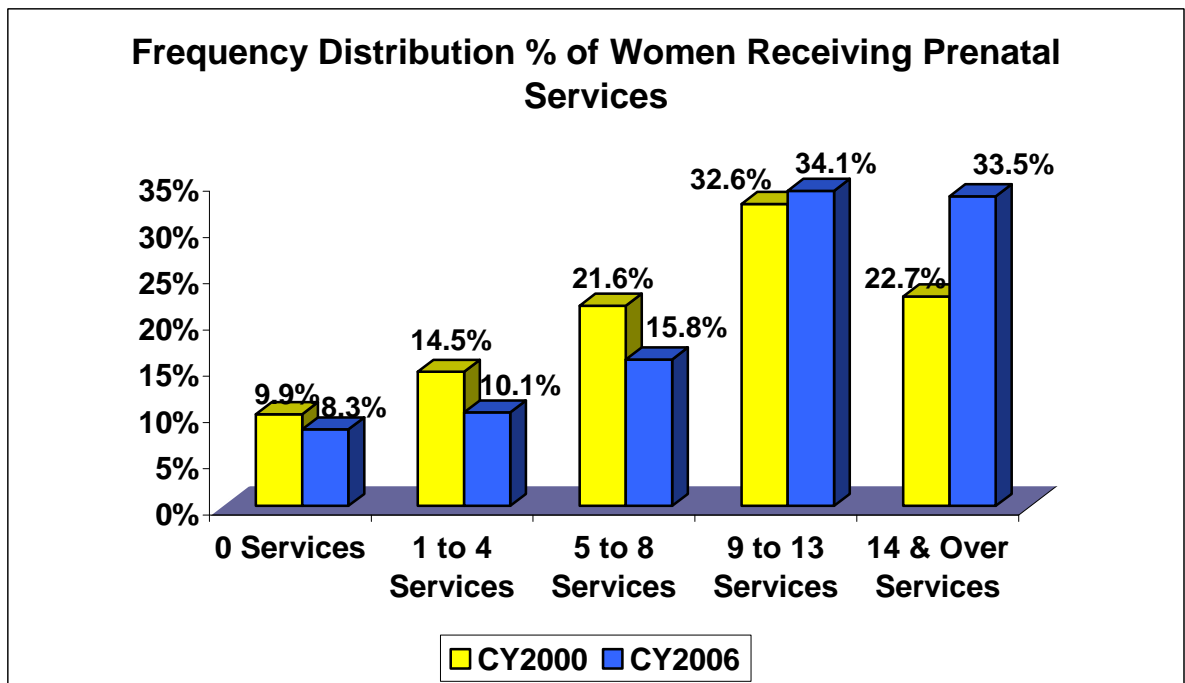


Table 25: Healthcare and Family Services, Paid Claims Data, 2000-2006

Adequate Prenatal Care

HFS uses HEDIS measures to monitor the frequency and timing of prenatal care. The percentage of pregnant HFS women receiving less than 21 percent of recommended prenatal care visits has dramatically decreased between 2004 and 2006 from 28 percent to 11 percent. At the same time, the percentage of pregnant HFS women receiving more than 81 percent of recommended prenatal care visits has significantly improved between 2004 and 2006 from 24 percent to almost 52 percent.

Frequency of Ongoing Prenatal Care
Percentage of Pregnant Women Receiving Prenatal Care Visits

Year	<21% Visits	21-40% Visits	41-60% Visits	61-80% Visits	>=81% Visits
2004	28.27%	19.34%	13.61%	14.28%	24.00%
2005	12.35%	8.33%	11.22%	18.55%	49.46%
2006	11.05%	7.09%	10.78%	19.24%	51.83%

Table 26: Healthcare and Family Services, Paid Claims Data, 2004-2006

The percentage of pregnant HFS women who received timely prenatal care visits has increased between 2004 and 2006, from 56 percent to almost 65 percent. Timely prenatal care visits are defined as visits occurring within the first trimester of the pregnancy or within 42 days of enrollment in one of the HFS medical programs.

Timeliness of Prenatal Care
Percentage of Pregnant Women Receiving a Timely Prenatal Care Visit
In the First Trimester or Within 42 Days of Enrollment

Year	% Timely
2004	56.40%
2005	59.63%
2006	64.79%

Table 27: Healthcare and Family Services, Paid Claims Data, 2004-2006

Postpartum Care

It is important for women to receive a postpartum visit so that they can develop a reproductive health plan, including birth control. Having a reproductive health plan will help women determine when or if to have another baby, and can improve birth spacing intervals, which is proven to improve birth outcomes. There has been an increase in the percentage of women whose delivery was paid for by HFS and who received postpartum care, with the largest increase in the age groups of 31-35 and 35 and over.

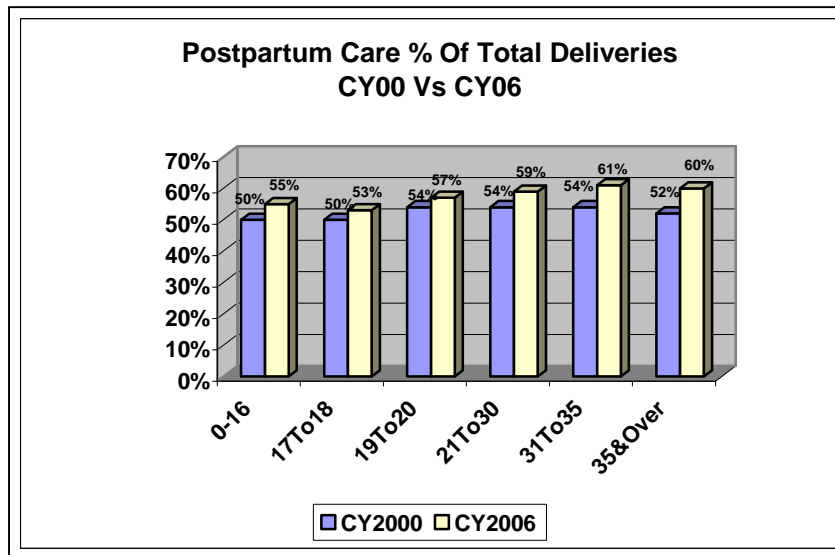


Table 28: Healthcare and Family Services, Paid Claims Data, 2000-2006

Perinatal Depression

Since 2004, when HFS began providing reimbursement for perinatal depression screening, the number of perinatal depression screenings has significantly increased. Peripartum women is defined as women who were pregnant during the calendar year or who delivered and are within 1 year of the delivery date.

Perinatal Depression Screenings

	2004	2005	2006
Total Peripartum Women	124,944	129,303	135,070
Unique Peripartum Women Receiving a Perinatal Depression Screening	11,234	22,841	28,120
Total Perinatal Depression Screenings	14,091	31,032	40,040
Increase Over Previous Year		16,941	9,008
% Increase Over Previous Year		30.93%	18.58%

Table 29: Healthcare and Family Services, Paid Claims Data, 2004-2006

HFS uses HEDIS-like measures to monitor perinatal depression screenings conducted prenatally and up to one year after delivery. This measure shows significant annual increases in the percent of women screened.

Perinatal Depression Screenings
Percent of Peripartum Women Receiving Perinatal Depression Screenings

Year	Prenatal Only	Postpartum Only	Both
2004	.64 %	.27%	.1%
2005	2.05%	2.07%	3.9%
2006	2.90%	2.89%	7.5%

Table 30: Healthcare and Family Services, Paid Claims Data 2004-2006

Public Act 95-0469, the Perinatal Mental Health Disorders Prevention and Treatment Act, is effective January 1, 2008. The purpose of the Act is to increase awareness and to promote early detection and treatment of perinatal depression.

This Act requires that:

- Women and their families be educated about perinatal mental health disorders in the prenatal and hospital (labor/delivery) settings
- Women be invited to complete a questionnaire to assess whether they suffer from perinatal mental health disorders in the prenatal, postnatal and pediatric care settings

HFS is working with the Departments of Human Services, Public Health, Financial and Professional Regulation and the Medical Licensing Board to develop policy, procedures and educational materials to assist providers in meeting requirements.

Infant Mortality

Illinois' infant mortality rate has decreased significantly since 1990. Although the infant mortality rate for African-Americans has continued to decrease, the racial disparity of the infant mortality rate continues to be dramatic.

Illinois Infant Mortality
Rates are Per 1,000 Live Births

Year	Number	Overall Rate	White	African-American
2005	1,294	7.2	5.7	15.4
2004	1,317	7.3	5.9	14.8
2003	1,380	7.6	6.1	15.6
2002	1,304	7.2	5.5	15.7
2001	1,379	7.5	5.9	14.9
2000	1,528	8.3	6.5	16.3
1999	1,504	8.3	6.2	17.4
1998	1,505	8.2	6.3	16.8
1997	1,476	8.2	6.2	16.5
1996	1,536	8.4	6.3	17.1
1995	1,724	9.3	7.2	18.2
1994	1,711	9.0	6.7	17.9
1993	1,838	9.6	7.1	18.8
1992	1,911	10.0	7.4	19.5
1991	2,068	10.7	7.9	21.1
1990	2,090	10.7	7.6	22.1

Table 31: Illinois Center for Health Statistics, IDPH, Vital Statistics, Illinois Mortality Statistics

The infant mortality rate for HFS infants decreased from 9.3 per 1,000 live births in calendar year 2000 (not shown) to 8.2 per 1,000 live births in calendar year 2004, although the infant mortality rate for HFS continues to be higher than the statewide rate. The statewide rate reported by IDPH and by IDHS differs slightly since IDPH excludes certain records from the file provided to IDHS for the Birth File Match. In addition, the IDPH rate is unmatched, whereas the IDHS rate is based on matched death to birth records that occurred in the same or the previous year.

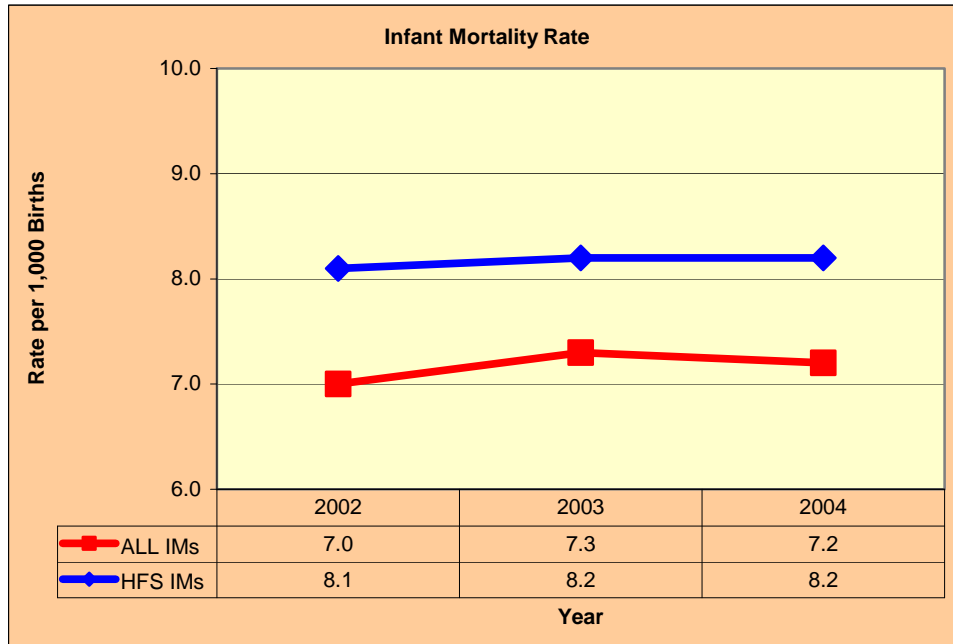


Table 32: Illinois Department of Human Services, Birth File Match, 2002-2004

Prematurity and Birth Weight

Prematurity accounted for 36.5 percent of all infant deaths in the U.S.³³ and was the second leading cause of infant mortality in the U.S.³⁴ The Centers for Disease Control and Prevention estimates a low birth weight infant is 40 times more likely to die during the first 28 days of life than normal weight infants.

Premature birth is defined as less than 37 weeks gestation. Low birth weight (LBW) is defined as weighing less than 2,500 grams or about 5.5 pounds. Very low birth weight (VLBW) is defined as weighing 1,500 grams, or less than 3 pounds, 5 ounces.

Overall, the rate of LBW in Illinois for calendar year 2005 was 8.4 percent. The rate for HFS was 9.5 percent, however, those in FCM and/or WIC had a LBW rate of 8.8 percent, and those without WIC and/or FCM experienced a LBW rate of 13.6 percent, significantly higher than those with the intervention. The Healthy People 2010 Objective (16-10a) is to reduce the LBW rate to 5.0 percent.

³³ Mathew TJ, Menacker F, MacDorman MF. Infant Mortality Statistics from the 2002 Period Linked Birth/Infant Death Data Set. National Vital Statistics Reports; Vol. 53, No. 10. Hyattsville, Maryland: National Center for Health Statistics, 2004.

³⁴ National Vital Statistics Reports, Vol. 53, No. 10, National Center for Health Statistics, 2004.

The VLBW rate for Illinois was 1.6 percent (calendar year 2005) and has remained relatively unchanged since 2001. The overall HFS VLBW rate was 1.8 percent while the VLBW rate of babies born to HFS-enrolled women who received WIC and/or FCM was 1.4 percent. HFS women who were without the intervention of WIC and/or FCM experienced a rate of 4.1 percent VLBW outcomes. This rate is more than three times higher than the rate of VLBW outcomes among women with intervention. HFS women who receive WIC and or FCM have better outcomes in relation to VLBW than that of the general population (not low income). Their VLBW rate was 1.6 percent. The Healthy People 2010 Objective (16-10b) is to reduce the VLBW rate to 0.9 percent.

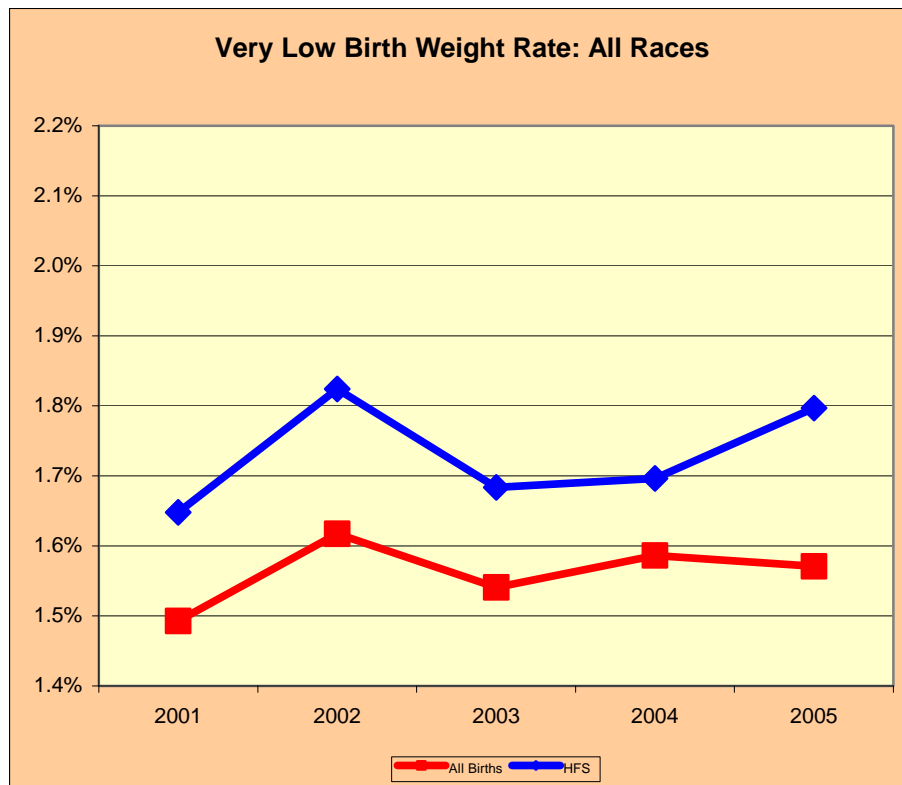


Table 33: Illinois Department of Human Services, Birth File Match, 2001-2005

The LBW rate for Illinois was 8.6 percent (IDPH 2005). The overall HFS LBW rate was 9.5 percent while the LBW rate of babies born to HFS-enrolled women who received WIC and/or FCM was 8.8 percent (IDHS, 2005). HFS women who were without the intervention of WIC and/or FCM experienced a rate of 13.6 percent LBW outcomes. This rate is significantly higher than the rate of LBW outcomes among women with intervention.

Low birth weight and very low birth weight rates in Illinois since 1990 are shown below.

Illinois Low Birth Weight Rates

YEAR	LBW Percent			VLBW Percent		
	ALL	BLACK	WHITE	ALL	BLACK	WHITE
1990	7.6	14.5	5.5	1.5	3.2	1.0
1991	7.8	14.9	5.7	1.5	3.1	1.0
1992	7.7	14.6	5.7	1.6	3.2	1.1
1993	8.1	15.3	5.9	1.6	3.2	1.1
1994	7.9	14.8	5.9	1.5	3.2	1.1
1995	7.9	14.5	6.1	1.6	3.1	1.2
1996	8.0	14.5	6.3	1.5	3.2	1.1
1997	8.0	14.1	6.4	1.6	3.2	1.2
1998	8.0	14.2	6.4	1.6	3.3	1.2
1999	8.0	14.3	6.5	1.7	3.6	1.2
2000	8.0	14.1	6.5	1.7	3.5	1.2
2001	8.0	13.8	6.7	1.6	3.1	1.2
2002	8.2	14.3	6.8	1.7	3.5	1.3
2003	8.3	14.5	6.9	1.6	3.4	1.2
2004	8.4	14.6	7.1	1.7	3.3	1.3
2005	8.6	15.1	7.1	1.6	3.5	1.3

Table 34: Illinois Department of Public Health, Vital Statistics, 1990-2005

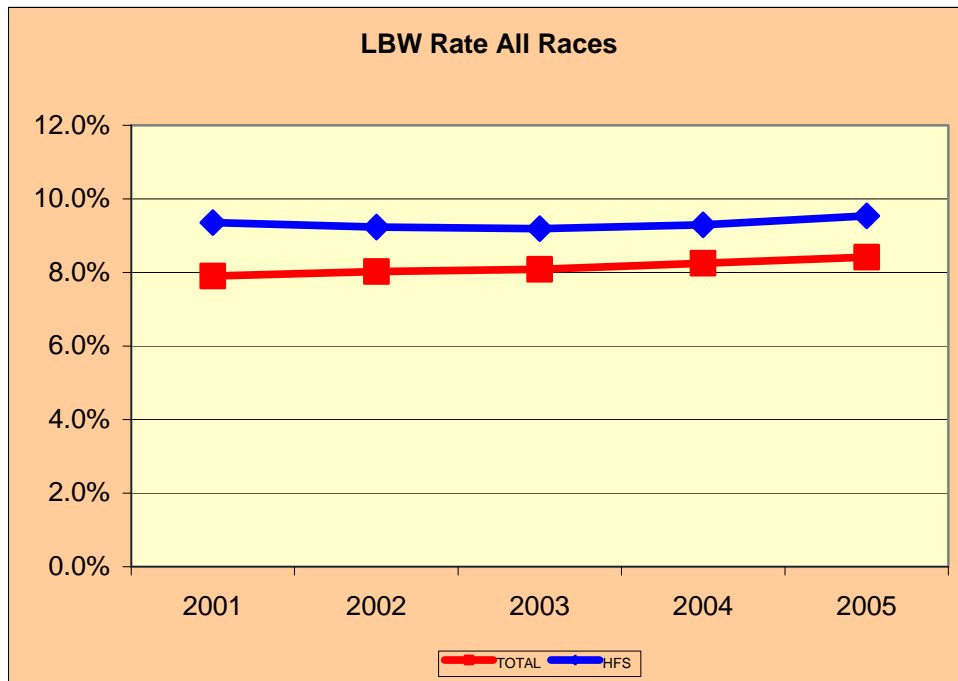


Table 35: Illinois Department of Human Services, Birth File Match, 2001-2005

Participation in FCM/WIC – Infant Mortality, Prematurity, Low Birth Weight, Very Low Birth Weight

Perinatal outcomes for WIC and FCM participants continue to be better than for non-participants. The infant mortality rate among infants born to women who participated in both WIC and FCM was 5.1 per 1,000 in calendar year 2004, one-third the rate (17.0) per 1,000 among infants born to HFS-eligible women who did not participate in either program. While infant mortality rates were lower with WIC and FCM participants, it is also possible that selection bias affects this lowering. Women who are more likely to have better birth outcomes may choose to participate in these programs. This is partly mitigated by the high proportion of the target population served. To definitively show improvement with the intervention, a randomized controlled trial would be necessary.

For 2004, infant mortality rates for African Americans, Hispanics, single mothers, teen mothers and the entire population were:

2004	African-American	Hispanic	Single	Teen	State
FCM/WIC	7.1	3.7	6.0	7.5	5.1
Medicaid, No Intervention	25.8	15.2	21.1	29.8	17.0
% Decrease	72.4%	75.4%	71.4%	73.1%	70.1%

Table 36: Illinois Department of Human Services, Birth File Match 2004

Using the Birth File Match Data, IDHS evaluated the benefit of participating in the FCM and WIC programs during pregnancy. The evaluation found that women who participated in both programs during pregnancy were much less likely to have a premature birth than women who did not participate in either program. Prematurity is defined as a very low birth weight infant, or an infant weighing less than 1,500 g. (e pounds, 5 ounces).

Very Low Birth Weight Rate (per 100 births) Among Infants Born to HFS-Eligible Women by Program Participation Status and Year						
Program Participation	2000	2001	2002	2003	2004	2005
Participated in WIC and FCM during pregnancy	1.3%	1.2%	1.5%	1.4 %	1.3%	1.4%
Did not participate in WIC or FCM during pregnancy	3.4%	3.7%	4.2%	3.9%	3.6%	4.1%
Percent Difference	61.8%	67.6%	65.2%	64.1%	63.9%	65.9%

Table 37: Illinois Department of Human Services, Birth File Match, 2001-2005

Women who participated in both programs during pregnancy were much less likely to have a low birth weight infant than women who did not participate in either program. Low birth weight is defined as less than 2,500 g. (5 pounds, 8 ounces).

Low Birth Weight Rate (per 100 births) Among Infants Born to HFS-Eligible Women by Program Participation Status and Year						
Program Participation	2000	2001	2002	2003	2004	2005
Participated in WIC and FCM during Pregnancy	7.9%	8.1%	8.6%	8.7%	8.5%	8.8%
Did Not Participate in WIC or FCM During Pregnancy	12.9%	13.6%	13.9%	13.4%	13.6%	13.6%
Percent Difference	38.8%	40.4%	38.5%	35.4%	37.6%	35.3%

Table 38: Illinois Department of Human Services, Birth File Match, 2001-2005

Infants born to women who participated in both programs during pregnancy were much less likely to die before their first birthday than infants born to women who did not participate in either program.

The Infant Mortality Rate (per 1,000 births) Among Infants Born to Medicaid Eligible Women by Program Participation Status and Year					
Program Participation	2000	2001	2002	2003	2004
Participated in WIC and FCM during Pregnancy	6.6	5.8	6.5	6.0	5.1
Did Not Participate in WIC or FCM During Pregnancy	21.4	16.2	17.8	20.5	17.0
Percent Difference	69.1%	64.0%	63.7%	70.8%	70%

Table 39: Illinois Department of Human Services, Birth File Match, 2000-2005

Infants born to women who participated in either program during pregnancy had lower health care costs during the first year of life than infants born to women who did not participate in either program. This table compares infants born to women who participated **in either one or both programs** to infants born to women who did not participate in either program. HFS claims data was used for comparison with the Birth File Match data set.

Average Medicaid Expenditures During the First Year of Life By Program Participation Status and Year						
Program Participation	2000	2001	2002	2003	2004	2005
Participated in WIC and FCM during Pregnancy	\$5,540	\$4,769	\$5,580	\$5,887	\$5,989	\$6,588
Did Not Participate in WIC or FCM During Pregnancy	\$8,652	\$7,072	\$9,457	\$8,924	\$8,956	\$10,697
Percent Difference	36.0%	32.6%	41.0%	34.0%	33.1%	38.4%

Table 40: Illinois Department of Human Services, Birth File Match, 2000-2005

The VLBW rates among infants born to women who participate in both programs is almost 66 percent lower than the rate among infants born to HFS-eligible women who did not participate in either program. Further, the LBW rate among participants is over 35 percent lower than the rate among infants born to non-participants; the infant mortality rate was 70 percent lower, and HFS expenditures during the first year of life were more than 38 percent lower.

Comparison of Outcome Measures Between HFS-Eligible Pregnant Women who Did and Did Not Participate in WIC and FCM: 2005			
Outcome Measure	WIC & FCM	No Intervention	Percent Difference
Very Low Birth Weight	1.4%	4.1%	66.5%
Low Birth Weight	8.8%	13.6%	35.3%
Infant Mortality*	5.1	17.0	70.1%
Avg \$ 1st year of Life	\$6,588	\$10,697	38.4%

*Per 1,000 Births for 2004; 2005 not yet available

Table 41: Illinois Department of Human Services, Birth File Match, 2005

Risk Factors

Alcohol

According to PRAMS data, HFS-eligible women and women who are not HFS-eligible appear to be equally likely to use alcohol before pregnancy. HFS-eligible women were somewhat more likely to not drink at all.

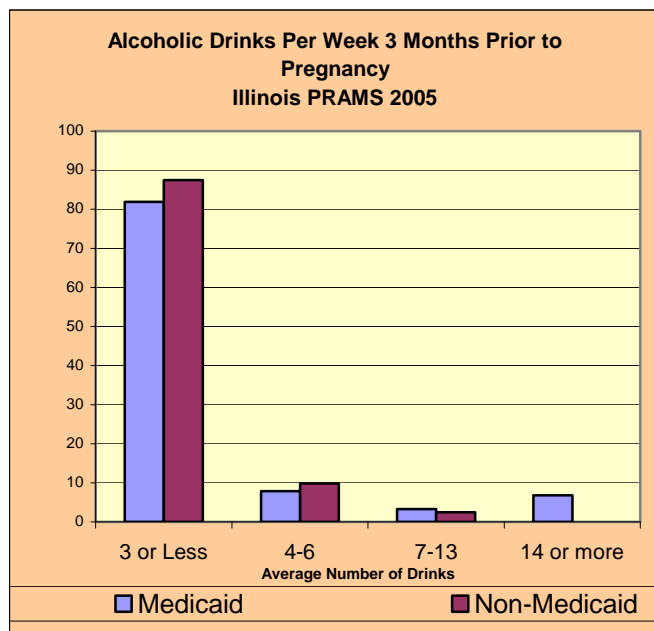


Table 42: Illinois Department of Public Health, PRAMS Data, 2005

According to HFS Paid Claims Data for 2006, 0.91 percent of HFS women who delivered were diagnosed with an alcohol related problem up to one year prior to delivery and 0.63 percent of HFS women who delivered were diagnosed with an alcohol related problem up to three months prior to delivery.

According to data from the 2005 Birth File Match, there is only a slight difference between HFS-eligible infants and infants not eligible for HFS medical programs in terms of alcohol exposure (0.5 percent compared to 0.3 percent).

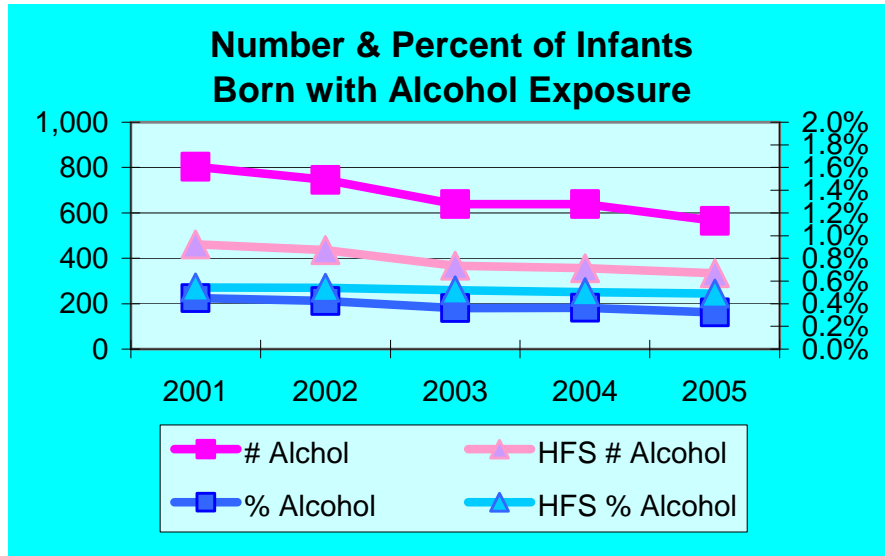


Table 43: Illinois Department of Human Services, Birth File Match, 2001-2005

Smoking

Overall, between 15 percent and 30 percent of women smoke at some point during their pregnancy.³⁵ According to 2005 PRAMS data, HFS-eligible women are more likely to smoke than women who are not eligible for HFS prior to pregnancy. Approximately 23 percent of the HFS-eligible women smoke three months prior to pregnancy while 14 percent of the women not eligible for HFS smoked three months prior to pregnancy.

Evidence of Smoking in Pregnancy: Illinois 2005

Illinois PRAMS:				
Women who smoked during last 3 months of pregnancy:			10%
Medical Birth File Match:				
	2001	2003	2005	
Medicaid pregnant women who report smoking	16.45%	16.10%	13.91%	
Other low-income pregnant women who report smoking	8.93%	7.77%	6.17%	
General population (Pregnant non-Medicaid or other low income)	5.29%	4.37%	3.22%	

Table 44: Illinois Department of Public Health, PRAMS Data, 2005; Illinois Department of Human Services, Birth File Match 2005

The calendar year 2005 birth file match data similarly indicates that HFS-eligible women are more likely to smoke during pregnancy than are their counterparts who are not eligible for HFS (13.91 percent compared to 6.17 percent). The incidence of smoking in pregnant women has declined from 2001 to 2005.

³⁵ C. Tracy Orleans, et al., "Helping Pregnant Smokers Quit: Meeting the Challenge of the Next Decade," Tobacco Control Princeton, NJ, The Robert Wood Johnson Foundation, Vol. 182 (1),68-75, 2000

Delivery Costs

There has been minimal change from calendar year 2000 to calendar year 2006 in the percentage of normal compared to non-normal births, with approximately a 3 percent absolute increase in the non-normal births covered by HFS. Non-normal births increased from 32 percent to 35 percent whereas normal births decreased from 68 percent to 65 percent.

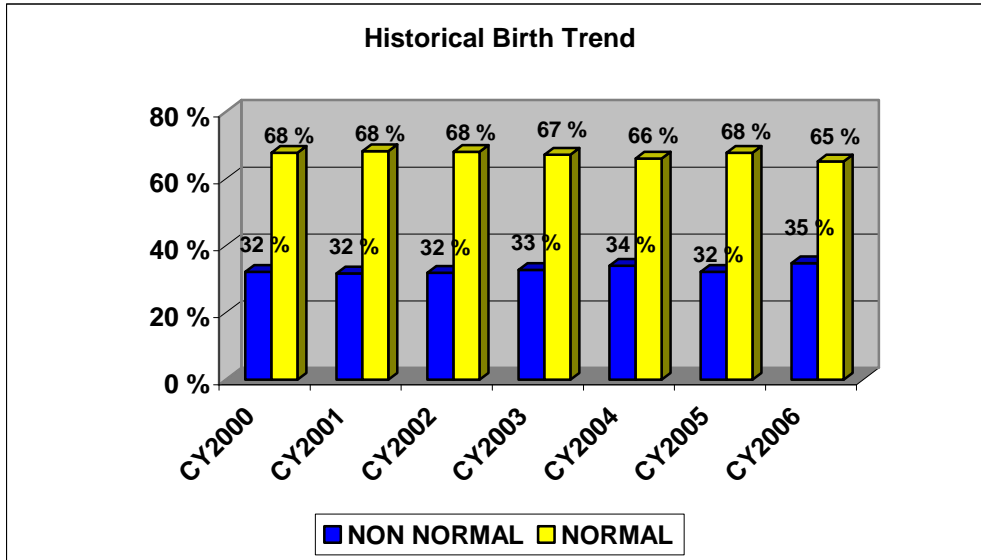


Table 45: Healthcare and Family Services, Paid Claims Data, 2000-2006

The average length of stay for infants born between calendar year 2000 and calendar year 2006 has remained fairly constant with extreme immaturity or respiratory distress syndrome having the longest length of stay (33 days).

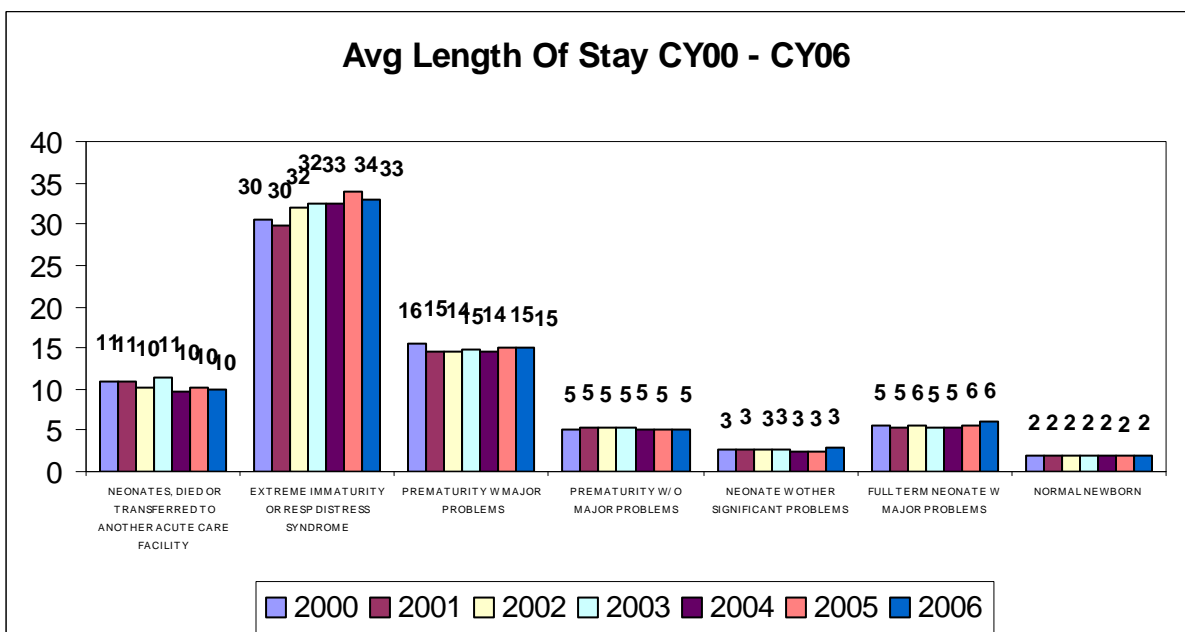


Table 46: Healthcare and Family Services, Paid Claims Data, 2000-2006

The cost per birth by Disease Related Group (DRG) has demonstrated minimal change between calendar year 2000 and calendar year 2005, but increased significantly in 2006.

Historical Cost per Birth – Calendar Years 2000 to 2006

	CY2000	CY2001	CY2002	CY2003	CY2004	CY2005	CY2006
NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	25,120.16	23,808.58	23,820.93	26,241.45	21,502.10	24,921.16	35,164.92
EXTREME IMMATUREITY OR RESP DISTRESS SYNDROME	46,552.73	42,721.52	48,463.61	44,863.79	46,034.10	49,399.02	65,449.18
PREMATURITY W MAJOR PROBLEMS	21,254.66	18,837.53	18,703.92	19,437.85	19,012.46	20,218.05	20,676.53
PREMATURITY W/O MAJOR PROBLEMS	5,303.28	4,640.88	4,797.27	5,022.67	4,583.57	4,741.75	4,911.39
FULL TERM NEONATE W MAJOR PROBLEMS	7,129.15	6,461.01	6,805.26	6,916.28	7,059.42	7,508.90	7,462.28
NEONATE W OTHER SIGNIFICANT PROBLEMS	1,786.09	1,749.34	1,816.80	1,785.61	1,712.67	1,690.48	1,769.81
NORMAL NEWBORN	93.62	94.73	95.56	97.14	109.84	103.90	93.92

Table 47: Healthcare and Family Services, Paid Claims Data, 2000-2006

The proportion of infants with non-normal diagnoses by the individual DRG increased comparing calendar year 2000 with calendar year 2006, while the percentage of normal births have decreased.

DRG Description	% of Total HFS Births						
	CY2000	CY2001	CY2002	CY2003	CY2004	CY2005	CY2006
NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	1.18%	1.04%	1.09%	0.99%	1.17%	1.01%	1.30%
EXTREME IMMATUREITY OR RESP DISTRESS SYNDROME	2.83%	2.90%	2.86%	3.00%	3.06%	2.84 t	2.15%
PREMATURITY W MAJOR PROBLEMS	2.43%	2.44%	2.40%	2.70%	2.57%	2.67	2.92%
PREMATURITY W/O MAJOR PROBLEMS	4.27%	4.22%	4.17%	4.13%	4.37%	4.15	4.41%
FULL TERM NEONATE W MAJOR PROBLEMS	7.76%	7.60%	7.13%	7.25%	7.25%	7.03	7.69%
NEONATE W OTHER SIGNIFICANT PROBLEMS	13.69%	13.51%	14.26%	14.70%	15.57%	14.47	16.35%
NORMAL NEWBORN	67.83	68.2%	68.09%	67.23%	66.02%	67.83%	65.18% t

Table 48: Healthcare and Family Services, Paid Claims Data, 2000-2006

Average Length of Hospital Stay of Newborns

	DRG	Newborns	Days	Admits	ALOS	Variance from Normal Newborn ALOS
Normal	391	49951	99847	50820	1.96	
Non Normal	385	746	10883	1067	10.20	8.23
	386	2092	67116	1982	33.86	31.90
	387	1968	32553	2177	14.95	12.99
	388	3053	15970	3123	5.11	3.15
	389	5174	32554	5909	5.51	3.54

Table 49: Healthcare and Family Services, Paid Claims Data, 2006

Non-Normal: 385, Neonates, Died or Transferred to Another Acute Care Facility
 386, Extreme Immaturity or Respiratory Distress Syndrome, Neonate
 387, Prematurity with Major Problems
 388, Prematurity without Major Problems
 389, Full Term Neonate with Major Problems

Non Level 3 Facilities	
NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	0.85 %
EXTREME IMMATURITY OR RESP DISTRESS SYNDROME	2.41%
PREMATURITY W MAJOR PROBLEMS	2.15%
PREMATURITY W/O MAJOR PROBLEMS	3.92%
FULL TERM NEONATE W MAJOR PROBLEMS	6.82%
Level 3 Facilities	
NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	1.49%
EXTREME IMMATURITY OR RESP DISTRESS SYNDROME	4.09%
PREMATURITY W MAJOR PROBLEMS	4.20%
PREMATURITY W/O MAJOR PROBLEMS	4.79%
FULL TERM NEONATE W MAJOR PROBLEMS	7.61%

Table 50: Healthcare and Family Services, Paid Claims Data, 2006

The following data suggests that HFS should initiate focused outreach to assure that high-risk women with non-normal births are served by the appropriate level facility.

Type of Hospital Used for High-Risk Non-Normal Births

Facility	Non-Normal Newborn Net Liability	
	%	%
Level 1 Facilities	2.33%	1.47%
Level 2 Facilities	38.80%	21.47%
Level 2+ Facilities	23.37%	12.12%
Level 3 Facilities	35.49%	64.94%

Table 51: Healthcare and Family Services, Paid Claims Data, 2006

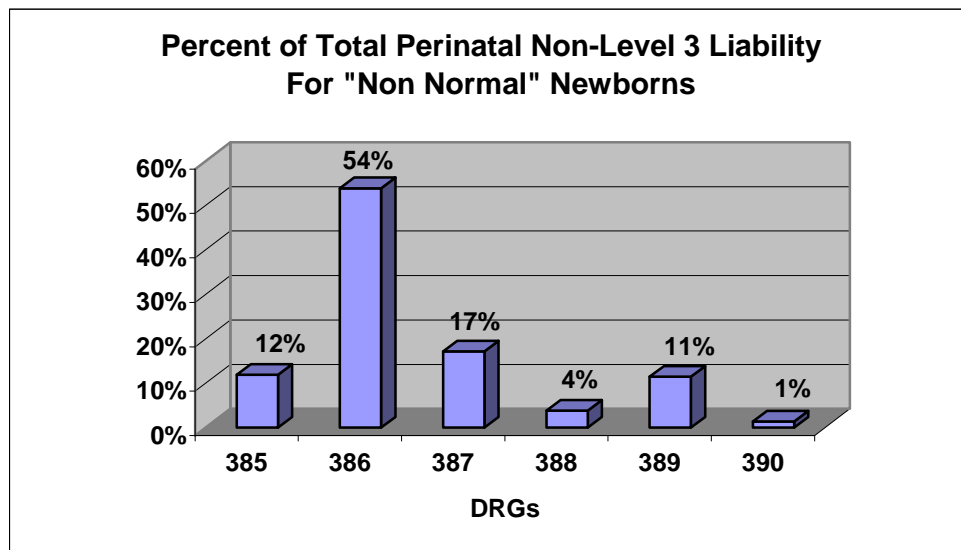


Table 52: Healthcare and Family Services, Paid Claims Data, 2006

Non-Normal: 385, Neonates, Died or Transferred to Another Acute Care Facility
386, Extreme Immaturity or Respiratory Distress Syndrome, Neonate
387, Prematurity with Major Problems
388, Prematurity without Major Problems
389, Full Term Neonate with Major Problems

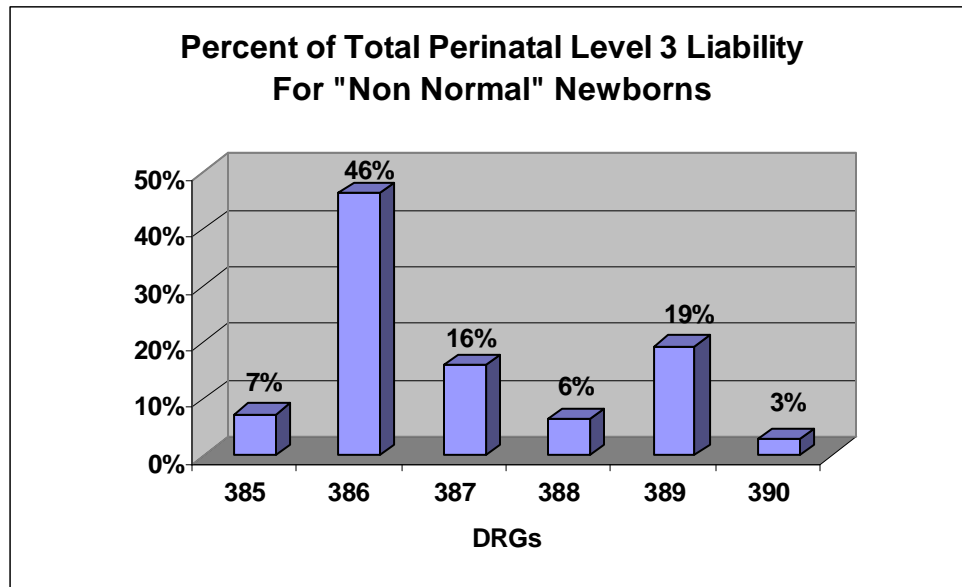


Table 53: Healthcare and Family Services, Paid Claims Data 2006

Non-Normal: 385, Neonates, Died or Transferred to Another Acute Care Facility
 386, Extreme Immaturity or Respiratory Distress Syndrome, Neonate
 387, Prematurity with Major Problems
 388, Prematurity without Major Problems
 389, Full Term Neonate with Major Problems

The seven-year average distribution of normal compared to non-normal births has been examined by racial and ethnic groups. Forty-one (41) percent of African American births are considered non-normal, as contrasted to 29 percent of Hispanic births, 30 percent of Caucasian births and 31 percent of American Indian/Alaskan/Asian/Pacific Islander births.

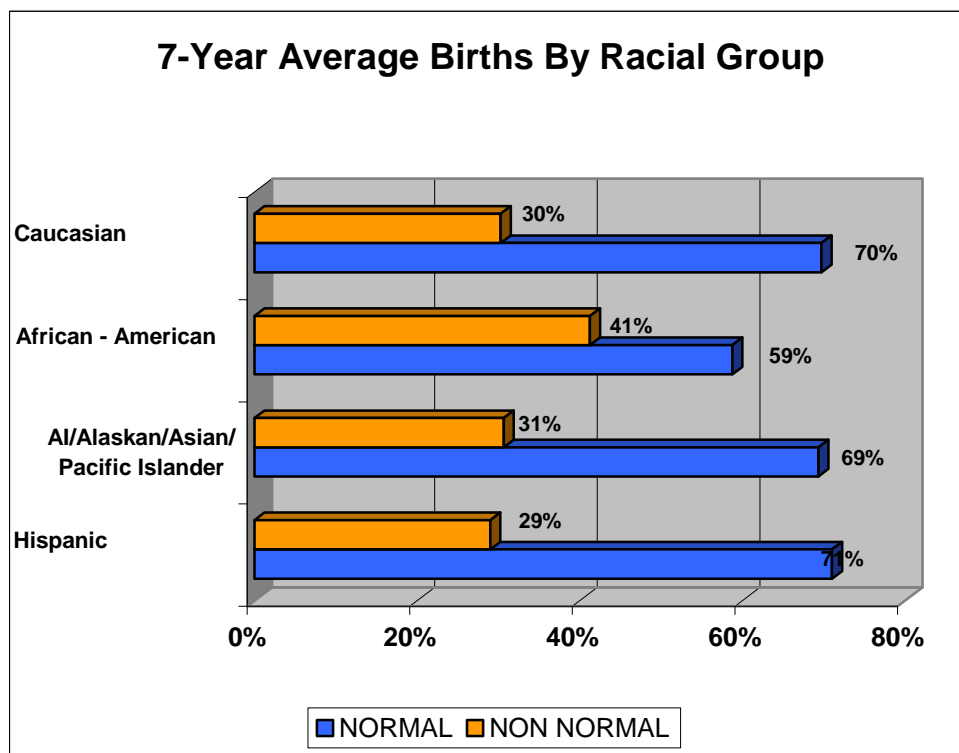


Table 54: Healthcare and Family Services, Paid Claims Data, 2000-2006

The distribution of normal compared to non-normal births has not changed significantly either in Cook County or Downstate between calendar year 2000 and calendar year 2006.

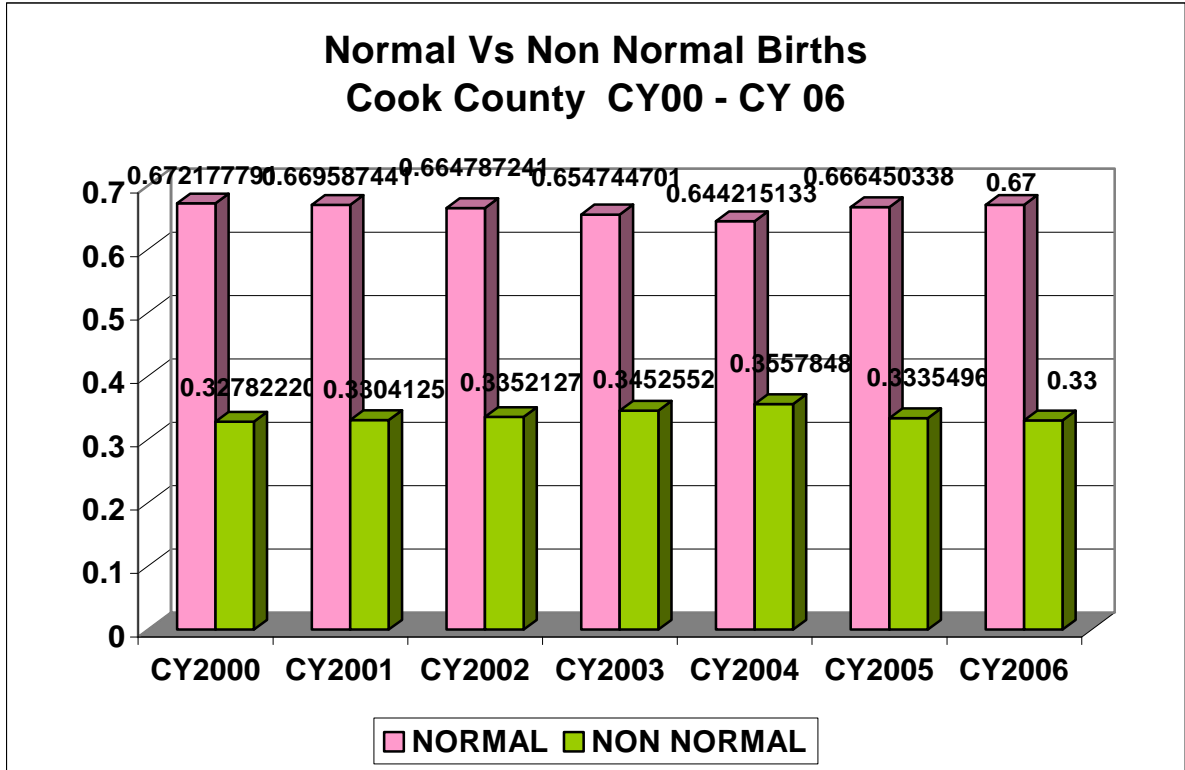


Table 55: Healthcare and Family Services, Paid Claims Data, 2000-2006

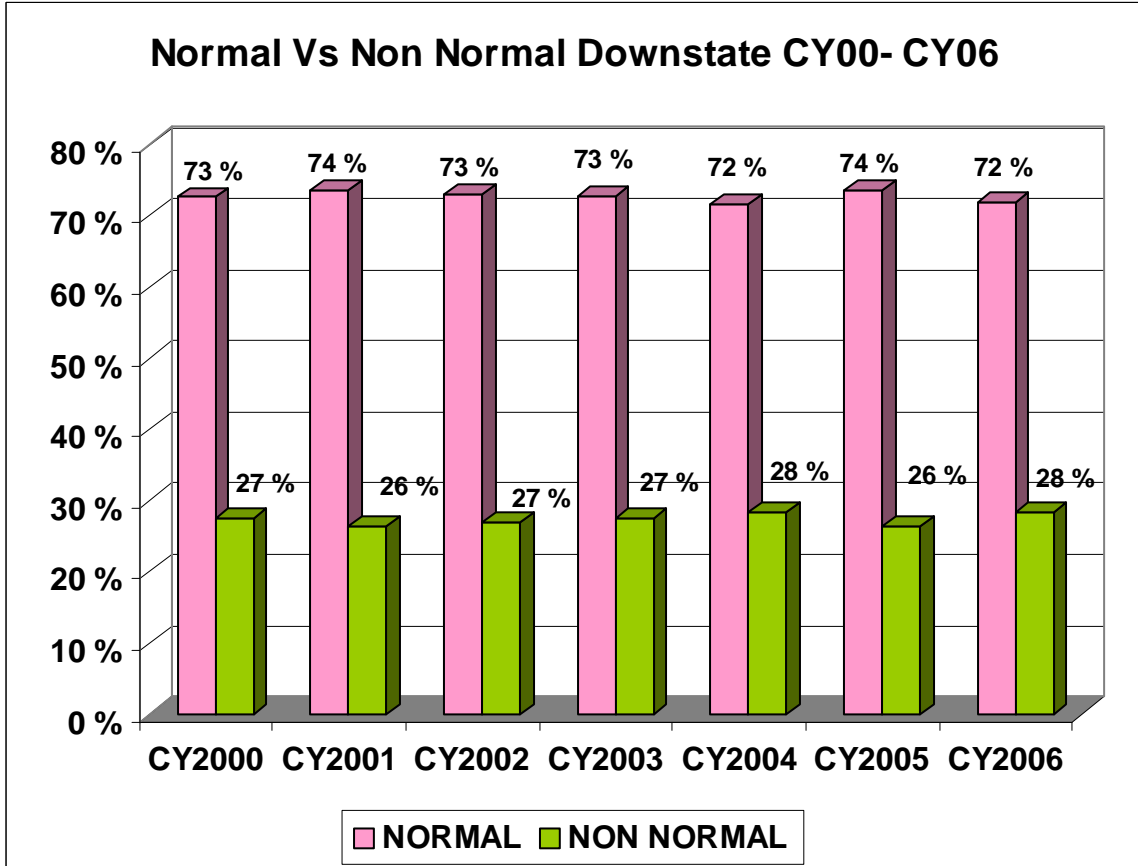


Table 56: Healthcare and Family Services, Paid Claims Data, 2000-2006

Distribution of HFS Births

There have been significant changes in the proportion of HFS births in Cook County compared to Downstate with the proportion in Cook County decreasing from 51.1 percent to 49.9 percent between calendar year 2000 and calendar year 2006 and the proportion in Downstate increasing from 48.9 percent to 50.2 percent during the same period.

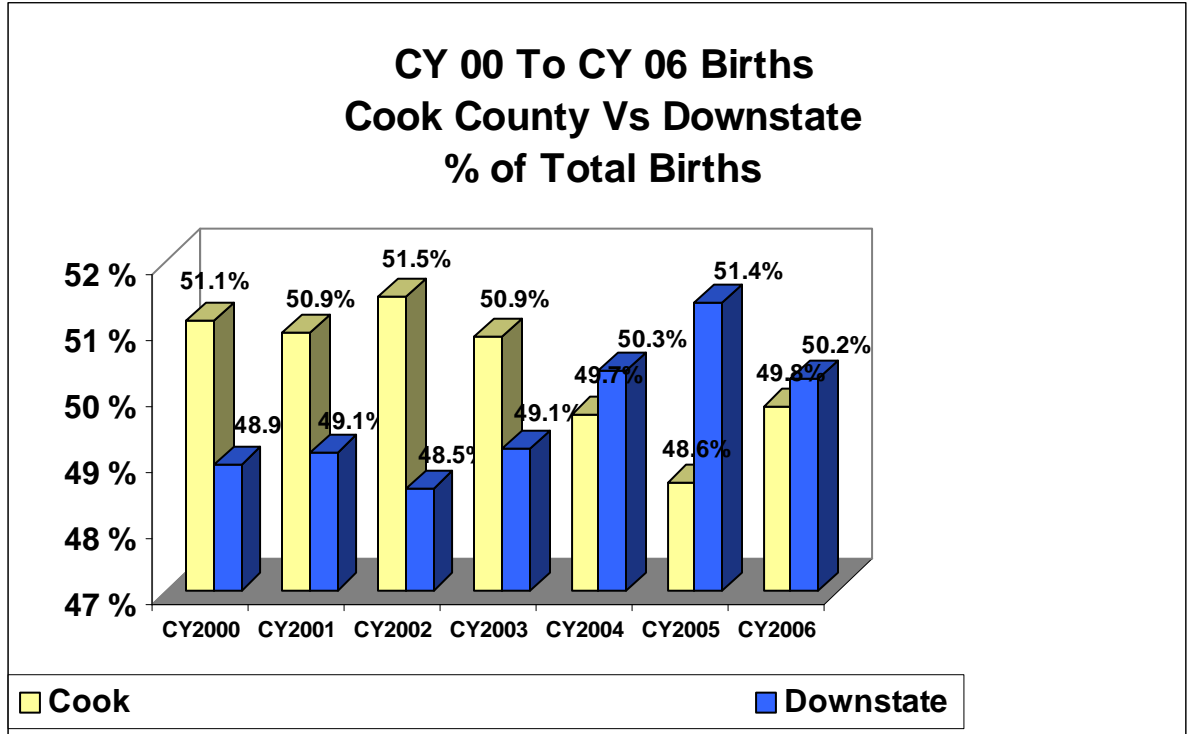


Table 57: Healthcare and Family Services, Paid Claims Data, 2000-2006

The geographic location of the counties in which the majority of HFS women deliver has remained fairly constant comparing calendar year 2000 with calendar year 2006, although some counties have realized significant growth in the number of total births (Cook, Lake, Kane, Will, St. Clair and Peoria). Cook County has the largest percent of HFS births (49 percent) and the largest number of HFS women of childbearing age.

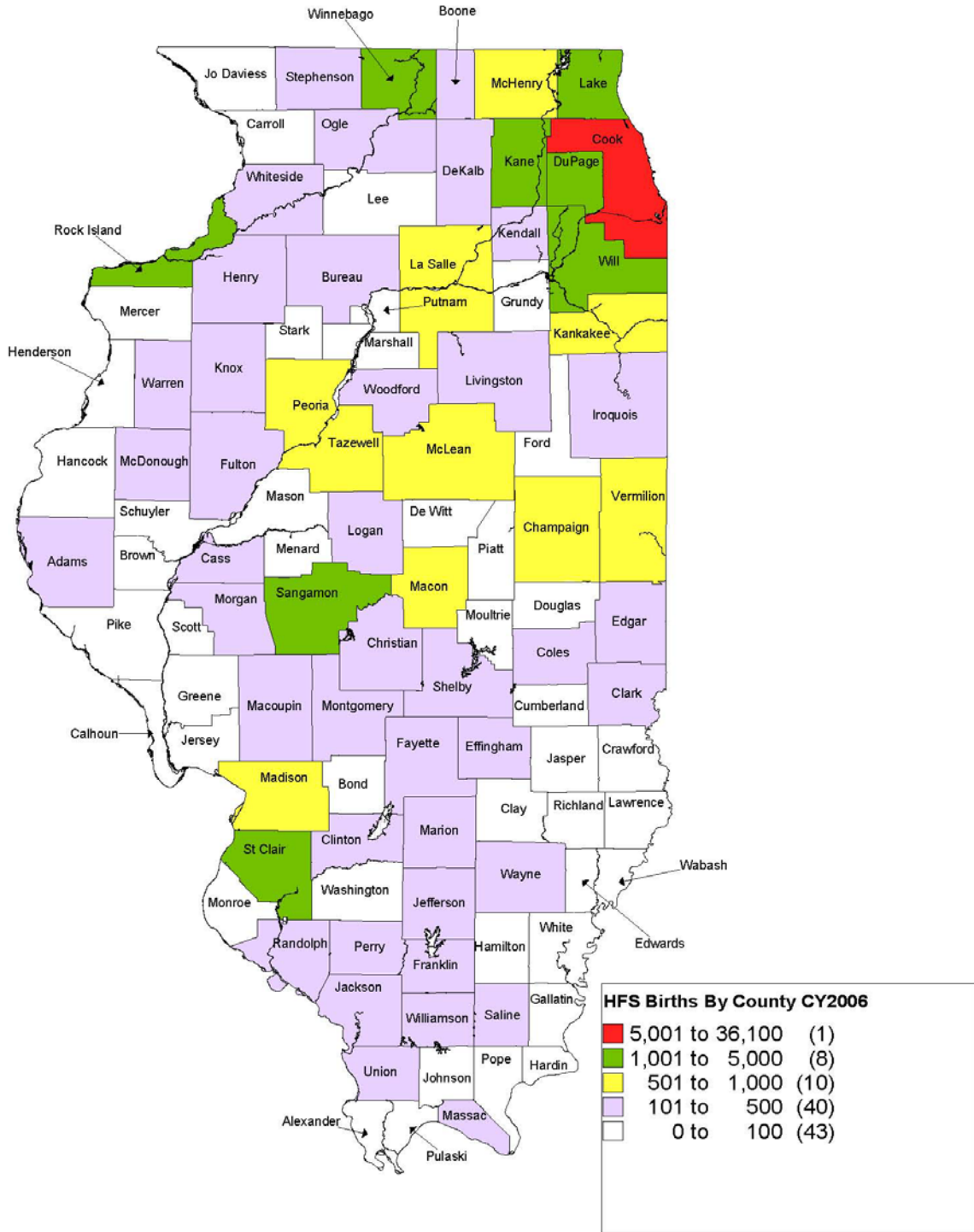
When analyzing the geographic distribution of non-normal births, Peoria, Rock Island, Will, Sangamon and DuPage counties experienced the highest proportion of non-normal births in 2006. The counties with the largest increases in non-normal births between 2000 and 2006 are Madison, DuPage and Peoria. The most significant decrease occurred in Winnebago County.

Top Counties for Births in Calendar Years 2000 Compared to 2006

CY2000					CY2006						
Counties	Total Births	% Non-Normal Births	% of Total HFS Births	Births Per 1000 HFS Women 19-44	Counties	Total Births	% Non-Normal Births	% of Total HFS Births	Births Per 1000 HFS Women 19-44	%Change from CY2000	
Cook	28637	35%	45%	139	Cook	34674	33%	49%	140	248250	0%
Kane	1963	29%	3%	199	Kane	3489	30%	5%	196	17774	-1%
Lake	1862	25%	3%	175	Lake	3131	23%	4%	200	15657	12%
Winnebago	1490	39%	2%	158	DuPage	2955	36%	4%	171	17270	16%
Saint Clair	1306	27%	2%	108	Will	2192	37%	3%	139	15794	1%
Will	1289	32%	2%	137	Winnebago	2016	35%	3%	140	14379	-13%
Du Page	1246	41%	2%	143	Saint Clair	1682	29%	2%	114	14725	5%
Peoria	834	39%	1%	115	Madison	1384	23%	2%	119	11644	28%
Sangamon	827	25%	1%	130	Peoria	1307	65%	2%	132	9913	13%
Madison	757	39%	1%	85	Sangamon	1180	36%	1%	130	9069	0%
Rock Island	745	31%	1%	144	Rock Island	1089	37%	1%	148	7354	3%
Champaign	697	25%	1%	148	Champaign	1087	30%	1%	156	6979	5%

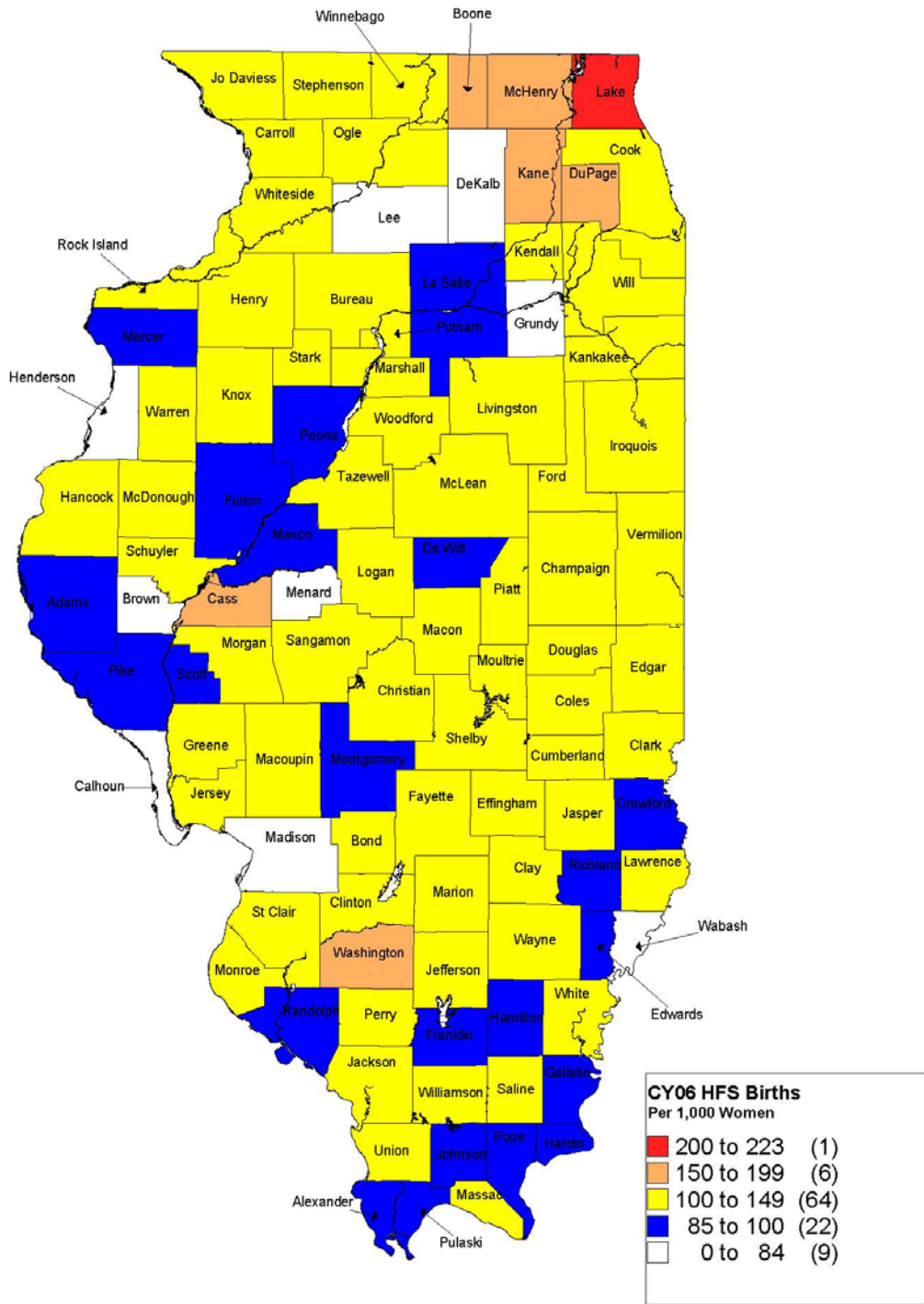
Table 58: Healthcare and Family Services, Paid Claims Data, 2000 and 2006

HFS Births by County



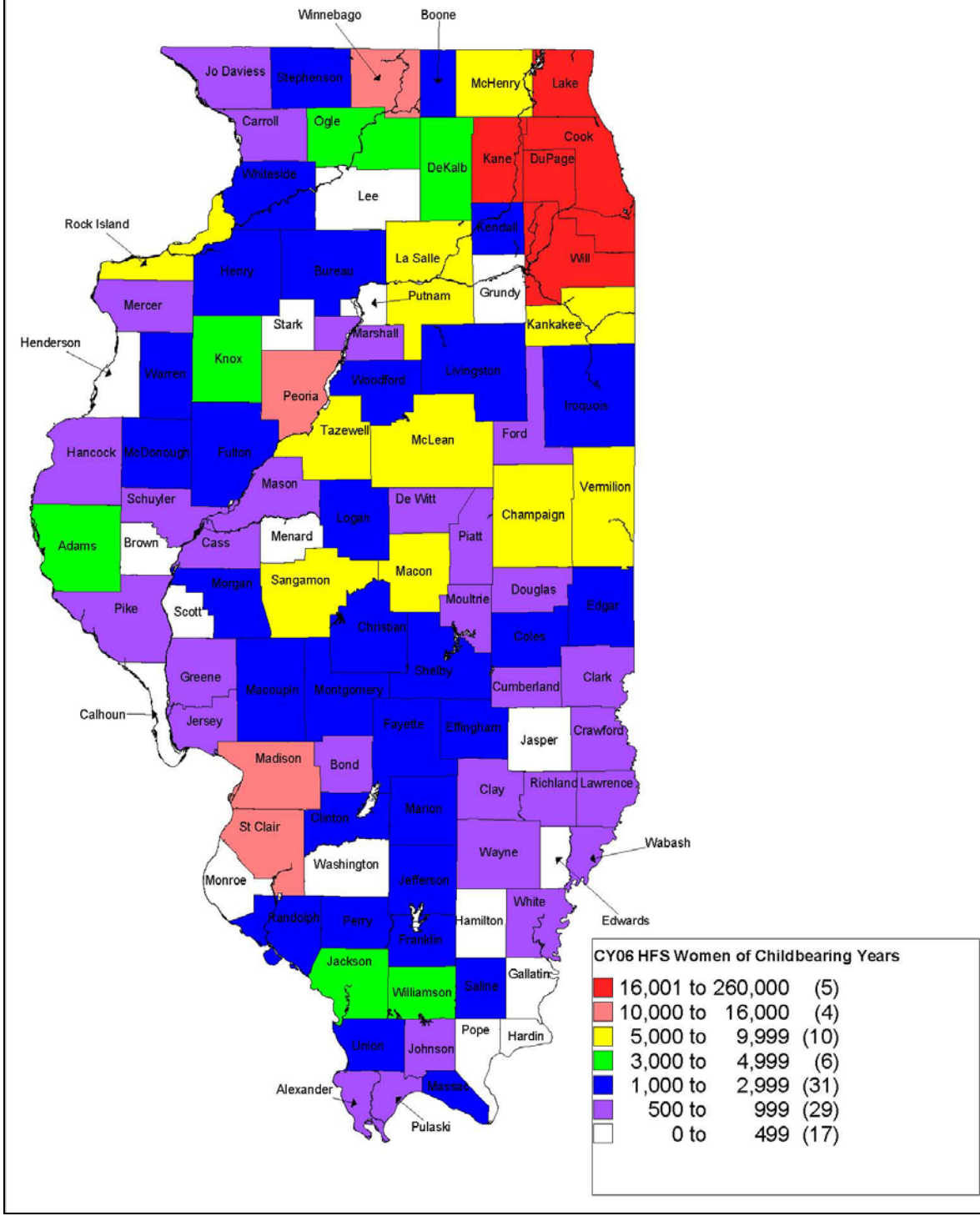
Map 1: Healthcare and Family Services, Paid Claims Data, 2006

HFS Births Per 1,000 HFS-Enrolled Women of Childbearing Age

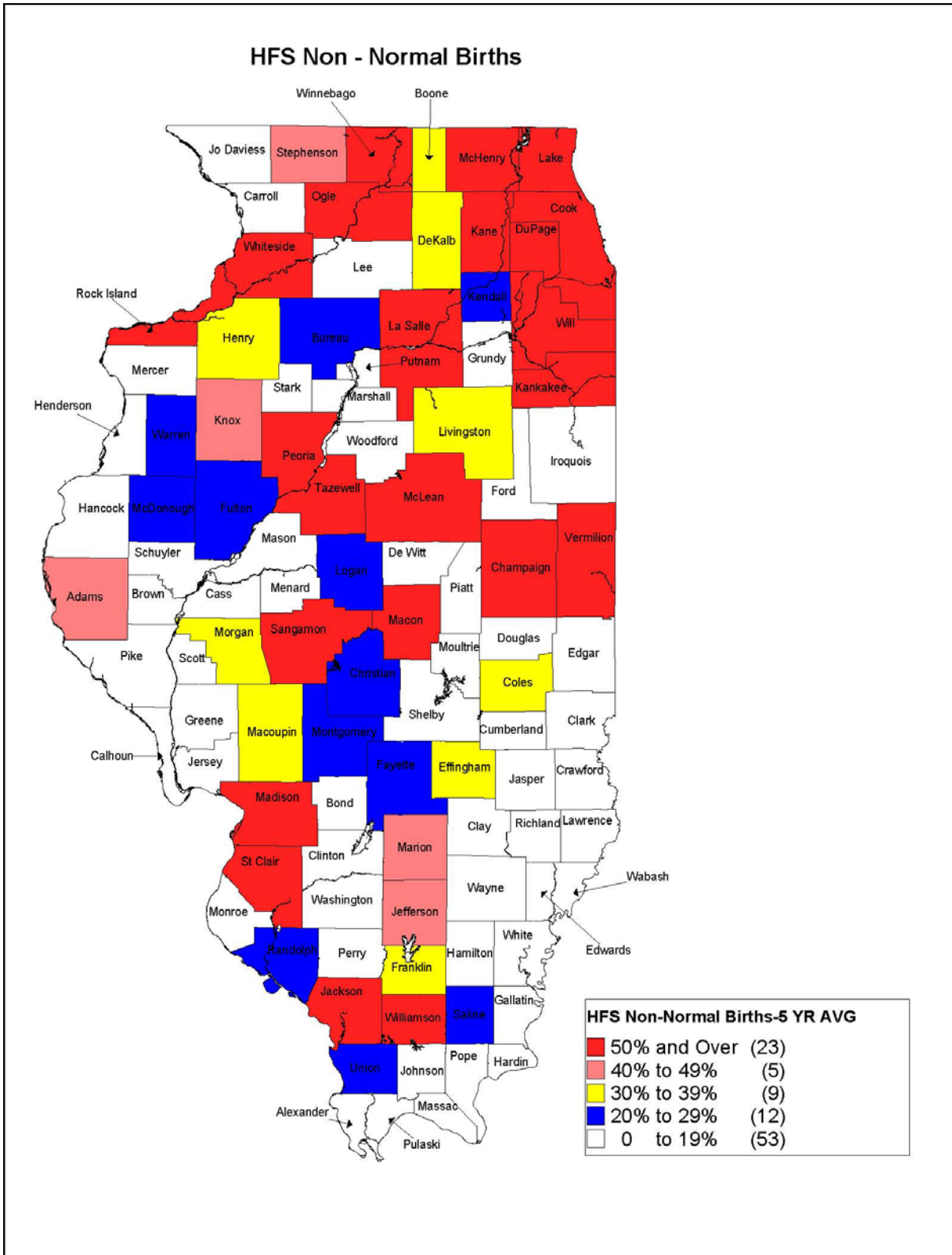


Map 2: Healthcare and Family Services, Paid Claims Data, 2006

Number of HFS Women of Childbearing Age



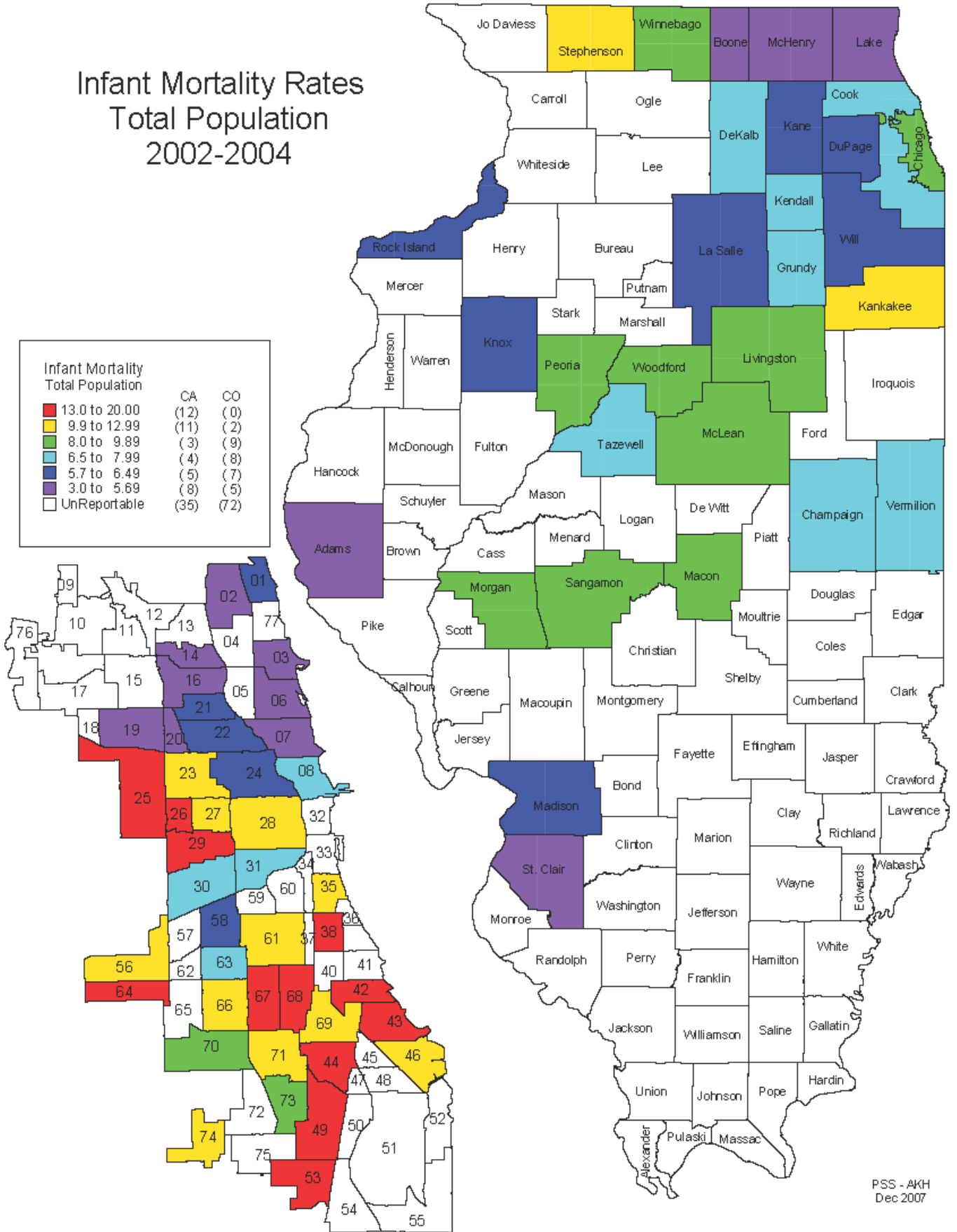
Map 3: Healthcare and Family Services, Eligibility Data, 2006



Map 4: Healthcare and Family Services, Paid Claims Data, 2002-2006

Infant Mortality Rates Total Population 2002-2004

Infant Mortality Total Population	CA	CO
13.0 to 20.00	(12)	(0)
9.9 to 12.99	(11)	(2)
8.0 to 9.89	(3)	(9)
6.5 to 7.99	(4)	(8)
5.7 to 6.49	(5)	(7)
3.0 to 5.69	(8)	(5)
UnReportable	(35)	(72)

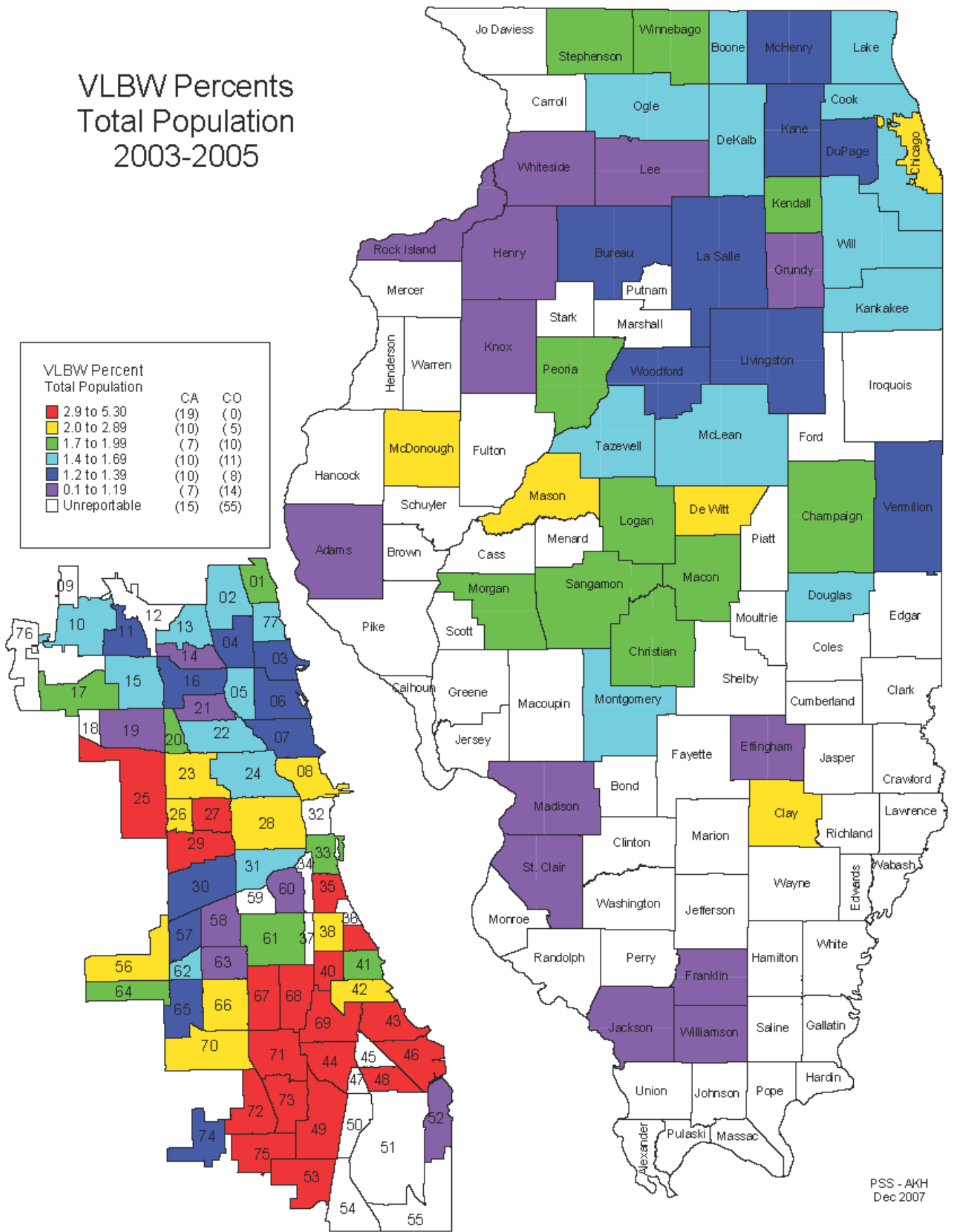


Map 5: Illinois Department of Human Services, Birth File Match, 2002-2004

PSS - AKH
Dec 2007

VLBW Percents Total Population 2003-2005

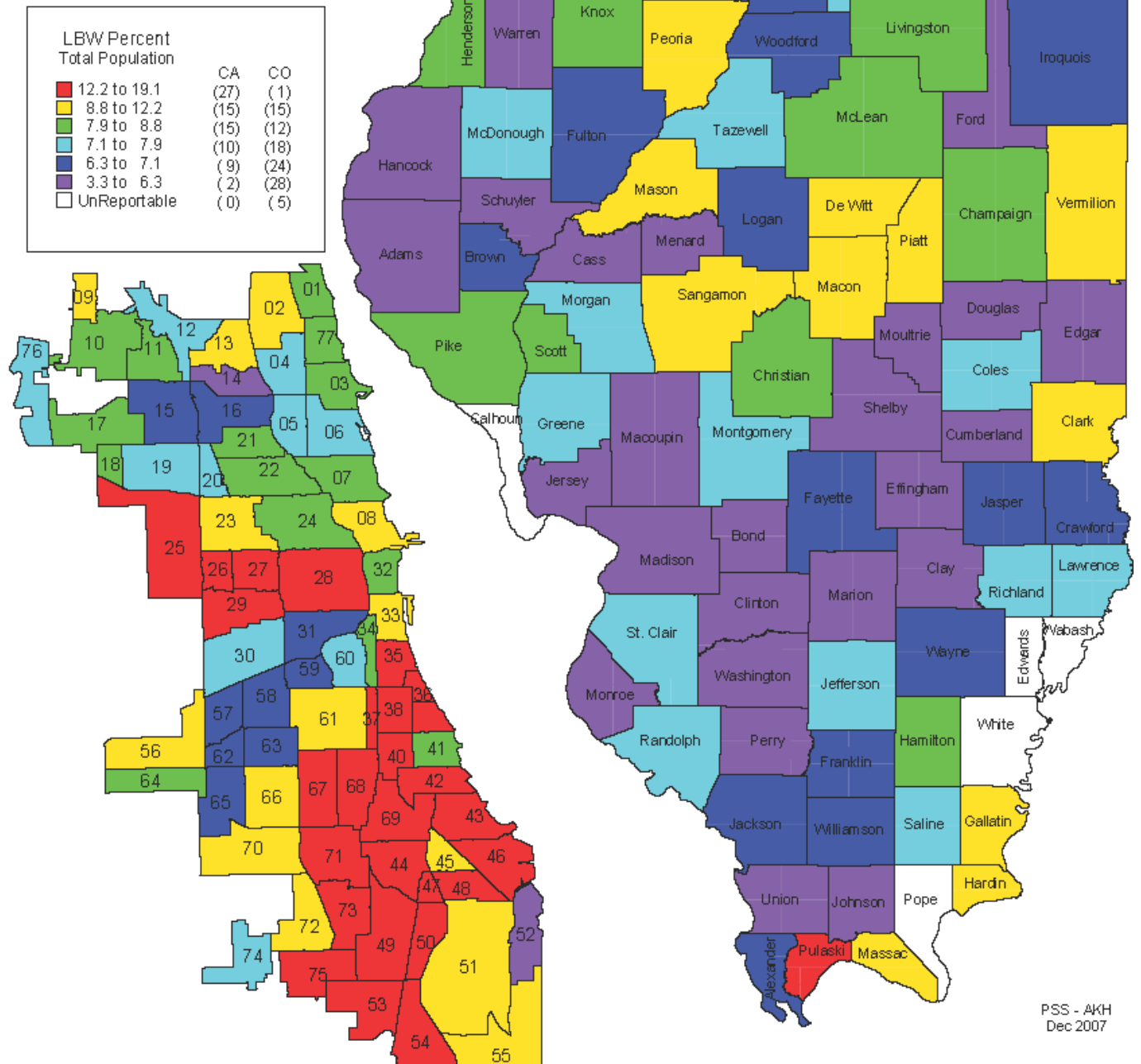
VLBW Percent Total Population	CA	CO
2.9 to 5.30	(19)	(0)
2.0 to 2.89	(10)	(5)
1.7 to 1.99	(7)	(10)
1.4 to 1.69	(10)	(11)
1.2 to 1.39	(10)	(8)
0.1 to 1.19	(7)	(14)
Unreportable	(15)	(55)



PSS - AKH
Dec 2007

Map 6: Illinois Department of Human Services Birth File Match, 2003-2005

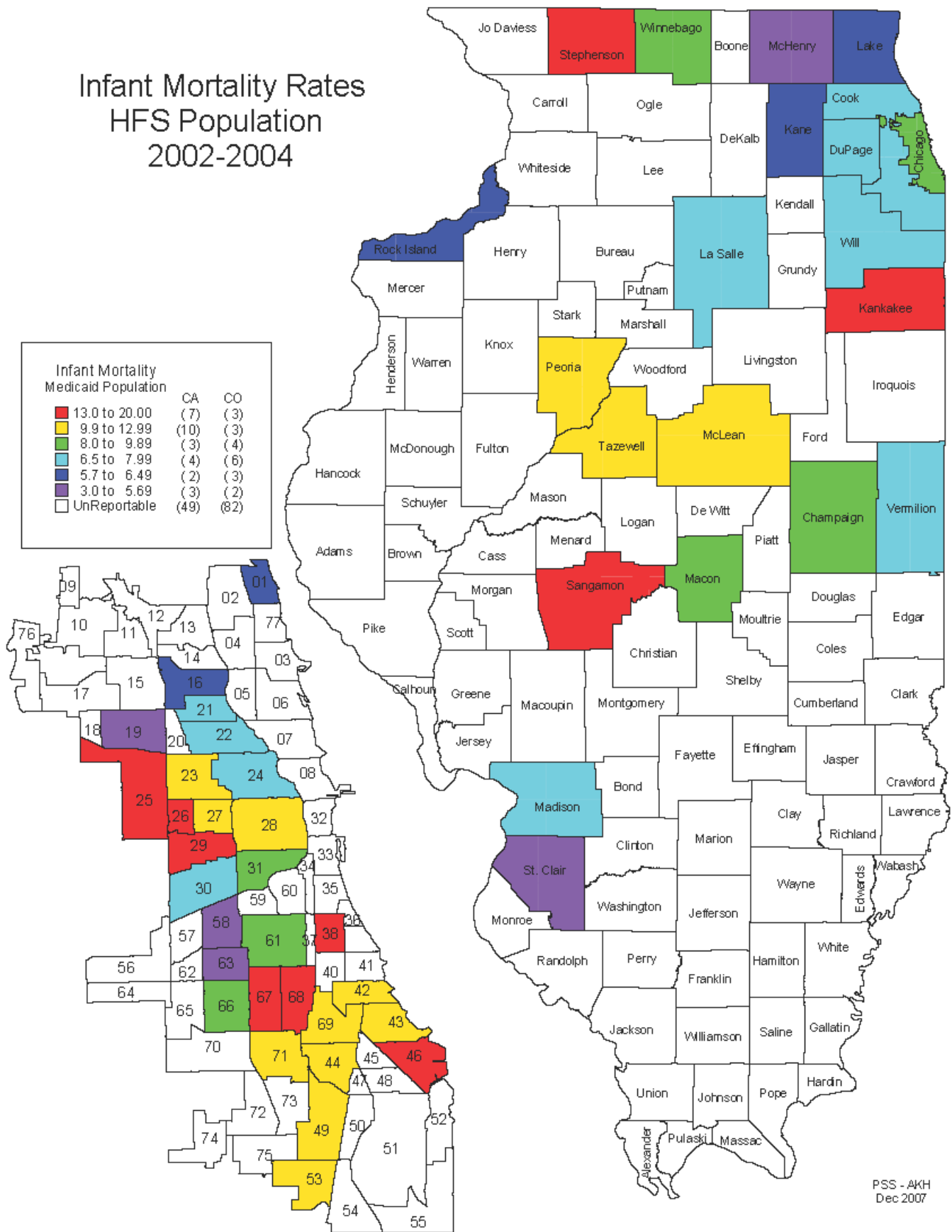
Low Birthweight % Total Population 2003-2005



Map 7: Illinois Department of Human Services, Birth File Match, 2003-2005

PSS - AKH
Dec 2007

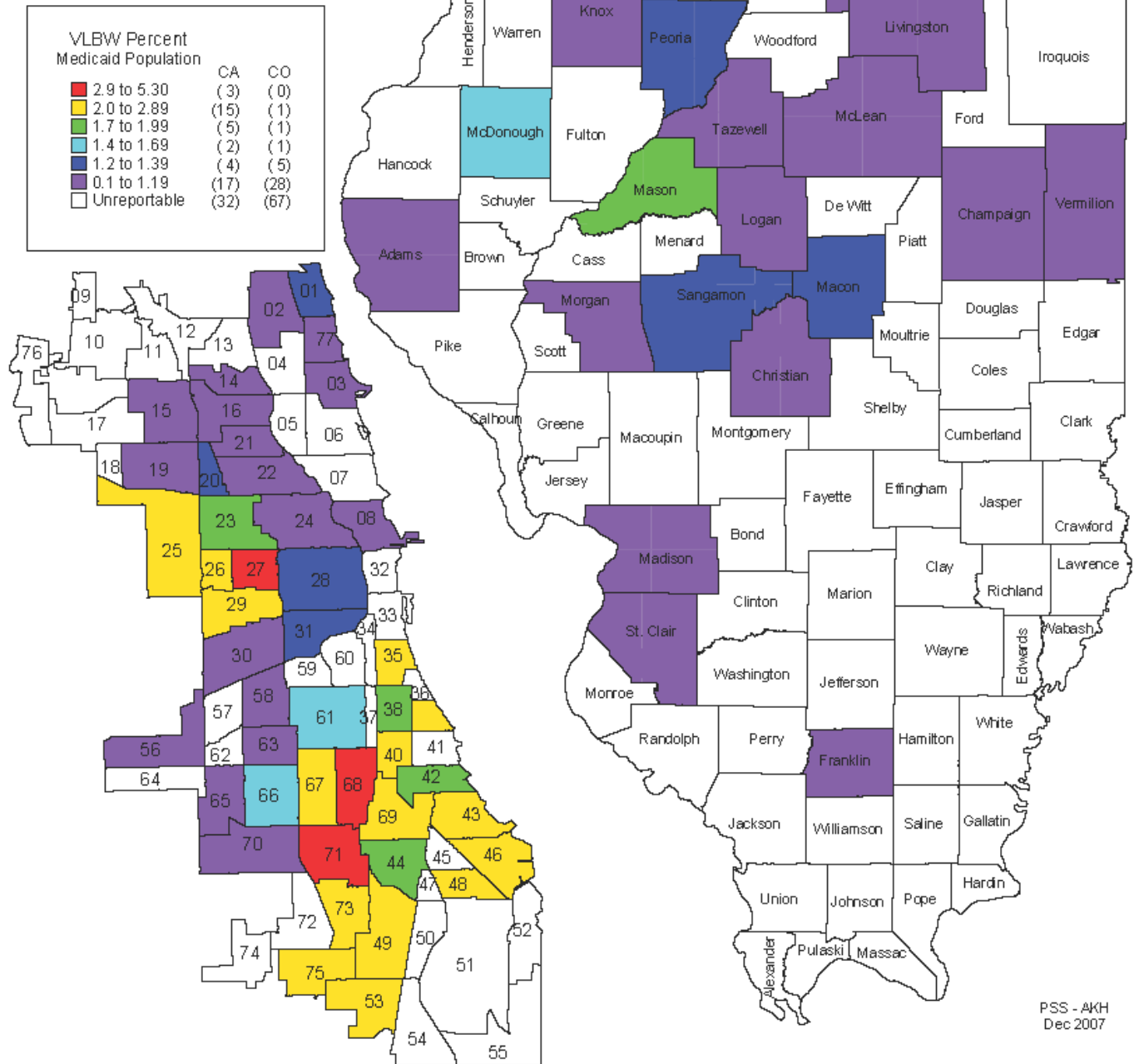
Infant Mortality Rates HFS Population 2002-2004



PSS - AKH
Dec 2007

Map 8: Illinois Department of Human Services, Birth File Match, 2002-2004

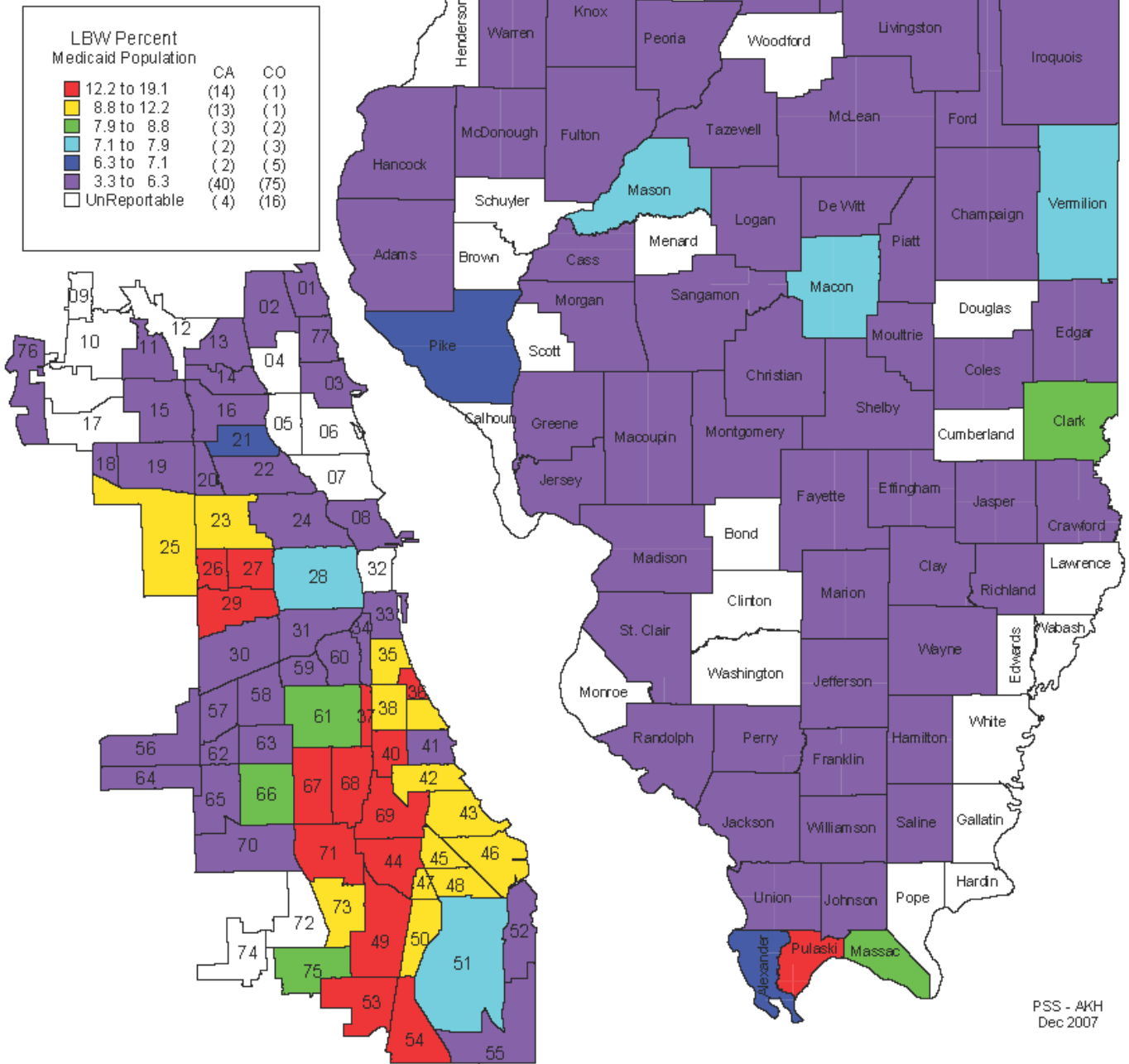
VLBW Percents HFS Population 2003-2005



PSS - AKH
Dec 2007

Map 9: Illinois Department of Human Services, Birth File Match, 2003-2005

Low Birthweight % HFS Population 2003-2005



Map 10: Illinois Department of Human Services, Birth File Match, 2003-2005

CA	Name	CA	Name	CA	Name
01	Rogers Park	27	East Garfield Park	53	West Pullman
02	West Ridge	28	Near West Side	54	Riverdale
03	Uptown	29	North Lawndale	55	Hegewisch
04	Lincoln Square	30	South Lawndale	56	Garfield Ridge
05	North Center	31	Lower West Side	57	Archer Heights
06	Lake View	32	Loop	58	Brighton Park
07	Lincoln Park	33	Near South Side	59	McKinley Park
08	Near North Side	34	Armour Square	60	Bridgeport
09	Edison Park	35	Douglas	61	New City
10	Norwood Park	36	Oakland	62	West Elsdon
11	Jefferson Park	37	Fuller Park	63	Gage Park
12	Forest Glen	38	Grand Boulevard	64	Clearing
13	North Park	39	Kenwood	65	West Lawn
14	Albany Park	40	Washington Park	66	Chicago Lawn
15	Portage Park	41	Hyde Park	67	West Englewood
16	Irving Park	42	Woodlawn	68	Englewood
17	Dunning	43	South Shore	69	Greater Grand Crossing
18	Montclare	44	Chatham	70	Ashburn
19	Belmont Cragin	45	Avalon Park	71	Auburn Gresham
20	Hermosa	46	South Chicago	72	Beverly
21	Avondale	47	Burnside	73	Washington Heights
22	Logan Square	48	Calumet Heights	74	Mount Greenwood
23	Humboldt Park	49	Roseland	75	Morgan Park
24	West Town	50	Pullman	76	O'Hare
25	Austin	51	South Deering	77	Edgewater
26	West Garfield Park	52	East Side		

Future Direction: Priorities for 2006 and 2007

Health Care Delivery System

A significant change that could impact the delivery of health care for participants is the landmark legislation Governor Blagojevich signed to provide comprehensive health coverage for every uninsured child in Illinois. The Governor's All Kids program offers children access to comprehensive health care. As part of the initiative, Illinois has implemented a statewide Primary Care Case Management (PCCM) program to ensure that participants (including adults) have a "medical home" and receive comprehensive preventive and primary care services. In Illinois, the PCCM program has been named *Illinois Health Connect*. *Illinois Health Connect* was implemented as a voluntary program on July 1, 2006 and is now mandatory statewide.

In *Illinois Health Connect*, eligible participants select a Primary Care Provider (PCP) for their medical home to provide their health care, or make referrals to specialty and medically-related care, as needed, or in counties where managed care is a choice, the participants who are eligible for managed care may select an MCO or *Illinois Health Connect*, and a PCP, for their medical home. *Illinois Health Connect* will:

- Provide enrollees with a medical home to ensure enrollees receive all necessary care in a timely manner
- Improve access to and quality of care for enrollees through the development of a Primary Care Provider Network and specialty care
- Improve health outcomes and appropriate health care utilization
- Provide ongoing feedback to PCPs about their patients' health care utilization, clinical care guidelines, and how they compare with peers on certain performance measures

In *Illinois Health Connect*, women will have direct access to HFS providers for family planning and obstetrical care, regardless of their PCP assignment. With the establishment of a medical home, the provider and the patient will establish a relationship conducive to continuity of needed health care services, and monitoring (and ongoing feedback) of those services can be more easily achieved. The PCCM program will focus on adult preventive care, care of chronic conditions and encouraging family planning (reproductive health planning), which may increase pregnancy spacing and improve birth outcomes. The PCCM program uses the strategy of monitoring key indicators to improve health outcomes and appropriate health care utilization.

An additional component of the FamilyCare initiative is Disease Management, specifically to provide disease management to certain high-risk groups. Women who meet the criteria for the program may be provided with this disease management strategy to control chronic conditions such as asthma, which can impact on birth outcomes. Frequent emergency room users are also targeted.

Implementation of *Illinois Healthy Women* Expansion

In the Summer 2008, HFS plans to submit a renewal application to CMS to extend the IHW family planning waiver. This extension will allow more low-income women to have access to

family planning care, increase birth spacing intervals, increase the number of intended pregnancies and provide a cost savings by reducing the number of HFS births.

Standards of Care

The medical record reviews for the Closing the Gap initiative will be completed and data will be provided to UIC for evaluation of the quality of care actually provided compared to ACOG standards. The purpose of the evaluation is to identify specific issues affecting the quality of care. Based on the results of the evaluation, HFS will work with perinatal care experts to develop a provider education curriculum that addresses the issues identified.

Educational Campaign on Reproductive Health Care

A client notice has been developed and will be mailed to female participants with April 2008 medical cards to educate them on issues affecting reproductive health care. The notice includes information on family planning services available, optimum interpregnancy spacing intervals for healthy births, the role of folic acid in decreasing neural tube defects, and the importance of reproductive health planning and early and continuous prenatal care, when pregnant.

Additional focus will be also given to educating and promoting women's preventive health care, such as breast and cervical cancer screening as when reviewing the data, less than one-half of women enrolled in HFS' medical programs are receiving breast cancer or cervical cancer screening, as recommended. A client notice addressing these issues has been developed and will be mailed to female participants with April 2008 medical cards.

Adult Preventive Care

In July 2007, HFS added coverage of preventive care for adults, including preconception care. HFS is currently researching a variety of risk assessment tools to determine if they meet the criteria for reimbursement (validated, individually administered and nationally distributed). These tools include assessment for smoking, alcohol, substance abuse and domestic violence.

Preconception/Interconception Care

Upon completion of the Preconception Care Screening Tool Pilot Project, HFS will contract with Health Systems Information (HSI) to provide an analysis and summary of the project's documents to determine the tool's efficacy, relevance in identifying risks, and ease of provider use. The documents to be examined include the completed tools used to screen clients, survey tool for clinician feedback, and a review tool for MCH nurse consultant's feedback on provider compliance in utilizing the screening instrument. Upon completion of the evaluation, HFS will use these findings to identify resources for providers in helping women achieve optimum health before or between pregnancies in order to lower the rate of many adverse pregnancy outcomes.

Preconception care is a preventive service for women of childbearing age who are planning a pregnancy in the near future. This service allows for early identification of issues that could affect a future pregnancy or fetus and that may be amenable to intervention, resulting in better birth outcomes. HFS is working on developing the content of a preconception care

visit which will include a wide range of screening, assessments, counseling and educational interventions in accordance with the standards of the American Academy of Obstetrics and Gynecology and the Centers for Disease Control and Prevention. Other additional preventive services may be covered as a result of the preconception care visit – immunizations, lab tests, genetic testing, etc. Once the content is developed, HFS will provide separate reimbursement for a preconception care visit. HFS is also focusing on interconception care, which is preconception care that is provided between pregnancies. Interconception care will focus on reproductive health planning and addressing health issues, risk and chronic conditions before another pregnancy.

Using Data to Drive Policy

HFS is analyzing historical claims data and will include vital records information once made available through the data sharing agreement between the State agencies (HFS, IDPH, IDHS), to develop a profile of pregnant women who have delivered a premature infant. Such information will allow HFS to identify women who may be at risk of a subsequent premature or high-risk delivery. HFS will develop outreach and care management strategies to reach these women prior to their next pregnancy or early in their next pregnancy, and assist them in obtaining risk appropriate health care between deliveries or during their subsequent pregnancy. Such strategies should result in a reduction of high-risk births. However, in order to adequately assess profiles, vital records of HFS-funded births must be provided by IDPH.

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